The Economic Impact of NIWC Atlantic

A National and State-Level Analysis

Naval Information Warfare Center

ATLANTIC

Developed by:

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Executive Summary

The purpose of this study is to complete a comprehensive economic impact analysis of the Naval Information Warfare Center Atlantic (NIWC Atlantic) on the United States. As part of the Department of the United States Navy, the primary purpose of NIWC Atlantic is to design and deploy advanced communications and information systems in the service of national defense. This includes significant engineering and technical support in the development and implementation of C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) solutions that support a wide variety of military operations.

NIWC Atlantic maintains facilities in six states in the United States, generating a significant national economic footprint. These impacts can be observed through direct job and income creation as well as procurement efforts that support a vast supplier network consisting of thousands of businesses across the United States. In addition, NIWC Atlantic actively promotes technological development that helps to sustain long-run economic growth. The key findings of this study are as follows:

- *The total economic impact resulting from all activities associated with NIWC Atlantic on the United States is estimated to be approximately $10.0 billion. This figure reflects the dollar value of all final goods and services that can be attributed (either directly or indirectly) to NIWC Atlantic. This impact corresponds to 41,419 jobs and $3.8 billion in labor income that would not exist otherwise.*

- *The largest state-level economic impacts of NIWC Atlantic are concentrated in Virginia and in South Carolina ($2.6 billion and $2.1 billion). Additionally, NIWC Atlantic also generates significant economic impacts in the states of Maryland ($426.0 million), Florida ($156.3 million), Louisiana ($124.2 million), and Washington, DC ($123.1 million).*

- *NIWC Atlantic provides a high-skilled, high-wage workforce to the regions in which it operates, supporting a growing knowledge economy; much of this workforce is also actively engaged in cyber security. Cyber security generally refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from damage or unauthorized access. As of FY24, approximately 50.1 percent of all NIWC Atlantic personnel were identified as having some level of cyber security-related job functions.*

- *Local regions with a high percentage of technology-driven sectors are among those that are growing at the fastest rates across the country, meaning that NIWC Atlantic facilities are providing a disproportionately large contribution to the health of the local economies in which they are engaged.*

- *One of the current ongoing challenges facing many organizations across all industries in the United States is attracting and retaining qualified workers. This study also presents the results of an analysis that provides a closer inspection of the specific workforce needs of NIWC Atlantic and then compares these needs to broader labor market trends in order to identify potential hiring challenges that NIWC Atlantic may face in the coming years.*

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Section I – Introduction

The Naval Information Warfare Center Atlantic (NIWC Atlantic) is a military facility headquartered in Charleston, South Carolina that is responsible for designing and deploying advanced communications and information systems in the service of national defense. To that end, NIWC Atlantic provides systems engineering and technical support for C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) that is used to transform ships, aircraft, and vehicles from individual units into integrated joint forces. As part of the Naval Information Warfare Systems Command, NIWC Atlantic serves as the Navy's technical lead for C4ISR and provides both hardware and software products that aid in these goals.

NIWC Atlantic has facilities located in multiple states and is a major contributor to local economies across the country. For South Carolina in particular, NIWC Atlantic's Charleston facility represents one of the region's largest employers and is a major driver of the overall Charleston economy. The economic impact of each NIWC Atlantic facility can be observed through its effects both at the local and national levels, most notably through job and income creation, local procurement efforts that support a large volume of local suppliers and defense contractors, and through promoting technological development that helps to support and increase long-run economic growth rates.

The contributions of NIWC Atlantic to technological development include a general expansion of the knowledge economy as well as a specific focus on the development of cyber security, which is becoming increasingly important in all regions that rely on technology-driven industries for economic growth. Local regions with a high percentage of technology-driven sectors are among those that are growing at the fastest rates across the country, meaning that NIWC Atlantic facilities are providing

a disproportionately large contribution to the health of the local economies in which they are engaged.

The purpose of this study is to quantify the economic impact of NIWC Atlantic on the state economies of South Carolina, Virginia, Maryland, Florida, Louisiana, Washington, DC, and for the United States overall. The primary results of this study will be expressed as a set of standard economic statistics that measure the impact of an organization on its local economy. These will include total economic output, employment, and labor income. To estimate these impacts, the Division of Research used information on NIWC Atlantic activities for fiscal years 2018-2024 and assessed the total impacts using a customized regional input-output model with specific state-level parameters for each region. A separate set of national parameters was used to determine the economic impact of NIWC Atlantic on the United States.

In addition, this study conducts a workforce analysis designed to identify potential hiring challenges that NIWC Atlantic may face in the coming years. More specifically, this study examines (1) the occupational workforce needs of NIWC Atlantic and (2) the projected growth of these occupations over the next decade in the U.S. labor market. These two sets of data are then compared in order to determine the employment positions that will be both the most and least challenging for NIWC Atlantic to fill over the next decade.

Section II – Overview of the NIWC Atlantic Labor Force

One of the primary drivers of any regional economy is innovation and technological advancement. NIWC Atlantic contributes to both, as its primary purpose is to provide advanced technology solutions that encompass command, control, communications, computers, intelligence, surveillance, and reconnaissance in support of the United States military. Examples of NIWC Atlantic's high-technology

solutions include battle management systems; undersea, terrestrial and space sensors; information transfer systems; joint and naval satellite communications systems; and information management systems. Through these operations, NIWC Atlantic makes a significant contribution to cultivating the skilled labor force of each local region in which it maintains a presence. The analysis of the NIWC Atlantic Charleston workforce presented below is one example and is representative of how NIWC Atlantic supports high-wage, high-skilled employment at each of its facilities in the United States.

Contributions to the Knowledge Economy

As of FY24, NIWC Atlantic employs a workforce of 3,207civilians in South Carolina, most of whom are located in the Charleston tri-county area. Many of these workers have advanced degrees in technical fields, making NIWC Atlantic a significant driver of the knowledge economy. Table 1 summarizes the distribution and average total compensation of each major occupation group across all 3,207 employees.

Table 1 – NIWC Atlantic Civilian Occupation Groups in South Carolina: FY24

Occupation Group Description	% of Total Workforce	Avg. Total Compensation
Accounting and Budget	12.0%	$108,750
Business and Industry	3.3%	$116,371
Education	0.1%	$129,385
Engineering and Architecture	31.5%	$124,575
Equipment, Facilities, and Services	0.3%	$122,834
General, Administrative, Clerical, and Office Services	18.5%	$114,972
Human Resources Management	1.1%	$97,617
Information and Arts	0.3%	$110,407
Information Technology	22.6%	$126,739
Inspection, Investigation, Enforcement, and Compliance	0.2%	$133,252
Legal and Kindred	0.4%	$159,820
Mathematical Sciences	16.8%	$113,166
Miscellaneous Occupations	1.8%	$90,584
Natural Resources Management and Biological Sciences	0.0%	$132,998
Physical Sciences	0.3%	$120,069
Quality Assurance, Inspection, and Grading	0.5%	$120,585
Social Science, Psychology, and Welfare	0.0%	$178,707
Supply	0.4%	$107,611

Occupation Group Description	% of Total Workforce	Avg. Total Compensation
Totals	**100.0%**	**$119,939**

Note that the average total compensation among all employees at NIWC Atlantic in South Carolina is approximately $119,939. This represents a more than 65 percent compensation premium over the average job in South Carolina (at $72,415). Moreover, NIWC Atlantic's most significant impact on the knowledge economy comes through their employment of engineers, which represents the single largest employment category at NIWC Atlantic.

In general, the field of engineering is highly technical and typically requires extensive academic training in mathematics and science as well as the ability for complex problem solving. Engineering tasks are often both theoretical and practical, combining the creative skills necessary for innovation and technological development with the practical knowledge of commercializing new ideas, which is what leads to regional economic growth and development. The intellectual talent required for jobs in this profession is highly sought after across the world. Regions with high concentrations of engineers generate enormous human capital resources and knowledge spillover effects. In FY24, NIWC Atlantic employed 1,005 individuals in South Carolina in the Engineering and Architecture group, which covers a broad range of specialty fields, including aerospace, computer, electronics, environmental, industrial, mechanical, safety, and others.

The single largest category of engineers working at NIWC Atlantic is electronics engineers.[1] Electronics engineers are typically involved in the design, development, testing, and supervision of electronic equipment manufacturing, notably in

[1] Electronics engineers are defined by NIWC Atlantic as employees classified within the electronics engineering workforce series. The total number of electronics engineers provided in this report refers to FY24.

communications systems. These engineers specialize in communications, signal processing, and control systems. NIWC Atlantic is one of the largest employers of electronics engineers in South Carolina. Of the 1,005 NIWC Atlantic-South Carolina engineers, 399 are electronics engineers. This implies that roughly 88.7 percent of all electronics engineers in the Charleston tri-county metropolitan region and 44.8 percent of all electronics engineers in South Carolina are employed with NIWC Atlantic.[2]

Contributions to Cyber Security

NIWC Atlantic provides a high-skilled, high-wage workforce to the regions in which it operates, supporting a growing knowledge economy; much of this workforce is also actively engaged in cyber security. Cyber security generally refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from damage or unauthorized access. As of FY24, approximately 50.1 percent of all NIWC Atlantic personnel were identified as having some level of cyber security-related job functions.

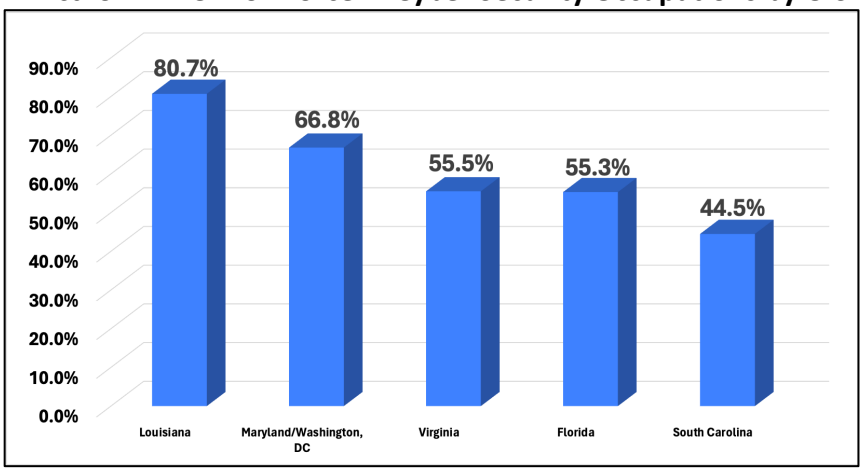
As displayed in Table 2, there are a total of 12 occupation groups where at least 10 percent of the positions include cyber security functions. In three occupation groups centered around computer and information technology, more than 50 percent of all employees are engaged in cyber security functions. These three occupation groups are Information Technology Management (97.3%), Computer Science (97.2%), and Computer Engineering (65.3%). Regionally, the highest concentration of cyber security-related job functions are at the NIWC Atlantic facilities in Louisiana (80.7%), Maryland/Washington, DC (66.8%), and Virginia (55.5%), as shown in Figure 1.

[2] These estimates are calculated by comparing NIWC Atlantic employment data to employment estimates from the U.S. Bureau of Labor Statistics' Occupational Employment and Wage Statistics (May 2024).

Table 2 – NIWC Atlantic Occ. Groups w/ Highest Pct. of Cyber Security Job Functions

Series/Occupation Category	Description	Total	Cyber	Pct. Cyber
2210	INFORMATION TECHNOLOGY MANAGEMENT	1,379	1,342	97.3%
1550	COMPUTER SCIENCE	632	614	97.2%
854	COMPUTER ENGINEERING	213	139	65.3%
855	ELECTRONICS ENGINEERING	482	160	33.2%
850	ELECTRICAL ENGINEERING	19	5	26.3%
801	GENERAL ENGINEERING	239	61	25.5%
1599	MATHEMATICS AND STATISTICS STUDENT TRAINEE	46	10	21.7%
2299	INFORMATION TECHNOLOGY STUDENT TRAINEE	10	2	20.0%
1515	OPERATIONS RESEARCH	101	19	18.8%
80	SECURITY ADMINISTRATION	56	10	17.9%
856	ELECTRONICS TECHNICAL	346	44	12.7%
340	PROGRAM MANAGEMENT	144	16	11.1%

Figure 1 – Pct. of NIWC Workforce in Cyber Security Occupations by U.S. Facility



Section III – Economic Impact Methodology

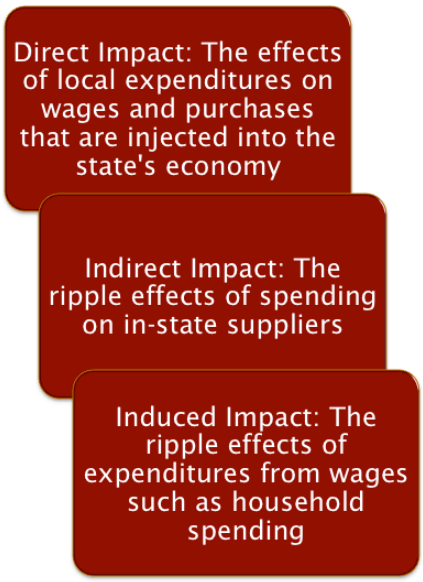
This report estimates the economic impact of NIWC Atlantic facilities in South Carolina, Virginia, Maryland, Florida, Louisiana, and Washington, DC on their respective states and on the United States as a whole. This section outlines the nature of economic impact analysis and how the regional impact of NIWC Atlantic facilities can be determined.

