

STATE *of* CONNECTICUT
OFFICE *of* MILITARY AFFAIRS
(OMA)

Annual Report
Fiscal Year 2018-2019



Robert T. Ross
Executive Director

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I. Introduction

For its legendary support in the Revolutionary War, President George Washington called Connecticut the “*Provisions State*.” From the beginning of America’s democracy, Connecticut has played a key role in producing the diverse and highest quality human and physical resources for our nation’s defense.



Connecticut Governor Ned Lamont shakes the hands of more than 125 deploying Connecticut Air National Guardsmen assigned to the 103rd Air Wing during the unit's sendoff ceremony at Bradley Air National Guard Base in East Granby, Tuesday, June 18, 2019. (Photo courtesy of Ms. Allison Joanis, Public Affairs Specialist, Connecticut National Guard)

Units of the Connecticut National Guard are dispersed in armories and other facilities across the state. Throughout its long history, dating back to colonial militias, Guard units have responded to state and national emergencies and performed combat operations around the world. The Connecticut National Guard is headquartered next to the State Capitol in Hartford, in the massive

State Armory and Arsenal building dedicated by President William H. Taft in 1909.

In 1794, after the Continental Congress decided to create a United States Navy, an expedition sailed from New London to retrieve live oak, the hardest wood available, to build America’s first warships at different shipyards along the East Coast. These ships were not modified merchant vessels. They were designed from the keel up to be warships. One of them, the USS Constitution, remains the oldest commissioned warship in the world.

The Navy base in Groton was originally a Naval Yard and Storage Depot, established in 1868. It was built on land donated by the people of Connecticut. The State Legislature provided \$15,000 and the City of New London appropriated \$75,000 for the purchase of land on the east bank of the Thames River in the New London harbor. In 1916 the base was designated the nation’s first Naval Submarine Base and home of the Submarine School.

The first land-based campus of the Coast Guard Academy was established at Fort Trumbull in 1910 and then moved to land donated by the City of New London in 1915. The Coast Guard Academy is the single officer accession source of all commissioned officers for the U.S. Coast Guard. Today, the men and women of the Coast Guard serve at stations ashore and aboard cutters deployed throughout the U.S. and in every ocean.

Since the first days of our democracy, Connecticut’s defense manufacturing industry has continued without interruption. The ships, submarines, aircraft, jet engines, helicopters, firearms and advanced weapon systems built in Connecticut reflect our state’s continuous innovation and highly skilled workforce. Connecticut’s defense industry and military bases produce billions of dollars in

economic activity throughout the state, in large and small businesses in virtually every municipality.

Overview of OMA

The Office of Military Affairs (OMA) was established by Connecticut General Statute 32-58b in 2007. Accordingly, “the Office of Military Affairs shall promote and coordinate state-wide activities that enhance the quality of life of all branches of military personnel and their families and to expand the military and homeland security presence in this state.”

Mission of OMA

- Coordinate efforts to prevent the closure or downsizing of Naval Submarine Base New London in Groton (SUBASE).
- Support Connecticut’s military families and enhance their quality of life.
- Advocate for Connecticut’s defense industry, a major component of the state’s economy and an engine of innovation and quality production for the U.S. Armed Forces.
- Encourage the retention of established military and defense industry missions and the relocation of new ones to the state.
- Serve as liaison to the Connecticut congressional delegation on defense and military issues.

Structure and Organization

As directed in statute, OMA is established within the Department of Economic and Community Development (DECD) for

administrative purposes only. OMA and DECD are co-located at 450 Columbus Boulevard in Hartford, Connecticut.

The office is minimally staffed with a full-time Executive Director, designated as a department head in the executive branch, reporting directly to the Office of the Governor. The Executive Director is supported by DECD staff members and interns who provide support for OMA in various functions including, but not limited to, office administration, public communications, financial management, legal counsel, information technology, economic research and legislative affairs.

The legislation setting forth duties and responsibilities of the OMA Executive Director was revised by the Connecticut General Assembly (Appendix A) and was signed into law by Governor Malloy on June 19, 2015.

OMA is an active member of the national Association of Defense Communities (ADC), a Washington-based organization that represents states and communities nationwide that host military installations. OMA Executive Director Bob Ross was elected to the ADC Board of Directors for his many contributions to the organization, including participation in numerous thought-leading programs at national and regional forums.

II. Key Defense Issues for the Nation and State

The year 2018 was something of a roller coaster with respect to national security developments, featuring up and down U.S. relations with North Korea and China, the sudden drawdown of U.S. forces in Afghanistan and Syria, the resignation of a highly respected Secretary of Defense, and a mid-term election that

gained control of the House of Representatives for Democrats and put new faces in charge of key House defense panels.

But there was welcome stability in defense funding, with a Department of Defense (DOD) appropriations bill passed by Congress and signed into law prior to the Oct. 1, 2018, start of Fiscal Year (FY) 2019. It was the first time in a decade that DOD received its annual funding on time.

For Connecticut, it was another good year for the state's defense industrial base. Oddly, both the FY18 and FY19 defense appropriations bills were passed in 2018, the former in March, the latter in September. Together, they provided very substantial funding for *Virginia*-class submarines and the new generation of *Columbia*-class ballistic missile submarines – with Electric Boat (EB) as the prime contractor for both -- Pratt & Whitney engines for the F-35 Joint Strike Fighter, and Sikorsky helicopter programs.

National Security Issues

The key national security developments in 2018 centered around North Korea, China and Afghanistan/Syria.

After exchanging nuclear missile threats in January 2018, President Donald Trump and North Korean leader Kim Jong Un met face-to-face six months later in Singapore. Subsequently the two leaders met in Vietnam in February 2019 and, briefly, at the North/South Korean border in July 2019. These extraordinary developments led to high expectations for improved relations between North and South Korea, and between North Korea and the United States. Negotiations in pursuit of these goals are still in progress.

In retaliation against high Chinese tariffs on imports, e.g., a 25% tariff on autos, and complaints from U.S. businesses that China

routinely steals or requires companies to hand over intellectual property, the United States imposed tariffs on certain Chinese products. In response, China imposed new tariffs that harmed U.S. soybean farmers and other exporters. The two countries have been closely engaged in on-again, off-again talks toward lowering or eliminating tariffs

In early 2019 the United States began to withdraw troops in Syria and Afghanistan. In following months debate involving the White House and Congress ensued on the timetable and scale of such drawdowns.

These and other national security risks and challenges throughout 2018 and into 2019 highlighted the need for a strong and ready defense, with advanced weapons systems such as those produced in Connecticut to support the Pentagon's National Defense Strategy (NDS).

Secretary of Defense Mattis Resignation

Secretary of Defense James Mattis, a highly respected retired four-star Marine Corps general, resigned on Dec. 20, in response to – and one day after – the President's announcement to withdraw U.S. forces from Syria. Secretary Mattis had commanded Marines in Afghanistan and in the 2003 invasion of Iraq before heading the U.S. Central Command, overseeing all U.S. forces in the Mideast. Today, the Pentagon is still operating under the NDS Secretary Mattis released in 2018.

Changes in Congressional Defense Leadership Positions

The outcome of the November mid-term congressional elections – with Democrats gaining control of the House – along with the Aug. 25, 2018, death of Arizona Republican Sen. John McCain, and the retirement of another prominent senator led to

changes in the leadership of congressional defense committees and subcommittees.

Sen. McCain, former Navy fighter pilot and prisoner of war in Vietnam, was chairman of the Senate Armed Forces Committee (SASC). He was one of the most effective and respected military experts in Congress over the past three decades. He was diagnosed with brain cancer in September 2017 but continued his work in the Senate while undergoing chemotherapy. Upon his death Sen. McCain was replaced as SASC chairman by Sen. James Inhofe of Oklahoma, a longtime SASC member.

On April 1, 2018, Republican Sen. Thad Cochran of Mississippi retired from the Senate due to health reasons. First elected to the Senate in 1978, he served as chairman of the Senate Appropriations Committee and its Defense Subcommittee at the time of his retirement. He was replaced in both positions by Sen. Richard Shelby of Alabama.

As a result of the mid-term House elections in November, Democratic Rep. Adam Smith of Washington in January 2019 became chairman of the House Armed Services Committee (HASC), replacing Republican Rep. Mac Thornberry of Texas. Thornberry, who had been HASC chairman since 2015, became Ranking Member (senior Republican) on the committee. Smith had been Ranking Member before his elevation to chairman.

Another important change in the House was the position of Chair, Defense Appropriations Subcommittee. Republican Rep. Kay Granger of Texas was replaced in that position by Democratic Rep. Pete Visclosky of Indiana.

The Democratic ascendancy in the House resulted in a significant boost for the Connecticut congressional delegation.

Connecticut Rep. Joe Courtney of the 2nd Congressional District became chair of the HASC Seapower Subcommittee, after having served as Ranking Member of that panel. Rep. Courtney's district in southeast Connecticut includes Navy Submarine Base New London and Electric Boat.

In the Senate, Democratic Sen. Richard Blumenthal of Connecticut continued to serve on SASC, including the Seapower, Airland and Cybersecurity subcommittees. Connecticut Democratic Sen. Chris Murphy continued to serve on the Senate Appropriations Committee, including the Military Construction/Veterans Affairs Subcommittee.

DOD Funding

As stated above, 2018 saw something unusual in the world of congressional appropriations – two defense appropriations bills passed in the same year.

The FY18 DOD appropriations bill – which, along with other appropriations bills should have been passed by Congress by Sept. 30, 2017 – wasn't passed until March 23, 2018. It was delayed by months of congressional negotiations over raising spending caps for FY18 and FY19 that had been imposed by the Budget Control Act (BCA) of 2011. The BCA spending limits, known as "sequestration," were scheduled to resume in 2018 after having been increased by Congress for 2016 and 2017. Congress finally passed legislation in February 2018 raising the FY18/19 spending caps; weeks later it passed an "omnibus" bill providing FY18 appropriations for DOD and other federal agencies.

