

THE MARITIME INDUSTRY AS A DRIVER OF ECONOMIC RECOVERY & MIDDLE- CLASS FORMATION IN ANNE ARUNDEL COUNTY, MD

PREPARED BY SAGE POLICY GROUP, INC.

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A Sage Report



Executive Summary

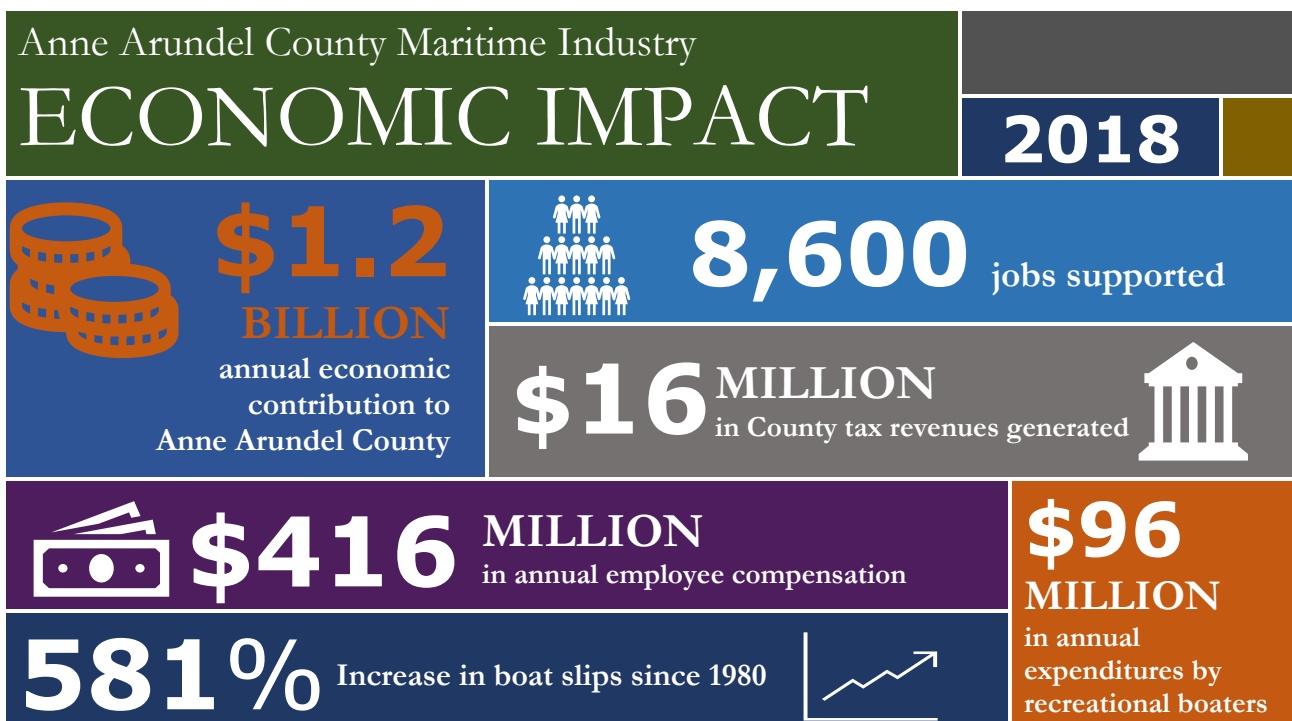
NATURE OF THE ENDEAVOR

The Anne Arundel County Economic Development Corporation commissioned Sage Policy Group, Inc. (Sage) to detail the economic and fiscal benefits generated by the County's maritime industry. To that end, this report: a) defines the industry; b) supplies statistical detail regarding industry performance; c) estimates the industry's contributions to the local economy; and d) supplies a set of recommendations aimed at expanding the industry's economic impact.

A BILLION DOLLAR INDUSTRY IN ANNE ARUNDEL COUNTY

With more than 500 miles of coastline, 300 marinas, and 12,000 boat slips, Anne Arundel County represents the most significant access to waterfront in Central Maryland. That access supports industries ranging from boat-building to global transport. The industry's ability to attract recreational boaters and their spending power to the county also supports jobs and economic activity. The same can be said for the presence of the Coast Guard and Naval Academy.

When properly defined, the maritime industry directly supports nearly 5,700 jobs and more than \$274 million in employee compensation/annum in Anne Arundel County. Once multiplier effects are considered, Anne Arundel County's maritime industry supports an estimated 8,600 jobs, \$416 million in annual employee compensation, and nearly \$1.2 billion in annual economic activity.





In an effort to contextualize these impacts, it is worth noting that Anne Arundel County's maritime industry's \$1.2 billion in annual economic activity equates to approximately 2.5 percent of Anne Arundel County's annual gross county product as reported by the U.S. Bureau of Economic Analysis. According to IMPLAN data, the county's maritime industry supports approximately 43 times more economic activity than the county's agriculture industry.

RECOMMENDATIONS TO EXPAND THE INDUSTRY

There are steps that can be taken to ensure these impacts expand over the coming years, which is rendered especially important in the context of the desire to quickly rebound from the economic setbacks generated by the novel coronavirus pandemic. In focus groups and interviews, maritime stakeholders expressed two common concerns: 1) the industry faces a dearth of available labor, 2) the permitting process is overly convoluted, time consuming, and expensive, and 3) that a decline in Anne Arundel County's water quality would have negative effects on the industry.

RECOMMENDATION 1: INCREASE YOUTH AWARENESS OF MARITIME CAREERS

- *The Anne Arundel County Maritime Advisory Board should coordinate efforts to expose youth to the idea of a maritime career, including through career fairs, vocational training programs, and other educational programs at Anne Arundel Community College.*

RECOMMENDATION 2: EXPAND & COLLABORATE WITH TECHNICAL TRAINING PROGRAMS

- *Encourage industry stakeholders to participate in training programs like the Marine Trades Association of Maryland on-the-job training program. These programs have shown significant promise in encouraging students who do not intend to attend four-year colleges to enter the maritime industry.*

RECOMMENDATION 3: PARTNER WITH ANNE ARUNDEL COMMUNITY COLLEGE (AACC) TO BUILD A MARINE SERVICES TECHNOLOGY PROGRAM AND POSSIBLE CREDIT PROGRAMS

- *Industry stakeholders should collaborate with AACC to implement the American Boat and Yacht Council (ABYC) Marine Service Technology Program, a standards-based curriculum that would allow students to earn a marine service technician certificate and digital badge of achievement upon completion, and to create needed credit certificates such as a Dockmaster Certificate or other credentials required for non-skilled trade jobs in the industry*
- *The County should supply AACC with approximately \$35,000 to purchase the curriculum package, maintain it, and outfit the workshop necessary to implement the ABYC Marine Service Technology Program.*



RECOMMENDATION 4: PROVIDE RESOURCES TO HELP BUSINESSES THROUGH THE PERMITTING PROCESS

- *Anne Arundel County should designate a staff member to aid potential maritime industry businesses as they navigate the County and MDE permitting process.*

RECOMMENDATION 5: SUPPORT EFFORTS TO IMPROVE ANNE ARUNDEL COUNTY'S WATER QUALITY

- *It is clear that sufficiently compromised water quality would negatively impact recreational activities critical to large segments of the county's maritime sector, and steps to mitigate this potential risk should be pursued by the Maritime Board, including in the form of aggressively supporting efforts to pursue federal funding to improve the Chesapeake Bay's water quality.*

CONCLUSION

The maritime industry already supports significant economic activity in Anne Arundel County while improving quality of life and bolstering the middle class. Resident incomes are higher as a result as are community property values. This provides the County with additional tax receipts and supports approximately \$1.2 billion in economic activity countywide each year. Sage estimates that maritime activities support \$8.7 million in County income tax collections each year and more than \$8 million in real property tax collections from marinas alone.