The goal of an economic impact analysis is to establish the total impact, or contribution, of an organization to its local economic region. For example, part of this analysis will estimate how many total jobs are generated in South Carolina due specifically to the operations of NIWC Atlantic. To determine the total impact of an organization, an economic impact analysis requires, as a starting point, the identification of a direct effect on the economy. This direct effect will, in turn, lead to additional economic ripple effects over a broader region.

A direct effect represents an initial injection of funds into a local area. For example, consider a firm that opens for business in a particular region and has total annual expenditures of $100 million – some of which is payroll and some of which is spent on non-labor inputs. The purchases of non-labor inputs from other businesses in the local region will, of course, increase their demand and sales levels. This increase in sales activity due to the purchases of the original firm represents a direct effect on the local economy. Similarly, expenditures that consist of payroll for employees of the original firm increase household income levels for each of these employees. Part of this additional household income will then be spent in the local economy at a variety of local businesses, again increasing their demand and sales levels. This too, reflects a direct effect on the economy.

These direct effects, however, only represent the initial effects on the local economy. The total impact on the economy will be far greater. The initial direct expenditures

(both labor and non-labor) lead to additional rounds of spending in the local economy, known more generally as the economic ripple effect or multiplier effect. These effects take two forms, the indirect effect and the induced effect.



The indirect effect represents all additional rounds of spending that result from inter-industry linkages between local businesses as additional rounds of spending move through a supply chain. For example, consider a firm that purchases computer hardware as an input to its production process. The computer hardware supplier would, as a result of the firm's purchases, see an increase in demand. This would, in turn, require him to purchase additional computer hardware parts from his suppliers. This purchase activity from the computer hardware parts suppliers represents the first round of the indirect effect. The original spending of the local business on the computer hardware supplier led to an additional round of spending by the computer hardware supplier. The computer hardware parts suppliers must then purchase additional inputs to fill their increased demand, representing a second round of indirect spending. These additional rounds of spending continue on through the supply chain. The total size of the indirect effect is a function of the total size of the local supplier network.

In addition to the direct effects and the indirect effects, there is one further set of impacts that also must be considered: the induced effects. Induced effects reflect all of the additional economic impacts that result from household spending that occurs as the result of income earned directly or indirectly from the initial, direct change in economic activity. For example, consider once again the firm that purchases computer hardware to use as inputs. The computer hardware supplier must hire

additional employees to service this rise in demand. These employees will then spend part of their additional income in the local economy on (for example) food, entertainment, and housing. Part of the wages earned in those industries can be attributed to the original firm's spending, which in turn supports further household expenditures. These impacts resulting from household expenditures reflect the induced effects. Taken together, the direct, indirect, and induced effects provide the total economic impact of an organization.

These successive rounds of indirect and induced spending outlined above do not go on forever. In each round, part of the money is "leaked out" of the local economy. For example, households may save a portion of their income or spend it outside of the local region. Businesses too, may purchase some of their inputs and supplies outside of the local economy. Spending that is leaked out cannot be used to support further economic activity in the local area. Thus, in each successive round of spending, the indirect and induced effects become smaller and smaller and eventually drop to zero. Because the successive rounds of spending eventually end, estimates can be generated for both the indirect and induced effects.

The economic multiplier effect is way of measuring the total indirect and induced effects that result from an initial direct effect. An economic multiplier is defined as the ratio of the total economic impact (direct, indirect, and induced) to the initial, direct effect. For example, if a firm was to spend $100 million within a particular sector and this led to a total economic output of $250 million, the output multiplier would be 2.5. Multiplier effects are larger when the region being analyzed is larger. For example, the total economic impact resulting from an initial direct effect will be larger in a state than it would be in any given county within that same state. Multiplier effects also vary from sector to sector because the sizes of supply networks vary among different local industries.

As the above discussion implies, an economic impact analysis involves two steps: (1) determining appropriate levels of direct economic activity; (2) determining and applying the appropriate values for economic multipliers to calculate the total impact on economic output, employment, and labor income. These are the three standard variables generally used to measure the major contributions of an organization to its local economy. Total economic output represents an aggregate measure of total spending that results from the initial direct expenditures. This includes spending by both businesses and consumers on goods and services, and is thus a broad, all-inclusive measure of the impact on total economic activity. Employment represents the impact on jobs in terms of the total number of positions associated with the estimated total economic output, while labor income represents the total value of wages, salaries, and benefits associated with total employment. These three economic impact measures are summarized in Table 3.

Table 3 – Definition of Economic Impact Measures

Economic Impact Measure	Description
Total Economic Impact (or Output)	The dollar value representing the total contribution to overall economic activity
Employment	The total number of full-time equivalent jobs needed to deliver the demand for the goods and services as measured by total economic output
Labor Income	The dollar value representing total wages, salaries, and benefits associated with total employment

In this analysis, the direct economic impact of NIWC Atlantic was based on employment and expenditure data of NIWC Atlantic at each of its facilities. All multiplier effects were calculated using input-output analysis, which is the industry-standard technique that is widely implemented by economists and statisticians across the United States. The Division of Research (DOR) developed customized input-output models for the U.S. economy and for the states of South Carolina, Virginia, Maryland, Louisiana, Florida, and Washington, DC, which all contain

specific information on economic linkages of over 500 different industries for each local region. The *IMPLAN* software package was combined with the DOR models to generate all estimates in this report.

Section IV – Economic Impact of NIWC Atlantic: South Carolina

As shown in Table 4, NIWC Atlantic generates a total economic impact of approximately $2.1 billion annually on the state of South Carolina. This level of economic activity, in turn, is estimated to support 9,912 jobs along with $810.0 million in labor income. These impacts include not just the direct spending activity that is introduced into the local economy by NIWC Atlantic itself, but also the increased spending activity among defense contractors and other local business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 4 – Economic Impact of NIWC Atlantic: South Carolina (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	4,519	$505,824,449	$1,200,492,429
Indirect Impact	2,799	$171,599,203	$481,528,020
Induced Impact	2,594	$132,596,912	$457,437,787
Total Impact	**9,912**	**$810,020,564**	**$2,139,458,236**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 5-10 highlight the annual impacts of NIWC Atlantic on South Carolina for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 5 – Economic Impact of NIWC Atlantic: South Carolina (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	4,485	$502,039,046	$1,191,508,388
Indirect Impact	2,778	$170,315,018	$477,924,443
Induced Impact	2,575	$131,604,606	$454,014,492
Total Impact	**9,838**	**$803,958,670**	**$2,123,447,323**

Table 6 – Economic Impact of NIWC Atlantic: South Carolina (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	4,482	$501,723,596	$1,190,759,718
Indirect Impact	2,776	$170,208,003	$477,624,145
Induced Impact	2,573	$131,521,914	$453,729,217
Total Impact	**9,832**	**$803,453,512**	**$2,122,113,080**

Table 7 – Economic Impact of NIWC Atlantic: South Carolina (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	4,697	$525,697,814	$1,247,658,642
Indirect Impact	2,909	$178,341,174	$500,446,801
Induced Impact	2,696	$137,806,519	$475,410,085
Total Impact	**10,301**	**$841,845,507**	**$2,223,515,529**

Table 8 – Economic Impact of NIWC Atlantic: South Carolina (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	4,753	$532,006,818	$1,262,632,043
Indirect Impact	2,944	$180,481,482	$506,452,763
Induced Impact	2,728	$139,460,363	$481,115,577
Total Impact	**10,425**	**$851,948,663**	**$2,250,200,384**

Table 9 – Economic Impact of NIWC Atlantic: South Carolina (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	4,594	$514,183,880	$1,220,332,185
Indirect Impact	2,845	$174,435,111	$489,485,920
Induced Impact	2,637	$134,788,255	$464,997,563
Total Impact	**10,076**	**$823,407,246**	**$2,174,815,669**

Table 10 – Economic Impact of NIWC Atlantic: South Carolina (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	4,250	$475,698,952	$1,128,994,439
Indirect Impact	2,632	$161,379,232	$452,849,550
Induced Impact	2,440	$124,699,809	$430,194,065
Total Impact	**9,322**	**$761,777,992**	**$2,012,038,054**

The economic impact of NIWC Atlantic can also be broken down at the local level. Tables 11 and 12 highlight the current economic impacts (from FY24) at both the county and U.S. congressional district levels.

Table 11 – Total Economic Impact of NIWC Atlantic in SC: Counties (FY24)

County Level Results

County	Total Employment	Total Labor Income	Total Economic Output
Abbeville County	11	$864,945	$2,284,526
Aiken County	77	$6,300,524	$16,641,192
Allendale County	3	$265,420	$701,038
Anderson County	93	$7,634,058	$20,163,374
Bamberg County	6	$452,385	$1,194,857
Barnwell County	9	$720,406	$1,902,766
Beaufort County	87	$7,092,461	$18,732,888
Berkeley County	1,982	$162,004,113	$427,891,647
Calhoun County	6	$500,857	$1,322,884
Charleston County	3,965	$324,008,226	$855,783,294
Cherokee County	25	$2,030,635	$5,363,394
Chester County	14	$1,136,165	$3,000,883
Chesterfield County	19	$1,563,769	$4,130,287
Clarendon County	13	$1,090,715	$2,880,840
Colleton County	17	$1,379,967	$3,644,824
Darlington County	27	$2,194,260	$5,795,567
Dillon County	12	$969,341	$2,560,262
Dorchester County	1,982	$162,004,113	$427,891,647
Edgefield County	13	$1,035,353	$2,734,616
Fairfield County	9	$715,977	$1,891,068
Florence County	59	$4,852,470	$12,816,535
Georgetown County	28	$2,321,153	$6,130,721
Greenville County	245	$20,061,884	$52,988,239

County	Total Employment	Total Labor Income	Total Economic Output
Greenwood County	30	$2,461,965	$6,502,640
Hampton County	8	$638,752	$1,687,097
Horry County	178	$14,530,837	$38,379,418
Jasper County	15	$1,251,985	$3,306,792
Kershaw County	31	$2,520,209	$6,656,477
Lancaster County	48	$3,924,606	$10,365,825
Laurens County	30	$2,479,681	$6,549,432
Lee County	7	$560,929	$1,481,548
Lexington County	135	$11,029,265	$29,130,928
McCormick County	4	$350,906	$926,826
Marion County	12	$997,145	$2,633,699
Marlboro County	11	$896,264	$2,367,247
Newberry County	17	$1,377,999	$3,639,625
Oconee County	35	$2,899,025	$7,657,018
Orangeburg County	36	$2,922,013	$7,717,736
Pickens County	59	$4,858,024	$12,831,204
Richland County	185	$15,137,532	$39,981,845
Saluda County	8	$683,745	$1,805,933
Spartanburg County	159	$12,979,476	$34,281,904
Sumter County	45	$3,682,913	$9,727,454
Union County	11	$937,741	$2,476,798
Williamsburg County	13	$1,049,765	$2,772,681
York County	130	$10,650,590	$28,130,758
Total Impact	**9,912**	**$810,020,564**	**$2,139,458,236**

Table 12 – Total Economic Impact of NIWC Atlantic in SC: U.S. Cong. Dists. (FY24)

U.S. Congressional District Level Results

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Congressional District 1	7,930	$648,016,451	$1,711,566,589
Congressional District 2	333	$27,248,779	$71,970,549
Congressional District 3	328	$26,822,979	$70,845,909
Congressional District 4	354	$28,965,210	$76,504,053
Congressional District 5	334	$27,286,656	$72,070,592
Congressional District 6	326	$26,656,651	$70,406,597
Congressional District 7	306	$25,023,838	$66,093,947