The FY19 congressional appropriations process was much smoother and faster, at least for defense funding. Without spending caps to deal with, Congress in September 2018 passed

FY19 appropriations bills for DOD, the Department of Veterans Affairs, and certain other departments. However, nine other Executive Branch departments were caught up in a dispute between Congress and President Trump over the latter's demand for \$5.7 billion for a U.S.-Mexico border wall. This resulted in a partial shutdown of the government, starting Dec. 22 and ending Jan. 25, 2019. It was the longest federal government shutdown in history and had severe financial impacts for United States Coast Guard organizations, personnel and their families in Connecticut.

State of Connecticut Defense Issues

The FY19 defense appropriations bill contained an increase of \$19.5 billion above the FY18 level, thanks mainly to the generous increase in FY19 spending caps approved by Congress in early 2018. The bill was very favorable to Connecticut's defense industrial base, particularly as regards submarine production. Key items:

- \$7.1B for procurement of two *Virginia*-class submarines and advanced procurement for future subs.
- \$180M for research and development for the next generation of attack submarines.
- \$3.2B for advanced procurement for *Columbia*-class ballistic missile submarines.
- \$543M for *Columbia*-class research and development.
- \$225M in submarine industrial base support to ensure that second- and third-tier submarine suppliers in Connecticut and elsewhere will be able to increase production to support the *Virginia*- and *Columbia*-class sub programs.
- \$9.3B for 93 F-35 Joint Strike Fighter aircraft, with Pratt & Whitney engines.

- Funding for 8 CH-53K heavy lift helicopters for the Marine Corps, 10 combat rescue helicopters, and 6 VH-92 Presidential helicopters, all built by Sikorsky.
- Funding for 9 additional Sikorsky Black Hawk helicopters.

The Connecticut congressional delegation was closely involved in supporting many of the bill's important provisions and noted the positive outcomes it produced.

"This is a good bill – it keeps our government funded and makes critical investments in our national security," said Sen. Murphy. "Once again, this shows that our country relies on Connecticut to make the machines that protect our country." Sen. Blumenthal noted that the bill funds "high-priority defense programs that create jobs and help drive economic growth in Connecticut." Rep. Courtney said the bill "is good news for Connecticut's defense industry and our economy as a whole."

Electric Boat Expansion and State Support

With submarine construction continuing to ramp up at a heady pace, EB in 2018 enhanced its commitment to Connecticut for expansion and hiring while the state responded with various means of support. On May 1 the State of Connecticut and EB announced an agreement aimed at supporting EB's growth along with substantial expansion of its workforce. Under the agreement, EB agreed to:

- Grow its workforce by 1,881, bringing its total in Connecticut to more than 13,000.
- Make capital investments of \$852M in the state.

- More than double its \$250M annual spending on 700+ Connecticut suppliers.

For its part, the state pledged to undertake the following actions:

- The CT Department of Economic and Community Development (DECD) would provide a \$35M loan for machinery and equipment.
- Provide up to \$20M in sales and use tax exemptions for capital and new construction at EB's facility in Groton.
- Provide an \$8M grant for third-party workforce development initiatives at community colleges, technical high schools and organizations in Connecticut such as the Eastern Workforce Investment Board.
- Provide \$20M for dredging, allowing future submarines to be launched from a new dry dock.

In announcing the agreement, then-Gov. Dannel Malloy said it would "ensure that thousands of good paying manufacturing jobs continue to grow for years to come," adding: "This isn't just a good deal for southeastern Connecticut. It's a good deal for residents across the state, where over 700 supply chain companies with locations in over 100 towns will see increased demands from the best submarine maker in the world."

In September 2018 EB announced plans for an \$852 million project to expand and improve its Groton shipyard, including a new construction bay where the *Columbia*-class ballistic missile submarines would be built. In addition to the new assembly building EB plans to build a floating dry dock. EB estimates that these projects will require some 2,500 construction jobs, with an onsite peak of 400.

At the end of 2018 EB had a company-wide workforce of some 17,000 employees, about 11,600 of them in Connecticut. The overall workforce is expected to grow to more than 20,000 by the mid-2020s.

According to a U.S. Maritime Association study, each job in the private shipbuilding and repair industry supports another 2.7 jobs. These additional jobs provide significant positive impact throughout Connecticut, for example, in retail, housing and education.

Pratt & Whitney/Sikorsky

It was also a good year for the other giant components of the state's defense industrial base, United Technologies Corporation's (UTC) Pratt & Whitney and Lockheed Martin subsidiary Sikorsky Aircraft.

In a May 23 news conference at the East Hartford headquarters of military jet engine manufacturer Pratt & Whitney, UTC CEO Greg Hayes announced that UTC would be hiring 35,000 workers over the next five years, 2,000 of them in Connecticut.

One of Pratt & Whitney's key programs is the exclusive manufacture of jet engines for the F-35 Joint Strike Fighter, designed for use by the Air Force, Navy and Marine Corps. On May 31, 2018, DOD awarded a \$2B contract to Pratt & Whitney for 135 F-35 engines, along with program management, engineering support, spare modules and spare parts. At the time, the company had delivered 375 F-35 engines. UTC received another substantial defense contract earlier in the year, on Feb. 21, when United Technologies Aerospace Systems was awarded a five-year \$2.5B contract by the Defense Logistics Agency (DLA) for aviation-related spare parts for all of the military services, including the Coast Guard.

Sikorsky's 2018 highlights included the May 16 delivery of the first CH-53K King Stallion heavy lift helicopter for the Marine Corps. It was the first of an expected 200 such helicopters, which will replace the Marines' aging fleet of CH-53E Super Stallion helicopters, in use since 1981. The overall cost is estimated to be \$25B.

Later in the year, on Nov. 5, Sikorsky was awarded a contract of \$717M for supply and logistics support for the fleet of the CH-53E and Navy MH-53E helicopters. The contract will help sustain these helicopters until the new CH-53K King Stallion helicopters are fully in operation.

Finally, on Oct. 31 Sikorsky marked the 40th anniversary of the delivery of its first iconic Black Hawk helicopter to the Army, in 1978. More than 4,000 Black Hawk aircraft are currently being used around the world; the U.S. Army is the largest operator with 2,136 Black Hawk H-60 helicopters. The Black Hawk program is supported by thousands of Sikorsky employees in Connecticut and elsewhere.

III. **Connecticut Defense Industry Outlook**

This analysis of past and projected defense spending in Connecticut is based on three sources of data:

1. OMA's monitoring of prime contracts (\$7M or more) awarded to Connecticut companies or companies doing business in the state, as reported by DOD on a daily basis. OMA tracks such year-to-year defense contracting via calendar years.
2. The website USASpending.Gov, which tracks federal prime contract awards as low as \$3,000 awarded in federal fiscal years. This is a federal government

website, managed by the Bureau of Fiscal Services in the Department of the Treasury.

3. The annual DOD publication, *Projected Defense Purchases, Detail by Industry and State*. This report calculates *projected* defense spending in states and regions. It is based on data from a DOD analytical tool, the Defense Employment and Purchases Projection System (DEPPS), and is thus known as the "DEPPS Report." It is produced by the Pentagon's office of Cost Assessment and Program Evaluation (CAPE).

To fully understand the data presented in OMA's analysis, it is important to know the methodology used in the DEPPS report. The DEPPS report provides projections based on the defense budget sent to Congress every year by the White House, usually in early February. Since Congress invariably makes changes to dozens of budget items – deleting some, adding others, raising or lowering spending amounts – the projections are not intended to be exact.

Rather, the intent is to show anticipated defense spending trends over the years covered in the report. Put differently, the projections serve as reference points describing "the future pattern of defense and defense-related expenditures," based on current defense spending plans. (*Projected Defense Purchases, Detail by Industry and State, 2018*, Office of the Secretary of Defense, Cost Assessment and Program Evaluation, p. 159.)

The 2018 DEPPS Report, issued on Sept. 9, 2019, is based on the Trump Administration's FY 2019 DOD budget sent to Congress in February 2018. This report includes five-year projections beyond the current fiscal year, from FY 2019 through FY 2023. These projections are derived from DOD's Future Year Defense Program (FYDP), which estimates defense spending for five years beyond

current year budgets. The FYDP is part of the annual budget sent to Congress.

Connecticut Defense Contracting in 2018

The year 2018 was a very good one for the Connecticut defense industrial base, with \$13.9B in contracts awarded to prime contractors in the state. Three major contracts accounted for roughly half that amount:

- As stated above, a \$2.5B award on Feb. 21 to United Technologies Aerospace Systems by the DLA for aviation-related spare parts and related services for all the military branches.
- Also reported above, a \$2B contract to Pratt & Whitney on May 31 from the Naval Air Systems Command for F-35 Joint Strike Fighter engines for the Navy, Marine Corps and Air Force, along with Foreign Military Sales customers.
- A DLA contract worth \$2.46B on Sept. 20 to United Technologies to furnish Air Force depots with repairable and consumable parts.

