

THE 2024 NATIONAL SECURITY SCORECARD

CRITICAL TECHNOLOGIES

FOREWORD

From the South China Sea to the labs of Silicon Valley, the United States in 2024 is immersed in an all-encompassing struggle to preserve its global leadership and national security.

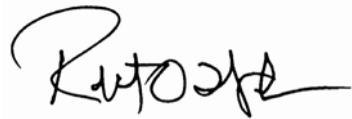
Beijing continues to aggressively modernize its defenses, from hypersonic missiles to AI-enabled weapons systems. It seeks to undermine the long-standing advantage that preserved peace and prosperity in the Indo-Pacific and globally. Chinese suppliers continue to linger in the supplier ecosystem across critical technologies such as biotechnology, advanced manufacturing, robotics and autonomy, and—despite promising policy changes—microelectronics. This is unacceptable, and our response must be a national priority.

Meanwhile, the war in Ukraine exposed vulnerabilities in our industrial base and brought the constraints of defense production for specific programs from the halls of the Pentagon to the center of national conversation. At the same time, the reemergence of tragic conflict in the Middle East exacerbates the production challenges facing the United States as we work to support allies and partners, work toward

peace and stability in the region, and ensure we have the stockpiles at home to deter against further attacks or opportunistic threats to our Homeland.

Successfully achieving these myriad and complex goals requires the United States to not just plan for the future, but to execute rapidly on those plans. The critical technologies that hold significant promise must transition into the capabilities that we need to ensure U.S. national interests are protected and we stand at the forefront of the global stage. There are signs of progress and still much work to be done.

The *2024 National Security Scorecard* uncovers these stark challenges using Govini's unique datasets and machine learning capabilities in our software, Ark. But the Scorecard also highlights opportunities to regain our posture. By understanding the critical technology trends, supply chain risks, and vendor ecosystems in this report, we can make better, data-driven decisions to outcompete our rivals. Our security and prosperity as a nation depend on it.



Robert O. Work, Chairman



Tara Murphy Dougherty, CEO

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EXECUTIVE SUMMARY

Govini's annual National Security Scorecard exists to provide decision makers across the Department of Defense and the U.S. national security community with an unparalleled assessment of the state of our nation's programs, critical technologies, and Defense Industrial Base. It is powered by the unique datasets, machine learning capabilities, and workflows in Govini's flagship platform, Ark.

This year's Scorecard analyzes government spending trends, private sector innovation, and supply chains across 15 critical technology areas identified as essential to future warfighting; it also explores the state of Defense Acquisition across our nation's most critical defense programs and all the military departments. Importantly, the 2024 Scorecard extends well beyond just DoD activities. It examines efforts within defense agencies and other key government entities that play a role in national security.

By providing this detailed context, the National Security Scorecard empowers decision makers to clearly see threats, prioritize actions, and take the steps necessary to ensure the U.S. maintains our decisive edge long into the future.

Key takeaways from The *2024 National Security Scorecard* include:

Need for Mature Investment in AI and ML

We leave opportunities on the table by under-investing in the practical, non-R&D AI capabilities that can deliver value today. There are 12

areas of investment in artificial intelligence, such as supervised vs. unsupervised ML, Generative AI, and NLP. Data in Ark showed us that 9 out of the 12 areas still have over 65% of their spend allocated to R&D in 2023 across the U.S. Government, with the minority in the Procurement account.

Widespread Program Part Risk

This year's scorecard analyzes Program Part Criticality, which evaluates 3 risk factors for parts across 7 major platforms. These risks include parts that have little to no inventory, parts that do not have more than one supplier, and parts that have a longer than average lead time for replacement. The majority of parts across all 7 platforms presented at least one of these risk factors.

Chinese Patent Acceleration in Critical Technologies

China accelerated its patent grants over the past several years in alignment with its "14th Five Year Plan for Informatization Development." By China's own accord, "Since 2019, our country has become the largest source of patent applications globally, and ranks first worldwide in patent application numbers in areas such as 5G, blockchain, and artificial intelligence." China outpaces the U.S. in 13 of 15 Critical Technologies according to patent analysis in Ark.

THE DEFENSE ACQUISITION PROCESS

To imagine, build, and field warfighting capabilities, the United States relies on the Defense Acquisition Process. It is the end-to-end system that brings the most critical technologies, platforms, and weapons systems to bear for the United States national security community.

The Acquisition community relies on robust, real-time data to make informed decisions across each stage of the Defense Acquisition Process: Supply Chain, Science & Technology, Production, Sustainment, and Modernization.

SUPPLY CHAIN

Ark provides the acquisition community with comprehensive visibility into the supply chains that matter for their programs, unearthing risks such as hidden prohibited suppliers, geographic vulnerabilities, and foreign reliance.

PRODUCTION

Ark assesses industrial base capacity for production demands by tracking vendor performance, forecasting part lead times, and monitoring supplier health.

MODERNIZATION

Ark equips the acquisition community to proactively drive modernization programs, by conducting technology market analysis, identifying vendor footprints, and pinpointing workforce challenges.



SCIENCE & TECHNOLOGY

Ark enables the rapid deployment of emerging technology into the defense ecosystem, by surfacing adversarial capital analysis, venture capital investment trends, and due diligence on capabilities.

SUSTAINMENT

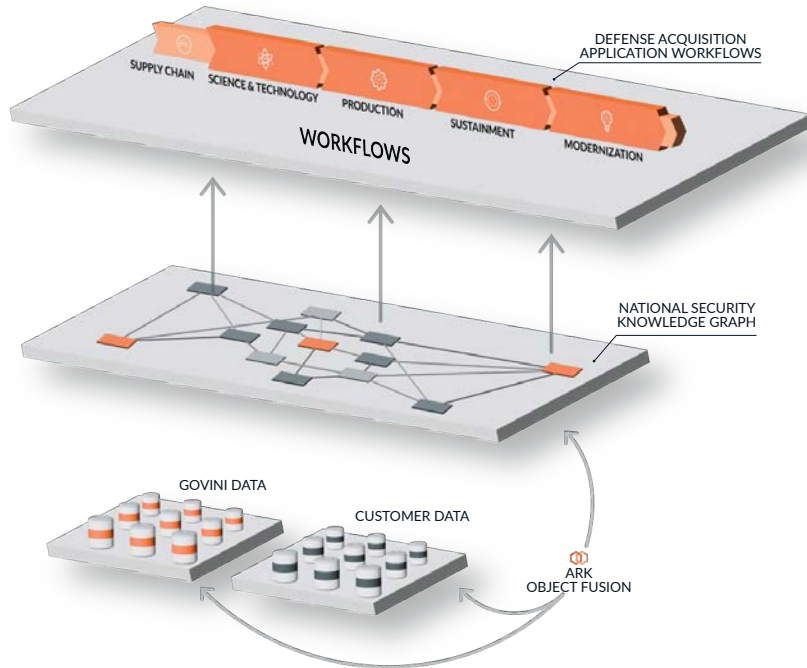
Ark ensures that vital defense programs remain operational, by flagging parts and companies with obsolescence risks, analyzing raw materials and parts pricing trends, and highlighting stock on-hand.

SCORECARD METHODOLOGY

The 2024 National Security Scorecard is designed to provide a data-backed understanding of risks and opportunities in these emerging technologies, such as foreign reliance, investment trends, and evolving innovation rates. The Critical Technologies represented in the Scorecard represent a curated set of advanced technologies with a vital role in advancing the technological dominance of the United States over sophisticated adversaries.

Drawing on Govini's Ark platform, the Scorecard leverages integrated commercial and government data to assess each technology across key challenges in the Acquisition Process. Data found within Ark has been meticulously curated and enriched for more than a decade. Govini's National Security Knowledge Graph (NSKG) brings together hundreds of data sources. The NSKG combined with Govini's unique Object Fusion engine, disparate data becomes integrated and enriched to provide unparalleled views resulting in analysis such as sampled in the National Security Scorecard.

The 2024 National Security Scorecard contains but is not limited to contract, OTA, grant, patent, supply chain, vendor, technology, financial, and geographic data. The combination of these datasets allow the Scorecard to create a wide aperture of visibility into critical and emerging technologies with the ultimate goal to help the U.S. defense acquisition community build, acquire, and field capabilities faster than our adversaries. Ark offers a suite of AI-enabled applications powered by integrated proprietary and government data that accelerate the entire defense acquisition process.



CRITICAL TECHNOLOGIES TAXONOMY

Biotechnologies	Population Health	Precision Medical	Informatics	Operational	
\$286.9 B ▲ 28.3%	\$193.2 B ▲ 28.7%	\$60.2 B ▲ 33.5%	\$26.0 B ▲ 12.0%	\$7.4 B ▲ 36.3%	
Data Visualization & Interfaces	Data Integration	Data Visualization			
\$118.8 B ▲ 2.4%	\$94.1 B ▲ 0.4%	\$24.6 B ▲ 12.1%			
Nuclear Modernization	Nuclear Laboratories	Delivery Systems	Warheads		
\$103.4 B ▲ 15.9%	\$47.9 B ▲ 13.9%	\$46.2 B ▲ 13.0%	\$9.3 B ▲ 58.7%		
Space Technologies & Systems	Space Missions	National Security Satellites	Space Science	Launch Vehicles	Earth Observation
\$71.1 B ▼ 5.1%	\$28.3 B ▼ 3.3%	\$19.0 B ▼ 0.9%	\$11.2 B ▼ 16.8%	\$10.5 B ▼ 6.0%	\$2.2 B ▼ 6.5%
Advanced Communications & Network Sensing	Cybersecurity	System Enablers	Integrated Network System-of-Systems	Future G/5G	
\$60.7 B ▲ 4.2%	\$36.7 B ▲ 7.0%	\$17.9 B ▲ 4.7%	\$4.3 B ▼ 7.8%	\$1.8 B ▼ 27.3%	
Gas Turbine Engines & Technologies	Engine Systems	Combustion & Cooling	Control Systems	Materials & Design	
\$32.2 B ▲ 0.6%	\$31.3 B ▲ 0.2%	\$572.0 M ▲ 114.5%	\$255.1 M ▼ 31.6%	\$99.2 M ▲ 72.0%	
Advanced Manufacturing	Design & Process Automation	Digital Manufacturing			
\$23.7 B ▲ 4.8%	\$18.4 B ▲ 1.6%	\$5.3 B ▲ 13.9%			

Robotics & Autonomy	Autonomous Vehicles	Human-Machine Interfaces	Robotics			
\$19.4 B ▾ 12.6%	\$15.8 B ▾ 15.9%	\$3.2 B ▾ 0.2%	\$401.0 M ▾ 15.1%			
Advanced Engineering Materials	Composites	Material Informatics	Polymers	Metals	Ceramics	Rare Earths
\$15.0 B ▾ 7.0%	\$7.7 B ▾ 18.2%	\$3.4 B △ 0.3%	\$1.5 B △ 6.8%	\$1.5 B △ 6.7%	\$505.4 M ▾ 2.7%	\$391.8 M △ 28.9%
Artificial Intelligence & Machine Learning	Machine Learning	Computer Vision	Natural Language Processing	Advanced AI Techniques		
\$12.1 B △ 25.8%	\$9.0 B △ 30.0%	\$1.4 B △ 2.9%	\$1.1 B △ 26.4%	\$661.3 M △ 23.8%		
Hypersonics	Missiles & Interceptors	Simulation & Modeling	C2 & Guidance Systems			
\$11.4 B △ 8.4%	\$5.9 B △ 16.7%	\$4.2 B ▾ 3.1%	\$1.3 B △ 8.6%			
Clean Energy, Generation, & Storage	Energy Generation	Distribution & Storage	Energy Efficiency			
\$11.4 B △ 30.1%	\$6.0 B △ 23.0%	\$4.0 B △ 33.6%	\$1.3 B △ 60.6%			
Semiconductors & Microelectronics	Memory & Processing	Design & Fabrication	Specialized Microelectronics			
\$11.2 B ▾ 0.5%	\$9.7 B ▾ 1.6%	\$1.4 B △ 6.3%	\$88.8 M △ 40.4%			
Advanced Computing	Computer Systems Engineering	Quantum Information Science				
\$9.4 B △ 0.9%	\$5.3 B △ 1.4%	\$4.1 B △ 0.1%				
Directed Energy	Directed Energy Systems	Assisting Technology				
\$5.2 B ▾ 7.1%	\$3.0 B △ 1.3%	\$2.2 B ▾ 18.0%				

