

# Executive Summary

In fiscal year (FY) 2017, defense contracts performed in New York totaled \$6.35 billion, or approximately 0.4% of the state's gross domestic product (GDP). This spending can directly support more than 18,300 jobs in the state—with an estimated ripple impact of more than 15,800 jobs—and generate nearly \$117 million in tax revenue for the state and local governments.

Defense contracts performed in New York have declined more than \$3 billion from a peak at \$9.5 billion in FY 2010. Between FY 2016 and FY 2017, contracts performed rose 0.2% and is expected to continue to grow over the next five years. Despite the expected increase in defense spending, helping defense-dependent firms diversify will better prepare them for the next downturn in the defense-spending cycle and mitigate potential negative impacts in New York.

To support the efforts of Empire State Development in targeting its diversification activities, this report examines the historical dependency of the New York economy on Department of Defense (DoD) contracts and identifies defense-reliant industries that may benefit from diversification assistance. Defense-dependent industries are identified based on historical contract awards, supply-chain linkages between prime and subcontractors on contracts performed in the state, and estimation of the economic and fiscal impact of defense spending by industry and region. The national and international climate and New York

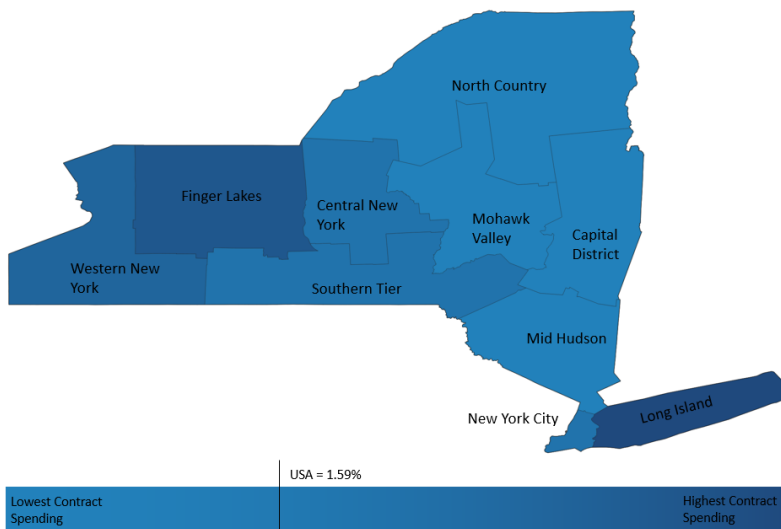
## Defense Contracts Performed, FY 2017 Economic and Fiscal Impact in New York

<b>Defense Contracts</b>	\$6.35 Billion
<b>DoD Contract Dependence</b>	0.4%
<b>DoD Contract Dependent Employment</b>	34,199
<b>Fiscal Impact</b>	\$117.0 Million

Source: Chmura Economics & Analytics

capabilities of these key industries are summarized in Chmura's Climate-Capabilities Index with recommendations for diversification.

New York's economy is less dependent on DoD contract spending than the overall U.S. economy—DoD contract spending as a percentage of New York's GDP has remained under one percent going back to 2010. However, some parts of the state are more highly dependent than others. Defense contract spending accounted for 4.8% of GDP in the Long



Island Region, and 3.4% in the Finger Lakes Region in FY 2017.

Two portfolio groups—electronic and communication equipment and research and development—account for a much larger share of DoD contracts performed in New York than the nation. Between FY 2010 and FY 2017, electronic and communication equipment accounted for 26% of DoD contracts performed in New York compared with 16% in the nation, while research and development accounted

for 19% in the state and 12% in the nation. At the detailed product service code level, eight of the top twenty codes with the most contracts performed since the peak in FY 2010 are related to aircraft, while another four are related to communications.

The manufacturing sector dominates defense contracts performed in New York. Between FY 2010 and FY 2017, the manufacturing sector accounted for 68% of all defense contracts performed in the state. Similar to the product service codes analysis, aerospace product and parts manufacturing tops the list, though the value of contracts performed has declined 19% since FY 2010. Despite the forecast increase in overall defense spending, contract spending in aerospace products and parts manufacturing and communications equipment manufacturing is forecast to decline in New York between FY 2017 and FY 2019.

The largest net flow of subcontracts into New York in FY 2017 was to navigational, measuring, electromedical, and control instrument manufacturers, with more than \$148 million more in defense contracts entering the state than exiting to out-of-state subcontractors. The largest net flow to out-of-state subcontractors was in computer systems design and related services (-\$48.1 million).



The strengths, weaknesses, and opportunities for diversification of defense-intensive industries were assessed using Chmura’s Climate-Capability Matrix. National and global trends provide a more favorable “climate” for some regional industries than for others and it is important to understand this context to determine the capacity for growth and diversification of New York’s defense-intensive industries. New York’s industries differ in their relative strengths and weaknesses, or “capabilities,” to take advantage of or compensate for the external climate.

-  Industries in the top right quadrant enjoy both favorable external climates and high capabilities in New York, suggesting those industries are **poised for growth** and likely in less need of support. Contracts for firms in some of these industries are small businesses that may be more dependent on defense contracts and good targets for diversification assistance.
-  Industries in the top left quadrant have favorable external climates but low capabilities in New York, representing potential **future growth industries**. The largest industry in this quadrant based on the value of DoD contracts performed in FY 2017 is aerospace product and parts manufacturing.
-  The lower right quadrant contains industries with less favorable climates but stronger capabilities in New York. Diversification efforts in these industries may focus on **increasing market share nationally and expanding current strong capabilities** into innovative new areas. The largest New York industry by DoD contracts performed is navigational, measuring, electromedical, and control instruments manufacturing.
-  Finally, industries in the lower left quadrant have both less favorable external climates and lower capabilities in New York, suggesting a **greater potential need for diversification assistance**. The largest industries by DoD contract spending are communications equipment manufacturing followed by professional and commercial equipment and supplies merchant wholesalers.

## New York Defense Industries Climate-Capabilities Matrix Results



Source: Chmura Economics & Analytics

● Manufacturing ● Wholesale Trade ● Professional, Scientific, and Technical Services