Some of these revenues should be reinvested in the maritime industry, including into impactful programmatic offerings at Anne Arundel Community College. At the same time, industry stakeholders should be positioned to more easily navigate permitting processes to accelerate investment. This would help speed the county's recovery from the COVID-19 induced recession while providing more middle-income jobs for those who have been dislocated economically by the crisis.



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A Maritime-Based Economy

The Anne Arundel Economic Development Corporation (AAEDC) commissioned Sage Policy Group to estimate the economic contributions of Anne Arundel County's maritime industry. This report uses data from a number of sources, including the U.S. Bureau of Labor Statistics, the U.S. Census Bureau, and IMPLAN economic modeling software to characterize and compute impacts.

WATER, WATER EVERYWHERE

Exhibit 1. Anne Arundel County Major Watersheds & Non-Tidal Stream Reaches



Source: Anne Arundel County

Even a cursory glance at a map of Anne Arundel County strongly hints at why the maritime industry is such a significant contributor to the local economy. The county boasts more than 500 miles of coastline; more than a mile of coastline for each square mile of land area.¹

Seven rivers—the Patuxent, the Patapsco, the Magothy, the Severn, the South, the Rhode, and the West—serve as tributaries of the Chesapeake Bay. Herring Bay graces the county's southern shore. Many creeks and other waterways connect with these larger bodies of water.

The significance of this access to water, including most importantly the Chesapeake Bay, is reflected in part by the 303 marinas and 12,035 boat slips that were counted as part of a 2018 inventory conducted by the County's Office of Planning and Zoning. The expanding value of this access to the commercial and recreational boating communities is reflected in the growth of marinas and boat slips since 1980, when the County counted 57 marinas and 1,767 slips.²

¹ The length of the County's coastline is difficult to measure accurately and can change as land along the shoreline is subject to accretion and erosion. Among several sources of coastline length, the Maryland Geological Survey estimated 508 miles of coastline in 2003 in "Land Areas, Inland-Water Areas, and Length of Shorelines of Maryland's Counties" (http://www.mgs.md.gov/geology/areas_and_lengths.html). The County's website indicates more than 533 miles of coastline (Anne Arundel County, Maryland, "Our County" <https://www.aacounty.org/our-county/>).

² Anne Arundel County Office of Planning & Zoning, "Marina Inventory of Anne Arundel County 2018," July 2018.



While marinas and boat slips are among the most iconic manifestations of the county's marine assets, there are many other activities that depend on access to water. The County's 2018 inventory of marinas noted that the Anne Arundel County Department of Recreation and Parks manages 34 parks, wharves, and other sites that supply water access for boating, fishing, swimming, and other shoreline recreation. These assets are rendered more valuable by Anne Arundel County's proximity to the Baltimore/Washington metropolitan area, which is approaching a population of 10 million.

Basic Maritime Industry Elements

The maritime industry of Anne Arundel County can be segmented into three broad categories. First, there are private businesses and industries that are clearly dependent upon access to the Chesapeake Bay and its various tributaries. Second, there are many people who enjoy boating and other recreational activities who are able to access these waterways. Third, there are agencies and institutions that also benefit from access to the bay and its many offshoots.

MARITIME BUSINESSES AND INDUSTRIES

The maritime industry encompasses a broad spectrum of activities and businesses. Certain aspects of the maritime industry take the form of businesses offering goods and services that are directly tied to the water.

These businesses can be characterized in several ways. One is to consider activities that are boat-related, transportation-related, or fishing-related. Boat-related activities include ship and boat building, boat dealers, and marinas. Marinas include those serving commercial and recreational boaters; a group that also includes community marinas. The latter provide limited services primarily for nearby residents and their guests. Transportation-related activities include water transportation of passengers and/or freight on ships, barges, or boats as well as sightseeing and other water-based tourism related activities. Fishing-related activities include not only commercial fishing, but wholesale, processing, and retail activities associated with fish and seafood.

With the exception of commercial fishing, the employment data in this report are taken from Bureau of Labor Statistics' (BLS) quarterly reports.³ The study team sourced commercial fishing data from a dataset supported by IMPLAN, a commercial economic data and econometric modeling service.⁴

While very useful, these data supply an incomplete picture of the county's maritime businesses. For instance, because the BLS data do not disclose information when only a small number of

³ Bureau of Labor Statistics, "Quarterly Census of Employment and Wages". <https://www.bls.gov/cew/>.

⁴ IMPLAN, "Anne Arundel County 2017 Industry Detail". <https://www.implan.com/>.



establishments in an industry are present, employment and wage data are unavailable for the fish and seafood wholesale industry, which includes at least one or two establishments in the county according to BLS.

More importantly, some industry categories are not associated with sufficient disaggregation to permit differentiation between maritime activities and similarly situated activities. A good example of this is the “other heavy and civil engineering construction industry”, which embodies marine construction, dock construction, channel dredging, and dam construction, but also includes recreational space construction, golf course construction, tunnel construction, and other activities unrelated to maritime activities. Because of the manner in which these data are structured, it is difficult to determine how many of the 31 establishments and 446 employees that BLS estimates for the county’s “other heavy and civil engineering construction” are tied to maritime activities.

As noted, the 2018 inventory of marinas identified 303 marinas including 158 community marinas and 145 commercial marinas, including yacht clubs. This count of marinas varies sharply with the BLS estimate of 58 establishments in the marinas industry sector. The discrepancy is attributable to the NAICS (North American Industry Classification System) categorization of business entities that own marinas. For instance, if a country club also has a marina, its NAICS classification would almost certainly be “Golf Courses and Country Clubs,” not marinas. Because of data issues such as these, in certain instances this report utilizes secondary data sources to supplement BLS parameters.

Other maritime categories are simply subsumed statistically by larger categories and are not separately disaggregated. Dockside restaurants, for instance, are considered part of the maritime industry for the purpose of this study, but BLS data do not get more granular than “Restaurants and other eating places.” To account for this, the study team identified as many dockside restaurants as possible from available lists, including those on reliable websites. Obtaining employment information for each individual restaurant is difficult, particularly given the temporal overlap between this study and the COVID-19 pandemic. The study team was able to make some simplifying assumptions that allowed for an assessment of the collective employment, wage bill, and operational spending of these dockside Anne Arundel County eateries.

Similarly, it is difficult to capture the entire impact of Anne Arundel County’s myriad boat shows. Every April, the Annapolis Spring Sailboat Show hosts retailers and displays sailboats in Annapolis’ inner harbor. Every October, Annapolis hosts the United States Sailboat Show and the United States Powerboat Show.

Some of the economic impacts generated by these boat shows, such as the increased sales by local maritime industry vendors as a result of the event, are apparent within the data, while others are not.