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Total Impact	**9,912**	**$810,020,564**	**$2,139,458,236**

Section V – Economic Impact of NIWC Atlantic: Virginia

As shown in Table 13, NIWC Atlantic generates a total economic impact of approximately $2.6 billion annually on Virginia. This level of economic activity, in turn, is estimated to support 10,881 jobs along with $1.0 billion in labor income. These impacts include not just the direct spending activity that is introduced into the local economy by NIWC Atlantic itself, but also the increased spending activity among defense contractors and other local business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 13 – Economic Impact of NIWC Atlantic: Virginia (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	5,216	$641,868,885	$1,446,503,263
Indirect Impact	2,685	$224,798,654	$586,947,601
Induced Impact	2,980	$181,070,701	$564,329,926
Total Impact	**10,881**	**$1,047,738,240**	**$2,597,780,790**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 14-19 highlight the annual impacts of NIWC Atlantic on Virginia for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 14 – Economic Impact of NIWC Atlantic: Virginia (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	5,077	$624,734,808	$1,407,890,240
Indirect Impact	2,613	$218,797,869	$571,279,595
Induced Impact	2,900	$176,237,192	$549,265,677
Total Impact	**10,591**	**$1,019,769,868**	**$2,528,435,512**

Table 15 – Economic Impact of NIWC Atlantic: Virginia (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	4,948	$608,918,737	$1,372,247,449
Indirect Impact	2,547	$213,258,682	$556,816,821
Induced Impact	2,827	$171,775,490	$535,360,217
Total Impact	**10,322**	**$993,952,909**	**$2,464,424,487**

Table 16 – Economic Impact of NIWC Atlantic: Virginia (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	5,093	$626,711,817	$1,412,345,588
Indirect Impact	2,622	$219,490,267	$573,087,442
Induced Impact	2,910	$176,794,904	$551,003,860
Total Impact	**10,624**	**$1,022,996,988**	**$2,536,436,890**

Table 17 – Economic Impact of NIWC Atlantic: Virginia (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	5,157	$634,619,852	$1,430,166,984
Indirect Impact	2,655	$222,259,860	$580,318,829
Induced Impact	2,946	$179,025,755	$557,956,590
Total Impact	**10,758**	**$1,035,905,467**	**$2,568,442,403**

Table 18 – Economic Impact of NIWC Atlantic: Virginia (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	5,002	$615,508,767	$1,387,098,612
Indirect Impact	2,575	$215,566,676	$562,842,977
Induced Impact	2,858	$173,634,533	$541,154,159
Total Impact	**10,434**	**$1,004,709,976**	**$2,491,095,747**

Table 19 – Economic Impact of NIWC Atlantic: Virginia (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	4,686	$576,627,592	$1,299,476,751
Indirect Impact	2,412	$201,949,509	$527,288,656
Induced Impact	2,677	$162,666,184	$506,969,903
Total Impact	**9,775**	**$941,243,285**	**$2,333,735,309**

The economic impact of NIWC Atlantic can also be broken down at the local level. Tables 20 and 21 highlight the current economic impacts (from FY24) at both the county, city, and U.S. congressional district levels.

Table 20 – Total Economic Impact of NIWC Atlantic in VA: Counties/Cities (FY24)

County/City Level Results

County/City	Total Employment	Total Labor Income	Total Economic Output
Accomack County	9	$840,520	$2,083,999
Albemarle County	31	$2,951,240	$7,317,356
Alleghany County	4	$368,097	$912,666
Amelia County	4	$345,053	$855,531
Amherst County	8	$796,218	$1,974,157
Appomattox County	4	$426,587	$1,057,687
Arlington County	63	$6,032,817	$14,957,875
Augusta County	21	$1,977,891	$4,904,019
Bath County	1	$102,414	$253,927
Bedford County	21	$2,067,450	$5,126,072
Bland County	2	$155,621	$385,850
Botetourt County	9	$858,582	$2,128,784
Brunswick County	4	$396,222	$982,401
Buchanan County	5	$468,725	$1,162,164
Buckingham County	4	$430,562	$1,067,542
Campbell County	14	$1,392,237	$3,451,937
Caroline County	9	$842,180	$2,088,116
Carroll County	8	$735,640	$1,823,959
Charles City County	2	$165,130	$409,427
Charlotte County	3	$283,217	$702,214
Chesterfield County	102	$9,806,011	$24,313,197
Clarke County	4	$392,398	$972,920
Craig County	1	$121,483	$301,207
Culpeper County	15	$1,411,935	$3,500,777
Cumberland County	3	$253,129	$627,614
Dickenson County	4	$337,380	$836,506
Dinwiddie County	7	$718,886	$1,782,418
Essex County	3	$268,752	$666,348
Fairfax County	303	$29,205,355	$72,412,276
Fauquier County	20	$1,908,534	$4,732,052
Floyd County	4	$393,908	$976,662

County/City	Total Employment	Total Labor Income	Total Economic Output
Fluvanna County	8	$723,162	$1,793,021
Franklin County	15	$1,399,658	$3,470,338
Frederick County	26	$2,468,125	$6,119,513
Giles County	4	$415,920	$1,031,240
Gloucester County	725	$69,849,216	$173,185,386
Goochland County	7	$710,005	$1,760,399
Grayson County	4	$384,021	$952,149
Greene County	6	$547,013	$1,356,274
Greensville County	3	$280,500	$695,477
Halifax County	9	$841,450	$2,086,307
Hanover County	30	$2,900,825	$7,192,357
Henrico County	88	$8,520,565	$21,126,040
Henry County	13	$1,242,377	$3,080,371
Highland County	1	$59,069	$146,456
Isle of Wight County	725	$69,849,216	$173,185,386
James City County	725	$69,849,216	$173,185,386
King and Queen County	2	$169,734	$420,842
King George County	8	$724,923	$1,797,388
King William County	5	$483,819	$1,199,589
Lancaster County	3	$278,286	$689,988
Lee County	6	$547,919	$1,358,520
Loudoun County	116	$11,154,097	$27,655,667
Louisa County	11	$1,059,335	$2,626,534
Lunenburg County	3	$303,393	$752,238
Madison County	4	$358,537	$888,963
Mathews County	725	$69,849,216	$173,185,386
Mecklenburg County	8	$775,438	$1,922,636
Middlesex County	3	$275,444	$682,940
Montgomery County	26	$2,490,490	$6,174,964
Nelson County	4	$371,468	$921,024
New Kent County	7	$684,722	$1,697,713
Northampton County	3	$301,984	$748,745
Northumberland County	3	$311,871	$773,258
Nottoway County	4	$393,254	$975,040
Orange County	10	$980,770	$2,431,738
Page County	6	$595,868	$1,477,406
Patrick County	5	$435,417	$1,079,580

County/City	Total Employment	Total Labor Income	Total Economic Output
Pittsylvania County	16	$1,494,576	$3,705,677
Powhatan County	8	$814,885	$2,020,439
Prince Edward County	6	$560,397	$1,389,457
Prince George County	11	$1,096,567	$2,718,848
Prince William County	130	$12,503,090	$31,000,382
Pulaski County	9	$844,746	$2,094,478
Rappahannock County	2	$188,149	$466,500
Richmond County	2	$231,821	$574,782
Roanoke County	25	$2,448,629	$6,071,173
Rockbridge County	6	$562,711	$1,395,196
Rockingham County	23	$2,205,612	$5,468,634
Russell County	7	$639,490	$1,585,563
Scott County	6	$538,057	$1,334,069
Shenandoah County	12	$1,143,158	$2,834,366
Smyth County	8	$732,999	$1,817,410
Southampton County	5	$451,341	$1,119,063
Spotsylvania County	40	$3,824,388	$9,482,255
Stafford County	44	$4,249,490	$10,536,261
Surry County	725	$69,849,216	$173,185,386
Sussex County	3	$270,513	$670,714
Tazewell County	10	$977,977	$2,424,814
Warren County	11	$1,068,190	$2,648,489
Washington County	14	$1,360,942	$3,374,343
Westmoreland County	5	$483,894	$1,199,776
Wise County	9	$879,815	$2,181,428
Wythe County	7	$706,911	$1,752,727
York County	725	$69,849,216	$173,185,386

Alexandria City	42	$4,002,524	$9,923,930
Bristol City	4	$410,461	$1,017,705
Buena Vista City	2	$165,558	$410,487
Charlottesville City	12	$1,126,202	$2,792,325
Chesapeake City	67	$6,414,952	$15,905,346
Colonial Heights City	5	$469,781	$1,164,784
Covington City	1	$142,464	$353,228
Danville City	11	$1,056,417	$2,619,298
Emporia City	1	$135,898	$336,948

County/City	Total Employment	Total Labor Income	Total Economic Output
Fairfax City	7	$662,635	$1,642,948
Falls Church City	4	$378,210	$937,740
Franklin City	2	$210,639	$522,263
Fredericksburg City	8	$754,508	$1,870,740
Galax City	2	$169,533	$420,343
Hampton City	36	$3,461,498	$8,582,501
Harrisonburg City	13	$1,287,131	$3,191,336
Hopewell City	6	$577,856	$1,432,745
Lexington City	2	$196,275	$486,647
Lynchburg City	21	$2,020,130	$5,008,746
Manassas City	11	$1,097,246	$2,720,532
Manassas Park City	4	$417,882	$1,036,105
Martinsville City	4	$348,022	$862,891
Newport News City	48	$4,605,134	$11,418,052
Norfolk City	4,352	$419,095,296	$1,039,112,316
Norton City	1	$87,496	$216,939
Petersburg City	9	$856,796	$2,124,355
Poquoson City	3	$323,368	$801,764
Portsmouth City	25	$2,427,195	$6,018,030
Radford City	5	$434,536	$1,077,397
Richmond City	61	$5,878,052	$14,574,146
Roanoke City	26	$2,463,169	$6,107,226
Salem City	7	$651,767	$1,616,002
Suffolk City	7	$663,163	$1,644,258
Virginia Beach City	27	$2,593,809	$6,431,137
Waynesboro City	119	$11,441,591	$28,368,484
Williamsburg City	6	$591,138	$1,465,679
Winchester City	4	$403,266	$999,865
Total Impact	**10,881**	**$1,047,738,240**	**$2,597,780,790**

Table 21 – Total Economic Impact of NIWC Atlantic in VA: U.S. Cong. Dists. (FY24)

U.S. Congressional District Level Results

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Congressional District 1	219	$21,041,303	$52,170,180
Congressional District 2	209	$20,168,625	$50,006,447
Congressional District 3	8,705	$838,190,592	$2,078,224,632

Congressional District 4	220	$21,175,256	$52,502,305
Congressional District 5	203	$19,504,466	$48,359,719
Congressional District 6	206	$19,859,312	$49,239,530
Congressional District 7	225	$21,673,838	$53,738,499
Congressional District 8	239	$23,044,569	$57,137,114
Congressional District 9	181	$17,394,428	$43,128,055
Congressional District 10	238	$22,900,938	$56,780,993
Congressional District 11	237	$22,784,913	$56,493,317
Total Impact	**10,881**	**$1,047,738,240**	**$2,597,780,790**

Section VI – Economic Impact of NIWC Atlantic: Florida

As shown in Table 22, NIWC Atlantic generates a total economic impact of approximately $156.3 million annually on the state of Florida. This level of economic activity, in turn, is estimated to support 737 jobs along with $58.4 million in labor income. These impacts include not just the direct spending activity that is introduced into the local economy by NIWC Atlantic itself, but also the increased spending activity among defense contractors and other local business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 22 – Economic Impact of NIWC Atlantic: Florida (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	312	$31,836,935	$77,059,698
Indirect Impact	202	$13,473,343	$37,290,031
Induced Impact	223	$13,056,960	$42,002,604
Total Impact	**737**	**$58,367,238**	**$156,352,333**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 23-28 highlight the annual impacts of NIWC Atlantic on Florida for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 23 – Economic Impact of NIWC Atlantic: Florida (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	310	$31,598,795	$76,483,291
Indirect Impact	200	$13,372,562	$37,011,102
Induced Impact	221	$12,959,294	$41,688,425
Total Impact	**731**	**$57,930,651**	**$155,182,818**

Table 24 – Economic Impact of NIWC Atlantic: Florida (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	309	$31,578,737	$76,434,744
Indirect Impact	200	$13,364,074	$36,987,609
Induced Impact	221	$12,951,068	$41,661,963
Total Impact	**731**	**$57,893,880**	**$155,084,316**

Table 25 – Economic Impact of NIWC Atlantic: Florida (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	324	$33,087,808	$80,087,374
Indirect Impact	210	$14,002,711	$38,755,156
Induced Impact	232	$13,569,968	$43,652,886
Total Impact	**766**	**$60,660,487**	**$162,495,416**

Table 26 – Economic Impact of NIWC Atlantic: Florida (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	328	$33,484,815	$81,048,308
Indirect Impact	212	$14,170,723	$39,220,163
Induced Impact	235	$13,732,788	$44,176,659
Total Impact	**775**	**$61,388,326**	**$164,445,130**

Table 27 – Economic Impact of NIWC Atlantic: Florida (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	317	$32,363,200	$78,333,495
Indirect Impact	205	$13,696,057	$37,906,435
Induced Impact	227	$13,272,792	$42,696,907
Total Impact	**749**	**$59,332,048**	**$158,936,837**

Table 28 – Economic Impact of NIWC Atlantic: Florida (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	293	$29,940,727	$72,470,022
Indirect Impact	190	$12,670,871	$35,069,037
Induced Impact	210	$12,279,287	$39,500,929
Total Impact	**693**	**$54,890,885**	**$147,039,988**

The economic impact of NIWC Atlantic can also be broken down at the local level. Tables 29 and 30 highlight the current economic impacts (from FY24) at both the county and U.S. congressional district levels.