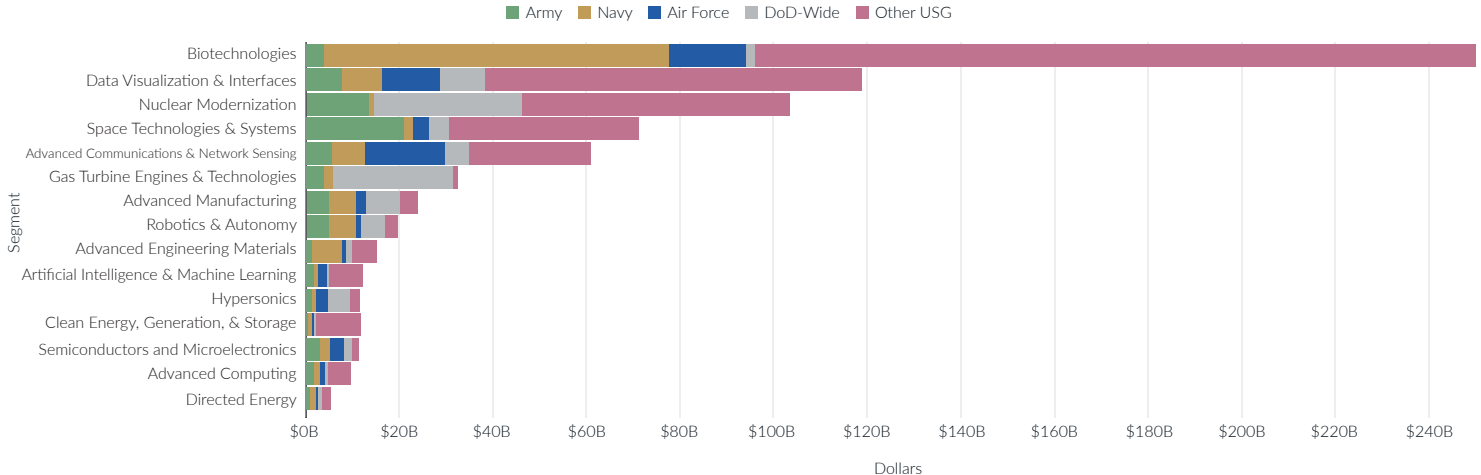
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Segment/Subsegment	
FY19-23 Obligation Total	△ +/- CAGR

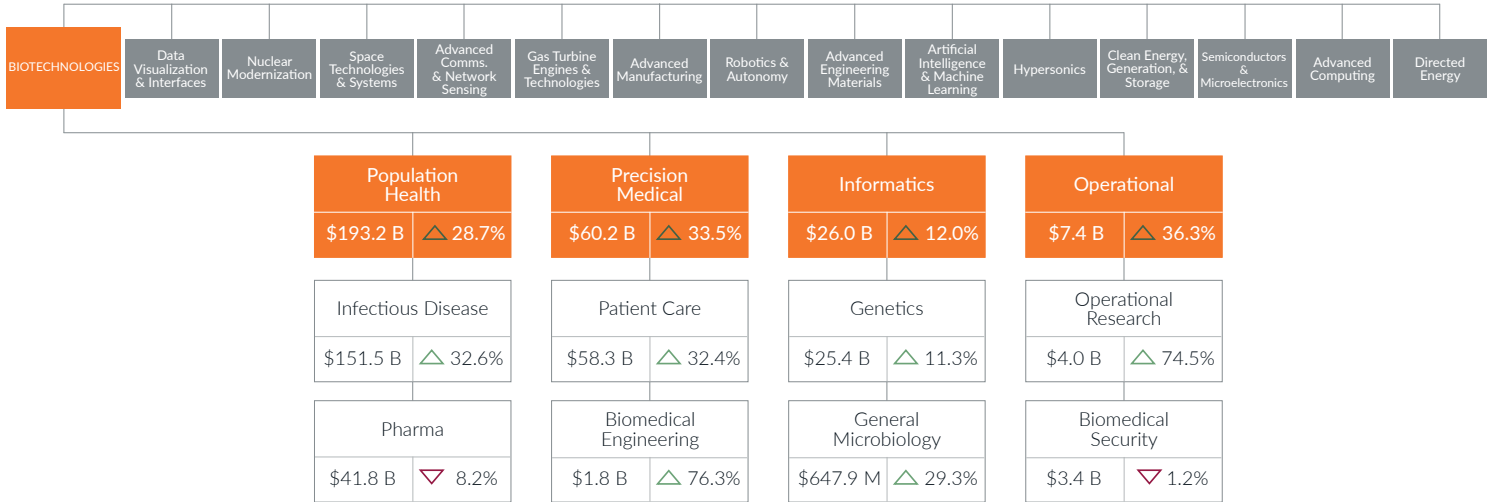
CRITICAL TECHNOLOGIES OVERVIEW 2024

RANK		SEGMENT	SPEND				CONTRACT-BASED		OTA- & GRANT-BASED	
FY24	FY23		FY19-23 SPEND	CAGR	FY23 SPEND	FY23 SHARE	FY19-23 SPEND	% OF SPEND	FY19-23 SPEND	% OF SPEND
1	1	Biotechnologies	\$286.9 B	△ 28.3%	\$61.2 B	35.1%	\$97.8 B	20.0%	\$189.1 B	62.6%
2	3	Data Visualization & Interfaces	\$118.8 B	△ 2.4%	\$27.3 B	15.7%	\$68.9 B	14.1%	\$49.8 B	16.5%
3	2	Nuclear Modernization	\$103.4 B	△ 15.9%	\$25.2 B	14.4%	\$103.0 B	21.0%	\$0.4 B	0.1%
4	5	Advanced Communications & Network Sensing	\$60.7 B	△ 4.2%	\$13.3 B	7.6%	\$48.1 B	9.8%	\$12.6 B	4.2%
5	4	Space Technologies	\$71.1 B	▽ 5.1%	\$13.0 B	7.4%	\$63.6 B	13.0%	\$7.6 B	2.5%
6	6	Gas Turbine Engines & Technologies	\$32.2 B	△ 0.6%	\$8.3 B	4.8%	\$31.3 B	6.4%	\$1.0 B	0.3%
7	7	Advanced Manufacturing	\$23.7 B	△ 4.8%	\$5.0 B	2.9%	\$19.0 B	3.9%	\$4.6 B	1.5%
8	11	Clean Energy, Generation, & Storage	\$11.4 B	△ 30.1%	\$4.2 B	2.4%	\$1.2 B	0.2%	\$10.2 B	3.4%
9	12	Artificial Intelligence & Machine Learning	\$12.1 B	△ 25.8%	\$3.9 B	2.2%	\$4.5 B	0.9%	\$7.6 B	2.5%
10	10	Advanced Engineering Materials	\$15.0 B	▽ 7.0%	\$2.8 B	1.6%	\$9.5 B	1.9%	\$5.5 B	1.8%
11	8	Robotics & Autonomy	\$19.4 B	▽ 12.6%	\$2.8 B	1.6%	\$15.3 B	3.1%	\$4.1 B	1.4%
12	13	Semiconductors & Microelectronics	\$11.2 B	▽ 0.5%	\$2.4 B	1.4%	\$9.1 B	1.9%	\$2.1 B	0.7%
13	9	Hypersonics	\$11.4 B	△ 8.4%	\$2.3 B	1.3%	\$8.8 B	1.8%	\$2.7 B	0.9%
14	14	Advanced Computing	\$9.4 B	△ 0.9%	\$1.9 B	1.1%	\$5.6 B	1.1%	\$3.8 B	1.3%
15	15	Directed Energy	\$5.2 B	▽ 7.1%	\$894.2 M	0.5%	\$4.0 B	0.8%	\$1.2 B	0.4%

SEGMENT SPEND BY GOVERNMENT AGENCIES, FY19-23



CRITICAL TECHNOLOGY SEGMENTS



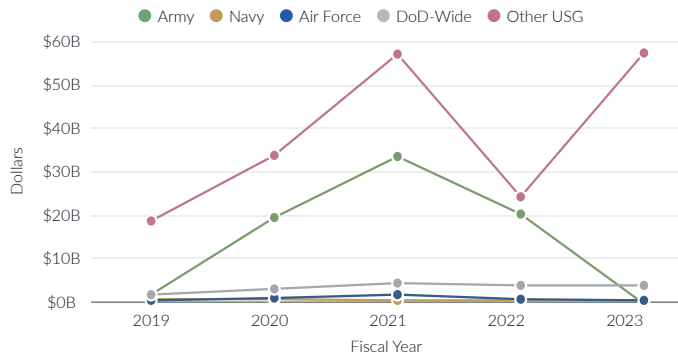
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Segment/Subsegment	
FY19-23 Obligation Total	▲ +/- CAGR

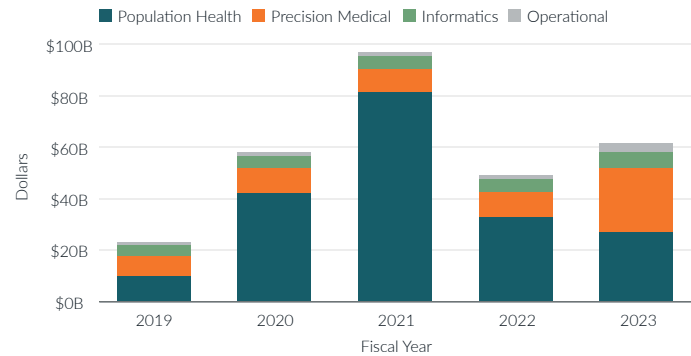
BIOTECHNOLOGIES

The Biotechnology sector spans medical, materials science, and logistics applications, enhancing soldier resilience and acting as a source for advanced materials. Research in this field focuses on areas like bio-enhanced materials for better protective gear, biomedical research for soldier health, and biofuels for sustainable energy sources. Biodefense is also a key line of effort, with efforts in developing rapid response to biological threats and enhancing diagnostics and vaccines.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



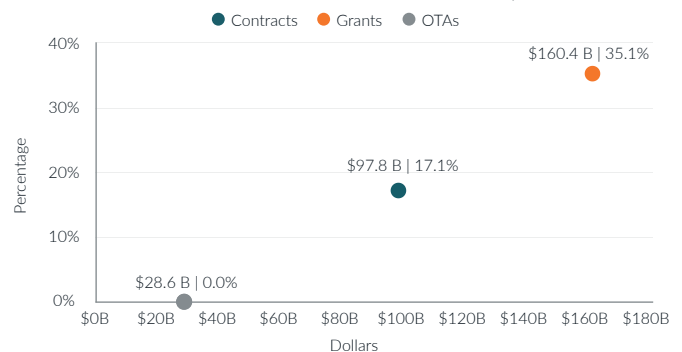
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	14,491	8,255	△ 22.7%
Subcontractors	577	66	▽ 17.5%
Tier 1	3,772	2,477	△ 1.6%
Tier 1 Supplier Breakdown			
U.S.	1,901	1,162	△ 2.0%
Allied	690	468	△ 0.9%
Other	958	662	△ 0.8%
Adversarial	223	185	▽ 2.6%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	32.3	△	2.3%
Competitiveness Score	22.7	△	1.1%

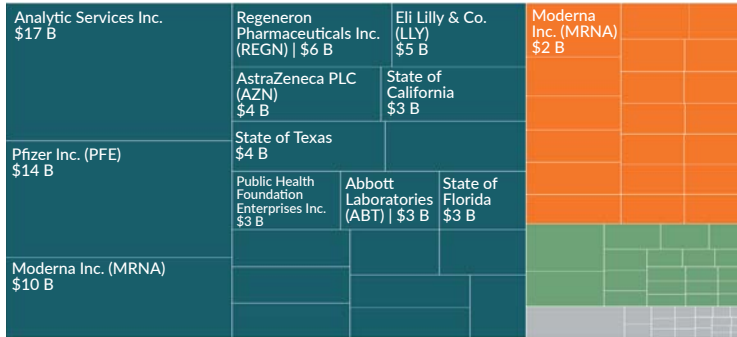
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



BIOTECHNOLOGIES

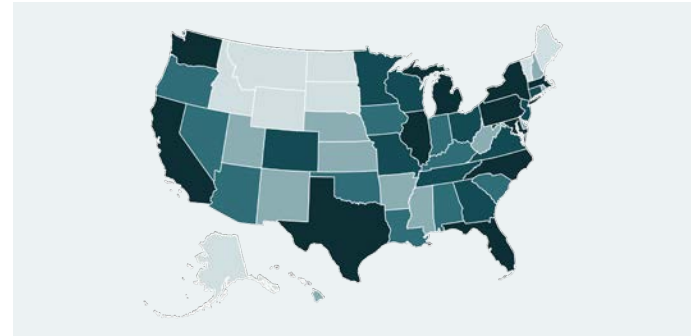
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Population Health ■ Precision Medical ■ Informatics ■ Operational