Visitors who flock to these events from outside of the county spend their money at local hotels, restaurants, and retail establishments. Without a survey of visitors, however, it is impossible to estimate the volume of this enhanced local spending.

Boat-related, transportation-related, and fishing-related maritime businesses also contribute substantially to the county's economy. These maritime industry elements include 398 business establishments employing more than 2,700 workers. These workers have been associated with almost \$103 million in wages per annum. It is quite likely that these figures understate the size of the industry given some of the data considerations discussed above. Exhibit 2 provides statistical detail regarding the levels of economic activity supported by these aspects of the county's maritime industry.

Exhibit 2. Characteristics of Select Maritime Industry Sectors, Anne Arundel County

Maritime Industry Sector	Employment	Establishments	Total Wages (thousands)	Average Weekly Wages	Average Annual Pay
NAICS 3366 Ship & boat building	50	10	\$2,061	\$790	\$41,080
NAICS 441222 Boat dealers	421	49	\$19,629	\$897	\$46,653
NAICS 713930 Marinas ⁵	1,572	303	\$60,301	\$737	\$38,332
Boat-related	2,043	362	\$81,991	\$772	\$40,128
NAICS 483 Water transportation	57	7	\$7,469	\$2,513	\$130,655
NAICS 4872 Scenic & sightseeing transportation, water	121	4	\$2,805	\$448	\$23,281
Transportation-related	178	11	\$10,274	\$1,110	\$57,719
NAICS 1141 Commercial fishing	34	N.A.	\$181	N.A.	\$5,300
NAICS 44522 Fish & seafood markets	129	11	\$3,800	\$567	\$29,497
Fishing-related	163	11	\$3,981	N.A.	\$24,401
Dockside Restaurants⁷	331	14	\$6,927	\$403	\$20,956
Total direct maritime industry	2,715	398	\$103,173	\$803	\$41,755

Sources: BLS, IMPLAN

MARITIME-BASED RECREATION

The maritime industry has a significant recreational dimension. Recreational boating is served by many maritime industry businesses. The 2018 marina inventory identified not only marinas, but also the number of boat slips available at those marinas.

Exhibit 3 summarizes these data, which encompass 303 marinas with 12,035 boat slips. Because yacht clubs and community marinas tend to provide very limited services beyond moorage and boat storage and are also designed to serve only members or nearby residents, commercial marinas are of relatively greater interest from the perspective of economic impact. Commercial marinas serve both commercial and recreational boaters. In addition to supplying moorage and boat storage, they are also more likely

⁵ Study team made manual adjustments to these categories of BLS data to better reflect reality of industry.



to provide services such as sales of fuel, marine engines, repair services, boat trailers, groceries, beverages, fishing supplies, and watercraft accessories. Some Anne Arundel County commercial marinas also provide marine salvage, towing operations, and other services.⁶

Exhibit 3. Marinas in Anne Arundel County, 2018

Type of Marina	Number of Marinas	Number of Boat Slips
Commercial, excluding yacht clubs	132	7,066
Yacht clubs	13	1,373
Community	158	3,596
Totals	303	12,035

Source. Anne Arundel County Office of Planning & Zoning

The hundreds of marinas noted above serve boat owners who choose to keep their boats in the County, many of whom do not live in the County (e.g., Montgomery County residents). Marinas also serve transient boaters who use the services of marinas on a temporary basis as visitors to the County as opposed to those who keep their boats at marinas on a more permanent basis.

Key to understanding the economic impacts of recreational boating is estimating the number of recreational boats that are kept in the County either by residents or by non-residents who choose to make the County the base for their boating activities. Recreational boating tends to generate substantial spending for boats (e.g., boat and trailer purchases, marina services, maintenance, and repair) and for boat trips (e.g., fuel, groceries, fishing gear, and supplies). In many ways, recreational boaters are similar to tourists who create business for the hospitality industry (e.g., restaurants, lodging, other entertainment). For those who keep their recreational boats in the County, whether residents or non-residents, most of this spending occurs locally.

One estimate of the number of recreational boats owned by County residents is included in a June 2004 report prepared for the Department of Natural Resources (DNR), which registers recreational boats in the state. That report lists over 200,000 boats registered in Maryland including over 20,000 owned by non-Marylanders. In Anne Arundel County, the report lists almost 39,000 recreational boats, most of which are “trailerred” (i.e. smaller boats that can be towed by private vehicles).⁷

More recent estimates of County recreational boats that were linked to DNR registrations were not identified. Statewide recreational boat registrations, however, indicate a decline of roughly 15 percent in Maryland recreational boats over the past two decades. Separate estimates listed 181,544 boats in 2013 and 170,365 boats in 2018.⁸ If decline in the number of boats in the County mirrored statewide

⁶ Op. cit., Anne Arundel County Office of Planning & Zoning.

⁷ University of Baltimore and Parsons Brinkerhoff, “Maryland’s Recreational Boating and Infrastructure Plan,” Maryland Department of Natural Resources, June 2004 https://dnr.maryland.gov/boating/Documents/Boating_Plan05.pdf

⁸ Environmental Finance Center, “Recreational Boating and Fiscal Analysis Study,” Maryland Department of Natural Resources, September 2014 <https://dnr.maryland.gov/boating/Documents/Boating/2014>; National Marine Manufacturers Association, “Economic Impact Infographics by State” <https://www.nmma.org/statistics/boating-state-data-research>



trends, then the current number of recreational boats in the County might be approximately 33,000 including about 21,000 trailered boats and 12,000 non-trailered boats.

These estimates exclude commercial vessels which rely on marinas for a wide range of services. One source listed over 200 commercial vessels in the County including commercial fishing boats, freight barges, passenger boats, and other vessels.⁹

Exhibit 4 summarizes information on the estimated number of commercial and recreational boats and boat owners in Anne Arundel County. Most of these boats are recreational boats that are kept on trailers. The remaining recreational and commercial boats are large and are typically kept at marinas or at private piers on the many waterfront properties in the County.

Exhibit 4. Boat Owners in Anne Arundel County

Type of Boat	Number of Boats
Recreational boats: trailered	20,811
Recreational boats: non-trailered	12,179
Commercial fishing boats	90
Freight barges	22
Passenger boats	129
Other vessels	102
Total documented vessel owners	33,332

Source. DNR, Boatinfoworld

There are more than 12,000 boat slips at marinas in the county, roughly the number of larger recreational and commercial boats that are not kept on trailers. In addition to these boat slips at marinas, however, many waterfront homes in the County have piers where recreational boats are kept. These private piers expand the capacity of the County to be the base for recreational boat owners. If roughly one-third of non-trailered recreational boats are kept at private piers, there may be capacity for thousands of recreational boats owned by individuals who do not reside in the County. This capacity serves as a source of revenue to the county's economy without burdening local schools or emergency response services.

Most of these nonresident boat owners are recreational boaters who keep their boats in the county. Many use marinas only on an intermittent basis. These are sometimes referred to as transient boaters, who form a common part of the Chesapeake Bay region's boating culture.

Naturally, recreational boating depends upon bodies of water such as the Chesapeake Bay and is a major source of demand for goods and services from the maritime industry and other County

⁹ Boatinfoworld, "Anne Arundel County Maryland Boat, Yacht & Ship Owners".
<https://www.boatinfoworld.com/boat/registrations/anne-arundel-county-md-maryland.asp>.



businesses. However, boating is not the only water-related recreational activity generating significant economic activity.