Table 29 – Total Economic Impact of NIWC Atlantic in FL: Counties (FY24)

County Level Results

County	Total Employment	Total Labor Income	Total Economic Output
Alachua County	3	$201,375	$539,437
Baker County	0	$20,239	$54,215
Bay County	2	$137,836	$369,232
Bradford County	0	$19,376	$51,904
Brevard County	6	$454,431	$1,217,315
Broward County	147	$11,673,448	$31,270,467
Calhoun County	0	$9,164	$24,548
Charlotte County	2	$146,397	$392,164
Citrus County	1	$117,447	$314,612
Clay County	2	$163,401	$437,714
Collier County	4	$287,266	$769,518
Columbia County	1	$51,056	$136,766
DeSoto County	0	$25,359	$67,931
Dixie County	0	$12,156	$32,564
Duval County	9	$728,224	$1,950,743
Escambia County	3	$228,631	$612,450
Flagler County	1	$94,375	$252,808
Franklin County	0	$8,958	$23,995
Gadsden County	0	$30,471	$81,625
Gilchrist County	0	$13,964	$37,406
Glades County	0	$9,063	$24,278
Gulf County	0	$10,957	$29,351
Hamilton County	0	$9,893	$26,500

County	Total Employment	Total Labor Income	Total Economic Output
Hardee County	0	$17,991	$48,194
Hendry County	0	$31,837	$85,284
Hernando County	2	$150,557	$403,309
Highlands County	1	$75,764	$202,954
Hillsborough County	14	$1,091,430	$2,923,688
Holmes County	0	$13,718	$36,746
Indian River County	2	$118,803	$318,245
Jackson County	0	$34,494	$92,401
Jefferson County	0	$10,988	$29,434
Lafayette County	0	$5,963	$15,973
Lake County	4	$306,570	$821,230
Lee County	8	$594,196	$1,591,713
Leon County	3	$207,383	$555,532
Levy County	0	$32,965	$88,306
Liberty County	0	$5,490	$14,707
Madison County	0	$12,674	$33,951
Manatee County	4	$316,334	$847,386
Marion County	4	$296,011	$792,945
Martin County	1	$114,335	$306,278
Miami-Dade County	295	$23,346,895	$62,540,933
Monroe County	1	$55,839	$149,580
Nassau County	1	$72,036	$192,967
Okaloosa County	2	$152,168	$407,622
Okeechobee County	0	$29,241	$78,330
Orange County	13	$1,058,454	$2,835,354
Osceola County	4	$323,033	$865,330
Palm Beach County	147	$11,673,448	$31,270,467
Pasco County	6	$454,891	$1,218,548
Pinellas County	8	$666,601	$1,785,669
Polk County	7	$588,618	$1,576,773
Putnam County	1	$53,350	$142,912
St Johns County	3	$231,152	$619,204
St Lucie County	3	$269,623	$722,258
Santa Rosa County	2	$143,313	$383,902
Sarasota County	4	$328,931	$881,130
Seminole County	4	$341,354	$914,409
Sumter County	1	$106,762	$285,991

County	Total Employment	Total Labor Income	Total Economic Output
Suwannee County	0	$32,807	$87,883
Taylor County	0	$15,075	$40,383
Union County	0	$10,862	$29,096
Volusia County	5	$416,006	$1,114,385
Wakulla County	0	$25,615	$68,617
Walton County	1	$61,883	$165,772
Washington County	0	$18,291	$48,998
Total Impact	**737**	**$58,367,238**	**$156,352,333**

Table 30 – Total Economic Impact of NIWC Atlantic in FL: U.S. Cong. Dists. (FY24)

U.S. Congressional District Level Results

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Congressional District 1	5	$403,022	$1,079,602
Congressional District 2	5	$419,149	$1,122,804
Congressional District 3	5	$389,923	$1,044,514
Congressional District 4	5	$422,947	$1,132,978
Congressional District 5	6	$474,824	$1,271,945
Congressional District 6	5	$382,886	$1,025,663
Congressional District 7	6	$450,892	$1,207,835
Congressional District 8	5	$409,482	$1,096,907
Congressional District 9	6	$491,019	$1,315,325
Congressional District 10	6	$471,320	$1,262,557
Congressional District 11	5	$417,037	$1,117,145
Congressional District 12	5	$399,806	$1,070,988
Congressional District 13	5	$422,890	$1,132,823
Congressional District 14	6	$468,115	$1,253,971
Congressional District 15	6	$451,532	$1,209,550
Congressional District 16	6	$450,481	$1,206,734
Congressional District 17	5	$391,608	$1,049,026
Congressional District 18	5	$421,087	$1,127,994
Congressional District 19	5	$389,956	$1,044,601
Congressional District 20	6	$466,264	$1,249,014
Congressional District 21	5	$420,725	$1,127,026
Congressional District 22	5	$409,038	$1,095,718
Congressional District 23	6	$443,995	$1,189,360
Congressional District 24	5	$424,372	$1,136,794

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Congressional District 25	6	$469,924	$1,258,819
Congressional District 26	6	$457,669	$1,225,990
Congressional District 27	6	$453,485	$1,214,782
Congressional District 28	590	$46,693,790	$125,081,866
Total Impact	**737**	**$58,367,238**	**$156,352,333**

Section VII – Economic Impact of NIWC Atlantic: Maryland

As shown in Table 31, NIWC Atlantic generates a total economic impact of approximately $426.0 million annually on the state of Maryland. This level of economic activity, in turn, is estimated to support 1,786 jobs along with $169.0 million in labor income. These impacts include not just the direct spending activity that is introduced into the local economy by NIWC Atlantic itself, but also the increased spending activity among defense contractors and other local business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 31 – Economic Impact of NIWC Atlantic: Maryland (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	852	$104,131,389	$239,673,107
Indirect Impact	458	$35,147,355	$95,773,754
Induced Impact	476	$29,686,886	$90,527,432
Total Impact	**1,786**	**$168,965,630**	**$425,974,293**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 32-37 highlight the annual impacts of NIWC Atlantic on Maryland for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 32 – Economic Impact of NIWC Atlantic: Maryland (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	846	$103,352,486	$237,880,352
Indirect Impact	455	$34,884,453	$95,057,366
Induced Impact	472	$29,464,828	$89,850,287
Total Impact	**1,773**	**$167,701,767**	**$422,788,005**

Table 33 – Economic Impact of NIWC Atlantic: Maryland (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	845	$103,286,883	$237,729,358
Indirect Impact	454	$34,862,310	$94,997,029
Induced Impact	472	$29,446,125	$89,793,255
Total Impact	**1,772**	**$167,595,319**	**$422,519,641**

Table 34 – Economic Impact of NIWC Atlantic: Maryland (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	885	$108,222,711	$249,089,863
Indirect Impact	476	$36,528,295	$99,536,705
Induced Impact	495	$30,853,284	$94,084,255
Total Impact	**1,856**	**$175,604,290**	**$442,710,823**

Table 35 – Economic Impact of NIWC Atlantic: Maryland (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	896	$109,521,230	$252,078,587
Indirect Impact	482	$36,966,582	$100,731,004
Induced Impact	501	$31,223,479	$95,213,132
Total Impact	**1,878**	**$177,711,291**	**$448,022,722**

Table 36 – Economic Impact of NIWC Atlantic: Maryland (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	866	$105,852,681	$243,634,903
Indirect Impact	466	$35,728,341	$97,356,894
Induced Impact	484	$30,177,610	$92,023,850
Total Impact	**1,816**	**$171,758,632**	**$433,015,648**

Table 37 – Economic Impact of NIWC Atlantic: Maryland (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	801	$97,929,323	$225,398,177
Indirect Impact	431	$33,053,979	$90,069,469
Induced Impact	448	$27,918,735	$85,135,618
Total Impact	**1,680**	**$158,902,037**	**$400,603,264**

The economic impact of NIWC Atlantic can also be broken down at the local level. Tables 38 and 39 highlight the current economic impacts (from FY24) at both the county, city, and U.S. congressional district levels.

Table 38 – Total Economic Impact of NIWC Atlantic in MD: Counties/Cities (FY24)

County/City Level Results

County/City	Total Employment	Total Labor Income	Total Economic Output
Allegany County	4	$374,666	$944,559
Anne Arundel County	36	$3,363,489	$8,479,593
Baltimore County	50	$4,759,894	$12,000,028
Calvert County	357	$33,793,126	$85,194,859
Caroline County	2	$191,239	$482,127
Carroll County	10	$988,961	$2,493,241
Cecil County	6	$593,601	$1,496,511
Charles County	10	$974,275	$2,456,217
Dorchester County	2	$185,041	$466,501
Frederick County	18	$1,671,369	$4,213,640
Garrett County	2	$158,545	$399,703
Harford County	16	$1,482,615	$3,737,778
Howard County	20	$1,896,687	$4,781,682
Kent County	1	$109,205	$275,314
Montgomery County	64	$6,043,352	$15,235,718
Prince George's County	57	$5,397,602	$13,607,737
Queen Anne's County	3	$299,791	$755,794
St Mary's County	1,072	$101,379,378	$255,584,576
Somerset County	1	$140,944	$355,331
Talbot County	2	$213,552	$538,381
Washington County	9	$877,952	$2,213,380

Wicomico County	6	$593,735	$1,496,848
Worcester County	3	$303,415	$764,930

Baltimore City	34	$3,173,194	$7,999,845
Total Impact	**1,786**	**$168,965,630**	**$425,974,293**

Table 39 – Total Economic Impact of NIWC Atlantic in MD: U.S. Cong. Dists. (FY24)

U.S. Congressional District Level Results

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Congressional District 1	50	$4,751,495	$11,978,854
Congressional District 2	51	$4,854,545	$12,238,651
Congressional District 3	53	$4,992,759	$12,587,099
Congressional District 4	49	$4,666,002	$11,763,321
Congressional District 5	1,429	$135,172,504	$340,779,434
Congressional District 6	53	$5,008,547	$12,626,900
Congressional District 7	48	$4,510,401	$11,371,040
Congressional District 8	53	$5,009,377	$12,628,993
Total Impact	**1,786**	**$168,965,630**	**$425,974,293**

Section VIII – Economic Impact of NIWC Atlantic: Louisiana

As shown in Table 40, NIWC Atlantic generates a total economic impact of approximately $124.2 million annually on the state of Louisiana. This level of economic activity, in turn, is estimated to support 559 jobs along with $46.0 million in labor income. These impacts include not just the direct spending activity that is introduced into the local economy by NIWC Atlantic itself, but also the increased spending activity among defense contractors and other local business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 40 – Economic Impact of NIWC Atlantic: Louisiana (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	251	$29,307,970	$72,372,082
Indirect Impact	148	$8,532,943	$24,637,028

Induced Impact	160	$8,207,639	$27,181,934
Total Impact	**559**	**$46,048,552**	**$124,191,044**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 41-46 highlight the annual impacts of NIWC Atlantic on Louisiana for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 41 – Economic Impact of NIWC Atlantic: Louisiana (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	249	$29,088,746	$71,830,739
Indirect Impact	147	$8,469,117	$24,452,743
Induced Impact	159	$8,146,246	$26,978,613
Total Impact	**555**	**$45,704,109**	**$123,262,095**

Table 42 – Economic Impact of NIWC Atlantic: Louisiana (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	249	$29,070,282	$71,785,144
Indirect Impact	147	$8,463,741	$24,437,222
Induced Impact	159	$8,141,075	$26,961,489
Total Impact	**554**	**$45,675,098**	**$123,183,855**

Table 43 – Economic Impact of NIWC Atlantic: Louisiana (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	261	$30,459,480	$75,215,581
Indirect Impact	154	$8,868,202	$25,605,017
Induced Impact	166	$8,530,117	$28,249,912
Total Impact	**581**	**$47,857,800**	**$129,070,510**

Table 44 – Economic Impact of NIWC Atlantic: Louisiana (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	264	$30,824,951	$76,118,061
Indirect Impact	156	$8,974,608	$25,912,241
Induced Impact	168	$8,632,466	$28,588,871
Total Impact	**588**	**$48,432,025**	**$130,619,172**

Table 45 – Economic Impact of NIWC Atlantic: Louisiana (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	255	$29,792,431	$73,568,393
Indirect Impact	150	$8,673,993	$25,044,278
Induced Impact	163	$8,343,311	$27,631,251
Total Impact	**568**	**$46,809,735**	**$126,243,922**

Table 46 – Economic Impact of NIWC Atlantic: Louisiana (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	236	$27,562,387	$68,061,601
Indirect Impact	139	$8,024,721	$23,169,647
Induced Impact	150	$7,718,792	$25,562,978
Total Impact	**526**	**$43,305,900**	**$116,794,225**

The economic impact of NIWC Atlantic can also be broken down at the local level. Tables 47 and 48 highlight the current economic impacts (from FY24) at both the parish and U.S. congressional district levels.