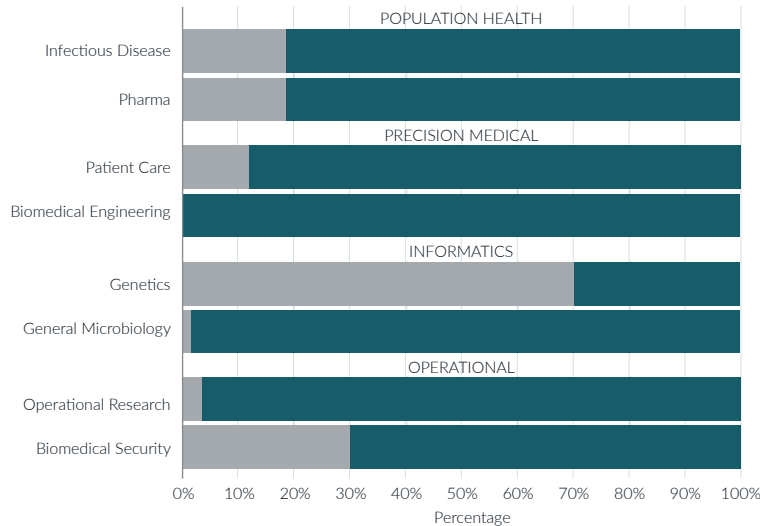
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars ■ 60-80% of Awarded Dollars ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars ■ Lowest 20% of Awarded Dollars



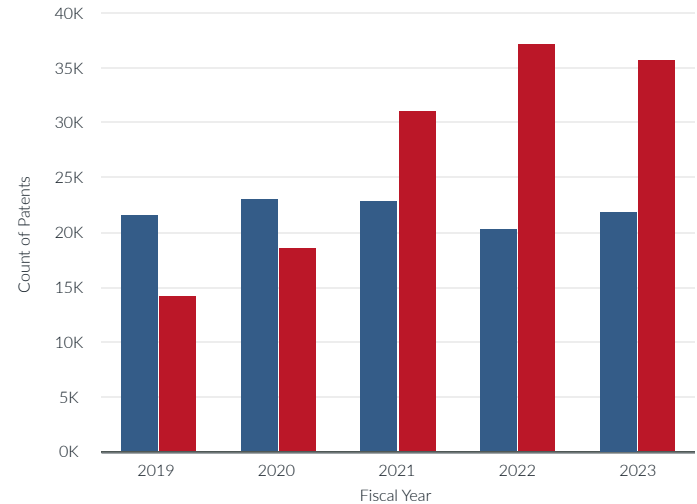
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Analytic Services Inc.	\$1.5 B	△ 299.8%
State of California	\$874.0 M	△ 108.7%
State of Texas	\$408.3 M	△ 80.0%
Emergent BioSolutions Inc.	\$393.1 M	△ 265.3%
Andon Health Co. Ltd.	\$357.8 M	▽ 79.8%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	182	▽ 2.7%
 United Kingdom	125	▽ 4.6%
 India	108	△ 1.9%
 Canada	97	△ 2.1%
 Japan	91	△ 11.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Biomedical Advanced Research and Development Authority	\$4.4 B	251
National Institute of Allergy and Infectious Diseases	\$3.0 B	8,561
Center for Surveillance, Epidemiology, and Laboratory Services	\$2.3 B	2,090
National Institute of General Medical Sciences	\$1.9 B	7,928
Center for Global Health (CDC)	\$1.6 B	4,528

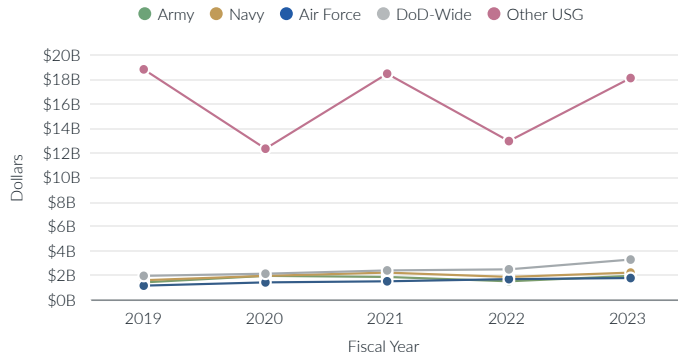
TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Alameda County, CA	\$8.0 B	D-12
Suffolk County, MA	\$6.0 B	D-07
New York County, NY	\$5.5 B	D-12
Allegheny County, PA	\$3.8 B	D-12
Durham County, NC	\$3.7 B	D-04

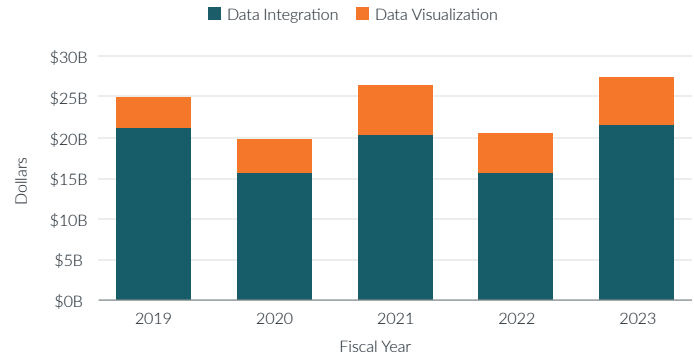
DATA VISUALIZATION & INTERFACES

Data Visualization & Interfaces technologies play a crucial role in enhancing the decision-making and operational capabilities of all U.S. national security agencies. By normalizing and transforming complex datasets into intuitive, actionable insights, these tools enable commanders and personnel to rapidly assess and respond to evergreen situations. This technology facilitates a comprehensive understanding of not only the battlefield, but of the global defense market, ensuring optimization of resource allocation, and improved strategic planning.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



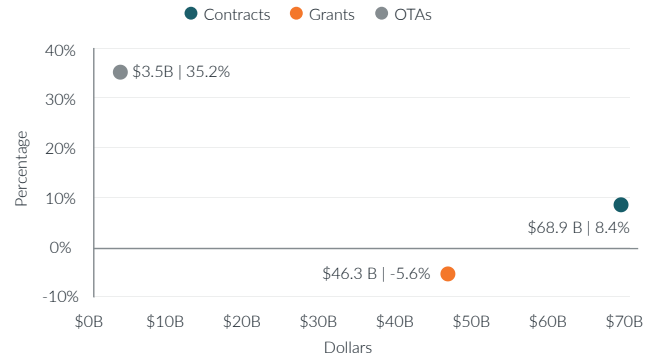
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	11,762	6,100	△ 8.1%
Subcontractors	1,519	220	▽ 10.9%
Tier 1	6,447	3,686	△ 44.2%
Tier 1 Supplier Breakdown			
U.S.	3,173	1,609	△ 29.3%
Allied	1,104	747	△ 42.0%
Other	1,753	1,065	△ 48.5%
Adversarial	417	265	△ 76.7%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	27.8	△	0.9%
Competitiveness Score	1.5	▽	1.2%

TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



DATA VISUALIZATION & INTERFACES

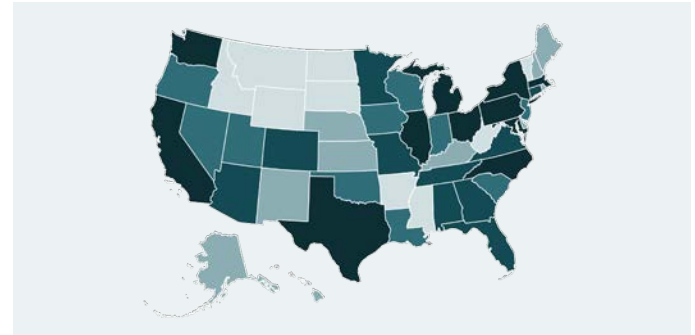
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Data Integration ■ Data Visualization



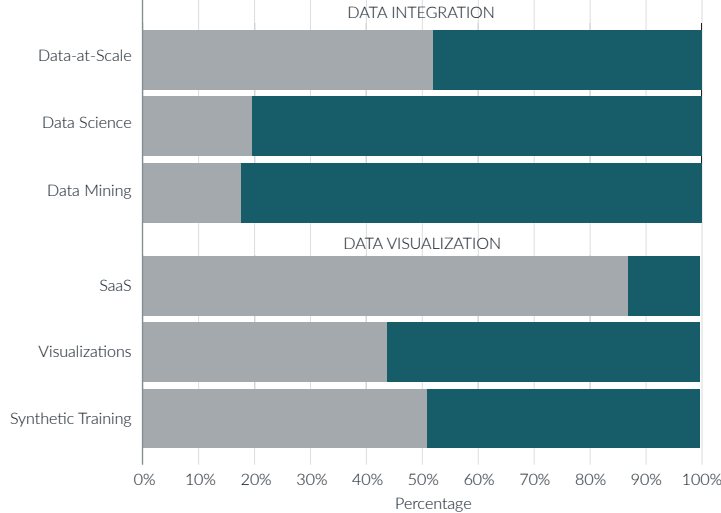
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

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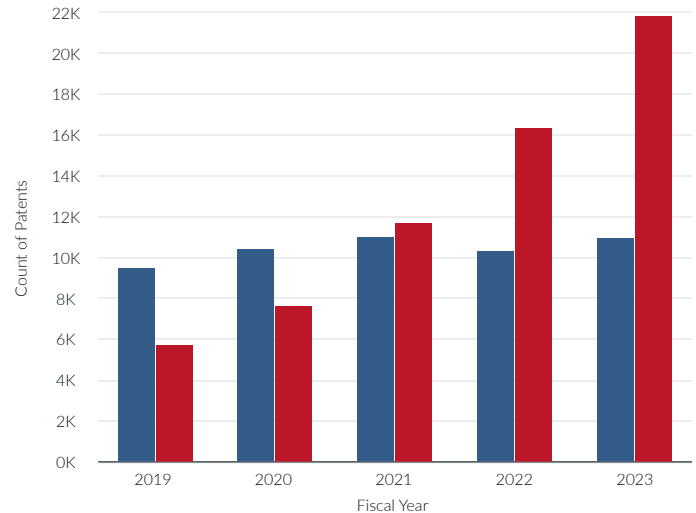
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Leidos Holdings Inc. (LDOS)	\$1.1 B	△ 32.3%
General Dynamics Corp. (GD)	\$923.7 M	△ 27.7%
Microsoft Corp. (MSFT)	\$719.0 M	△ 343.8%
Veritas Capital LLC	\$441.0 M	△ 31.5%
Booz Allen Hamilton Holding Corp. (BAH)	\$344.3 M	△ 23.3%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	263	△ 77.7%
 United Kingdom	253	△ 36.8%
 Japan	173	△ 68.0%
 India	142	△ 89.3%
 Canada	139	△ 78.2%

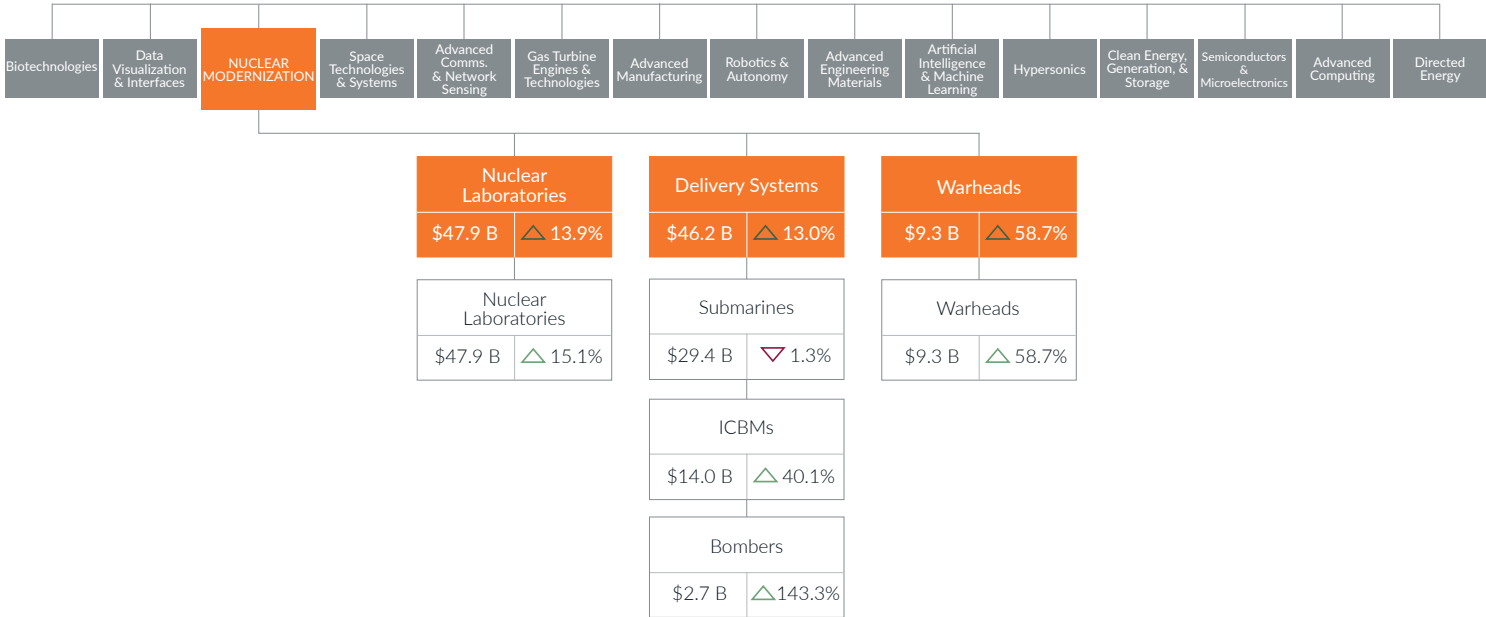
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Office of Acquisition and Grants Management (CMS)	\$925.9 M	305
Naval Information Warfare Systems Command	\$826.2 M	769
Program Executive Office Solider Belvior, W6DS	\$596.4 M	4
Goddard Space Flight Center (NASA)	\$559.4 M	160
Office of Acquisition Services (CDC)	\$356.0 M	756