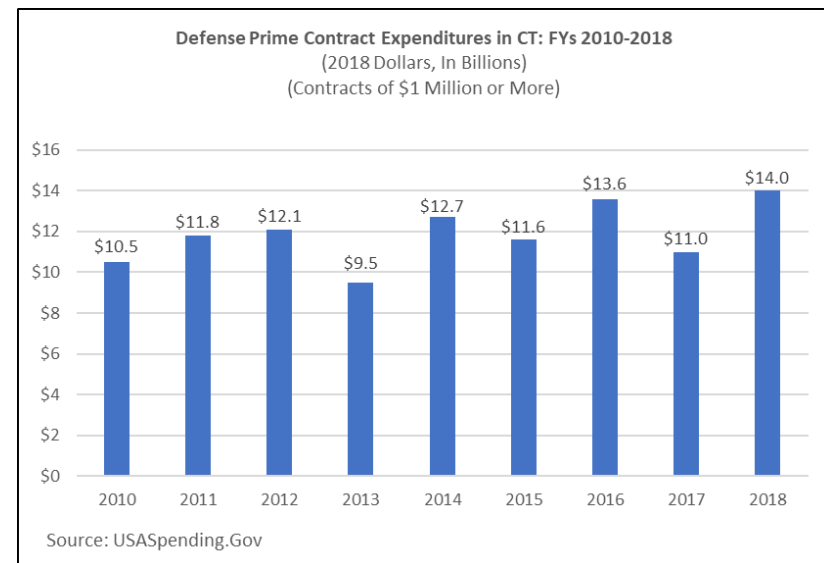
It was the third highest year for defense contracts since 2007, the year OMA was established and when it started tracking contracts to Connecticut companies or companies doing business in the state as reported by DOD.

The best year was 2014, when CT defense contracts soared to \$27.1B. Almost two-thirds of that amount came from the largest shipbuilding contract in Navy history, \$17.6B, awarded to EB for construction of 10 *Virginia*-class submarines. Electric Boat is the prime contractor and shares contracts in a teaming agreement with Huntington Ingalls Industries in Newport News, Virginia.

The second highest year was 2017, when Connecticut's defense contract awards amounted to \$23.04B. This marks the first time since 2007 that the state's defense industry has had two consecutive years with annual contracts of more than \$10B.

Trend in Prior Year Contracting

Figure 1 shows the trend in defense spending to Connecticut companies for fiscal years 2010-2018. The chart is based on data from the federal government website USASpending.gov.



[Figure 1]

As stated on P. 7 above, DOD announces – and OMA tracks – only prime contracts of \$7M or more. However, USASpending.Gov tracks DOD prime contracts as low as \$3,000. Its contract data can be measured in various increments of contract values above that. Figure 1 is based on contracts worth \$1M or

more. The USASpending amounts are higher than those reported by OMA since they include many hundreds of relatively small contracts.

And, as noted above, another significant difference between the OMA/DOD contract numbers and those of USA Spending is that the former are based on calendar years, while USASpending tracks contract spending by fiscal years.

Despite these differences, the USASpending data is very helpful in depicting trends over a prior-years timeframe, just as the DEPPS report projects spending trends over future years.

Figure 1 depicts strong and steady defense contract spending in Connecticut for the nine-year period for fiscal years 2010-2018, with each year except 2013 above \$10B. The dip from \$12.1B in 2012 to \$9.5B in 2013 is most likely the result of government-wide spending caps known as “sequestration,” imposed by the Budget Control Act of 2011.

Passed by Congress with the goal of lowering federal budget deficits, the cuts took effect in 2013 and included significant defense spending reductions for that year. The spending caps were subsequently raised by Congress in two-year increments from FYs 2014 through 2019. The most recent budget caps were scheduled to expire at the end of FY 2019, that is, by Sept. 30, 2019.

In the spring and early summer of 2019 congressional leaders were in discussions on lifting the spending caps for 2020 and 2021. At the end of July 2019 – just before Congress’s August recess – the White House reached an agreement with Senate and House leaders on a two-year budget deal that will once again raise spending caps and raise the debt ceiling.

Under the deal, defense spending will get an additional \$20B in FY 2020 beyond the BCA spending caps and a \$24.5B increase in FY 2021. Non-defense spending will get \$27B more in FY 2020 and an additional \$29.5B the year after. And, importantly, the BCA spending caps will no longer apply beyond FY 2021.

The decline from 2016 to 2017 is most likely based on the difference in reporting on contract awards as announced daily by DOD and tracked by OMA, and awards reported by USASpending. Federal contracts – especially large ones -- are almost always spread over multi-years, with actual amounts awarded year-by-year. DOD announces the full amount of multi-year contracts as they are awarded. However, USASpending.Gov tracks the awards as the amounts are actually allocated to the contractor in each year of the contract.

Total defense contracts awarded to Connecticut companies during CY 2017, as announced by DOD, totaled a lofty \$23B. As stated above, it was one of the best years ever for the state’s defense industry and included several multi-billion, multi-year contracts.

For example, Pratt & Whitney in 2017 received a \$6.7B Air Force contract for sustainment of F-119 engines used on the F-22 jet fighters. The contract life was through 2025, with funds parceled out year-by-year until then. While this contract accounted for a sizeable amount of the \$23B reported by OMA for 2017, USASpending takes into consideration only amounts made available to the contractor each year between 2017 and 2025. Thus, the 2017 amounts reported in USASpending are considerably lower than those tabulated by OMA.

Suppliers to Prime Contractors

Another measurement of the health of the state’s defense industrial base is the value of sub-contracts awarded by the prime contractors to their suppliers in Connecticut. Although such spending is hard to quantify, the Submarine Industrial Base Council tracks amounts spent or contracted to submarine suppliers for major submarine programs.

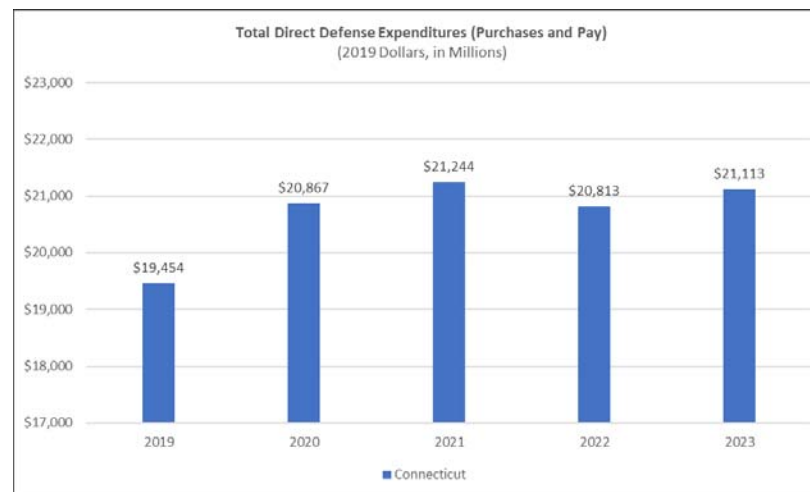
In February 2019 the Council issued a state-by-state report showing contracts awarded to submarine industrial base suppliers over the past five years for major submarine programs. For Connecticut, the amount was \$861.7M. This was significantly higher than a similar report issued by the Council in March 2018, when the Connecticut sub supplier contract amount for the prior five years was \$605.4M. The increase is a clear indicator that Connecticut suppliers are benefitting substantially from strong and growing funding for the *Virginia*-class and *Columbia*-class submarine programs.

Moreover, in its 2019 report the Council notes that while its data is a good representation of the economic impact that submarine programs have on states and communities, “it is estimated that thousands of additional lower tier suppliers exist across the U.S. that are not represented.” That is most certainly true in Connecticut.

Connecticut Defense Contracting Projections

Figure 2 shows projections of direct defense expenditures in Connecticut in calendar years 2019 through 2023. “Direct” expenditures means DOD spending for goods or services, i.e., defense contracts, plus military and civilian pay. The amounts are

projected to grow steadily 2018 through 2021, dip slightly in 2022, and rebound in 2023.

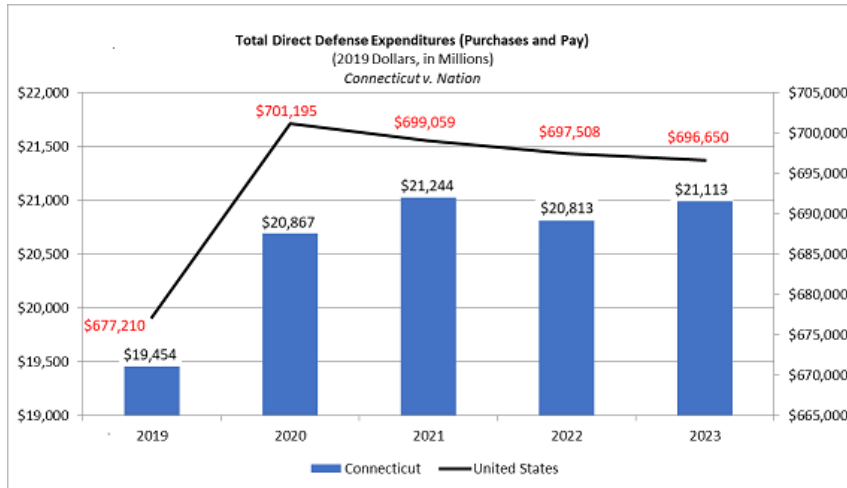


[Figure 2]

It’s not clear why defense spending in the state is projected to decline slightly in 2022. This is particularly true since Congress has authorized construction of up to 13 *Virginia*-class submarines through FY 2023. Also, construction on the first *Columbia*-class ballistic missile submarine is scheduled to start in 2021, with the last boat of its class slated for delivery in 2027. Thus, the state’s main defense industry – shipbuilding – will remain strong and vibrant in the years ahead.

To provide perspective on defense spending in Connecticut, Figure 3 shows projected defense spending in the state compared to the nation as a whole. Overall, Connecticut fares somewhat better. Both the state and the nation increase significantly from 2019 to 2020. Connecticut continues to rise in 2021, dips a bit in

2022, but climbs again in 2023. The nation, however, shows a steady decline from 2020 through 2023.