A recent study conducted by the National Oceanic and Atmospheric Administration estimated that more than 48 million participants in the United States collectively spent over \$141 billion on ocean-related recreation in 2012. At \$16 billion, recreational boating represented a significant source of expenditure. Nevertheless, other activities accounted for even more spending, including recreational fishing and shellfishing (\$32 billion), viewing or photographing the ocean (\$38 billion), beachcombing, tidepooling, or collecting items (\$23 billion), and outdoor activities not involving water contact (\$20 billion). Water contact sports accounted for \$11 billion in expenditures, while hunting waterfowl or other animals accounted for \$376 million. For this report, ocean-related recreation included recreation tied to major estuaries in the United States like the Chesapeake Bay.¹⁰

The significance of this ocean-related (i.e. Bay-related) recreation is reflected in part in the dozens of shoreline facilities managed by County government. As noted above, these include parks, wharves, and other sites that provide water access for boating, fishing, swimming, and other shoreline recreation. Whether the interest is in paddle boards, fishing, crabbing, or just enjoying a walk along the shore, the waterfront is a major magnet for recreation and a generator of demands for goods and services. These demands stimulate economic activity and opportunities for county businesses.

MARITIME-BASED FEDERAL INSTITUTIONS AND FACILITIES

Since 1845, the Naval Academy has operated at the confluence of the Severn River and the Chesapeake Bay. In 2018, the Academy is estimated to have made total expenditures of \$440 million.¹¹ Employment at the Academy totaled 876 that year, including 335 instructional and research faculty.

To the north of the Naval Academy, the U.S. Coast Guard operates a shipyard on Curtis Bay. Tracing its origins to 1899, the shipyard is the only shipbuilding and major repair facility operated by the Coast Guard. Considered an essential part of the Coast Guard's core industrial base and fleet support operations, the YARD, as it is known, employed 1,007 Maryland workers in 2018 and performed more than \$116 million worth of contract work that year.¹²

¹⁰ Kosaka, R. and S. Steinback, "2012 National Ocean Recreation Expenditure Survey," July 2018.

¹¹ The budget estimate is based on full-time enrollment in 2018 of 4,512 students and core expenses per student of \$97,730 according to the Integrated Postsecondary Education Data System of the National Center for Education Statistics which also provides data on employment. <https://nces.ed.gov/ipeds/datacenter/institutionprofile.aspx?unitId=164155&goToReportId=6>.

¹² Maryland Department of Commerce, "Federal facilities profile: US Coast Guard Yard". <https://commerce.maryland.gov/grow/federal-contracting>.



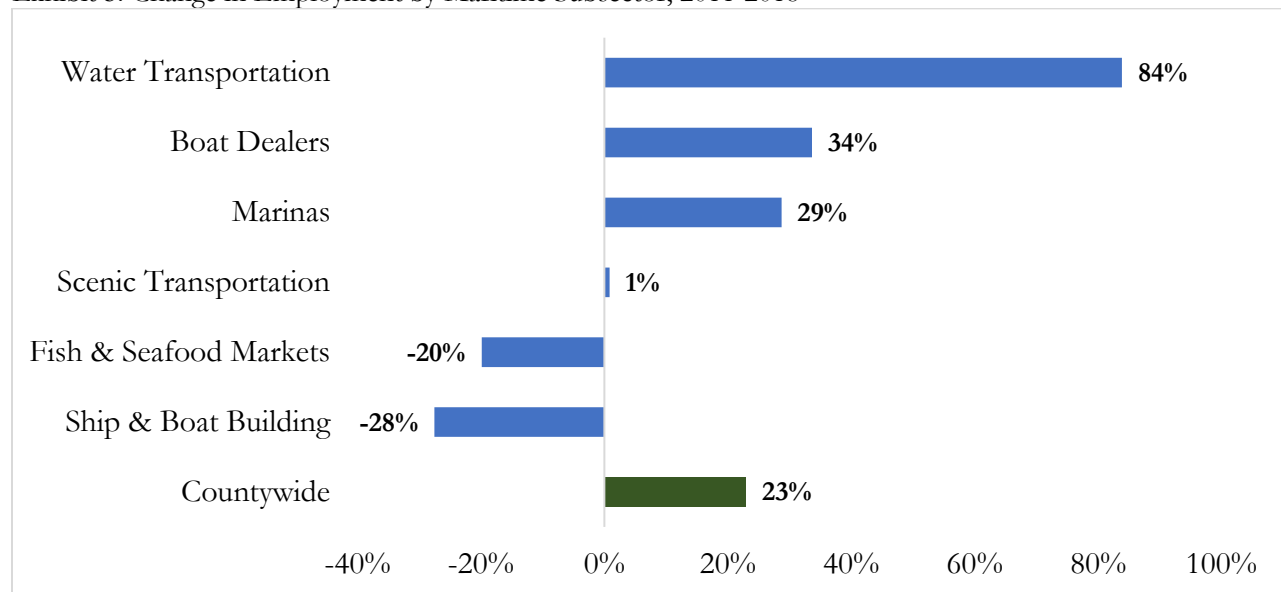
Maritime Industry Trends

The Naval Academy and the YARD are relatively stable components of the Anne Arundel County maritime industry. The other broad categories of the maritime industry — maritime businesses and recreation — are subject to more substantial changes over time and are far more susceptible to business cycles.

TRENDS IN MARITIME BUSINESSES

From 2011 to 2018, some segments of Anne Arundel County’s maritime industry expanded rapidly while others have steadily contracted. Employment in the water transportation category, for instance, increased by 84 percent over that span. This reflects only modest increase in absolute terms, however, from 31 employees in 2011 to 57 employees in 2018. Employment at boat dealers and marinas has also expanded since the end of the Great Recession.

Exhibit 5. Change in Employment by Maritime Subsector, 2011-2018



Source: Bureau of Labor Statistics, Sage

Other industry segments have not been as fortunate. Ship and boat building employment has contracted by 28 percent since 2011, while fish and seafood market employment fell 20 percent. It’s important to note that these were relatively small components of the county’s maritime industry, however, with the two segments combining to lose just 51 employees over an 8-year span.

Employment in the maritime industry in the county is dominated by boat dealers and marinas, which accounted for 75 percent of total industry employment in 2008. That share grew to nearly 85 percent of total industry employment by 2018.



While industry employment has expanded, there has been a consistent decrease in the number of maritime industry establishments since 2008. For all sectors, the number of establishments declined by 15 percent since 2008 and by 6 percent since 2011.

Boat building has experienced the most dramatic decrease in establishments, from 16 in 2008 to four in 2018, a 75 percent decline. Similarly, scenic and sightseeing transportation establishments have decreased from nine in 2008 to four in 2018.

Most other maritime industries have also experienced reductions in the number of establishments. The only industry segment with an increase in establishments is water transportation, which gained just one establishment over the course of a decade. Exhibit 6 supplies more complete statistical detail.