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Fairfax County, VA	\$3.3 B	D-11
District of Columbia, DC	\$2.3 B	D-DC
Los Angeles County, CA	\$1.8 B	D-28
Suffolk County, MA	\$1.7 B	D-07
Montgomery County, MD	\$1.6 B	D-08

NUCLEAR MODERNIZATION



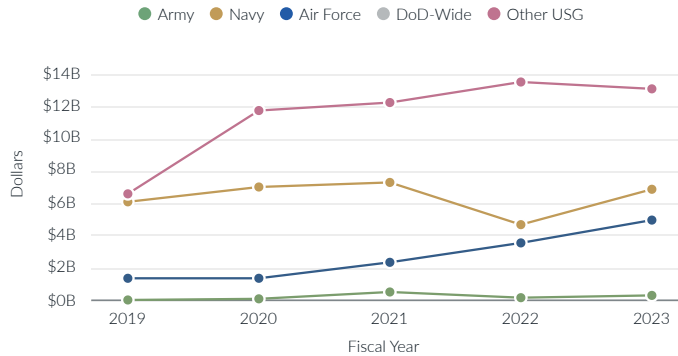
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Segment/Subsegment	
FY19-23 Obligation Total	▲ +/- CAGR

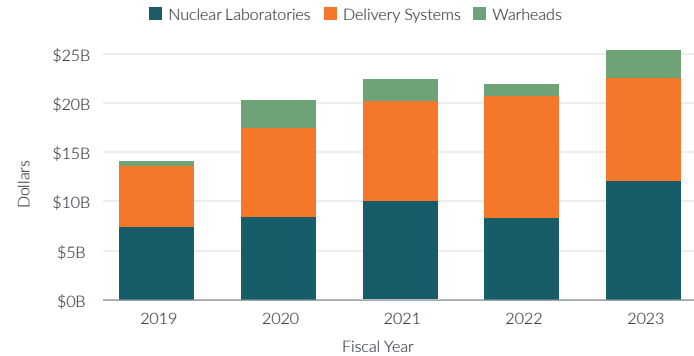
NUCLEAR MODERNIZATION

Nuclear Modernization is crucial for U.S. military and defense, ensuring the reliability, security, and effectiveness of its nuclear arsenal. Modernization of the nuclear triad means upgrading missile systems, developing new submarines, and enhancing bomber fleets, coupled with advanced research in nuclear command, control, and communications (NC3). These steps ensure the U.S. maintains a credible nuclear deterrent, adapting to contemporary threats while supporting global stability and security.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



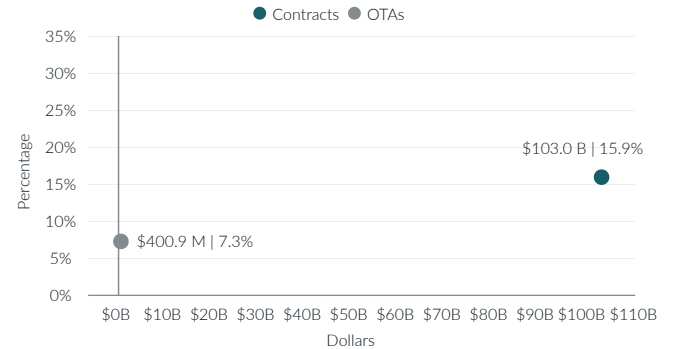
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	2,258	1,084	△ 13.9%
Subcontractors	1,363	97	▽ 72.2%
Tier 1	3,207	1,250	▽ 29.9%
Tier 1 Supplier Breakdown			
U.S.	1,973	553	▽ 43.2%
Allied	433	258	▽ 25.7%
Other	675	357	▽ 33.5%
Adversarial	126	82	▽ 19.6%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	34.7	▽ 1.0%	
Competitiveness Score	1.0	△ 2.6%	

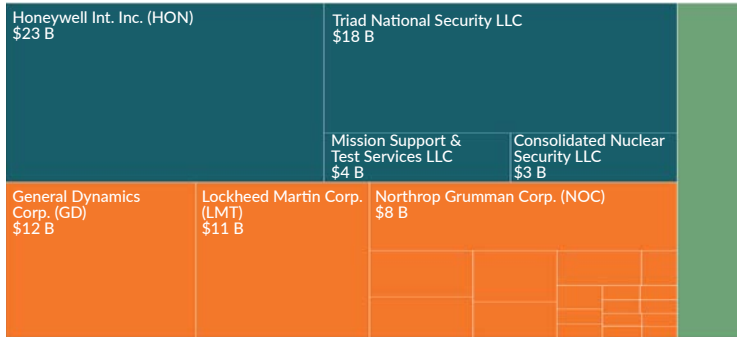
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



NUCLEAR MODERNIZATION

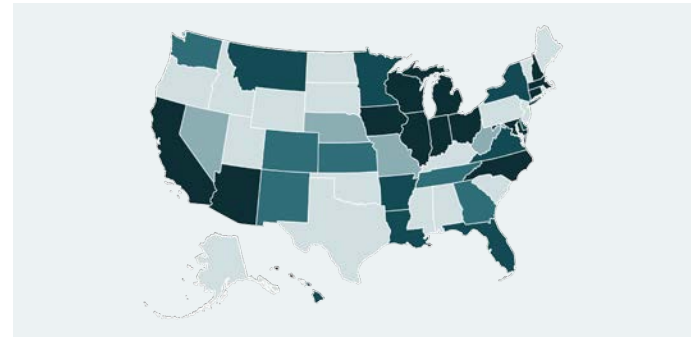
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Nuclear Laboratories ■ Delivery Systems ■ Warheads



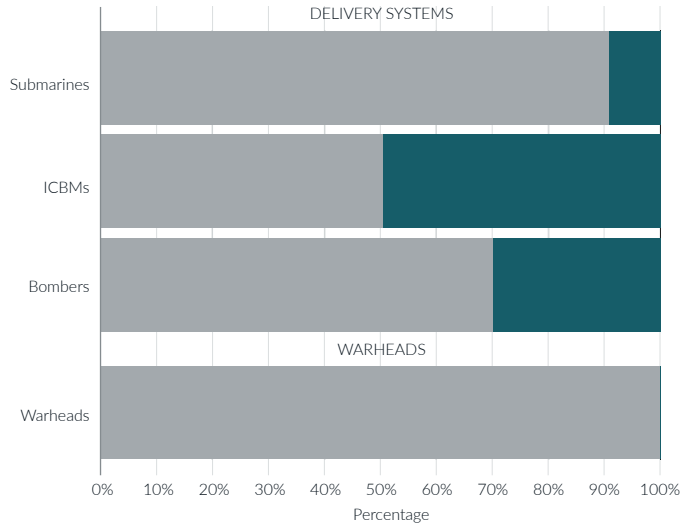
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars ■ 60-80% of Awarded Dollars ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars ■ Lowest 20% of Awarded Dollars



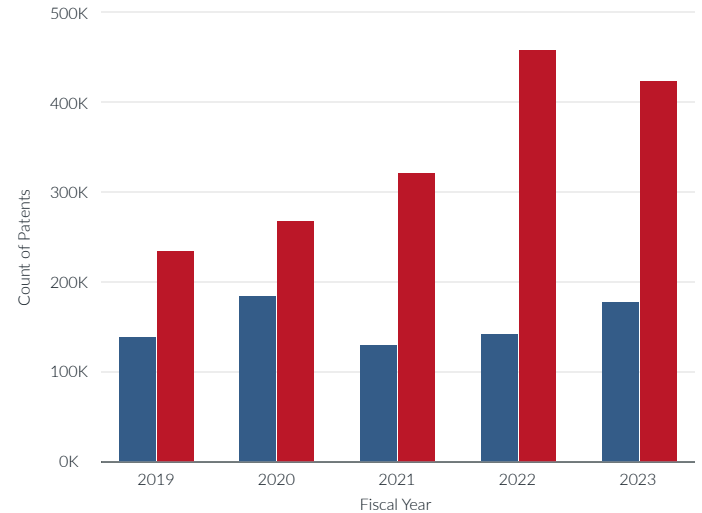
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23

■ United States ■ China








NUCLEAR MODERNIZATION

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Honeywell Int. Inc. (HON)	\$5.7 B	△ 3.5%
Triad National Security, LLC	\$4.3 B	△ 13.9%
Northrop Grumman Corp. (NOC)	\$3.3 B	△ 35.9%
Consolidated Nuclear Security LLC	\$3.3 B	▽ 13.3%
Lockheed Martin Corp. (LMT)	\$2.8 B	△ 35.6%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 United Kingdom	98	▽ 19.0%
 China	82	▽ 18.8%
 Japan	54	▽ 47.6%
 India	49	▽ 5.8%
 Sweden	40	▽ 11.1%

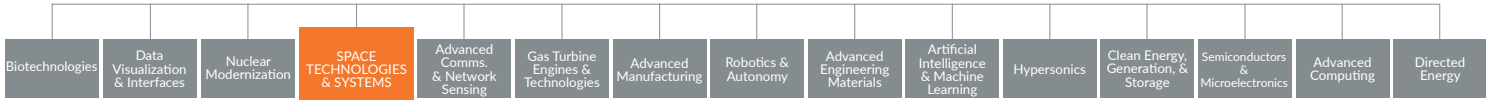
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
National Nuclear Security Administration's Weapons Activities	\$13.1 B	115
Strategic Systems Programs	\$4.3 B	1,810
Air Force Nuclear Weapons Center	\$3.3 B	142
Naval Air Systems Command	\$1.1 B	51
Naval Undersea Warfare Center Division Newport	\$805.5 M	2,938

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Los Alamos County, NM	\$4.3 B	D-03
Bernalillo County, NM	\$4.1 B	D-01
Andersen County, TN	\$3.3 B	R-03
Weber County, UT	\$2.9 B	R-01
Jackson County, MO	\$1.6 B	D-05

SPACE TECHNOLOGIES & SYSTEMS



SPACE TECHNOLOGIES & SYSTEMS		National Security Satellites		Space Science		Launch Vehicles		Earth Observation	
\$28.3 B	▽ 3.3%	\$19.0 B	▽ 0.9%	\$11.2 B	▽ 16.8%	\$10.3 B	▽ 6.0%	\$2.2 B	▽ 6.5%
ISS Sustainment		Early Warning Satellite		Solar System Science		Small Lift		Climate Atmosphere	
\$13.6 B	▽ 8.7%	\$9.9 B	▽ 5.9%	\$9.9 B	▽ 16.7%	\$4.0 B	△ 28.8%	\$1.8 B	▽ 6.1%
Human Space Flight		GPS		Universe Science		Mission Assurance		Near Earth Space	
\$10.1 B	△ 6.2%	\$8.2 B	△ 3.1%	\$1.3 B	▽ 17.3%	\$3.6 B	▽ 16.4%	\$381.0 M	▽ 8.2%
Space Sensing		Communications				Heavy Lift			
\$4.6 B	▽ 10.3%	\$945.4 M	△ 21.8%			\$1.6 B	▽ 18.6%		
						Medium Lift			
						\$1.2 B	▽ 50.6%		

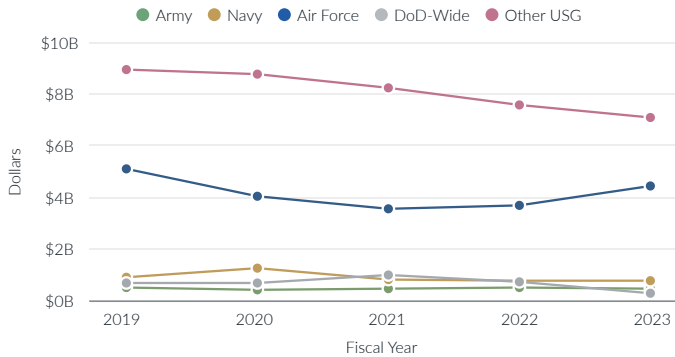
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	△ +/- CAGR