[Figure 3]

Total Direct Expenditures (Purchases and Pay) – 2019
(2019 Dollars in Millions)

1. California	75,425
2. Virginia	74,208
3. Texas	57,616
4. Florida	33,096
5. Maryland	30,810
6. Georgia	22,574
7. Massachusetts	20,272
8. Pennsylvania	20,266
9. Alabama	19,685
10. Connecticut	19,454

[Table 1]

Another way of measuring the strength of Connecticut’s defense industrial base is to compare it against the other top defense contracting states. Table 1 below shows the DEPPS report’s top ten states for total projected direct defense expenditures, i.e., purchases and pay, for 2019.

Connecticut is ranked 10th behind larger states, most of which have many large military bases with significantly larger military and civilian payrolls.

However, the real strength of the state’s defense industrial base is better captured in Table 2 below. This contains the DEPPS report’s projections of direct purchases from procurement and RDT&E (research, development, test and evaluation). It does not include pay to military and civilian personnel.

Direct Purchases from Procurement/RDTE – 2019
(2019 Dollars in Millions)

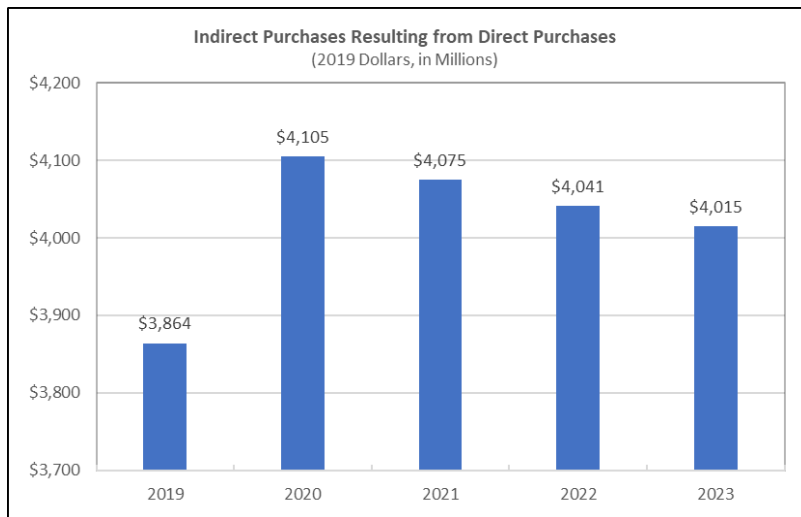
1. California	28,137
2. Virginia	22,252
3. Texas	19,951
4. Connecticut	16,957
5. Massachusetts	14,508
6. Maryland	10,614
7. Florida	7,452
8. Pennsylvania	6,734
9. Arizona	6,724
10. Alabama	6,681

[Table 2]

These are the states where critical defense items are designed, built, and maintained. Connecticut’s 4th place ranking – behind only the defense behemoths of California, Virginia and Texas

– shows it to be a national powerhouse in provisioning U.S. military forces. As such, it remains true to the distinction it earned during the Revolutionary War as the main source of weapons and ammunition for the Continental Army.

Another Defense Department measurement of a state’s economic impact of defense spending is the “indirect” defense purchases resulting from direct purchases. These are purchases of goods and services by prime contractors from subcontractors and lower level suppliers used to produce the weapons systems – submarines, jet engines, helicopters – and other items purchased directly by DOD.

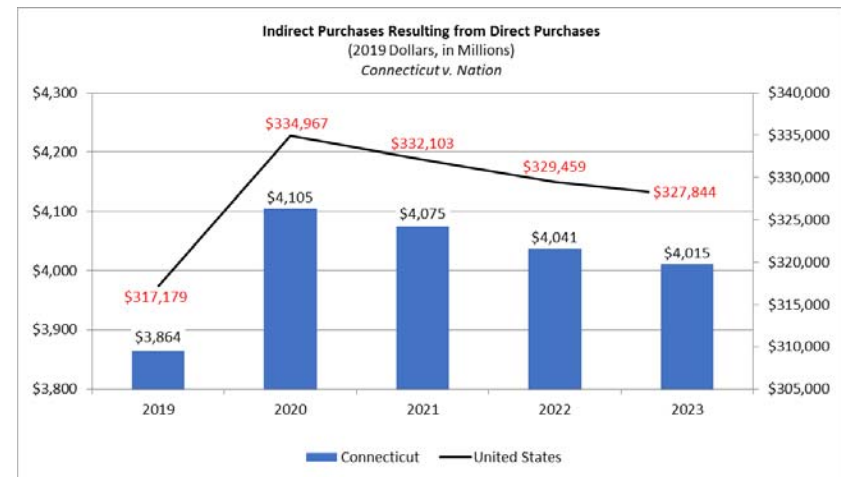


[Figure 4]

Figure 4 depicts projections for Connecticut’s indirect purchases over the period 2019-2023. There is a marked increase from 2019 to 2020. The state shows a slight decline through 2023 but remains generally stable in the \$4B range. The stability is not surprising in view of the critical need for the major weapons

programs designed and built in Connecticut: nuclear submarines, military jet engines, helicopters for the military services.

Connecticut’s trend line for indirect purchases trends closely to the nation as a whole, as shown in Figure 5. Like Connecticut, there is a distinct uptick nationwide from 2019 to 2020. But then there is a slight decline in the U.S. indirect purchases from 2020 through 2023, similar to that of Connecticut.

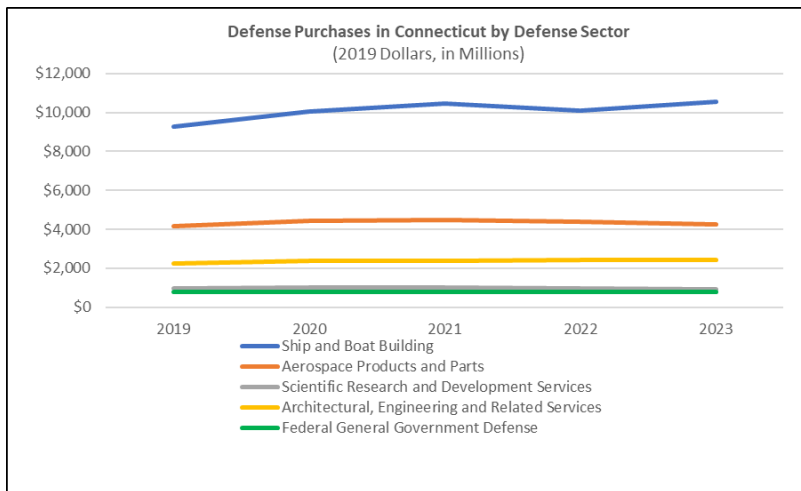


[Figure 5]

Industrial Sectors

Figure 6 shows DOD projections in purchases from the various defense industrial sectors in Connecticut, through 2023. It’s no surprise that shipbuilding, shown in the top line, is the leading sector by far. The shipbuilding trend line shows steady increases from \$9.2B in 2019 to \$10.5B in 2023, except for a slight and unexplained dip in 2022.

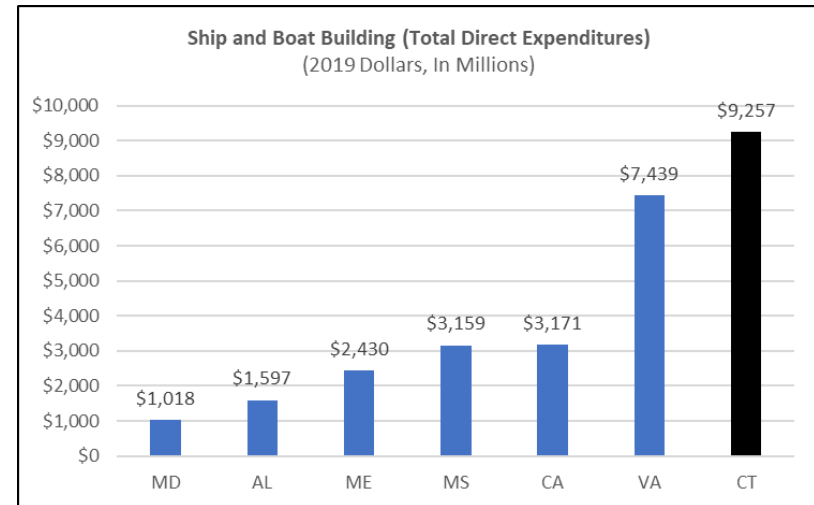
The second leading industrial sector is aerospace products and parts – jet engines, helicopters, and the parts and services for sustaining them decades after the initial purchases. In third place is architectural, engineering and design services, which in large part reflects the engineering and design work required for *Columbia*-class ballistic missile submarines and other complex defense programs.



[Figure 6]

In addition to projecting DOD’s purchases by industrial sectors in each state, the DEPPS report shows the states with the largest concentrations of 2019 defense spending in each of the top five defense industry sectors nationwide: (1) Aerospace products and parts; (2) scientific research and development; (3) architectural, engineering and related services; (4) ship and boat building; (5) new construction. The state rankings are based on projected total direct expenditures, i.e., purchases and pay, expected to be made in each state.

As shown in Figure 7 below, Connecticut is ranked first in the shipbuilding category by far, with \$9.2B in project 2020 defense spending. It is followed by Virginia (\$7.4B), California (\$3.17B), Mississippi (\$3.25B), and Maine (\$2.4B). These are the states where most Navy shipbuilding takes place.