Exhibit 6. Establishments in the Maritime Industry

	Total	Ship & Boat Building	Boat Building	Boat Dealers	Marinas	Fish & Seafood Markets	Water Transportation	Scenic & Sightseeing Transportation
2008	453	18	16	62	329	13	6	9
2011	410	14	11	50	308	12	6	9
2015	387	7	4	44	308	11	8	5
2018	384	6	4	49	303	11	7	4

Source: BLS

Past is not necessarily prologue. The decline in establishments coupled with an increase in overall employment is consistent with the notion that Anne Arundel County policymakers should provide additional support for business survival and growth. As an example of a major opportunity, more of the global supply chain is being reshored to the United States. This includes boatbuilding and shipbuilding activities. These are the types of activities that County policymakers should consider in their deliberations, including with respect to support for relevant training programs.

TRENDS IN RECREATION

One measure of trends in recreational boating is the capacity of county marinas. The 2018 inventory included data on the inventory in 1980. As reflected in Exhibit 7, there has been remarkable growth in the number of marinas since 1980. The growth in the number of boat slips has been even more dramatic, increasing 581 percent since 1980 from 1,767 boat slips to 12,035. While the inventory of marinas conducted by the County is not directly comparable to the data on marinas compiled by the Bureau of Labor Statistics, both sources show a significant growth in activity at marinas over time.

Exhibit 7. Marinas and Boat Slips

	Marinas	Boat Slips
1980	57	1,767
2018	303	12,035
Growth	432%	581%

Source: Anne Arundel County Office of Planning & Zoning



Maritime Industry Economic Contributions

MARITIME ENTERPRISES

The maritime industry's major elements contribute to the local economy in two ways beyond directly supported employment, wages, and business sales. First, each establishment requires goods and services to operate. These inputs to the businesses and establishments create a supply chain that encompasses both local providers of those goods and services as well as providers located outside the county. To the extent that the operations of maritime businesses create demand for other county businesses, this expands the maritime industry's contributions to the local economy. These contributions to the economy are considered the indirect effect of the maritime industry.

Second, when maritime industry workers, whether directly or indirectly supported, spend their wages in the county, they create additional revenue opportunities for a diverse array of businesses operating in the consumer economy. These contributions are considered the induced effects of the maritime industry. Together, indirect and induced effects are referred to as the multiplier effect. Adding these multiplier effects to direct impacts produces total economic impact.

Exhibit 8 summarizes the economic contributions of Anne Arundel County's maritime businesses. The industry directly supports more than 2,700 positions, more than \$103 million in annual labor income, and nearly a quarter of a billion dollars in output/business sales. Maritime industry enterprises support another 469 jobs via the supply chain (indirect effects). Induced (household spending) impacts add another 457 positions.

In total, maritime businesses support an estimated 3,640 jobs, which represent a mix of full-time and part-time positions. These workers receive almost \$150 million in annual compensation, or in the range of \$41,208/position/year. The business sales/output supported by maritime businesses is estimated at approximately \$380 million per annum. To reiterate, these impacts relate to maritime businesses that provide services such as marinas and those in water transportation as well as businesses primarily engaged in selling products, particularly boats, boating equipment, boat repair services, and supplies.

Exhibit 8. Economic Contributions of Maritime Businesses

Impact Type	Employment (full- and part-time jobs)	Labor Income (millions)	Business Sales/Output (millions)
Direct Effect	2,715	\$103.2	\$246.2
Indirect Effect	469	\$26.2	\$72.4
Induced Effect	457	\$19.9	\$59.9
Total Effect	3,641	\$149.3	\$378.5

Sources. IMPLAN, Sage



Because most of the value of goods is associated with the manufacture or production of those goods, much of the economic benefit when goods are sold is allocated to the location where they are manufactured or produced. Boats sold in the county are not necessarily built in the county. Indeed, they are very likely to be built elsewhere. Similarly, fuel for boats sold in the county is refined elsewhere. In these instances, the economic contribution of that out-of-county production is not included in the estimated output contributions reflected in Exhibit 8.

RECREATIONAL BOATING

Recreational boating generates a significant amount of spending both on boats themselves as well as upon activities associated with boat trips. An assessment of the economics of recreational boating in Virginia supplies useful information that likely applies to recreational boating in Anne Arundel County.

That assessment analyzed spending behavior associated with more than 250,000 power and sail boats ranging in size from under 16 feet to greater than 40 feet. On average, a boat owner spends more than \$4,600 annually on maintenance and repairs of these boats and on boat trips. This spending ranges widely and depends primarily upon the length of the boat and the demand for fuel. Powerboats and sailboats under 16 feet in length registered average annual expenditures of approximately \$1,400. The typical sailboat over 40 feet in length generated annual spending approaching \$27,000, while powerboats in excess of 40 feet in length generated annual spending exceeding \$48,000.¹³ This form of spending encompasses thousands of people, and therefore represents a sizable source of economic impact.

As noted earlier, Sage estimates that there are approximately 33,000 recreational boat owners in Anne Arundel County.¹⁴ Over 60 percent of these boats are kept on trailers and many of the non-traileried boats are kept at private piers at waterfront homes. If it is assumed that one-third of non-traileried boats are at private piers, then County boat owners might dock over 8,000 boats at county marinas. In this case, there are plenty of other boat slips available for recreational boaters who live outside the county. This is still the case even if one presumes that all commercial and other non-recreational boats registered in the county utilize local boat slips and that some boat slips are vacant or are used by transient boaters who use County marinas on an intermittent basis.

Under these assumptions, more than 11,500 boat slips are available for recreational boaters, including over 2,000 boat slips available for nonlocal recreational boaters. Accordingly, the estimate of 35,000 recreational boats in Anne Arundel County is a conservative one.

The economic contribution of 35,000 recreational boaters to the county's economy is summarized in Exhibit 9. Approximately 42 percent of recreational boating expenditures identified in the study of Virginia's boating industry were attributable to marinas, boat dealers, and other establishments that form an important part of the maritime industry. Spending associated with boat trips, however,

¹³ Murray, Thomas, "Assessment of the economic impacts of recreational boating in Virginia," Virginia Institute of Marine Science, December 2012. Spending estimates in the Virginia study were in 2012 dollars and have been adjusted to 2018 values for use in this analysis.

¹⁴ Op. cit., DNR.



includes purchases of groceries, fishing supplies, restaurant meals, lodging, and miscellaneous retail goods. Recreational boaters also spend money on registering their boats and other government related expenses. The contributions associated with spending on services provided by marinas and other maritime businesses as well as purchases of boats or boating supplies from boat dealers are estimated above in Exhibit 8.

Total employment associated with the non-maritime industry spending of recreational boating activity is estimated at 1,536 jobs. These jobs are associated with earnings estimated at \$60.7 million. Output associated with this spending is estimated at \$150.8 million. As noted above, the estimated value of output for goods only includes the value added in the county. When recreational boaters purchase fishing supplies or apparel or other items during their boating trips, the economic contribution of the manufacture or production of those items is often located outside the county. To the extent that County policymakers can support greater production of what is consumed locally, economic impacts would expand aggressively.