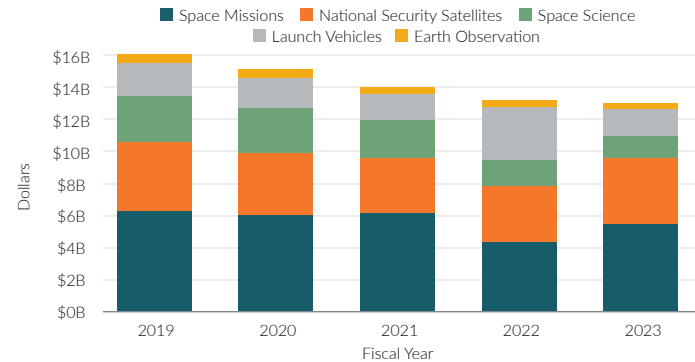
SPACE TECHNOLOGIES & SYSTEMS

Space Technologies & Systems are pivotal to U.S. military and defense operations, enhancing communication, navigation, surveillance, and missile detection. The use of satellites and space-based sensors ensures global situational awareness, secure data transmission, and precise positioning. As space becomes an increasingly contested domain, the U.S. is investing in advanced space technologies to maintain superiority, protect assets, and ensure resilience against emerging space-based threats, affirming space as a crucial frontier in national defense strategy.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



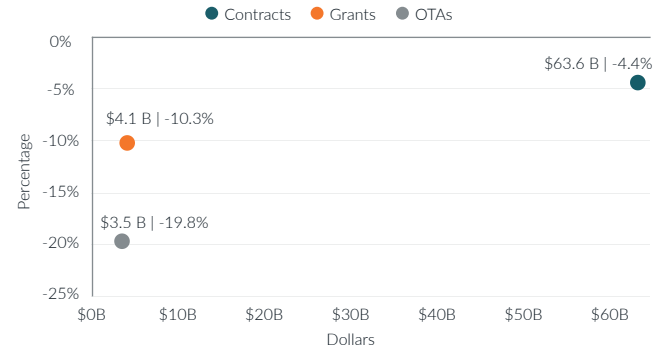
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

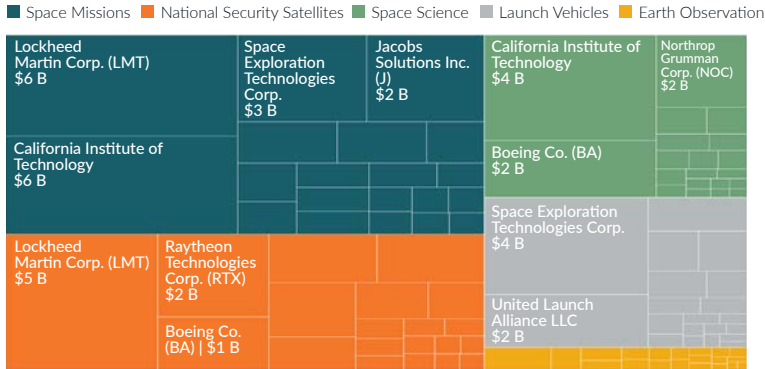
METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	3,063	1,322	△ 4.6%
Subcontractors	900	94	▽ 10.5%
Tier 1	1,197	362	△ 15.3%
Tier 1 Supplier Breakdown			
U.S.	981	252	△ 0.8%
Allied	114	52	△ 18.2%
Other	95	51	△ 18.6%
Adversarial	7	7	△ 75.0%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	33.1	△	4.0%
Competitiveness Score	25.9	△	4.8%

TECHNOLOGY PROCUREMENT VELOCITY, FY19-23

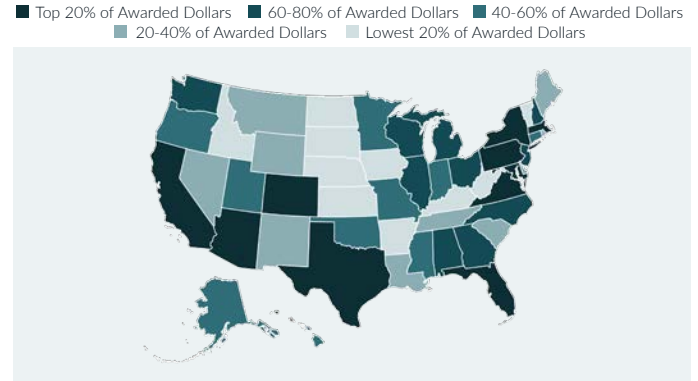


SPACE TECHNOLOGIES & SYSTEMS

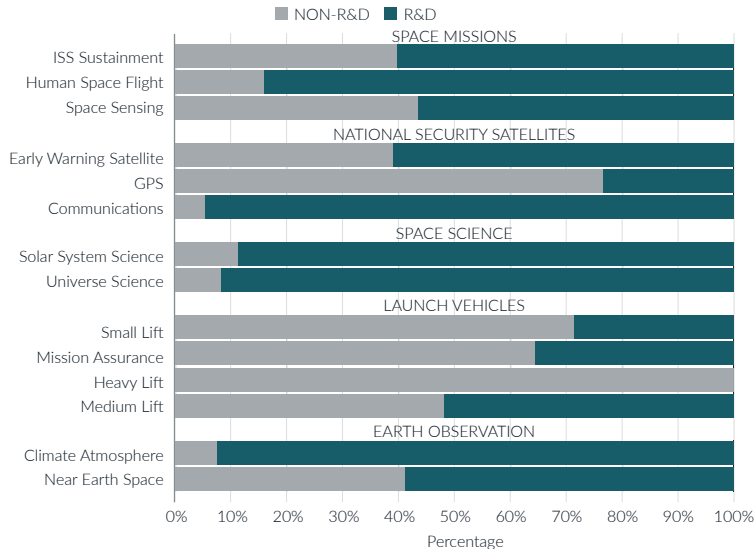
TOP 20 AWARDEES BY SEGMENT, FY19-23



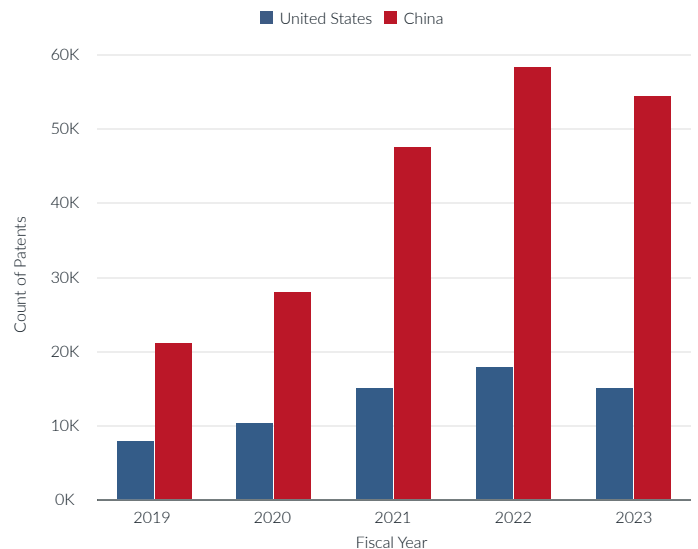
PLACE OF PERFORMANCE CONCENTRATION, FY19-23



TECHNOLOGY MATURITY BY SPEND, FY19-23








YOY PATENTS GRANTED, FY19-23



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Lockheed Martin Corp. (LMT)	\$2.5 B	△ 5.4%
Space Exploration Technologies Corp.	\$2.4 B	△ 21.2%
California Institute of Technology	\$1.5 B	▽ 12.4%
Northrop Grumman Corp. (NOC)	\$504.9 M	▽ 11.3%
Raytheon Technologies Corp. (RTX)	\$450.3 M	△ 1.9%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 United Kingdom	19	▽ 26.7%
 Canada	11	— N/A
 Australia	7	— N/A
 Sweden	7	▽ 40.0%
 China	7	△ 75.0%

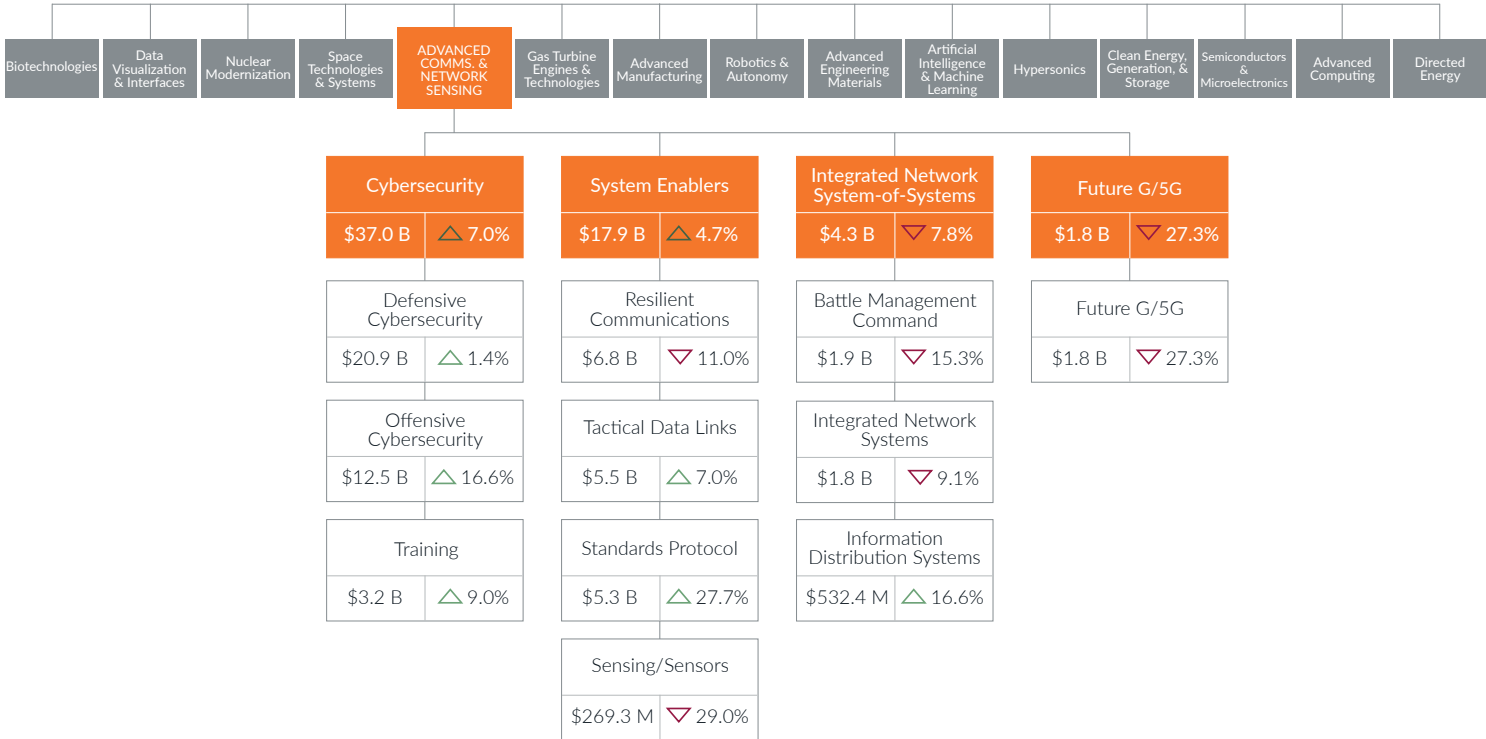
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Marshall Space Flight Center (NASA)	\$1.8 B	236
Department of the Air Force F2T5JA SMC GP	\$1.7 B	164
Management Office - JPL (NASA)	\$1.5 B	1,027
Goddard Space Flight Center (NASA)	\$924.1 M	512
Kennedy Space Center (NASA)	\$884.3 M	161

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Los Angeles County, CA	\$3.9 B	D-43
Douglas County, CO	\$1.7 B	D-07
Brevard County, FL	\$862.1 M	R-08
Arapahoe County, CO	\$486.0 M	D-06
King County, WA	\$467.2 M	D-09

ADVANCED COMMUNICATIONS & NETWORK SENSING



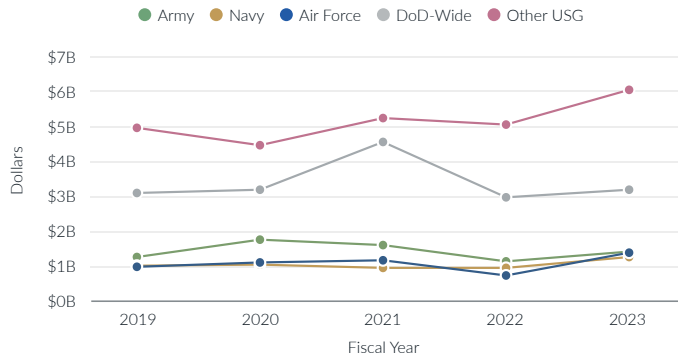
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	▲ +/- CAGR

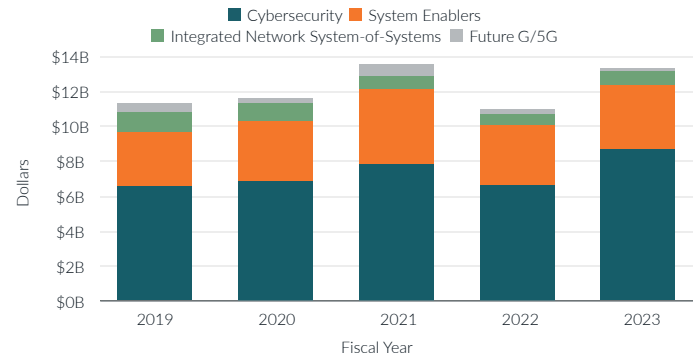
ADVANCED COMMUNICATIONS & NETWORK SENSING