[Figure 7]

As one of only two states where nuclear submarines are built and as prime contractor for all of the *Virginia*-class subs, it is no surprise that Connecticut is the leading state in the shipbuilding sector. However, Connecticut is also ranked in the top 10 states in two other industrial sectors:

- #3 for aerospace products and parts, with projected 2019 direct expenditures by DOD of \$3.9B, behind only Texas at \$14.3B and California, \$8.1B.
- #5 for architectural, engineering and related services, with 2019 projected defense spending of \$2.2B. As

stated above, Connecticut’s high ranking is reflective of the large amount of engineering and design work required for *Columbia*-class submarines and other defense programs. The only states ahead of Connecticut are Virginia (\$6.9B), Maryland (\$4.79B), California (\$4.76B), and Florida (\$2.3B).

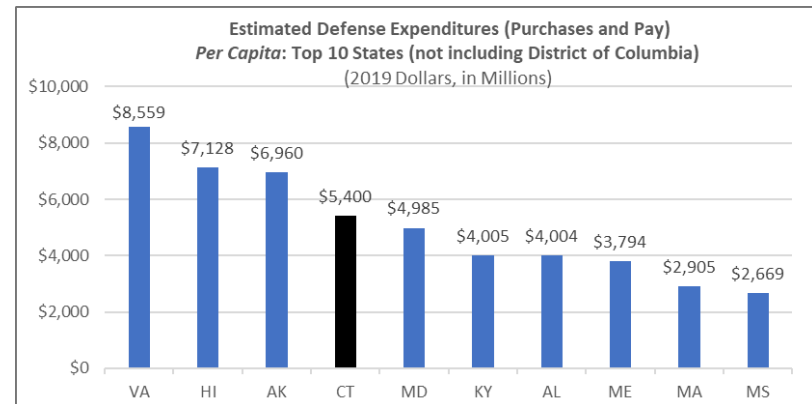
Connecticut also does relatively well in 2019 projected DOD spending in the scientific research and development sector, ranked 14th at \$961M. This sector is dominated by states with large universities, laboratories, defense-oriented think tanks, and federally funded research and development centers. The leading states in this category are California (\$9.6B), Virginia (\$6.9B), Alabama (\$5.8B), Maryland (\$4.2B), and Massachusetts (\$4.0B).

The fifth ranked industrial sector for defense spending nationwide is new construction. This mainly relates to new military facilities or expansion of current ones. It thus favors states with many military bases and National Guard/reserve facilities. Not surprising, Connecticut is far down on the list, which is topped by California, Texas, Florida, Virginia, and Maryland.

All things considered, Connecticut’s rankings in 2019 projected defense spending in the leading defense industries nationwide are very impressive, given its relatively small size and population.

Per Capita Projections

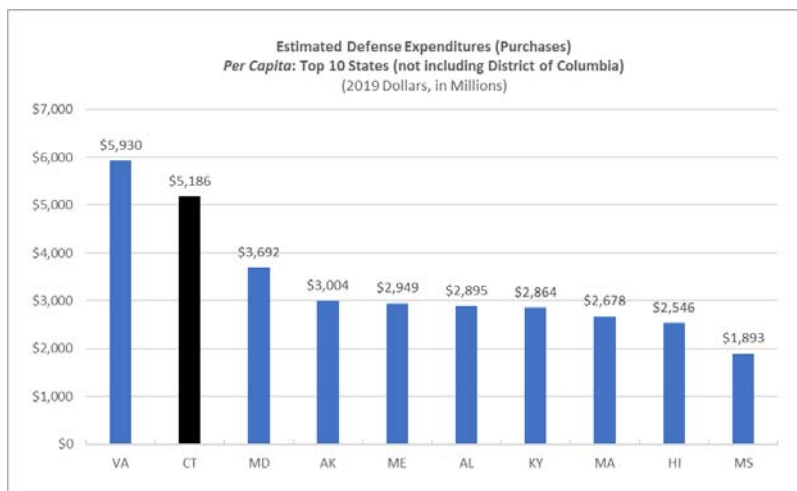
Another method of measuring the strength of Connecticut’s defense industrial base relative to other states is by *per capita* projections for 2019 defense spending, as reported in the 2018 DEPPS report.



[Figure 8]

Figure 8 depicts the top 10 states ranked on a *per capita* basis for 2019 projected direct defense expenditures. Again, ‘direct’ expenditures refers to both purchases, i.e., defense contracts, and military/civilian pay. Connecticut is ranked 4th at \$5.4B, behind only #1 Virginia (\$8.5B) with its many military bases, and #2 Hawaii (\$7.1B) and #3 Alaska (\$6.9B), with their tiny populations. (The District of Columbia is not included.)

Connecticut does much better in the *per capita* rankings on estimated DOD spending for purchases only, excluding pay. As shown in Figure 9, Connecticut is ranked 2nd at \$5.1B, behind only Virginia at \$5.9B. Interestingly, Virginia and Connecticut are far in front of all other states, with Maryland in 3rd at \$3.6B, Alaska in 4th (\$3.0B), and Maine in 5th (\$2.9B).



[Figure 9]

Regional Projections

In addition to its state ranking of estimated 2019 defense spending, the DEPPS report measures such expenditures by *region*, both outright and on a *per capita* basis. The report divides the nation into the following nine regions: New England, Mid-Atlantic, South Atlantic, East South Central, West North Central, East South Central, West South Central, Mountain, and Pacific. As one would expect, the New England region is comprised of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

In outright projected spending, not *per capita*, the South Atlantic region is far in the lead at \$200.8B. Many states in this region have numerous large military bases and are headquarters for leading defense contractors (e.g., Lockheed Martin in Maryland, General Dynamics in Virginia). Ranked second is the Pacific region at \$113.0B, due mainly to California (\$75.4B). New England is 6th place, \$50.0B.

However, the *per capita* regional rankings tell a different story. As shown in Table 3, New England winds up on top with an estimated \$3.3B in 2019 direct defense expenditures (both purchases and pay). In second place is the South Atlantic region at \$3.0B, followed in 3rd place by East South Central region at \$2.7B (Alabama, Kentucky, Mississippi, Tennessee).

Estimated Direct Defense Expenditures *Per Capita* – 2019
(By Region in 2019 Dollars)

1. New England	\$3,349
2. South Atlantic	\$3,046
3. East South Central	\$2,756
4. Pacific	\$2,075
5. Mountain	\$1,990
6. West South Central	\$1,841
7. West North Central	\$1,758
8. Mid-Atlantic	\$1,214
9. East North Central	\$990

[Table 3]

New England's dominance is even stronger in the *per capita* regional comparisons for 2019 defense spending on purchases alone, not including pay. As shown in Table 4, New England far outdistances all other regions at \$3.0B. Far behind in second place is East South Central at \$1.9B, followed closely by South Atlantic at \$1.8B.

These figures confirm that although New England has states with small populations and relatively few military bases, it remains true to its Revolutionary War roots as a key source of military provisions.

Estimated Defense Purchases *Per Capita* – 2019
 [By Region in 2019 Dollars)

1. New England	\$3,014
2. East South Central	\$1,962
3. South Atlantic	\$1,896
4. Pacific	\$1,381
5. West North Central	\$1,262
6. Mountain	\$1,240
7. West South Central	\$1,109
8. Mid-Atlantic	\$935
9. East North Central	\$721

[Table 4]

Summary

As shown above, there are many ways of measuring the strength of a state or region’s defense industrial base. For Connecticut and the entire New England region, all indications – particularly the highly detailed DOD spending projections -- point to vibrant defense economies providing the nation with critical weapons systems. For Connecticut this will likely be the case for decades to come, as it continues to produce and maintain the world’s most sophisticated nuclear submarines, military jet engines, and rotary wing aircraft. These are major acquisition programs directly tied to DOD’s NDS.

IV. U.S. Naval Submarine Base New London and the Submarine Industrial Base

Chief among the reasons to create OMA was the very real probability that the SUBASE in Groton would be closed. Twice it was targeted by the DOD for closure in the BRAC process. Twice, *Team Connecticut*, a group of public and private sector individuals,

got organized and worked tirelessly to reverse the almost certain closure of the base. Today, the primary task of OMA is to do proactively what *Team Connecticut* had to do reactively in the BRAC rounds of 1993 and 2005. We don’t want to wage this battle again.

The predictable economic catastrophe associated with the potential closure of the SUBASE is obvious to anyone familiar with southeastern Connecticut. The loss of the positive effects we realize from the base as it generates over \$6B in annual economic impacts and over 30,000 jobs would be devastating. The ripple effect throughout the state would simply be the reverse of what we experience today. Hundreds of small businesses deriving their business and clientele from the base would go under. Without this economic anchor, the regional economy would be severely impacted, in every industry cluster.

Creating Military Value

It is clear that that DOD will continue to make adjustments to force structure and military bases. However, another formal BRAC round is not currently requested by DOD and the Congress continues to resist this politically difficult process. Subject matter experts widely believe DOD will eventually request another BRAC round. However, future BRAC rounds may be much different from previous rounds. Previous rounds focused on cost savings and strategic basing. Future rounds will likely have new criteria added, including the quality of host community public schools, State level efforts to address military spouse unemployment and licensure reciprocity, and relocations required due to the effects of climate change and sea level rise.

OMA efforts will continue to closely monitor developments in BRAC requests and basing criteria. And OMA will continue to focus on developing and executing strategic initiatives to enhance

the *military value* of the base in preparation for the next BRAC round when it comes.

In 2007, the Connecticut General Assembly authorized \$40 million for future investments in *military value* at the SUBASE to protect it from closure. Since then, funding has been directed to several carefully selected projects. This strategy is built on the criteria used by prior BRAC Commissions and aims to assess and enhance the *military value* of the base, thereby decreasing the likelihood it will be targeted for closure. By increasing *military value* in operations, infrastructure and efficiency, we reduce the likelihood of closure because DOD simply can't afford to recreate that strategic capacity anywhere else. It's not about sunk cost. It's about current and future *military value*.