Exhibit 9. Economic Contributions of Recreational Boating Excluding Maritime Businesses

Impact Type	Employment (full- and part-time jobs)	Labor Income (millions)	Business Sales/Output (millions)
Direct Effect	1,182	\$42.4	\$96.2
Indirect Effect	148	\$8.5	\$25.2
Induced Effect	207	\$9.8	\$29.4
Total Effect	1,536	\$60.7	\$150.8

Sources. IMPLAN, Sage

FEDERAL INSTITUTIONS AND FACILITIES

The U.S. Coast Guard YARD is another significant source of economic contributions to the local economy. This shipyard directly employed over a thousand workers and had contracts worth \$116 million in 2018. When the supply chain (i.e. indirect effects) and spending of wages in the local economy (i.e. induced effects) are considered, the activities of the shipyard support an estimated 1,386 jobs in the county and wages exceeding \$64 million. Total local business sales/output are augmented by \$177 million.

The U.S. Naval Academy is not only iconic, but also a major contributor to the local economy. As noted above the Academy had a budget estimated at approximately \$440 million in 2018. Employment at the Academy totaled 876 that year, including 335 instructional and research faculty.¹⁵ Sage estimates that the share of the budget that is spent in Anne Arundel County is 67 percent based on the ability of county establishments to supply the goods and services that the Academy requires to operate.¹⁶

¹⁵ Op. cit., Integrated Postsecondary Education Data System of the National Center for Education Statistics.

¹⁶ IMPLAN, an industry standard economic data service, generates models of county economies. These models provide estimates of direct, indirect, and induced impacts of local industries, including colleges and universities as well as ability of local industries to meet demands generated by the local economy. For Anne Arundel County, the weighted average ability of County industries to meet local demand is 67 percent based on IMPLAN estimates of institutional demand. That estimate is used to calculate the share of Academy spending that occurs locally.



Exhibit 10. Economic Contributions of U.S. Coast Guard YARD

Impact Type	Employment (full- and part-time jobs)	Labor Income (millions)	Business Sales/Output (millions)
Direct Effect	1,007	\$41.4	\$116.2
Indirect Effect	188	\$14.0	\$33.5
Induced Effect	190	\$9.1	\$27.4
Total Effect	1,386	\$64.5	\$177.0

Sources. IMPLAN, Sage

Exhibit 11 summarizes estimated contributions of the Academy to Anne Arundel County’s economy. This estimate credits all Academy employment and 67 percent of the output (i.e. budget expenditures) to the county. Total impacts include 2,025 jobs with associated income of \$142 million and \$467 million in output.

Exhibit 11. Economic Contributions of U.S. Naval Academy

Impact Type	Employment (full- and part-time jobs)	Labor Income (millions)	Business Sales/Output (millions)
Direct Effect	876	\$87.6	\$295.8
Indirect Effect	432	\$19.7	\$68.3
Induced Effect	717	\$34.3	\$103.1
Total Effect	2,025	\$141.7	\$467.2

Sources. IMPLAN, Sage

TOTAL ECONOMIC CONTRIBUTIONS

Exhibit 12 summarizes these various contributions that the maritime industry makes to the economy of Anne Arundel County. Total impacts include nearly 8,600 jobs with associated annual income of \$416 million and more than \$1.1 billion of annual economic activity.

Exhibit 12. Summary of Economic Contributions of Maritime Industry in Anne Arundel County

Impact Type	Employment (full- and part-time jobs)	Labor Income (millions)	Business Sales/Output (millions)
Direct Effect	5,780	\$274.6	\$754.4
Indirect Effect	1,237	\$68.4	\$199.4
Induced Effect	1,571	\$73.1	\$219.8
Total Effect	8,588	\$416.1	\$1,173.5

Sources. IMPLAN, Sage

In an effort to contextualize these impacts, it is worth noting that Anne Arundel County’s maritime industry’s \$1.2 billion in annual economic activity equates to approximately 2.5 percent of Anne Arundel County’s annual gross county product as reported by the U.S. Bureau of Economic Analysis. According to IMPLAN data, the county’s maritime industry supports approximately 43 times more economic activity than the county’s agriculture industry. Moreover, Anne Arundel County accounts for more than a quarter of statewide maritime jobs. Nearly four out of ten boat dealerships and three out of ten marinas in the state are located in the county.



Maritime Industry Fiscal Contributions

The maritime industry supports an estimated \$416 million in annual income in Anne Arundel County. Based on income tax receipts during tax year 2018, the effective personal income tax rates for residents of Anne Arundel County can be estimated.¹⁷ Using these effective tax rates, state and local annual personal income tax collections that this income generates can also be estimated. As indicated in Exhibit 13, state and local collections are estimated at \$16.8 million and \$8.7 million, respectively.

Exhibit 13. Estimated Income Tax Impacts

Type of Tax	Net Tax Rate	Tax (millions)
State share of personal income tax	4.039%	\$16.8
Local share of personal income tax	2.102%	\$8.7
Total		\$25.6

Source. Comptroller of Maryland

Obviously, Maryland's local governments also rely on property taxes to support operations. Workers in the maritime industry pay these taxes on their residences either directly or as part of their rent. Maritime industry businesses also incur property taxes, both for the real property they own and the personal property (i.e. the furnishings, fixtures, and equipment) located at these properties.

Assessed values of properties are available from a real property database maintained by the Maryland Department of Assessments and Taxation.¹⁸ The assessed values of a half dozen marinas were gathered from the database to provide a sense of the magnitude of fiscal impact. On average, these marinas registered assessed real property values of almost \$4 million each. Not included in this value was the value of personal property at these marinas.

Most of the assessed value at these marinas was associated with land, rather than improvements (i.e. structures built on the land). For the six marinas, the share of total assessed value attributed to land ranged from 62 percent to 85 percent and averaged 77 percent.

To estimate the real property tax contributions of marinas, Sage examined the value of boat slips. While many boat slips are provided on a rental basis, others are sold to individual boat owners. A review of boat slips currently for sale in Maryland at marinas on the Chesapeake Bay identified 209 slips in four marinas. Values are generally correlated to the size of the slip as measured by its length. Value is also affected by the amenities available at the relevant marina. Some marinas offer relatively limited amenities while other provide extensive facilities and services, including clubhouses, swimming

¹⁷ Effective tax rates are defined as the actual tax revenue generated as a percentage of the Maryland Adjusted Gross Income (Comptroller of Maryland, "2018 Income Tax Summary Report". <https://www.marylandtaxes.gov/reports/income-summary.php>).

¹⁸ Maryland Department of Assessments and Taxation, "Real Property Data Search". <https://sdat.dat.maryland.gov/RealProperty/Pages/default.aspx>.



pools and repair services. These slips range in price from \$1,500 to \$86,000. The average asking price for these boat slips was \$24,600 for a boat slip almost 39 feet in length.¹⁹

To help begin to understand the real property taxes that the maritime industry contributes to local government, real property taxes associated with marinas, the majority of all maritime industry establishments, were estimated. The estimate is based on the total number of boat slips in the county, 12,035 in 2018, and the estimated value of these slips. At an average value of \$24,600, the total number of boat slips at County marinas are valued at \$296 million. This value represents some, but not all, of the value of these marinas. Given that land values represent most of the assessed value of the handful of marinas that were identified in the state’s database of property assessments, a conservative estimate of the value of all marinas would be three times the value of the boat slips or \$888 million.

The Maryland Department of Assessments and Taxation publishes real property tax rates for Anne Arundel County and the City of Annapolis.²⁰ Because some marinas are located in Annapolis, they are subject to both County and Annapolis property taxes.