Advanced Communications and Network Sensing are critical to the U.S. military's strategic capabilities, enhancing connectivity and situational awareness. Innovations in network sensing contribute to comprehensive surveillance, target acquisition, and reconnaissance, crucial for operational superiority. Research and deployment focus on ensuring resilience against cyber threats, integrating AI for data analysis, and developing communications infrastructure for austere environments.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



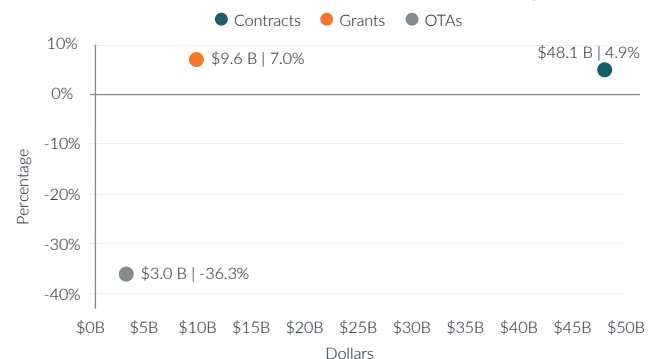
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	7,170	3,560	△ 19.8%
Subcontractors	1,191	119	▽ 19.1%
Tier 1	4,144	2,388	△ 51.0%
Tier 1 Supplier Breakdown			
U.S.	2,245	1,060	△ 36.3%
Allied	639	488	△ 53.0%
Other	1,037	663	△ 45.4%
Adversarial	223	177	△ 80.6%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	32.3	△	2.3%
Competitiveness Score	14.1	△	12.2%

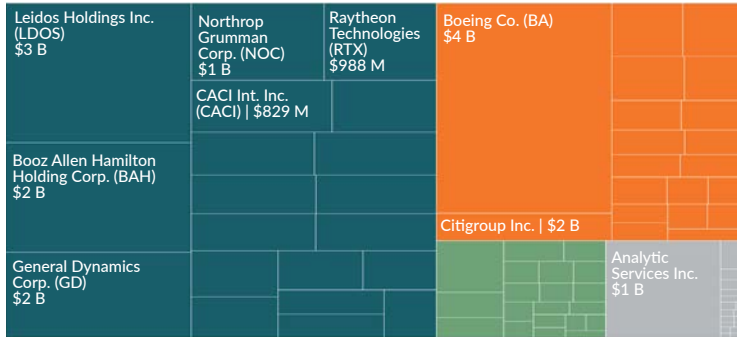
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



ADVANCED COMMUNICATIONS & NETWORK SENSING

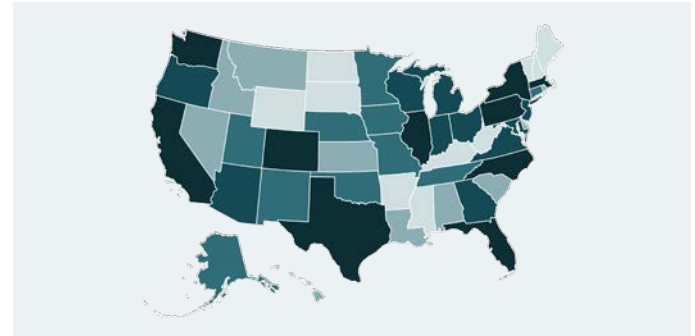
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Cybersecurity
 ■ System Enablers
 ■ Integrated Network System-of-Systems
 ■ Future G/5G



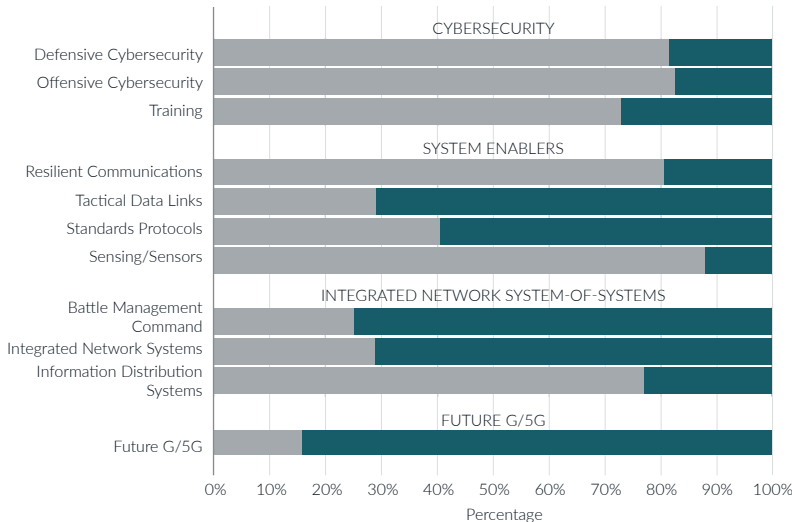
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars
 ■ 60-80% of Awarded Dollars
 ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars
 ■ Lowest 20% of Awarded Dollars



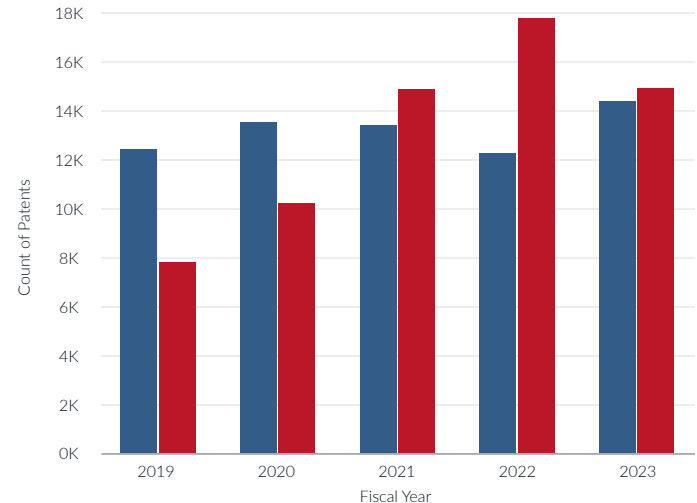
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D
 ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States
 ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Leidos Holdings, Inc. (LDOS)	\$1.0 B	△ 77.7%
Booz Allen Hamilton Holding Corp. (BAH)	\$844.5 M	△ 63.1%
General Dynamics Corp. (GD)	\$545.0 M	▽ 11.7%
CACI Int. Inc. (CACI)	\$385.0 M	△ 42.4%
Jacobs Solutions, Inc. (J)	\$288.3 M	△ 331.8%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	177	△ 80.6%
 United Kingdom	169	△ 50.9%
 Canada	90	△ 69.8%
 India	85	△ 80.9%
 Japan	80	△ 11.1%

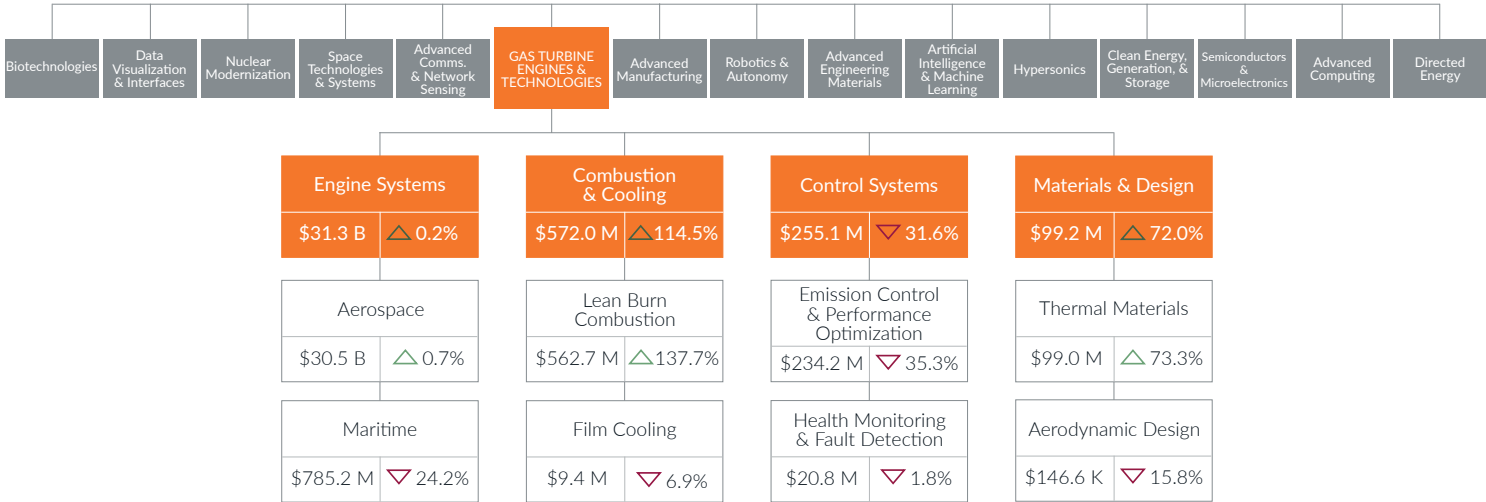
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Office of the Director, Cybersecurity & Infrastructure Security Agency	\$840.7 M	161
Missile Defense Agency	\$752.3 M	241
Technology Acquisition Center NJ (36C10B)	\$548.2 M	143
Defense Information Systems Agency	\$433.9 M	409
DHMSM Program Management Office	\$343.0 M	30

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Fairfax County, VA	\$2.7 B	D-11
Arlington County, VA	\$1.1 B	D-08
District of Columbia, DC	\$784.1 M	D-DC
Madison County, AL	\$634.3 M	R-05
Anne Arundel County, MD	\$573.2 M	D-05

GAS TURBINE ENGINES & TECHNOLOGIES



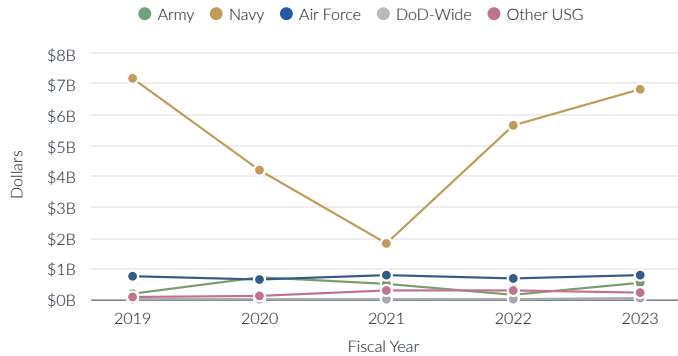
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	△ +/- CAGR

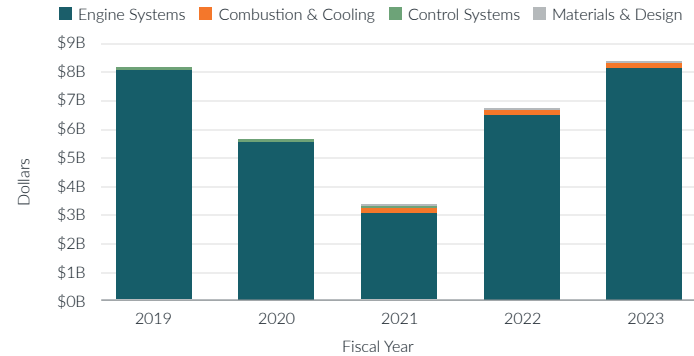
GAS TURBINE ENGINES & TECHNOLOGIES

Gas Turbine Engines & Technologies significantly enhance the U.S. military's operational efficiency and capability, powering aircraft, naval vessels, and some land vehicles with improved propulsion, fuel efficiency, and reliability. Innovations in materials, aerodynamics, and combustion efficiency drive these advancements, enabling higher performance, reduced logistical footprints, and greater endurance. Research focuses on developing engines that offer greater thrust-to-weight ratios, lower emissions, and adaptability to various fuels.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



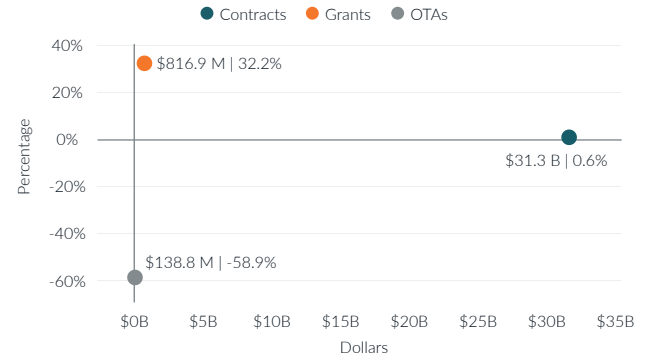
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