Today the SUBASE is undergoing a remarkable transformation as old infrastructure is demolished and replaced with modern capacity. People familiar with the SUBASE recognize its ongoing dramatic transformation into a modern campus of new buildings specifically designed for unique operations, specialized training and high-tech support functions associated with producing and maintaining our nation's submarine force.

Working in a close partnership with Navy officials in Connecticut and at the Pentagon, OMA established a legal framework through which the state can transfer funds to the Navy for carefully selected projects at the SUBASE.

In 2012, former Governor Dannel P. Malloy met with former Secretary of the Navy Ray Mabus in his Pentagon office to discuss the SUBASE. The Governor confirmed that the state would continue its unprecedented partnership with the Navy to transform the base and support service members and their families.

In May 2019, Governor Ned Lamont, participated in the formal change of command ceremony at SUBASE New London. In his remarks, he reconfirmed the State's unwavering commitment to enhancing the *military value* of the SUBASE. While the State has a new Governor and the SUBASE a new commanding officer, the innovative investments and unprecedented partnership endures.



Governor Lamont welcomes commanding officers to New London for the annual Connecticut Maritime Heritage Festival (Sept. 12, 2019). Pictured from left to right, Navy Capt. Todd Moore of Naval Submarine Base New London, Governor Ned Lamont, Coast Guard Capt. Michael Turdo of USCGC EAGLE, Navy Cmdr. Dan Reiher of USS SIOUX CITY. (Photo by Keith Hedrick)

Previous state-funded projects have included construction of new buildings to support operations and maintenance, construction of training equipment, installation of a new high efficiency boiler for base-wide steam utilities, and purchases of land and structures for encroachment mitigation on both the northern

and southern perimeters of the base and in the Navy's area of operations within the Thames River. The state funded a complete renovation of the road leading to the main gate making significant improvements to public safety, traffic management and physical security. Collectively, these projects represent a wholly unique partnership with the Navy in diverse and creative areas of base improvements.

In 2015, the State Bond Commission authorized OMA to provide funding to the Navy for early planning of a microgrid to be developed on the base. This microgrid will provide resilient infrastructure and energy security for base operations and potentially reduce the operating cost of the base by incorporating clean cogeneration capacity and highly efficient power controls and distribution systems. In response to the State's proposal, the Secretary of the Navy agreed to provide his authority and staff expertise. He sent delegations to meet with state and local officials to advance the microgrid project.

Site work is nearly complete in preparation for fuel cell installation and testing early in 2020. The microgrid, with a high tech integrated distribution and monitoring systems, is expected to be fully operational by the end of 2021. The project was initiated with funding from OMA, then with a larger grant from the CT Department of Energy and Environmental Protection. The total value of this project is projected to be somewhere close to \$100M over the life of several agreements, including an Enhanced Use Lease (EUL), Energy Savings Performance Contract (ESPC), Long-term Power Purchase Agreements (PPA) and other Public-Private Partnerships (PPP) agreements. This project reflects an impressive collection of innovative financing tools and creative partnering between organizations, all dedicated to creating affordable resilient energy security for the SUBASE.

In response to another proposal from OMA, Secretary of the Navy Richard Spencer agreed to join in a new partnership with the State of Connecticut and a third party investor to build a Consolidated Emergency Management Center on the base. This new facility will enable the Navy to demolish two archaic buildings, repurpose two other buildings and enhance security and safety throughout the base with state of the art equipment at a much improved location. The State Bond Commission authorized OMA to invest up to \$13 million in the \$28 million project. See Appendix C for a project overview and correspondence between the Governor and the Secretary of the Navy.



181029-N-LW591-027 GROTON, Conn. (Oct. 29, 2018) The *Virginia*-class fast-attack submarine USS Indiana (SSN 789) transits the Thames River as it arrives at its new homeport at Naval Submarine Base New London in Groton, Connecticut, Oct. 29, 2018. The submarine made the transition from the shipyard to a fully operational, combat-ready vessel after officially joining the fleet on Sept. 29, during a commissioning ceremony in Port Canaveral, Florida. (U.S. Navy photo by Mass Communication Specialist 1st Class Steven Hoskins/Released)

As important as these ongoing state-funded investments are, they represent only a small fraction of the military construction projects underway on the base. Since 2005, there have been over \$450M worth of planning, demolition and construction projects on the base, with about \$27M funded by the state. So, the state is an important but modest partner in a much larger effort to modernize the base.

OMA will continue to work closely with our congressional delegation, state and local officials, regional stakeholders and Navy leadership to identify future projects and missions as part of our ongoing strategy to enhance the *military value* of the base and protect it from closure in a future BRAC round.

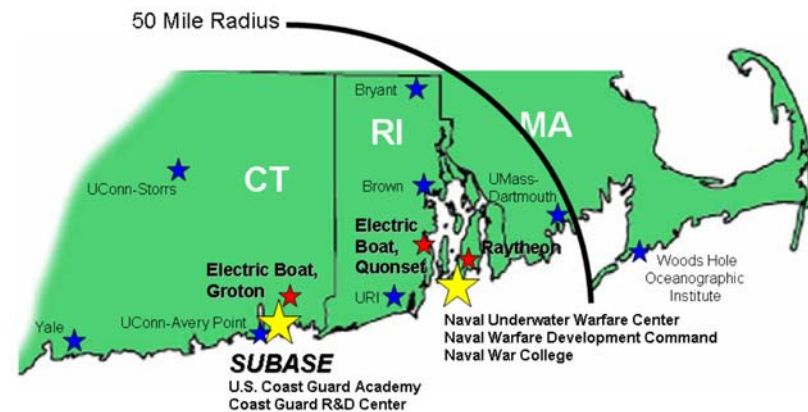
Connecticut's Submarine Industrial Base

Central to the argument *Team Connecticut* advanced in the 2005 BRAC was that the SUBASE was not given adequate credit for the *unparalleled synergy* created in the close proximity and interactions among so many public and private submarine related defense industry and military organizations.

Submarines are designed and built at EB in Groton. All submarine personnel receive basic and advanced training at the Naval Submarine School on SUBASE. Fleet-wide integrated tactics are developed by the newly established Naval Undersea Warfighting Development Center. The Naval Undersea Warfare Center in nearby Newport, RI, conducts research and development activities in Rhode Island and on the SUBASE. The Naval Undersea Medical Research Labs are located on the base. And the base is home to the Naval Submarine Force Library and Museum and the Historic Ship Nautilus. This is the Submarine Capital of the World, where the nation's submarine force history and heritage is archived and commemorated. These organizations, and many others, coalesce to

create a Submarine Force Center of Excellence – the center of gravity for nation's military undersea profession. Or, as the current Secretary of Defense Mark Esper recently characterized this cluster during a visit to EB, "the Silicon Valley of the undersea world."

The Nation's Center of Undersea Warfare Excellence



One of the greatest affirmations of this synergy is demonstrated in the Navy's decision to establish the Naval Undersea Warfighting Development Center headquarters at Submarine Base New London. This global command impacts fleet operations and organizations all over the world from its headquarters in southeastern Connecticut.

Understanding the value of this synergy led the state also to enter into assistance agreements with EB as the nation's premier manufacturer of undersea platforms and technologies. In 2007 the State helped EB refurbish dry docks in its Groton shipyard. The state's \$9.9M investment helped EB complete a \$65M renovation project that helped keep submarines in Connecticut and brought other business to the region. Since 2008, EB has generated over

\$1.68B in sales and paid over \$511M in wages related to submarine work performed in these dry docks. That work includes overhaul, repair, maintenance, modernization and post shakedown availability. These depot-level facilities, in such close proximity to the SUBASE, are also a positive consideration that a future BRAC Commission will take into account when assessing the total *military value* of the SUBASE.

Subsequently, the state granted EB \$15M to help purchase the former Pfizer headquarters buildings and campus in New London. This major expansion has given EB the space needed for its work in designing the new *Columbia-class* replacement for the aging *Ohio-class* strategic ballistic missile submarines (SSBN). Since 2011, EB has hired 3,206 engineers and 1,264 designers. The building also accommodates a workforce to produce ongoing technology upgrades for the *Virginia-class* submarines. This facility has already reached its capacity as new employees are being added to the industrial base in New London.

In October 2014 Governor Malloy announced an agreement with EB to help finance the company's expansion in Groton. Under the terms of this agreement, the Department of Economic and Community Development provided a \$10 million grant to EB in support of this \$31.5M capital expansion project to purchase and renovate a building in Groton. This new space was needed to accommodate 200 new purchasing and supply chain management jobs.

In 2019 EB held a groundbreaking ceremony for a massive \$852M shipyard expansion project to prepare for the construction of *Columbia-class* nuclear-powered strategic ballistic missile submarines (SSBN) to replace the decommissioning *Ohio-class*

submarines. All of the new *Columbia class* submarines will be assembled in the Groton, Connecticut shipyard.



181121-N-LW591-001 Groton, Conn. (Nov. 21, 2018) Connecticut Gov. Dannel Malloy and crew members of the Los Angeles-class fast-attack submarine USS Hartford (SSN 768) transit the Thames River as Hartford returns to Naval Submarine Base New London following a scheduled underway. Malloy visited the crew the day before Thanksgiving to show support to the city of Hartford's namesake submarine. (U.S. Navy photo by Mass Communication Specialist 1st Class Steven Hoskins/Released)

While investments in our submarine industrial base are concentrated in southeastern Connecticut, the impacts are state-wide. For example, in the *Virginia-class* program, over 900 suppliers are dispersed in all five of the state's congressional districts, with the largest concentration in central Connecticut's 1st District. All together, they supply over \$1B worth of goods and services over a five-year period. As we seek to maintain production of *Virginia-*

class submarines at two or more per year, the positive impacts on our state economy will be pervasive for decades to come. And the new *Columbia*-class submarines will further enhance this economic impact and create thousands of high-end jobs. The direct and indirect employment related to submarine construction and repair is forecast to last for decades to come.