Table 47 – Total Economic Impact of NIWC Atlantic in LA: Parishes (FY24)

Parish Level Results

Parish	Total Employment	Total Labor Income	Total Economic Output
Acadia Parish	2	$143,551	$387,151
Allen Parish	1	$57,064	$153,899
Ascension Parish	4	$338,650	$913,324

Parish	Total Employment	Total Labor Income	Total Economic Output
Assumption Parish	1	$50,848	$137,135
Avoyelles Parish	1	$97,316	$262,457
Beauregard Parish	1	$93,061	$250,980
Bienville Parish	0	$31,478	$84,894
Bossier Parish	4	$332,482	$896,690
Caddo Parish	7	$570,341	$1,538,186
Calcasieu Parish	6	$524,611	$1,414,854
Caldwell Parish	0	$23,821	$64,245
Cameron Parish	0	$11,864	$31,996
Catahoula Parish	0	$20,999	$56,632
Claiborne Parish	0	$34,331	$92,588
Concordia Parish	1	$45,134	$121,725
De Soto Parish	1	$69,168	$186,544
East Baton Rouge Parish	14	$1,148,889	$3,098,506
East Carroll Parish	0	$17,478	$47,139
East Feliciana Parish	1	$48,469	$130,719
Evangeline Parish	1	$80,507	$217,124
Franklin Parish	1	$48,456	$130,685
Grant Parish	1	$56,070	$151,218
Iberia Parish	2	$171,285	$461,949
Iberville Parish	1	$75,488	$203,589
Jackson Parish	0	$37,526	$101,206
Jefferson Parish	37	$3,069,903	$8,279,403
Jefferson Davis Parish	1	$79,723	$215,011
Lafayette Parish	8	$644,769	$1,738,916
Lafourche Parish	3	$241,793	$652,105
LaSalle Parish	0	$37,285	$100,556
Lincoln Parish	1	$122,347	$329,965
Livingston Parish	5	$387,727	$1,045,685
Madison Parish	0	$23,060	$62,193
Morehouse Parish	1	$60,325	$162,694
Natchitoches Parish	1	$91,252	$246,104
Orleans Parish	224	18419420.8	49676417.6
Ouachita Parish	5	$400,377	$1,079,801
Plaquemines Parish	37	$3,069,903	$8,279,403
Pointe Coupee Parish	1	$50,328	$135,733
Rapides Parish	4	$319,287	$861,103

Parish	Total Employment	Total Labor Income	Total Economic Output
Red River Parish	0	$18,356	$49,505
Richland Parish	1	$49,816	$134,351
Sabine Parish	1	$55,149	$148,735
St Bernard Parish	37	$3,069,903	$8,279,403
St Charles Parish	37	$3,069,903	$8,279,403
St Helena Parish	0	$27,534	$74,258
St James Parish	37	$3,069,903	$8,279,403
St John the Baptist Parish	37	$3,069,903	$8,279,403
St Landry Parish	2	$205,088	$553,115
St Martin Parish	2	$129,892	$350,313
St Mary Parish	1	$118,685	$320,088
St Tammany Parish	9	$704,047	$1,898,786
Tangipahoa Parish	4	$354,599	$956,339
Tensas Parish	0	$9,749	$26,292
Terrebonne Parish	3	$263,405	$710,392
Union Parish	1	$52,286	$141,013
Vermilion Parish	2	$146,181	$394,243
Vernon Parish	1	$116,200	$313,385
Washington Parish	1	$114,351	$308,399
Webster Parish	1	$89,229	$240,646
West Baton Rouge Parish	1	$72,087	$194,417
West Carroll Parish	0	$23,469	$63,294
West Feliciana Parish	0	$38,434	$103,655
Winn Parish	0	$33,996	$91,685
Total Impact	**559**	**$46,048,552**	**$124,191,044**

Table 48 – Total Economic Impact of NIWC Atlantic in LA: U.S. Cong. Dists. (FY24)

U.S. Congressional District Level Results

U.S. District	Total Employment	Total Labor Income	Total Economic Output
Congressional District 1	25	$2,065,660	$5,570,999
Congressional District 2	447	$36,838,842	$99,352,835
Congressional District 3	23	$1,905,028	$5,137,781
Congressional District 4	21	$1,725,929	$4,654,760
Congressional District 5	22	$1,806,229	$4,871,325
Congressional District 6	21	$1,706,865	$4,603,344
Total Impact	**559**	**$46,048,552**	**$124,191,044**

Section IX – Economic Impact of NIWC Atlantic: Washington, DC

As shown in Table 4, NIWC Atlantic generates a total economic impact of approximately $123.1 million annually on Washington, DC. This level of economic activity, in turn, is estimated to support 469 jobs along with $52.7 million in labor income. These impacts include not just the direct spending activity that is introduced into the local economy by NIWC Atlantic itself, but also the increased spending activity among defense contractors and other local business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 49 – Economic Impact of NIWC Atlantic: Washington, DC (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	225	$31,966,911	$68,969,509
Indirect Impact	113	$11,330,565	$27,410,790
Induced Impact	131	$9,427,147	$26,693,901
Total Impact	**469**	**$52,724,623**	**$123,074,200**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 50-55 highlight the annual impacts of NIWC Atlantic on Washington, DC for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 50 – Economic Impact of NIWC Atlantic: Washington, DC (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	223	$31,727,799	$68,453,617
Indirect Impact	112	$11,245,812	$27,205,757
Induced Impact	130	$9,356,632	$26,494,231
Total Impact	**465**	**$52,330,243**	**$122,153,605**

Table 51 – Economic Impact of NIWC Atlantic: Washington, DC (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	223	$31,707,659	$68,410,166

Indirect Impact	112	$11,238,674	$27,188,488
Induced Impact	130	$9,350,693	$26,477,413
Total Impact	**465**	**$52,297,026**	**$122,076,068**

Table 52 – Economic Impact of NIWC Atlantic: Washington, DC (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	234	$33,222,891	$71,679,321
Indirect Impact	117	$11,775,743	$28,487,760
Induced Impact	136	$9,797,540	$27,742,704
Total Impact	**487**	**$54,796,173**	**$127,909,785**

Table 53 – Economic Impact of NIWC Atlantic: Washington, DC (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	237	$33,621,518	$72,539,371
Indirect Impact	119	$11,917,035	$28,829,572
Induced Impact	138	$9,915,096	$28,075,577
Total Impact	**493**	**$55,453,649**	**$129,444,521**

Table 54 – Economic Impact of NIWC Atlantic: Washington, DC (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	229	$32,495,324	$70,109,575
Indirect Impact	115	$11,517,859	$27,863,890
Induced Impact	133	$9,582,978	$27,135,151
Total Impact	**477**	**$53,596,161**	**$125,108,617**

Table 55 – Economic Impact of NIWC Atlantic: Washington, DC (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	212	$30,062,962	$64,861,685
Indirect Impact	106	$10,655,717	$25,778,203
Induced Impact	123	$8,865,666	$25,104,012
Total Impact	**441**	**$49,584,344**	**$115,743,901**

Section X – Economic Impact of NIWC Atlantic: United States

As shown in Table 56, NIWC Atlantic generates a total economic impact of approximately $10.0 billion annually on the United States. This level of economic activity, in turn, is estimated to support 41,419 jobs along with $3.8 billion in labor income. These impacts include not just the direct spending activity of NIWC Atlantic itself, but also the increased spending activity among defense contractors and other business establishments due to the increased demand that they experience as a result of the presence of NIWC Atlantic.

Table 56 – Economic Impact of NIWC Atlantic: United States (FY24)

	Employment	Labor Income	Economic Output
Direct Impact	14,593	$1,766,736,591	$4,053,409,755
Indirect Impact	10,607	$891,418,631	$2,490,185,028
Induced Impact	16,219	$1,117,240,353	$3,481,439,558
Total Impact	**41,419**	**$3,775,395,575**	**$10,025,034,341**

NIWC Atlantic also represents a strong, consistent presence over time. Tables 57-62 highlight the annual impacts of NIWC Atlantic on the United States for fiscal years 2018-2023. Notice that the total annual impact remains relatively consistent from year to year, underscoring NIWC Atlantic's long-term contributions to the local economic regions in which it is a part.

Table 57 – Economic Impact of NIWC Atlantic: United States (FY23)

	Employment	Labor Income	Economic Output
Direct Impact	14,484	$1,753,521,401	$4,023,090,250
Indirect Impact	10,528	$884,750,820	$2,471,558,444
Induced Impact	16,098	$1,108,883,395	$3,455,398,390
Total Impact	**41,109**	**$3,747,155,616**	**$9,950,047,084**

Table 58 – Economic Impact of NIWC Atlantic: United States (FY22)

	Employment	Labor Income	Economic Output
Direct Impact	14,475	$1,752,408,357	$4,020,536,602
Indirect Impact	10,521	$884,189,226	$2,469,989,627
Induced Impact	16,087	$1,108,179,534	$3,453,205,083
Total Impact	**41,083**	**$3,744,777,117**	**$9,943,731,312**

Table 59 – Economic Impact of NIWC Atlantic: United States (FY21)

	Employment	Labor Income	Economic Output
Direct Impact	15,166	$1,836,151,672	$4,212,668,224
Indirect Impact	11,024	$926,442,469	$2,588,024,398
Induced Impact	16,856	$1,161,136,726	$3,618,225,318
Total Impact	**43,046**	**$3,923,730,867**	**$10,418,917,940**

Table 60 – Economic Impact of NIWC Atlantic: United States (FY20)

	Employment	Labor Income	Economic Output
Direct Impact	15,348	$1,858,182,877	$4,263,214,244
Indirect Impact	11,156	$937,558,459	$2,619,077,005
Induced Impact	17,058	$1,175,068,714	$3,661,638,870
Total Impact	**43,563**	**$3,970,810,050**	**$10,543,930,118**

Table 61 – Economic Impact of NIWC Atlantic: United States (FY19)

	Employment	Labor Income	Economic Output
Direct Impact	14,834	$1,795,940,747	$4,120,412,618
Indirect Impact	10,782	$906,153,781	$2,531,347,787
Induced Impact	16,487	$1,135,708,336	$3,538,987,754
Total Impact	**42,104**	**$3,837,802,864**	**$10,190,748,159**

Table 62 – Economic Impact of NIWC Atlantic: United States (FY18)

	Employment	Labor Income	Economic Output
Direct Impact	13,724	$1,661,509,760	$3,811,988,670
Indirect Impact	9,975	$838,325,737	$2,341,869,608
Induced Impact	15,253	$1,050,697,518	$3,274,085,018
Total Impact	**38,952**	**$3,550,533,015**	**$9,427,943,296**

Section XI – Identifying the Future Workforce Needs of NIWC Atlantic

One of the current ongoing challenges facing many organizations across all industries in the United States is attracting and retaining qualified workers. A persistent labor shortage has emerged since the onset of the COVID-19 pandemic and is largely driven by the retirement of the Baby Boomers and the general aging of the population. As such, this labor shortage is not a temporary phenomenon and therefore represents a long-run hiring challenge for NIWC Atlantic that must be proactively addressed. Section XI of this report provides a closer inspection of the specific workforce needs of NIWC Atlantic and then compares these needs to broader labor market trends in order to identify potential hiring challenges that NIWC Atlantic may face in the coming years.