Exhibit 14 summarizes the estimate of annual real property taxes generated by marinas. These properties generate an estimated \$8.3 million in County real property taxes and \$200,000 for the City of Annapolis per annum.

Exhibit 14. Estimated Real Property Tax for County Marinas

Factor	Value
No. of county boat slips	12,035
Average price per boat slip	\$24,600
Total value of boat slips (millions)	\$296
Total value of marinas (millions)	\$888
Anne Arundel County tax at 0.935% (millions)	\$8.3
Annapolis tax at 0.561% for 5% of total slips (millions)	\$0.2

Source: Maryland Department of Assessments and Taxation, Sage

The value of the maritime industry’s real property is not restricted to marinas. As noted in Exhibit 2, there are almost 100 other known maritime industry establishments that are subject to property taxes. Moreover, these values do not include the real property taxes paid by maritime industry workers on their residences or the personal property taxes paid by the industry’s businesses. The total value of all these property taxes is almost certainly in the millions of dollars per annum.

¹⁹ Asking prices for boat slips were obtained from Anchorage Marina (<https://www.anchagemarina.com/boat-slips-for-sale-baltimore>) Bowleys Marina (<https://bowleysmarina.com/marina-slip-sales-map/>), Magothy Marina (<http://magothymarina.com/slip-info.html>), and Piney Narrows Yacht Haven (<https://pineynarrowsyachthaven.com/piney-narrows-boat-slips-lease-and-sales/>).

²⁰ Maryland Department of Assessments and Taxation. "Tax Rates". <https://dat.maryland.gov/Pages/Tax-Rates.aspx>.



RECOMMENDATIONS

As stated in the sections above, the maritime industry's impact on Anne Arundel County is real and significant. This section of the report discusses the most prominent opportunities and threats facing the industry, presenting five recommendations to ensure continued industry expansion. Note that some of these recommendations are more feasible than others. For instance, implementing expanded workforce training programs is feasible and relatively simple, while reforming the process by which someone obtains a permit from the Maryland Department of the Environment (MDE) is not.

ENSURE A CAPABLE WORKFORCE

During focus groups conducted with industry stakeholders, nearly every participant listed a lack of available workers among the greatest threats to Anne Arundel County's maritime industry. The industry's current workforce is aging, and many businesses struggle to attract younger talent. Accordingly, there is concern that when the current generation of maritime workers retires, the industry will contract due to a lack of available talent.

The inability to identify workers has already affected industry growth and, anecdotally, has caused enterprises to leave the industry. For instance, worker shortages have rendered boaters unable to secure necessary repairs, resulting in many boaters disengaging. As one stakeholder explained, the lack of easily consumable and affordable repair services entices some to "sell their boats and take up golf".

With some programs already in place that can serve as a template for future workforce development efforts, this issue represents the industry's lowest hanging fruit. However, a pervasive reluctance among parents and educators to push students toward careers that do not require a college degree must be overcome. It is conceivable that the economic dislocations generated by COVID-19 will induce more young people to broaden their occupational considerations.

RECOMMENDATION 1: INCREASE YOUTH AWARENESS OF MARITIME CAREERS

Assuming these cultural hurdles can be overcome, a multifaceted approach involving youth outreach, technical and vocational training programs, and apprenticeship programs can ensure that Anne Arundel County's maritime industry has the necessary workforce to thrive over the next several decades. That would not only help improve maritime industry prospects, but would also pave the way for the creation of more middle-income jobs in the county that do not require substantial formal educational attainment, including in boat-building and boat repair.



Roughly two in three U.S. adults does not have a college degree²¹, yet when asked the question “How important is a college education today?” 87 percent respond with either “very important” or “fairly important.”²² This view — that one must invest time and money into college education to succeed in contemporary society — has left several industries scrambling to fill open positions.

For Anne Arundel County’s maritime industry, there’s good and bad news along this dimension. The bad news is that this cultural view has gained traction over the past half-century, a period during which the share of Americans graduating from college increased by more than 300 percent. Removing the stigma associated with blue collar jobs, many of which pay wages in excess of many white-collar jobs, will not be easy.

The good news is that there is some evidence indicating that perspectives are already shifting. In 2013, 70 percent of Americans thought a college education was “very important.” That fell to 51 percent by 2019. Campaigns by organizations associated with the skilled trades — careers that typically don’t require a college degree — likely contribute to this shifting perception. Concerns related to college affordability, a desire to avoid significant debt accumulation, and return on investment have likely helped as well.

To the extent that the county’s industry can influence views on the merits of a maritime career, we recommend exposing students to the idea of working in the maritime industry early and often. Career fairs, having a presence at youth maritime-related events, and working with vocational training programs will all help to seed the idea that a maritime career represents a worthwhile pursuit that can support an elevated quality of life and more broadly shared prosperity.

RECOMMENDATION 2: EXPAND & COLLABORATE WITH TECHNICAL TRAINING PROGRAMS

Career training programs should target students who do not attend traditional four-year colleges, funneling a sufficient fraction of youth population toward stable employment opportunities within the maritime industry. This approach should make students aware of the industry’s employment opportunities at as young an age as possible while stressing myriad perks: high incomes, proximity to jobs, and the ability to work near the water. Proximity to the water has been a human desire for millennia.

Anecdotally, a student from Shady Side was first exposed to the industry through the Marine Service Technician Program at the Center of Applied Technology (CAT) South, an Anne Arundel County Public Schools’ magnet program offering vocational training options.²³ Upon graduating, that student

²¹ National Center for Education Statistics, Digest of Education Statistics, Rates of high school completion and bachelor's degree attainment among persons age 25 and over, by race/ethnicity and sex: Selected years, 1910 through 2018.

²² Gallup, “Half in U.S. Now Consider College Education Very Important.” Stephanie Marken. December 30, 2019.

²³ Anne Arundel County Public Schools, “Marine Trades Association of Maryland Continued Trainee Success,” aacps.org.



completed the six-week Marine Trades Association of Maryland (MTAM) on-the-job training program before eventually gaining full time employment as a marine service technician at a county marina.

That MTAM on-the-job training program consists of an orientation that introduces all participants to the industry's various career options, a six-week paid training program, and work placement for qualified participants. The program partners with 77 companies across the state to supply training and hire potential graduates.

According to industry leaders, the MTAM training program is “a great model for local industry manpower development.” We recommend that the Anne Arundel Economic Development Corporation encourage maritime firms to lean into the program, commit resources to attracting participants to the training program, provide supplemental training assistance, and strongly consider hiring program graduates, even during challenging economic times.

RECOMMENDATION 3: PARTNER WITH ANNE ARUNDEL COMMUNITY COLLEGE (AACC) TO BUILD MARINE SERVICES TECHNOLOGY PROGRAM

The American Boat and Yacht Council (ABYC) operates a Marine Service Technology Program that secondary schools can use to implement a standards-based curriculum that allows students to earn a marine service technician certificate and digital badge of achievement upon completion. These certificates are approved by the National Occupational Competency Testing Institute (NOCTI). Industry stakeholders indicate that having the ABYC at Anne Arundel Community College would be a “game changer” for the industry’s workforce development efforts.

Conversations with Community College officials suggest that the institution is amenable to implementing the ABYC curriculum, but may not be able to afford its total cost. While the curriculum itself is not particularly expensive — \$5,499 for the initial curriculum package and a \$599 annual maintenance fee, the program requires a workshop. While AACC likely has the requisite space to build the necessary workshop, outfitting that workshop will likely cost upwards of \$15,000.