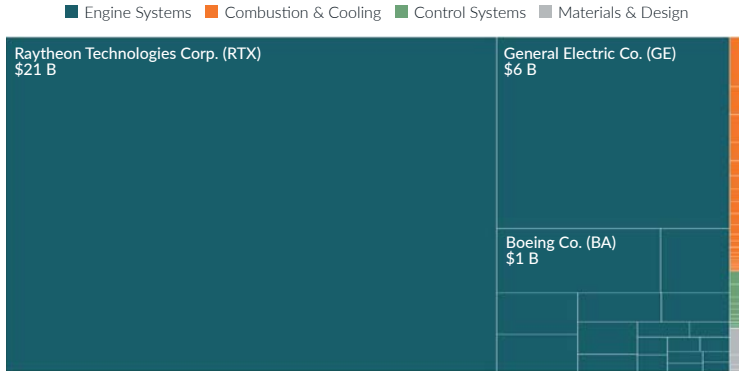
METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	493	241	▼ 8.7%
Subcontractors	162	14	▼ 30.0%
Tier 1	1,062	127	▼ 86.5%
Tier 1 Supplier Breakdown			
U.S.	468	79	▼ 73.9%
Allied	189	23	▼ 86.6%
Other	293	22	▼ 91.8%
Adversarial	112	3	▼ 97.2%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	33.9	▼ 0.8%	
Competitiveness Score	0.4	▲ 12.1%	

TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



GAS TURBINE ENGINES & TECHNOLOGIES

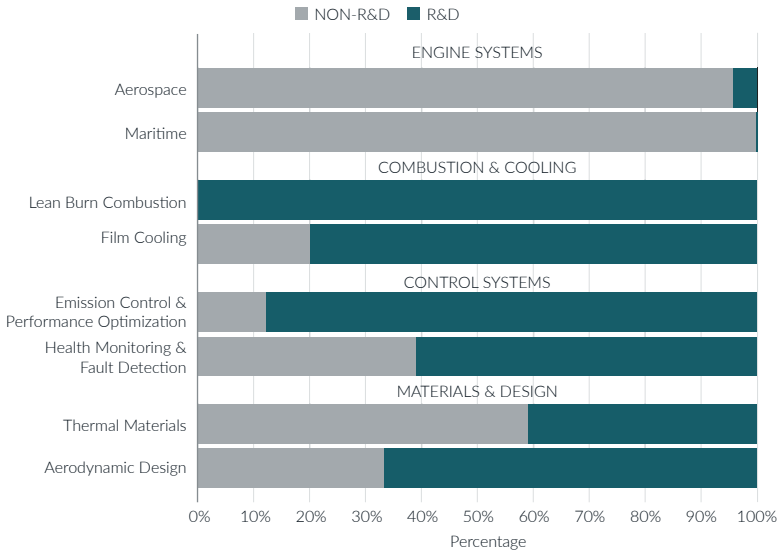
TOP 20 AWARDEES BY SEGMENT, FY19-23



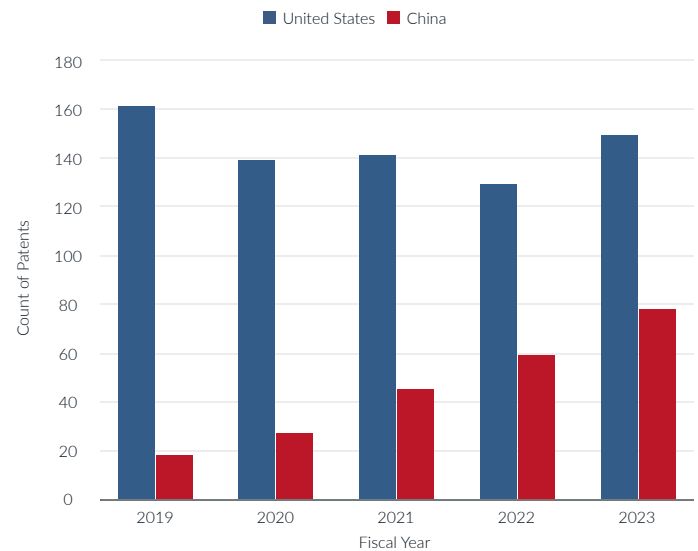
PLACE OF PERFORMANCE CONCENTRATION, FY19-23



TECHNOLOGY MATURITY BY SPEND, FY19-23



YOY PATENTS GRANTED, FY19-23





GAS TURBINE ENGINES & TECHNOLOGIES

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Raytheon Technologies Corp. (RTX)	\$5.7 B	△ 7.3%
General Electric Co. (GE)	\$1.4 B	△ 298.9%
Boeing Co. (BA)	\$354.7 M	△ 9.7%
Honeywell Int. Inc. (HON)	\$142.2 M	△ 131.6%
AeroVironment Inc. (AVAV)	\$78.5 M	△ 93.3%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

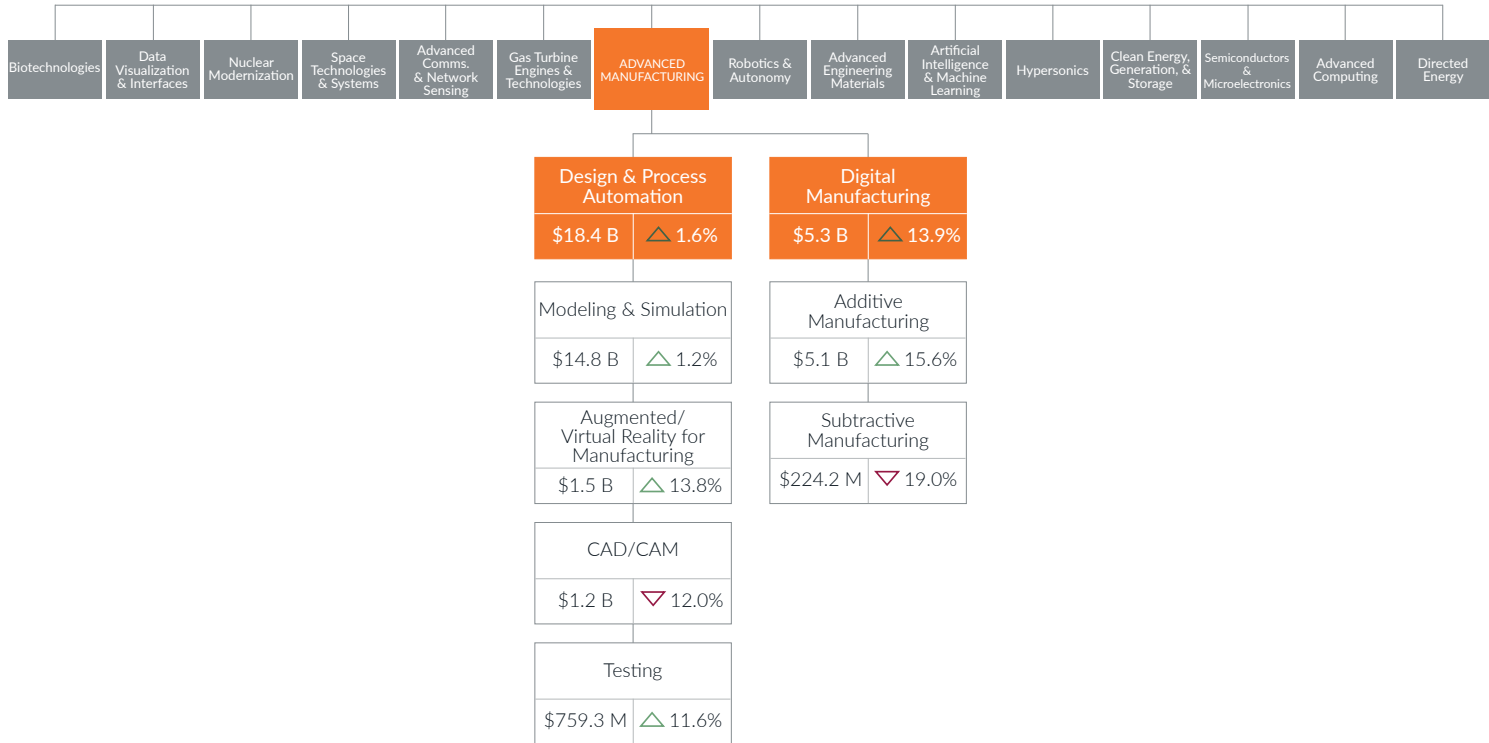
COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 Canada	8	▽ 66.7%
 Australia	4	▽ 84.6%
 Germany	4	▽ 77.8%
 United Kingdom	4	▽ 92.3%
 France	3	▽ 88.9%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Naval Air Systems Command	\$6.2 B	118
NAVSUP Weapon Systems Support	\$452.8 M	12
Program Executive Office Aviation W6DQ, Sparkman CTR	\$271.6 M	31
Air Force Lifecycle Management Center WWD, F4FDCZ	\$202.7 M	34
Office of Budget and Policy (TBP)	\$175.6 M	21

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Hartford County, CT	\$5.7 B	D-01
Essex County, MA	\$1.3 B	D-06
Oklahoma County, OK	\$357.4 M	R-04
Maricopa County, AZ	\$142.5 M	D-03
Ventura County, CA	\$78.5 M	D-26



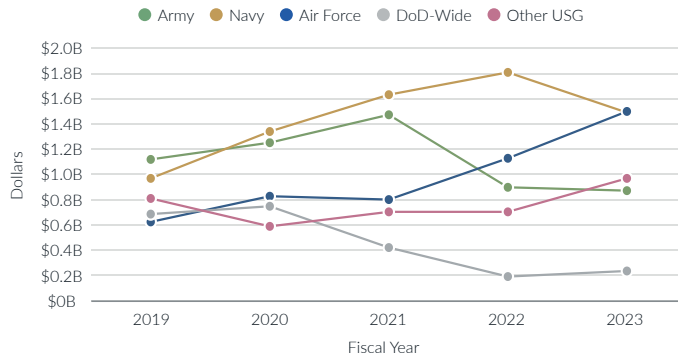
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	▲ +/- CAGR

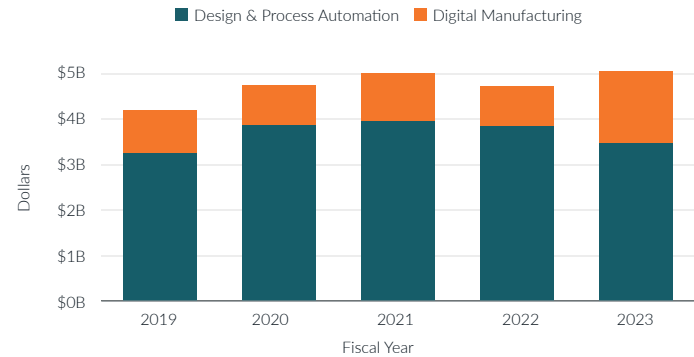
ADVANCED MANUFACTURING

Advanced Manufacturing plays a pivotal role in enhancing operational readiness and technological superiority for the U.S. military. This sector includes 3-D printing, robotics, and digital manufacturing processes, enabling rapid production, prototyping, and customization of parts and equipment. Research focuses on materials innovation, process efficiency, and integrating AI to optimize manufacturing for defense needs, ensuring the military maintains a cutting-edge in equipment and capabilities.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



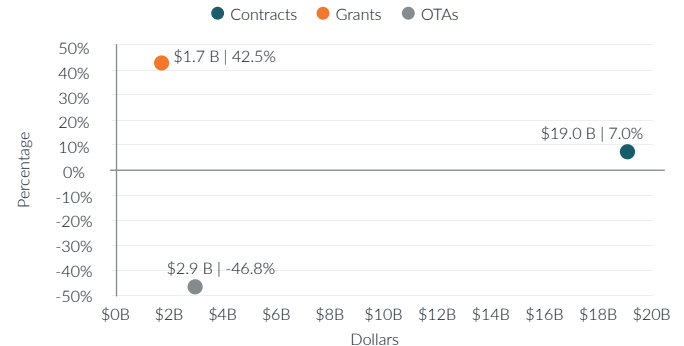
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	3,671	1,818	△ 30.4%
Subcontractors	821	75	▽ 42.3%
Tier 1	2,637	1,600	△ 122.4%
Tier 1 Supplier Breakdown			
U.S.	1,468	676	△ 51.6%
Allied	436	326	△ 132.9%
Other	601	480	△ 158.1%
Adversarial	132	118	△ 227.8%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	31.9	▽	2.0%
Competitiveness Score	30.9	△	6.0%

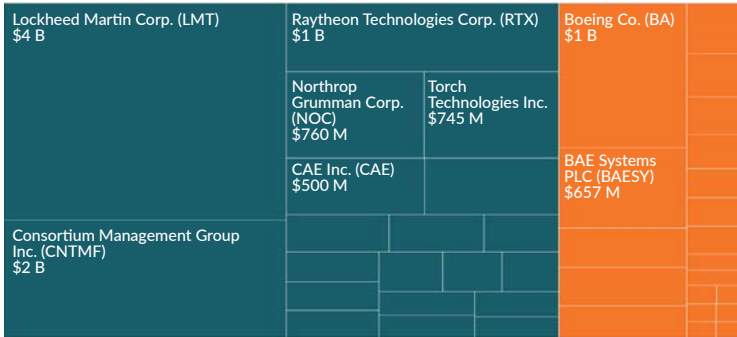
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