A Profile of the Current NIWC Atlantic Workforce

In FY24, NIWC Atlantic maintained a civilian employment count of approximately 4,900 individuals with employment concentrated primarily in the following occupation groups: Engineering and Architecture (29.6%), Information Technology (27.9%), Mathematical Sciences (16.8%), and General, Administrative, Clerical, and Office Services (16.8%). The average total compensation across all occupation groups is approximately $121,083. Table 63 provides a breakdown of the distribution of employment by individual occupation group along with each group's average compensation level.

Table 63: Employment Distribution and Average Salaries by Occupation Group

All NIWC Atlantic Facilities

Occupation Group	% Employment	Average Total Compensation
Accounting and Budget	1.4%	$109,859
Business and Industry	2.7%	$116,147
Education	0.1%	$129,385
Engineering and Architecture	29.6%	$124,761
Equipment, Facilities, and Services	0.3%	$121,329
General, Administrative, Clerical, and Office	16.8%	$116,441

Human Resources Management	0.9%	$99,537
Information and Arts	0.3%	$110,563
Information Technology	27.9%	$127,255
Inspection, Investigation, Enforcement, and Compliance	0.1%	$133,252
Legal and Kindred	0.3%	$161,751
Mathematical Sciences	16.8%	$114,066
Miscellaneous	1.5%	$92,219
Natural Resources Management and Biological Sciences	0.0%	$132,998
Physical Sciences	0.2%	$117,686
Quality Assurance, Inspection, and Grading	0.6%	$117,694
Social Science, Psychology, and Welfare	0.0%	$178,707
Supply	0.3%	$108,032
Transportation	0.3%	$123,585
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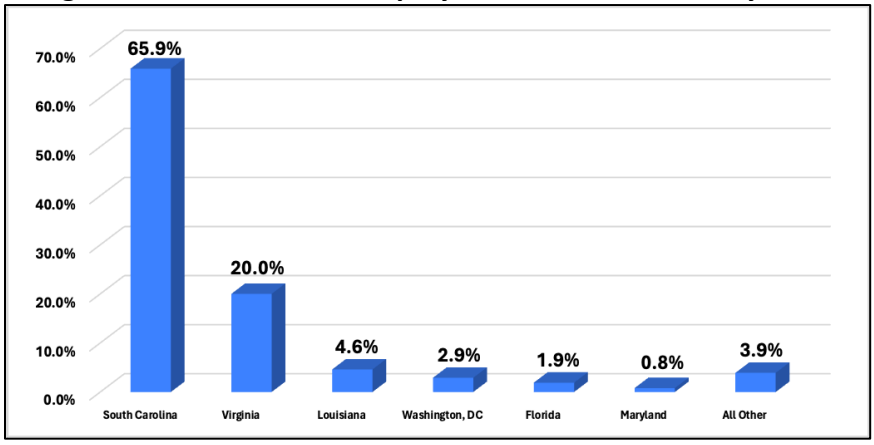
Total	**100%**	**$121,083**

The majority of NIWC Atlantic's employment base is located within the NIWC Atlantic facilities located in the District of Columbia, Florida, Louisiana, Maryland, South Carolina, and Virginia. Figure 2 shows the distribution of FY24 employment among these six regions. Nearly two-thirds of all employment is concentrated within facilities in South Carolina.

Figure 2: NIWC Atlantic Employment Concentration by State



In order to identify the occupation and labor market trends associated with the NIWC Atlantic workforce, it is first necessary to translate each occupation group into the equivalent Standard Occupational Classification (SOC) codes as maintained by the U.S. Bureau of Labor Statistics (BLS). SOC codes represent the standard system of identification used by the BLS the to organize and group different types of jobs to track employment trends, wages, and job growth across the country. Each NIWC Atlantic position and/or series title in the two most concentrated occupation groups[3] was assigned to its corresponding SOC code, with the list of all NIWC Atlantic occupation groups and all corresponding SOC codes shown in Appendix A.

The Hiring Challenge Index (HCI)

Once all NIWC Atlantic occupations are assigned to their corresponding SOC codes, it becomes possible to examine relative hiring challenges across occupations, which are impacted by national and local labor market trends. In this analysis, four specific criteria were identified and used to create a Hiring Challenge Index (HCI) in order to be able to explicitly compare the relative hiring challenges among the largest occupation groups at NIWC Atlantic. Each occupation was assigned one of four HCI ratings depending on relative hiring difficulty: "significantly easier" (dark green), "moderately easier" (light green), "neutral" (yellow), "moderately harder" (light

[3] Engineering and Architecture Group; Information Technology Group

red), or "significantly harder" (dark red). For example, an occupation assigned a moderately harder HCI (light red) implies that this occupation is expected to generate more hiring challenges relative to the average NIWC Atlantic occupation. The four components that comprise the HCI, which are all weighted equally, are described below.

HCI Component 1: Total Compensation

The first HCI component measures, for each occupation, the competitiveness of the total compensation offered at NIWC Atlantic when measured against other potential employers in the United States. It specifically compares the total compensation associated with each occupation at NIWC Atlantic with the national median total compensation for that occupation as reported by the U.S. Bureau of Labor Statistics' Occupational Employment and Wages Statistics (OEWS) program. The most recent data available are from May 2024.

Occupations for which the total compensation at NIWC Atlantic is more than 10 percent below the national average or 2 to 10 percent below the national average are coded as dark red and light red, respectively. If the total compensation for an occupation is between 2 percent lower and 2 percent above the national average, it is coded as yellow. Occupations between 2 and 10 percent higher than the national average or more than 10 percent above the national average are coded as light green and dark green, respectively. For example, Computer and Information Systems Managers have an average NIWC Atlantic total compensation that is estimated to be more than 25 percent below the national average and is therefore coded as dark red for HCI Component 1.

HCI Component 2: NIWC Atlantic Demand

The second HCI component measures the total size of NIWC Atlantic's workforce within each occupation being examined. A larger number of workers in a given occupation, all else being equal, means that NIWC Atlantic's demand for this occupation will likely be higher over time. This implies that hiring for this occupation will be more challenging when compared to occupation categories at NIWC Atlantic in which only a few employees are working.

Occupations that comprise more than 25 percent of NIWC Atlantic's employment base across all of NIWC Atlantic's major occupation groups are coded as dark red. Occupations that comprise 15 percent to 25 percent, 5 percent to 15 percent, 2 to 5 percent, and less than 2 percent are coded as light red, yellow, light green, and dark green, respectively. The single largest occupation category in the NIWC Atlantic workforce is "Electronics Engineers, Except Computer," which spans 851 total employees and is officially coded dark red for HCI Component 2.

HCI Component 3: Labor Market Supply

Nearly all the occupations associated with positions at NIWC Atlantic require post-secondary education – and most often a bachelor's degree. Using data from the National Center for Education Statistics' (NCES), the specific post-secondary educational requirements for each NIWC Atlantic occupation can be identified along with the number of annual graduates in each field within the five-state region of South Carolina, Virginia, Florida, Louisiana, Maryland – plus Washington, DC. Examining the number of individuals that are graduating in fields that would prepare and/or qualify them for these occupations provides an estimate of the relative labor supply for NIWC Atlantic within each occupation.

Occupations in which there are fewer than 100 annual graduates in preparatory and/or qualifying degree programs are coded as dark red. For occupations in which the number of graduates fall between 100-500, 500-1,000, 1,000-2,500, or more

than 2,500, they are coded as light red, yellow, light green, and dark green, respectively. The occupation category with the fewest estimated number of annual graduates in preparatory and/or qualifying fields (46) is Marine Engineering and Naval Architect. This occupation is thus officially coded as dark red for HCI Component 3.

HCI Component 4: Labor Market Competition

The final component of the Hiring Challenge Index is a measure of labor market competition – that is – the degree to which other industries are competing for the same workers as NIWC Atlantic. All else being equal, it will be more difficult for NIWC Atlantic to hire workers in occupations where there is significant competition for these workers from other industries.

In order to measure the extent to which this competition exists, data on growth rates for each NIWC Atlantic occupation were obtained from the U.S. BLS and used as an estimate for relative competition.[4] In other words, occupations that are projected to experience the highest growth rates over the next decade suggest a high level of demand from growing industry sectors or the need to replace existing workers who are retiring, quitting, or are otherwise unavailable.

Any occupation projected to experience positive annual growth of more than 12 percent are coded as dark red. (Note that the average annual growth rate among all occupations through the year 2033 is 4%, implying that dark red occupations are expected to growth more than three times the national average). Occupations projected to experience growth between 8 percent and 12 percent, 4 percent and 8 percent, 0 percent to 4 percent, or negative growth are coded as light red, yellow, light green, and dark green, respectively. For example, consider that current projections show that the number of software developers will increase by 17.9

[4] The most recently available occupation projections extend through the year 2033.

percent per year over the next decade. This high level of demand indicates high levels of competition for these workers and results in a dark red rating for this component.

Hiring Challenge Index: Main Results

When all four components are examined and combined, the weighted average of each component generates the final HCI for each NIWC Atlantic occupation examined. These results are summarized in Table 64.

Table 64: Hiring Challenge Index (HCI) Ratings

SOC Code	Occupation	HCI Rating
11-3021	Computer and Information System Managers	Dark Red
17-2072	Electronics Engineers, Except Computer	Dark Red
15-1212	Information Security Analysts	Dark Red
15-1241	Computer Network Architects	Dark Red
15-1252	Software Developers	Dark Red
17-2061	Computer Hardware Engineers	Light Red
17-2141	Mechanical Engineers	Light Red
15-1232	Computer User Support Specialists	Yellow
15-1211	Computer Systems Analysts	Yellow
17-2011	Aerospace Engineers	Yellow
17-2121	Marine Engineers and Naval Architects	Yellow
17-2199	Engineers, All Other	Yellow
17-2071	Electrical Engineers	Yellow
17-2081	Environmental Engineers	Yellow
17-2112	Industrial Engineers	Yellow
15-1242	Database Administrators	Light Green
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	Light Green
15-1299	Computer Occupations, All Other	Light Green
17-2051	Civil Engineers	Light Green
13-1082	Project Management Specialists	Dark Green
15-1244	Network and Computer Systems Administrators	Dark Green

The primary occupations in which NIWC Atlantic will likely face hiring challenges over the next decade are those in the fields of Computer and Information System Managers, Electronics Engineers (Except Computer), Information Security Analysts, Computer Network Architects, and Software Developers. Note that these all represent SOC categories that encompass multiple NIWC Atlantic occupation groups, as displayed in Appendix A. For example, the Electronic Engineers (Except Computer) category in Table 64 matches to two NIWC Atlantic positions as identified in Appendix A: Electronics Engineering and Electronics Technical.

For all occupations identified by the HCI as either dark or light red, national industry staffing patterns were used to identify competitive industry sectors that are likely to be hiring the same types of workers that NIWC Atlantic is pursuing. The IT occupations coded as dark and light red in Table 64 are most commonly employed (and thus generally sought after) in the industries of Professional, Scientific, and Technical Services; Information Services; and Finance and Insurance Services.

The engineering occupations coded as dark and light red are most commonly found (and sought after) in the industries of Professional, Scientific, and Technical Services; Manufacturing; and Information Services. More specifically, the industry with the highest demand for engineers is Computer and Systems Design and Related Services. This industry contains establishments specializing in providing expertise in information technology, software development, computer system design, on-site management of computer systems, and related technical advice. Common examples of marquee companies in this industry include Alphabet Inc., Accenture Inc., Tata Consultancy Services Ltd., and Cognizant Tech Solutions Corp.

In the Information industry, companies in the Telecommunications and Software Publishers subsectors also represent areas of potential competition for qualified workers. Additionally, the Federal Government employs about 15.4 percent of all

Electronics Engineers, making other federal agencies potential competition for applicants.