V. The National Coast Guard Museum

The United States Coast Guard (USCG) is the only military service that does not have a national museum. On April 5, 2013, after a decade of false starts and failed attempts, the Commandant of the Coast Guard announced the decision to build a National Coast Guard Museum (NCGM) in downtown New London. The National Coast Guard Museum Association (NCGMA), a non-profit organization chartered to build the museum, proposed a state-of-the-art building at the head of New London City Pier. It will be adjacent to the Union Station, the Greyhound bus station and Cross Sound Ferry landings. Governor Malloy participated in the announcement and committed up to \$20M in state funding to build a pedestrian bridge to connect the museum with all elements of New London's multi-modal transportation hub.

The Governor directed all state agencies to collaborate in this undertaking and to help the USCG and City of New London advance the project. He also directed the OMA to coordinate the efforts of state agencies on his behalf.

Negotiations with stakeholders advanced swiftly. The State Bond Commission approved \$500,000 for advance engineering and design of the pedestrian bridge and authorized the DECD to enter into an assistance agreement with the NCGMA. The State of Connecticut, City of New London, USCG and NCGMA negotiated a

Memorandum of Agreement to clearly define roles and responsibilities in this partnership to build the museum.

State agencies worked closely with project stakeholders to complete the Environmental Impact Evaluation (EIE) as required by the Connecticut Environmental Protection Act. The EIE authorized detailed engineering and design to proceed on the pedestrian bridge portion of the project.

Much of the financing for the \$100M museum is being raised in a national fundraising campaign coordinated by the NCGMA. Contingent upon this fundraising effort and a series of prerequisite agreements with area stakeholders, construction could begin as early as 2022.

Related to the National Coast Guard Museum project is the Thames River Heritage Park (TRHP) designation for the New London Harbor. Centuries of American maritime history at sites along the shores of the Thames River is connected by a water taxi service. The TRHP Foundation obtained two surplus 40-foot USN utility boats to provide this service and become part of the maritime heritage exhibit. The OMA Executive Director serves on the TRHP Foundation Board of Directors and worked with local officials to obtain the authentic Navy boats which provide waterborne access to Thames River historic sites, to eventually include the Submarine Force Museum and future National Coast Guard Museum.

The Connecticut Port Authority granted the Town of Groton a \$750,000 grant through the Small Harbor Improvement Project Program (SHIPP) to construct a floating pier at the Submarine Force Library & Museum to receive TRHP boats. This new pier should be operational for the 2020 summer season. In the years ahead these Coast Guard and Navy museums, connected by the Thames River,

will become the TRHP major anchor sites and are expected to draw tens of thousands of people to southeastern Connecticut.

VI. Quality of Life and Military Service in Connecticut

Advocating for service members and their families has become one of the most important roles of OMA. Military families stationed in Connecticut for duty assignments and training enjoy supportive local communities, excellent public schools and the unique experience of living in New England. As families in transition, they occasionally need reasonable accommodations and OMA actively engages state agencies and local organizations on their behalf.

OMA worked with regional leaders at LEARN (a regional educational service center), and the Military Superintendent's Liaison Committee to make charter and magnet schools more available to military families. The DOD tends to transfer families in the summer months to avoid moves during the school year. However, the unintended consequence of this policy is that newly arriving military families often can't establish residency in time to compete in the drawing/lottery for seats in charter and magnet schools. Area superintendents implemented a program to hold back a number of seats to be made available to highly mobile families when they arrive later in the summer months. This benefits military families, giving them a level playing field to compete for seats in these unique educational programs.

The State of Connecticut is an active member of the Interstate Compact on Educational Opportunity for Military Children. This national organization recognizes the unique challenges military children face as members of families in transition. Making reasonable accommodations for these children in matters such as immunizations, physicals, administrative and

academic documentation reduces the stress and challenges associated with the many relocations imposed on military families.

The OMA Executive Director served on the outreach steering committee for the Military Child Education Coalition in Connecticut. This organization facilitates training and awareness of teachers, healthcare providers and other community leaders to the unique challenges faced by children in military families. Deployments, relocations, separations and service-related disabilities all take a toll on children and through awareness and training we enable communities to better recognize and respond to these issues.



180928-N-ZB537-041 NORTH ATLANTIC (Sept. 28, 2018) F-35 Patuxent River Integrated Test Force test pilots, U.S. Marine Corps Maj. Michael Lippert and Royal Navy Cmdr. Nathan Gray, continue first of class flight trials (fixed wing) developmental test flights aboard the Royal Navy aircraft carrier HMS Queen Elizabeth (R08), Sept. 28, 2018. (U.S. Navy photo courtesy of Lockheed Martin by Dane Wiedmann/Released)

OMA contributed significant time and resources to help the Town of East Lyme and the Connecticut National Guard complete a DOD funded Joint Land Use Study (JLUS) to identify compatibility issues that arise from training operations in proximity to current and future municipal development. This study guides the Town planners in preventing encroachment and protecting the shared benefits of having two major National Guard bases in their jurisdiction.



A Connecticut Army National Guard CH-47 Chinook transports a 12,000-pound navigational buoy under the watchful eye of United States Coast Guard vessel off the coast of Nantucket, April 10, 2019. The buoy broke free of its mooring and beached itself, requiring aircraft large enough to hoist and return it to serviceable waters. Photo courtesy of the Connecticut Army National Guard

A similar DOD funded JLUS has been completed with the municipalities surrounding the SUBASE in Groton. A JLUS Implementation Committee was formed to take actions

recommended in this study. The OMA Executive Director serves as chairman of the Implementation Committee. A subsequent project related to the JLUS is nearing completion. This follow-on study investigated impacts expected in the regional housing market and transportation infrastructure related to significant growth at EB as civilian and military families are added to the work force in southeastern Connecticut.



170819-N-OX430-060 ATLANTIC OCEAN (Aug. 19, 2017) Aviation Boatswain's Mate 2nd Class Meghan Wise directs a Sikorsky SH-60B Sea Hawk helicopter assigned to the "Jaguars" of Navy Reserve Helicopter Antisubmarine Squadron (HSL) 60 as it lands aboard the aircraft carrier USS George H.W. Bush (CVN 77). The ship and its carrier strike group are transiting home from a seven-month deployment in support of maritime security operations and theater cooperation efforts in the U.S. 5th and 6th Fleet areas of operation. (U.S. Navy photo by Mass Communication Specialist 3rd Class Daniel Gaither)

Working with the Eastern Connecticut Chamber of Commerce, annual military appreciation events have been established in southeastern Connecticut to honor service members from all branches of the military. These venues offer excellent opportunities to showcase the supportive relationships and

professional partnerships established between the State and our military communities. OMA has been closely involved with these initiatives.



GROTON, CONNECTICUT. Elected officials and community and military leaders comprising the Southeastern Connecticut Council of Governments stand behind the flag designating Southeastern Connecticut a Great American Defense Community. U.S. Navy Photo by Mark C. Jones

In partnership with the Chamber of Commerce of Eastern Connecticut, the Navy, the Coast Guard, and the National Guard, OMA orchestrated the seventh annual Military Orientation Day to expose future community leaders to all of the military branches in eastern Connecticut. The day includes an orientation at the SUBASE, a tour of a nuclear-powered submarine, a tour of the USCG Academy or USCG Station New London, and visits to several National Guard facilities throughout southeastern CT. Weather permitting, air transportation is provided by National Guard Black

Hawk helicopters, ground transportation is donated by a local livery service, and waterborne transportation by the USCG. This program is designed to educate future community leaders on Connecticut based military missions, ongoing operations, economic impacts, and civic contributions to the region. These future leaders can in turn inform other people within their spheres of influence.

The OMA Executive Director was a founding board member of the Southeastern CT Cultural Coalition and now serves as a member of its Advisory Council. This newly formed non-profit advocates for the entertainment, arts and cultural sectors of the region's economy. Military art, history and performance units have played an instrumental role in the region, and having the military represented in the organization's leadership reflects an appreciation of how the military is so deeply ingrained in the social, civic and economic landscape of Connecticut.

VII. Conclusion

Connecticut's Office of Military Affairs demonstrates an efficient model for achieving tangible strategic outcomes. Since it was established, the office produced a partnership with the Navy that was unprecedented in the United States. The SUBASE is now in a much better position to withstand another round of BRAC. The Connecticut National Guard and U.S. Coast Guard Academy are realizing and planning for expansions with new facilities to support their missions. The state and City of New London are looking forward to being the home of the National Coast Guard Museum. OMA has helped coordinate consistent and sustained support for increases in defense and military spending, and positive economic impacts within the state. Most importantly, OMA has advanced the *quality of life and quality of service* for service members and their

families stationed here and deploying to destinations around the world.

The state's diversified defense industries continue to thrive. Connecticut defense industries are thriving due to the high quality and strategic relevance of the products designed and manufactured throughout the state. Our defense industries enjoy superb reputations for their highly skilled workforces, outstanding management and efficient business practices.

Residents should be proud of Connecticut's long history as the *Provisions State*. It is a foundational part of our character, embedded in the economic fabric of our state and a legacy that should be carefully protected. The Office of Military Affairs will continue to seek opportunities to enhance the military and defense industry presence in Connecticut and advocate for the many organizations and people in our state - particularly military members and their families - who serve and support our nation's defense.