Given how COVID-19 has impacted educational budgets, it is unlikely that AACC can expeditiously fund outfitting the workshop, although conversations with school officials indicate a willingness to fund the ABYC curriculum package. We recommend that the County and maritime industry stakeholders collaborate with AACC to fund the facilities necessary to implement the ABYC curriculum.



A CONVOLUTED PERMITTING PROCESS

Many maritime industry leaders decry the difficulty of developing along Anne Arundel County's shorelines. Part of the issue involves overly-restrictive zoning that renders significant portions of the waterfront unusable. This zoning, of course, is the result of prior democratic processes in which communities across Anne Arundel County have pushed back on the idea of waterfront or water-adjacent development (while simultaneously expressing a need for more tourism activity). There is no simple answer to this other than to revisit waterfront zoning with an eye toward balancing considerations of jobs, tax collections, the environment, traffic, etc.

Perhaps a larger inhibition to maritime industry expansion is the difficulty developers face when attempting to obtain a permit from the Maryland Department of the Environment (MDE). According to conversations with industry stakeholders, obtaining a permit for development from the MDE is "overly complex," "glacial," and can be "prohibitively expensive and time consuming." Data from MDE support these views, with the average time to process an application for a tidal wetland permit ranging from eight to eleven months.²⁴ These are the average times, meaning that at least some portion of applications take longer to process, and there is no guarantee that a permit will be approved. Direct fees range from \$750 to \$7,500, though many applications require legal and environmental consultants to complete, driving costs significantly higher.

For many would-be maritime entrepreneurs, the costs (both temporal and fiscal) of the permitting process are too steep and/or too difficult. This has contributed to the decline in the number of Anne Arundel County maritime businesses observed over the past decade. From 2008 to 2018, the number of maritime-related businesses in Anne Arundel County decreased by roughly 15 percent.

RECOMMENDATION 4: PROVIDE RESOURCES TO HELP GUIDE MARITIME BUSINESSES THROUGH THE PERMITTING PROCESS

Anne Arundel County should designate a staff member to supply guidance and resources to maritime industry entities trying to navigate the County and MDE permitting process. This coordinator should make themselves available to maritime businesses seeking to infuse entrepreneurship along the county's waterfront, including in ways that are both economically and environmentally friendly. Establishing channels of communication with MDE to resolve disputes and streamline communications between permit applicants and the State and County would serve to reduce the uncertainty involved in the process and increase the likelihood that entrepreneurs persevere.

²⁴ Maryland Department of the Environment Proposed Calendar Year 2020 Standard Permit Application Turnaround Times.



MAINTAIN ENVIRONMENTAL AWARENESS

RECOMMENDATION 5: SUPPORT EFFORTS TO IMPROVE ANNE ARUNDEL COUNTY'S WATER QUALITY

Some Anne Arundel County maritime stakeholders have expressed concerns that degraded water quality could negatively impact economic outcomes. While this study is not focused upon environmental science, it is clear that sufficiently compromised water quality would negatively impact recreational activities critical to large segments of the county's maritime sector. This includes marinas, recreational boating, and fishing. Steps to mitigate this potential risk should be pursued by the Maritime Board, including in the form of aggressively supporting efforts to pursue federal funding to improve the Chesapeake Bay's water quality.

Conclusion

The maritime industry already supports significant economic activity in Anne Arundel County while improving quality of life and bolstering the middle class. Resident incomes are higher as a result as are community property values. This provides the County with additional tax receipts and supports approximately \$1.2 billion in economic activity countywide each year. Sage estimates that maritime activities support \$8.7 million in County income tax collections each year and more than \$8 million in real property tax collections from marinas alone.

Some of these revenues should be reinvested in the maritime industry, including into impactful programmatic offerings at Anne Arundel Community College. At the same time, industry stakeholders should be positioned to more easily navigate permitting processes to accelerate investment. This would help speed the county's recovery from the COVID-19 induced recession while providing more middle-income jobs for those who have been dislocated economically by the crisis.



Appendix A: COVID-19 & The Maritime Industry

The quantitative data that forms the basis of most of this analysis predates the onset of the coronavirus pandemic. The pandemic, which began in earnest in the United States during the first half of March 2020, has had a remarkable effect on the nation's economy and has resulted in unemployment levels unseen since the Great Depression.

A recent discussion with leaders of the maritime industry in Anne Arundel County suggests that business activity across the maritime industry in March and April may only have been about 40 percent of normal levels, but rose to perhaps 75 percent by the end of May.²⁵ As one industry leader explained, “we all had an April that wasn’t.”

As of early June, however, it appears that some segments of Anne Arundel County's maritime industry have and will continue to suffer the effects of COVID-19, while others have escaped relatively unscathed. Waterfront dining (like all forms of dining) has been devastated by the pandemic. Beyond legal prohibitions regarding complete reopening, restaurants will have to grapple with consumers who may be hesitant to return to eating indoors at restaurants.

Social distancing also poses challenges for boat shows that typically draw large crowds. Creating appropriate distances and spacing would diminish attendance, but as one industry professional explained could also spread attendance more evenly over the days of boat shows, with exhibitors only able to attend for one day of the weekend-long event. Summer camps and sailing schools face similar constraints.

Other maritime industry segments appear to be thriving. Social distancing directives and travel restrictions have inured to the benefit of the recreational boating industry, with several industry leaders noting “an explosion in demand for boat use.” One professional who sells boats at the “the lower end of the price range” said that as of May 2020 “sales are up 60 percent year-over-year” and would be up by more if not for supply chain issues and a lack of inventory. Another industry leader asserted that “boating is more relevant now than ever” and that interest in boating clubs and organizations is at unprecedented levels.

Anecdotes suggest some consumers have used funds set aside for now-canceled vacations to purchase boats. One industry leader spoke of a couple who had planned a summer vacation in Europe, but opted to purchase a boat instead.

²⁵ Maritime leader comments were made at a meeting of the Anne Arundel County Maritime Advisory Board, June 1, 2020.



Data from the U.S. Bureau of Economic Analysis support the notion that demand for recreational boats has surged during the pandemic. While retail sales statistics do not disaggregate boat dealerships from other motorized vehicle dealerships, spending in the category that encompasses increased by 52 percent from April to May 2020 and is only marginally lower than in May 2019.

Another factor aiding the recreational boating industry is the composition of job losses associated with COVID-19. While recreational vessels are a discretionary, luxury good, the pandemic did not impact high-wage earners nearly as harshly as it did those in lower-wage positions. The job losses so disproportionately affected low-earners during the pandemic, that in April 2020, a month that saw the unemployment rate (14.7%) rise to its highest level since World War II, average hourly earnings *climbed* to their highest-ever level according to the Bureau of Labor Statistics.

While the full economic consequences of COVID-19 remain unclear as of this writing, a period during which infection rates in Maryland and the balance of the nation are rising (summer 2020), it appears that Anne Arundel County's maritime industry has weathered the storm better than most industries. As this report indicates, assisting the industry in relevant ways would help accelerate industry growth, thereby supplying significant numbers of new middle-income opportunities for many who have suffered interruptions to their pre-existing career trajectories.



A Sage Report