Additional Localized Wage Comparisons

Although the HCI identifies the occupation groups for which NIWC Atlantic will likely have the most (and least) relative difficulty in hiring over the next decade, localized wage comparisons can provide additional insight into hiring challenges at the level of the individual NIWC Atlantic facility. As such, in addition to the HCI itself, this study specifically examines how total compensation levels at NIWC Atlantic for each occupation compares to the average compensation of that occupation within the broader region.[5]

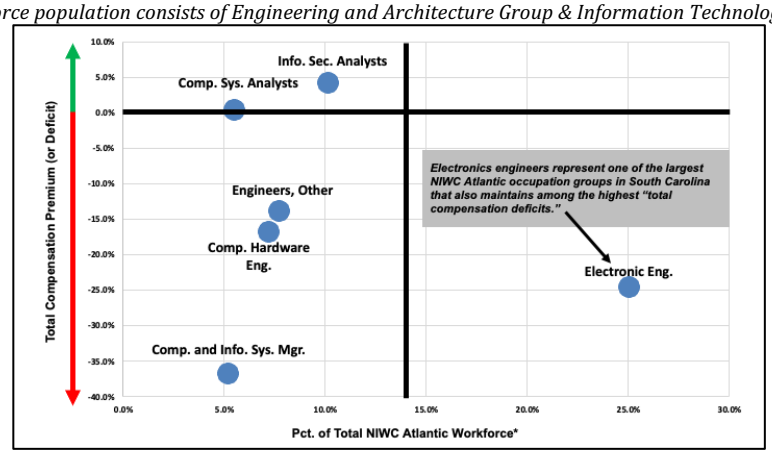
South Carolina

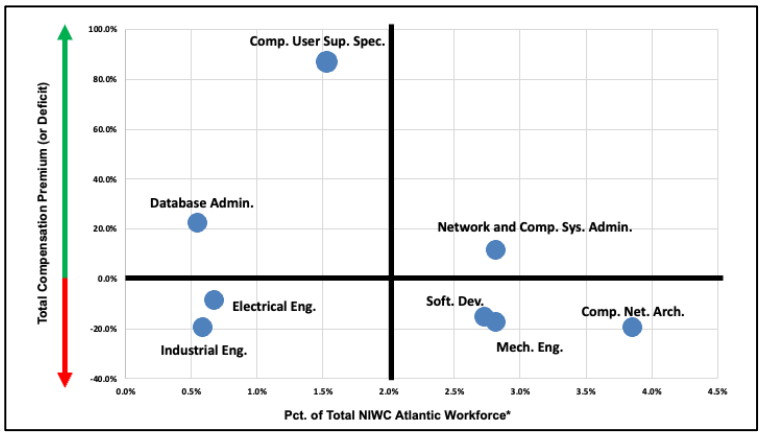
Within the South Carolina NIWC Atlantic facilities (located in Charleston, SC), Electronics Engineers represent the occupation category that maintains the largest "compensation deficit," – that is – the category that pays the lowest compensation relative to competitors in Charleston. More specifically, NIWC Atlantic pays Electronics Engineers approximately 24.6 percent below the average compensation for Electronics Engineers located in Charleston. In addition, Electronics Engineers is one of the largest occupation categories at NIWC Atlantic in Charleston, representing approximately 25.0 percent of the local NIWC Atlantic workforce. This combination – a large quantity of workers who are paid below their counterparts working for other local employers – implies that NIWC Atlantic may struggle to attract and retain talent in this field in the coming years. Figure 3 highlights the compensation deficit (or premium) for each occupation category along with the size of that occupation category. Note that occupations in the lower right quadrant represent those where NIWC Atlantic in South Carolina will likely face significant hiring challenges.

[5] Note that, as in the previous section, this analysis continues to examine the largest two occupation groups at NIWC Atlantic: Engineering and Architecture Group; Information Technology Group

Figure 3: Compensation Premiums and Workforce Size by Occupation: South Carolina

**Workforce population consists of Engineering and Architecture Group & Information Technology Group*





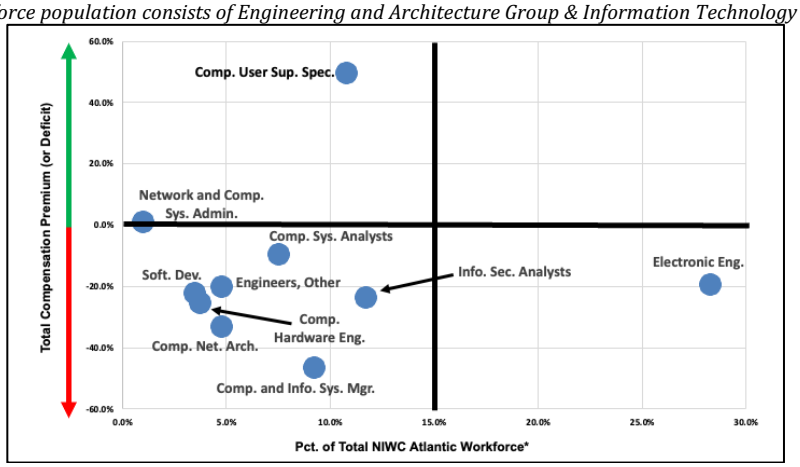
Virginia

Within the Virginia NIWC Atlantic facilities, Electronics Engineers again represents an occupation category that maintains a large "compensation deficit." More specifically, NIWC Atlantic pays Electronics Engineers approximately 19.6 percent below the average compensation for Electronics Engineers located in the broader region. In addition, Electronics Engineers is one of the largest occupation categories at NIWC Atlantic in Virginia, representing approximately 28.3 percent of the local NIWC Atlantic workforce, implying that NIWC Atlantic will face hiring challenges in Virginia for this occupation group. However, significant compensation deficits also exist for Computer and Information Systems Managers (-46.6%) and Computer

Network Architects (-33.4%), and Computer Hardware Engineers (-25.5%), among others. However, these latter three categories are not as large as that of Electronics Engineers. Figure 4 highlights the compensation deficit (or premium) for each occupation category along with the size of that occupation category.

Figure 4: Compensation Premiums and Workforce Size by Occupation: Virginia

**Workforce population consists of Engineering and Architecture Group & Information Technology Group*

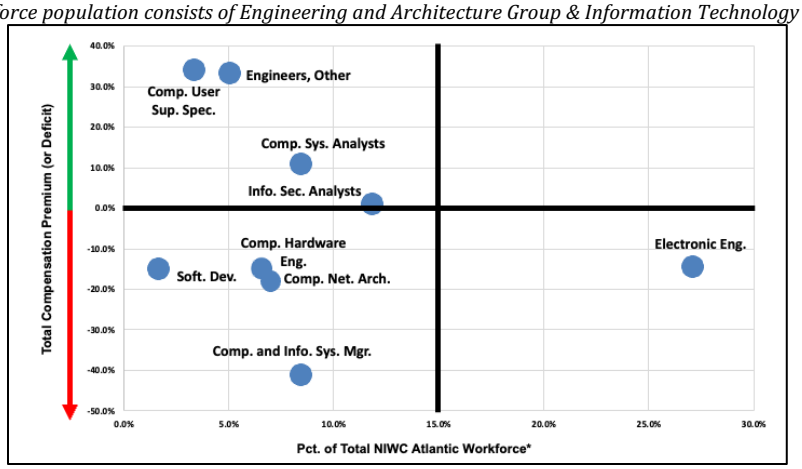


Florida

Within the Florida NIWC Atlantic facilities, Electronics Engineers is again the category maintaining the unique combination of being relatively large (in terms of the number of workers) and who are paid below their counterparts working for other local employers. Other occupation groups facing significant compensation deficits also exist for Computer and Information Systems Managers (-41.2%) and Sofware Developers (-15.0%), and Computer Network Architects (-14.1%), among others. Figure 5 highlights the compensation deficit (or premium) for each occupation category along with the size of that occupation category.

Figure 5: Compensation Premiums and Workforce Size by Occupation: Florida

**Workforce population consists of Engineering and Architecture Group & Information Technology Group*

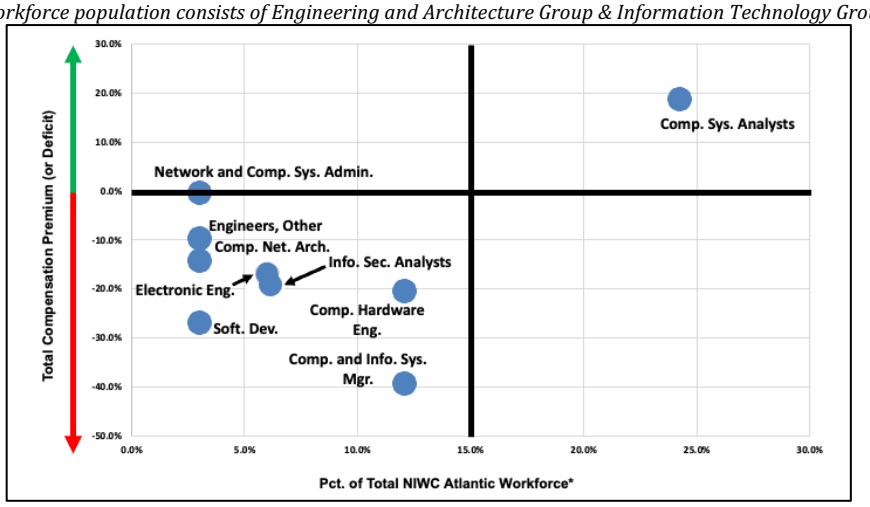


Maryland

Within the Maryland NIWC Atlantic facilities, the largest occupation category is that of Computer Systems Analysts, which represents 24.2 percent of the local NIWC Atlantic employment base and pays an 18.6 percent compensation premium. Although there are no relatively large occupations (as a percentage of the local NIWC Atlantic workforce) with a compensation deficit, several smaller occupations nevertheless offer lower compensation than that of local competitors. These occupations include Computer and Information Systems Managers (-39.3%), Software Developers (-27.1%), and Computer Hardware Engineers (-20.6%), among others. Figure 6 highlights the compensation deficit (or premium) for each occupation category along with the size of that occupation category.

Figure 6: Compensation Premiums and Workforce Size by Occupation: Maryland

**Workforce population consists of Engineering and Architecture Group & Information Technology Group*

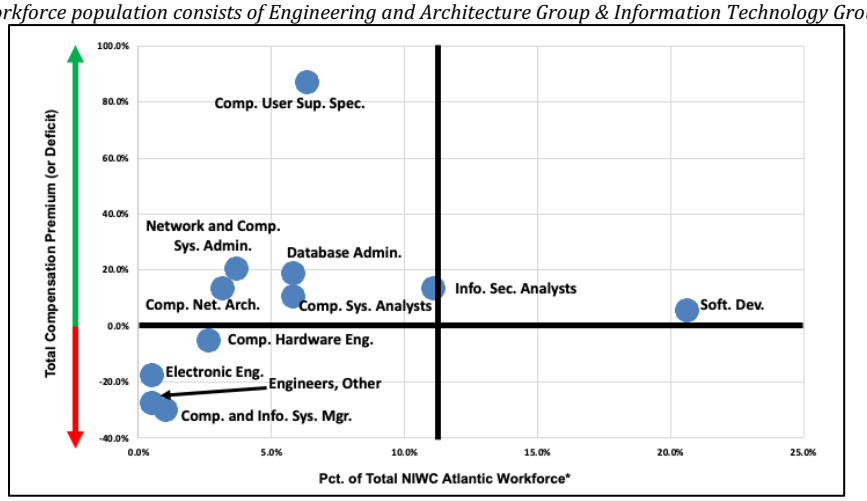


Louisiana

Within the Louisiana NIWC Atlantic facilities, the largest occupation category is that of Software Developers, which represents 20.6 percent of the local NIWC Atlantic employment base and pays a 5.4 percent compensation premium. Although there are no relatively large occupations (as a percentage of the local NIWC Atlantic workforce) with a compensation deficit, several smaller occupations nevertheless offer lower compensation than that of local competitors. These occupations include Computer and Information Systems Managers (-29.9%), Engineers-Other (-27.5%), and Electronics Engineers (-17.8%), among others. Figure 7 highlights the compensation deficit (or premium) for each occupation category along with the size of that occupation category.