Robert T. Ross
Executive Director

Questions or comments concerning this report should be directed to the OMA Executive Director, at (860) 500-2374 or to bob.ross@ct.gov.

Appendix A: Public Act No. 15-65

Connecticut General Assembly
House Bill No. 6833
Public Act No. 15-65

AN ACT CONCERNING THE QUALIFICATIONS AND DUTIES OF THE EXECUTIVE DIRECTOR OF THE OFFICE OF MILITARY AFFAIRS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Subsection (b) of section 32-58b of the general statutes is repealed and the following is substituted in lieu thereof (Effective October 1, 2015):

(b) The Governor, in consultation with the Commissioner of Economic and Community Development, shall appoint an executive director to manage the daily activities and duties of the Office of Military Affairs. The executive director shall have the necessary qualifications to perform the duties of said office, including, but not limited to, having prior military experience, and having attained the rank of a field grade or senior officer within a branch of the armed forces. The Governor shall give preference to any person with the necessary training and experience who has served in the Navy or who has knowledge or prior experience with the federal Base Realignment and Closure or "BRAC" process. Within available appropriations, the executive director shall: (1) Appoint, employ and remove such assistants, employees and personnel as deemed necessary for the efficient and effective administration of the activities of the office; (2) coordinate state and local efforts to prevent the closure or downsizing of Connecticut military facilities, particularly United States Naval Submarine Base-New London, located in Groton; (3) maximize the state's input into the federal Base Realignment and Closure or "BRAC" process, including, but not limited to, (A) acting as liaison to the state's congressional delegation on defense, military and BRAC issues, and (B) coordinating the activities of consultants hired by the state to assist in monitoring activities related to BRAC; (4) encourage the relocation of military missions to the state; (5) coordinate state and local efforts to enhance the quality of life of all branches of military personnel stationed in or deploying from Connecticut and their families living or working in Connecticut; (6) review and make recommendations for state policies that affect Connecticut's military facilities and defense and homeland security industries; (7) coordinate state, regional and local efforts to encourage the growth of Connecticut's defense and homeland security industry; (8) serve as an advocate for service members and their families to other state agencies; (9) initiate and sustain collaborative partnerships with local military commanders; (10) consult with the Department of Economic and Community Development on proposed financial assistance agreements with defense and homeland security firms; and (11) prepare and submit a report of activities, findings and recommendations annually to the Governor and the joint standing committees of the General Assembly having cognizance of matters relating to commerce and public safety, in accordance with the provisions of section 11-4a.

Approved June 19, 2015

Appendix B: Biography of OMA Executive Director



ROBERT T. ROSS

Bob Ross is Executive Director of the Connecticut Office of Military Affairs. He was originally appointed by Governor M. Jodi Rell in July 2009, reappointed twice by Governor Dannel P. Malloy, and reappointed to a fourth term by Governor Ned Lamont. He serves as an advisor to the Governor and legislature on defense industry issues and is the primary liaison to the Connecticut congressional delegation on military and defense matters. He is responsible for coordinating state-wide efforts to protect Connecticut military bases and facilities from closure in future Base Realignment and Closure (BRAC) rounds. He also represents the state in local efforts to enhance quality of life for service members and military families residing in or deploying from Connecticut.

He is a retired naval officer who piloted aircraft carriers and guided missile cruisers before directing public affairs for the U.S. Sixth Fleet, encompassing naval operations ashore and at sea in the Mediterranean, European and North African areas of responsibility. He also served as a spokesman at the Pentagon and was director of community and media relations for the U.S. Atlantic Fleet.

He holds an M.A. in National Security and Strategy from the U.S. Naval War College in Newport, RI, and an M.A. in Public Policy and Administration from the University of Connecticut. As a former City Administrator for the City of Cripple Creek, Colorado, and former First Selectman (Mayor) of the Town of Salem, Connecticut, he has decades of experience in federal, state and municipal government. He was previously selected by the national Association of Defense Communities as their Member of the Year for leadership and commitment and currently serves as a member of their Board of Directors. He is a Trustee of the Chamber of Commerce of Eastern Connecticut and former Commissioner on the Connecticut Maritime Commission. He's a former Adjunct Professor of Public Policy in the UCONN Graduate School and is a recipient of the UCONN Department of Public Policy Distinguished Alumni award for continued commitment and excellence in public administration.

Appendix C: Governor's Letter to Secretary of the Navy



Dannel P. Malloy
GOVERNOR
STATE OF CONNECTICUT

August 10, 2018

The Honorable Richard V. Spencer
U.S. Secretary of the Navy
1000 Navy Pentagon
Washington D.C. 20350

Dear Secretary Spencer,

The State of Connecticut enjoys a long history and lasting partnership with the United States Navy. We are proud to host Submarine Base New London (Subbase), the only remaining Navy base in all of New England that continues to deploy operational fleet forces. Your predecessor, Secretary Ray Mabus, and I enjoyed a productive relationship and I look to forward to establishing such a relationship with you.

As you may know, the State of Connecticut pioneered an unprecedented partnership with the Navy to fund infrastructure improvements on a federal military base. Connecticut has thus far invested over \$14 million in a variety of projects to enhance military value and mitigate future operational encroachments. And we are nearing completion of a public-private partnership to build out an installation microgrid to provide energy security and resiliency.

I write to propose a new public partnership to enhance Subbase. As described in the attached proposal, a consolidated emergency management facility would offer tremendous benefits to the Navy and clear the way for critical future projects to enhance base operations. By creating such a partnership, the cost can be shared among stakeholders with great outcomes for each. I ask for your support in approving the proposed financial arrangement to complete this \$28 million project.

I know our staffs have been in contact on this proposal and that discussions are advancing. I would welcome the opportunity to speak with you later this month and then to meet with you when I am in Washington, D.C., on September 17th. It is my hope that the necessary approvals can be in place so Connecticut's commitment of \$13 million can be authorized by the Connecticut Bond Commission, which I will convene this fall.

The Subbase is a vital part of Connecticut's history and heritage and I am proud of my Administration's record supporting its enduring operations. I look forward to discussing this proposal with you - and meeting with you - in the near future. My staff will be in touch to make arrangements.

Sincerely,

Dannel P. Malloy
Governor

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Submarine Base New London Consolidated Emergency Management Center Proposed "Military Value" Enhancement

In response to a solicitation from CT Office of Military Affairs for a proposed project to improve infrastructure of Submarine Base New London (Subbase), the Navy proposed the construction of a consolidated emergency management center. The State of Connecticut supports this project to improve operational efficiency, reduce excess infrastructure and enhance the installation's overall military value.

On its own this project would not likely score well or successfully compete for funding within the Navy because it isn't a "direct warfighting" project. This is often the case where the Navy underfunds shore installations to support fleet operations. By creating a partnership of investors to share the cost, this project offers a tremendous benefit to the Navy in a greater than fivefold return on investment.

This project will consolidate two firehouses, the base security department and associated equipment. It will allow the Navy to demolish two inefficient antiquated buildings and repurpose two others. It will also enable the Subbase to move forward in relocating the main gate further inside the fence line to comply with Navy physical security requirements. First responders will have all new facilities and better work environments. In this consolidation there are no job losses or reductions in apparatus. The response time to on and off base calls is not significantly diminished, and in many instances improved. This project fits nicely within the Subbase long-range plan of development.

The total cost of the project is projected at \$28M. The State proposes a partnership to share the cost. A State contribution, coupled with investments from a private firm and the Navy would disperse the financial burden between the stakeholders.

The State of Connecticut has an existing bond authorization for infrastructure improvements to increase the "Military Value" of the Subbase and improve its relative position in the next Base Realignment and Closure round. The State will contribute \$13M in the form of an offer of gift.

Northeast Housing LLC, the public-private venture between the Navy and Balfour Beatty Communities (BBC), was established to own, operate and manage all of the privatized Navy housing at the Subbase. The partnership has a vested interest in closing the off base firehouse to reduce its operating expense by \$1.25M annually. BBC supports a \$10M contribution to avoid this reoccurring expense. This project will save the partnership about \$62M over the remaining term of their contract.

The Navy is asked to fund the remaining \$5M balance. If the Navy reprogramed \$5M to this project, it would have a \$28M asset added to Subbase New London and all of the ancillary benefits that go with it. The Navy would also realize the benefit of shedding excess archaic infrastructure while replacing it with new energy efficient state-of-the-art facilities. The State would realize the benefit of further enhancing the "Military Value" of the base — the intended purpose of the bond authorization.

The completed project would serve as another outstanding example of an innovative and enduring partnership between the Navy, Submarine Base New London, its housing management firm, neighboring communities, and the State of Connecticut.

State of Connecticut
Office of Military Affairs
7/27/2018



THE SECRETARY OF THE NAVY
WASHINGTON DC 20350-1000

September 11, 2018


The Honorable Dannel P. Malloy
Governor of Connecticut
210 Capitol Avenue
Hartford, CT 06106

Dear Governor Malloy:

Thank you for your letter of August 10, 2018, concerning the State of Connecticut's proposed new public partnership to fund a consolidated emergency management facility at Naval Submarine Base New London. The Department of the Navy considers its long-standing partnership with the State of Connecticut to support the Sub Base as a model relationship for the rest of the country.

As we discussed on September 7, 2018, you have my full support for the concept to partner with the State of Connecticut and Northeast Housing LLC to fund a consolidated emergency management facility. Once the Connecticut Bond Commission authorizes the State's gift, I will ensure the Department of the Navy processes this generous offer in a timely manner and begin planning to program the \$5M as the Navy's eventual contribution to this important partnership.

Please convey my personal gratitude to all individuals involved with this innovative proposal. Your continued support of the Submarine Base and the Department of the Navy is greatly appreciated and highly valued.

Sincerely,

Richard V. Spencer