Figure 7: Compensation Premiums and Workforce Size by Occupation: Louisiana

**Workforce population consists of Engineering and Architecture Group & Information Technology Group*

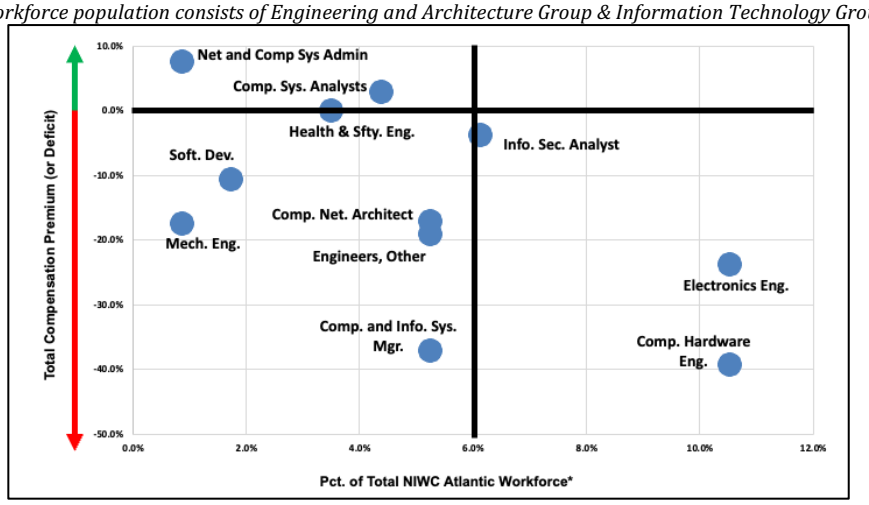


Washington, DC

Within the Washington, DC NIWC Atlantic facilities, there are multiple occupation groups that are both relatively large and maintain compensation deficits. These include Computer Hardware Engineers, Electronics Engineers, and Information Security Analysts, as shown in Figure 8 – and represent occupations in which NIWC Atlantic may struggle to attract and retain talent in the coming years. Occupations with the largest compensation deficits are Computer Hardware Engineers (-39.4%), Computer and Information Systems Analysts (-37.1%), and Electronics Engineers (-23.8%).

Figure 8: Compensation Premiums and Workforce Size by Occupation: Washington, DC

**Workforce population consists of Engineering and Architecture Group & Information Technology Group*



Section XII – Conclusion

The primary mission of NIWC Atlantic is to design and deploy advanced communications and information systems in the service of national defense. With facilities located in multiple states, NIWC Atlantic is a major contributor to local economies across the country. This is especially true with respect to the knowledge economy as well as to the specific development of cyber security, which is increasingly important for economic growth within regions containing industrial sectors that are technology-driven. The economic impact of NIWC Atlantic is driven both by the high-skilled, high-wage talent it attracts to the region as well as local procurement efforts that support a large volume of local suppliers and defense contractors. The total annual economic impact resulting from all activities associated with NIWC Atlantic on the United States is estimated to be approximately $10.0 billion, which is associated with 41,419 jobs and $3.8 billion in labor income. In addition, as of FY24, approximately 50.1 percent of all NIWC Atlantic personnel were identified as having some level of cyber security-related job functions.

A majority of NIWC Atlantic's workforce is also employed in various scientific and computer related professions. The most significant contribution to the knowledge economy comes through the employment of engineers, which represents the single

largest employment category at NIWC Atlantic. Regions with high concentrations of workers in the knowledge economy generate high levels of human capital resources and knowledge spillover effects. In the United States today, regions with a well-educated workforce and a strong innovation sector are those that are growing the fastest and those that have workers who are among the most productive, creative, and well paid in the country. Thus, the economic impact of NIWC Atlantic not only helps to support local economic growth through its sheer size, but also through its active support of the knowledge economy and the secondary benefits that such support provides. Because of these twin contributions, NIWC Atlantic continues to serve as a critical element of all of the local economies of which it is a part.

Appendix A

NIWC Atlantic Position Title/Series Title	FY24 Employment	Match SOC Code	Matched SOC Description	Hiring Challenge Index
INFORMATION TECHNOLOGY GROUP				
INFORMATION TECHNOLOGY SPECIALIST (APPLICATIONS SOFTWARE)	1	15-1252	Software Developers	Dark Red
INFORMATION TECHNOLOGY SPECIALIST (INFOSEC)	2	15-1212	Information Security Analysts	Dark Red
INFORMATION TECHNOLOGY SPECIALIST (SYSADMIN)	1	15-1244	Network and Computer Systems Administrators	Dark Green
INFORMATION TECHNOLOGY SPECIALIST (SYSANALYSIS)	1	15-1211	Computer Systems Analysts	Yellow
IT CYBERSECURITY SPECIALIST (INFOSEC)	3	15-1212	Information Security Analysts	Dark Red
IT PROGRAM MANAGER (APPSW)	2	15-1252	Software Developers	Dark Red
IT PROGRAM MANAGER (ENTARCH)	1	15-1241	Computer Network Architects	Dark Red
IT PROGRAM MANAGER (PLCYPLN)	24	11-3021	Computer and Informaton Systems Managers	Dark Red
IT PROGRAM MANAGER (SYSANALYSIS)	6	15-1211	Computer Systems Analysts	Yellow
IT PROGRAM MANAGER(PLCYPLN)	2	11-3021	Computer and Informaton Systems Managers	Dark Red
IT PROJECT MANAGER (APPSW)	1	15-1252	Software Developers	Dark Red
IT PROJECT MANAGER (CUSTSPT)	1	15-1232	Computer User Support Specialists	Yellow
IT PROJECT MANAGER (INFOSEC)	1	15-1212	Information Security Analysts	Dark Red
IT PROJECT MANAGER (PLCYPLN)	163	11-3021	Computer and Informaton Systems Managers	Dark Red
IT PROJECT MANAGER (SYSANALYSIS)	8	15-1211	Computer Systems Analysts	Yellow
IT SPECIALIST (APPSW)	119	15-1252	Software Developers	Dark Red
IT SPECIALIST (APPSW) (DATAMGT)	1	15-1252	Software Developers	Dark Red
IT SPECIALIST (APPSW) (SYSANALYSIS)	1	15-1252	Software Developers	Dark Red
IT SPECIALIST (APPSW/INFOSEC)	1	15-1252	Software Developers	Dark Red
IT SPECIALIST (APPSW/SYSADMIN)	1	15-1252	Software Developers	Dark Red
IT SPECIALIST (APPSW/SYSANALYSIS)	1	15-1252	Software Developers	Dark Red
IT SPECIALIST (CUSTSPT)	131	15-1232	Computer User Support Specialists	Yellow
IT SPECIALIST (CUSTSPT/NETWORK)	1	15-1232	Computer User Support Specialists	Yellow
IT SPECIALIST (CUSTSPT/SYSADMIN)	1	15-1232	Computer User Support Specialists	Yellow
IT SPECIALIST (DATAMGT)	22	15-1242	Database Administrators	Light Green
IT SPECIALIST (DATAMGT) (APPSW)	1	15-1242	Database Administrators	Light Green
IT SPECIALIST (DATAMGT) (SYSANALYSIS)	1	15-1242	Database Administrators	Light Green
IT SPECIALIST (ENTARCH)	32	15-1241	Computer Network Architects	Dark Red
IT SPECIALIST (INFOSEC)	334	15-1212	Information Security Analysts	Dark Red
IT SPECIALIST (INFOSEC/SYSADMIN)	1	15-1212	Information Security Analysts	Dark Red
IT SPECIALIST (NETWORK)	108	15-1241	Computer Network Architects	Dark Red
IT SPECIALIST (NETWORK/CUSTSPT)	1	15-1241	Computer Network Architects	Dark Red

NIWC Atlantic Position Title/Series Title	FY24 Employment	Match SOC Code	Matched SOC Description	Hiring Challenge Index
IT SPECIALIST (NETWORK/SYSADMIN)	1	15-1241	Computer Network Architects	Dark Red
IT SPECIALIST (OS)	2	15-1299	Computer Occupations, All Other	Light Green
IT SPECIALIST (PLCYPLN)	20	11-3021	Computer and Informaton Systems Managers	Dark Red
IT SPECIALIST (PLCYPLN) (APPSW)	1	11-3021	Computer and Informaton Systems Managers	Dark Red
IT SPECIALIST (PROJMGT)	1	13-1082	Project Management Speciaists	Dark Green
IT SPECIALIST (SYSADMIN)	80	15-1244	Network and Computer Systems Administrators	Dark Green
IT SPECIALIST (SYSADMIN) (SYSANALYSIS)	1	15-1244	Network and Computer Systems Administrators	Dark Green
IT SPECIALIST (SYSANALYSIS)	181	15-1211	Computer Systems Analysts	Yellow
IT SPECIALIST (SYSANALYSIS) (CUSTSPT)	1	15-1211	Computer Systems Analysts	Yellow
IT SPECIALIST (SYSANALYSIS/NETWORK)	1	15-1211	Computer Systems Analysts	Yellow
IT SPECIALIST(INFOSEC)	4	15-1212	Information Security Analysts	Dark Red
IT SPECIALIST(NETWORK)	1	15-1241	Computer Network Architects	Dark Red
IT SPECIALIST(SYSADMIN)	1	15-1244	Network and Computer Systems Administrators	Dark Green
IT SPECIALIST(SYSANALYSIS)	2	15-1211	Computer Systems Analysts	Yellow
SUPERVISOR	1	11-3021	Computer and Informaton Systems Managers	Dark Red
SUPERVISORY INFORMATION TECHNOLOGY SPECIALIST (INFOSEC)	1	15-1212	Information Security Analysts	Dark Red
SUPERVISORY IT CYBERSECURITY SPECIALIST (INFOSEC)	1	15-1212	Information Security Analysts	Dark Red
SUPERVISORY IT CYBERSECURITY SPECIALIST (SYSANALYSIS)	1	15-1211	Computer Systems Analysts	Yellow
SUPERVISORY IT PROGRAM MANAGER (PLCYPLN)	7	11-3021	Computer and Informaton Systems Managers	Dark Red
SUPERVISORY IT PROGRAM MANAGER (SYSANALYSIS)	1	15-1211	Computer Systems Analysts	Yellow
SUPERVISORY IT PROJECT MANAGER (PLCYPLN)	1	11-3021	Computer and Informaton Systems Managers	Dark Red
SUPERVISORY IT PROJECT MANAGER (SYSANALYSIS)	1	15-1211	Computer Systems Analysts	Yellow
SUPERVISORY IT SPECIALIST (APPSW)	4	15-1252	Software Developers	Dark Red
SUPERVISORY IT SPECIALIST (CUSTSPT)	7	15-1232	Computer User Support Specialists	Yellow
SUPERVISORY IT SPECIALIST (ENTARCH)	1	15-1241	Computer Network Architects	Dark Red
SUPERVISORY IT SPECIALIST (INFOSEC)	6	15-1212	Information Security Analysts	Dark Red
SUPERVISORY IT SPECIALIST (NETWORK)	3	15-1241	Computer Network Architects	Dark Red
SUPERVISORY IT SPECIALIST (SYSANALYSIS)	6	15-1211	Computer Systems Analysts	Yellow
SUPV IT SPECIALIST (SYSANALYSIS)	1	15-1211	Computer Systems Analysts	Yellow
SUPV IT SPECIALIST (APPSW)	8	15-1252	Software Developers	Dark Red
SUPV IT SPECIALIST (CUSTSPT)	3	15-1232	Computer User Support Specialists	Yellow
SUPV IT SPECIALIST (INFOSEC)	9	15-1212	Information Security Analysts	Dark Red
SUPV IT SPECIALIST (NETWORK)	2	15-1241	Computer Network Architects	Dark Red

NIWC Atlantic Position Title/Series Title	FY24 Employment	Match SOC Code	Matched SOC Description	Hiring Challenge Index
SUPV IT SPECIALIST (SYSANALYSIS)	14	15-1211	Computer Systems Analysts	Yellow
Supervisory IT Specialist (PLCYPLN)	1	11-3021	Computer and Information Systems Managers	Dark Red
ENGINEERING AND ARCHITECTURE GROUP				
AEROSPACE ENGINEERING	2	17-2011	Aerospace Engineers	Yellow
ARCHITECTURE	2	17-2121	Marine Engineers and Naval Architects	Yellow
CIVIL ENGINEERING	1	17-2051	Civil Engineers	Light Green
COMPUTER ENGINEERING	217	17-2061	Computer Hardware Engineers	Light Red
ELECTRICAL ENGINEERING	17	17-2071	Electrical Engineers	Yellow
ELECTRONICS ENGINEERING	493	17-2072	Electronics Engineers, Except Computer	Dark Red
ELECTRONICS TECHNICAL	358	17-2072	Electronics Engineers, Except Computer	Dark Red
ENGINEERING TECHNICAL	5	17-2199	Engineers, All Other	Yellow
ENVIRONMENTAL ENGINEERING	1	17-2081	Environmental Engineers	Yellow
GENERAL ENGINEERING	237	17-2199	Engineers, All Other	Yellow
INDUSTRIAL ENGINEERING	18	17-2112	Industrial Engineers	Yellow
MECHANICAL ENGINEERING	68	17-2141	Mechanical Engineers	Light Red
SAFETY ENGINEERING	1	17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	Light Green