ADVANCED MANUFACTURING

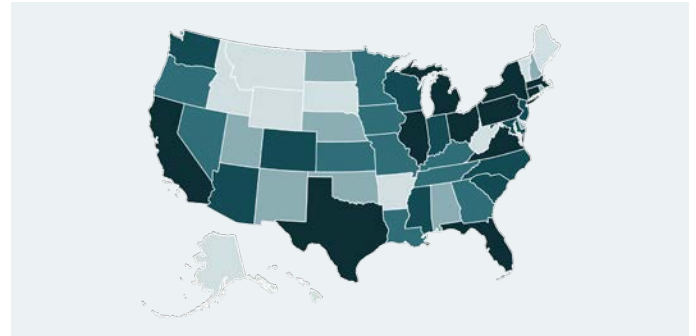
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Design & Process Automation ■ Digital Manufacturing



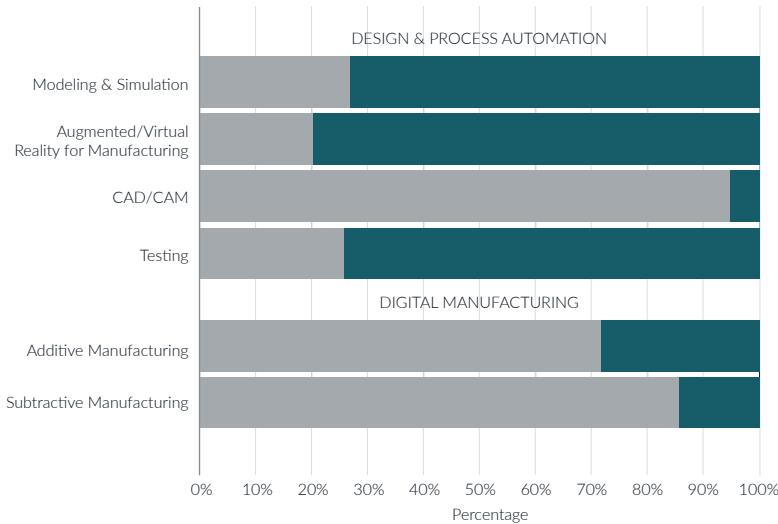
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars ■ 60-80% of Awarded Dollars ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars ■ Lowest 20% of Awarded Dollars



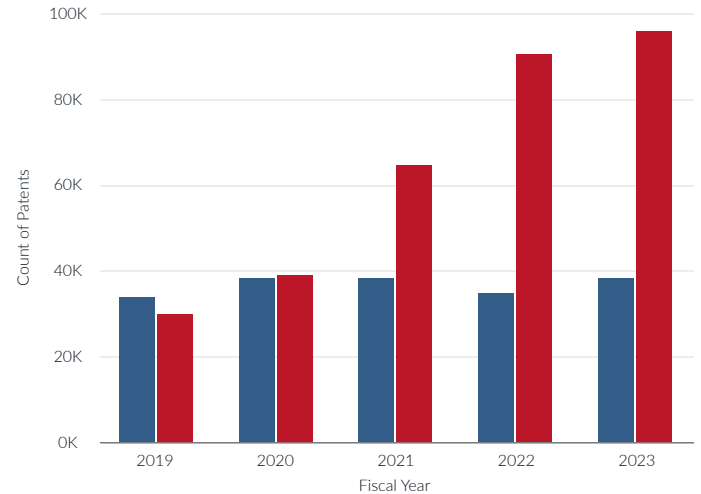
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Boeing Co. (BA)	\$741.9 M	△ 226.4%
Lockheed Martin Corp. (LMT)	\$565.0 M	▽ 55.0%
Raytheon Technologies Corp. (RTX)	\$304.6 M	▽ 6.9%
Science Applications Int. Corp. (SAIC)	\$225.7 M	△ 64.7%
Sikorsky Aircraft Corp.	\$144.9 M	— N/A

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

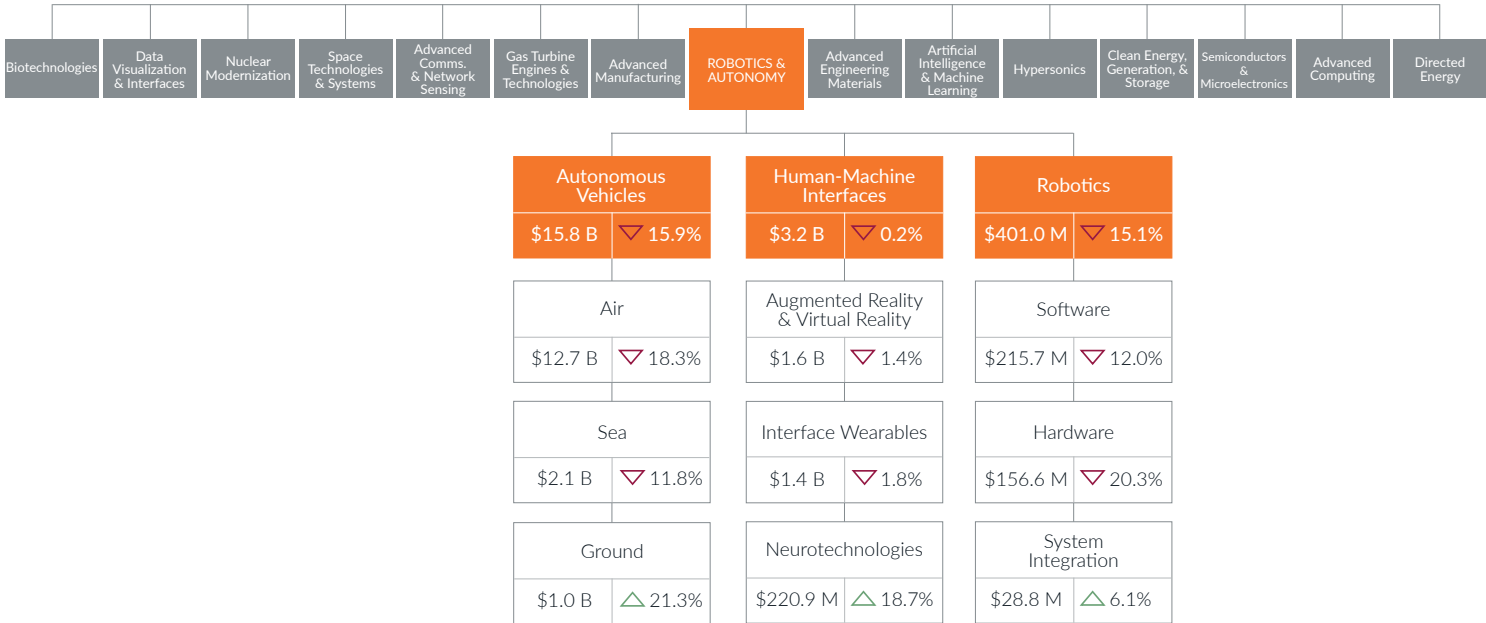
COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	118	△ 227.8%
 United Kingdom	105	△ 105.9%
 Japan	61	△ 144.0%
 South Korea	59	△ 136.0%
 India	58	△ 132.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Naval Air Systems Command	\$589.2 M	182
Strategic Systems Programs	\$441.2 M	28
Air Force Lifecycle Management Center HBS, F2BDBD	\$390.6 M	5
Air Force Lifecycle Management Center WWD, F3YCAX	\$327.5 M	12
Air Force Lifecycle Management Center WNS, F4FDAY	\$126.7 M	64

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Douglas County, CO	\$452.6 M	D-07
King County, WA	\$412.4 M	D-07
Madison County, AL	\$398.9 M	R-05
Oklahoma County, OK	\$359.9 M	R-04
Pima County, AZ	\$278.5 M	D-07



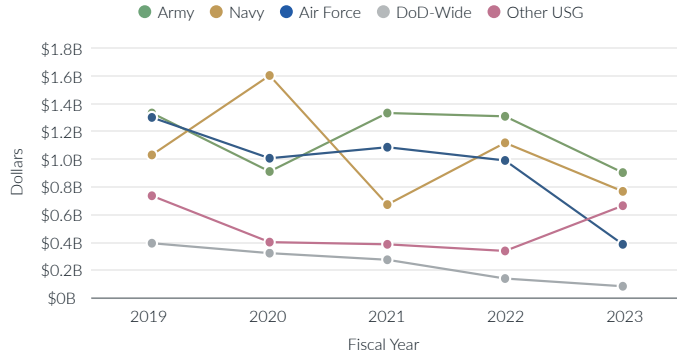
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	▲ +/- CAGR

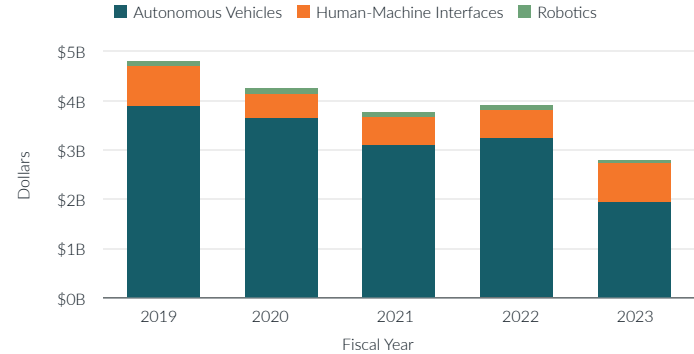
ROBOTICS & AUTONOMY

Robotics and Autonomy technologies enable unmanned systems and robotic platforms to perform reconnaissance, combat, and logistical tasks with increased precision and reduced human safety risk and/or error. Their integration into current U.S. weapons programs has transformed battlefield strategies, improving decision-making speed and operational effectiveness.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



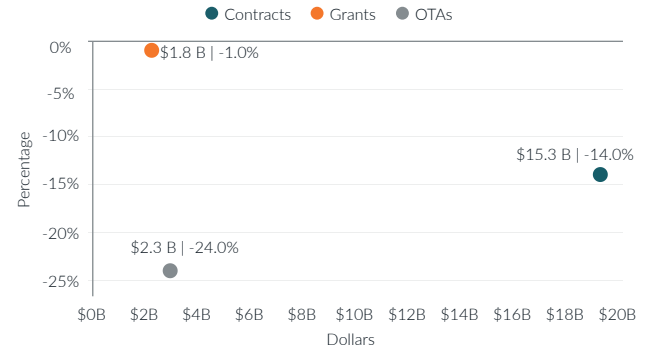
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	1,686	767	△ 13.6%
Subcontractors	363	46	△ 39.4%
Tier 1	2,516	2,075	△ 59.6%
Tier 1 Supplier Breakdown			
U.S.	1,012	698	△ 22.7%
Allied	579	528	△ 85.9%
Other	746	685	△ 89.2%
Adversarial	179	164	△ 90.7%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	33.9	△ 2.6%	
Competitiveness Score	4.3	△ 3.8%	

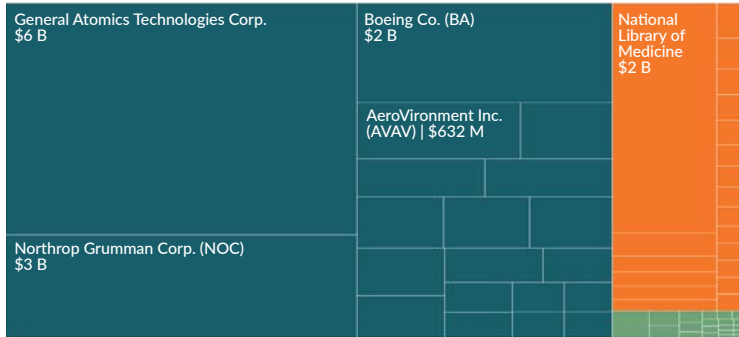
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



ROBOTICS & AUTONOMY

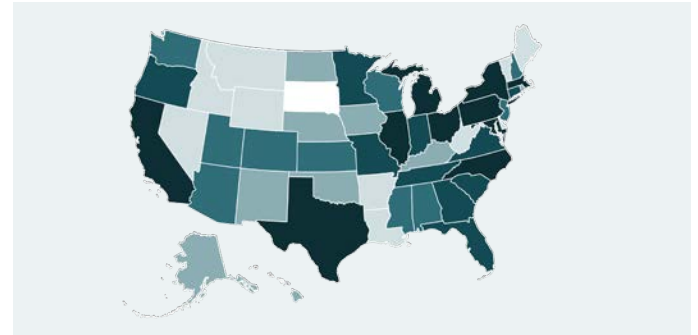
TOP 20 AWARDEES BY SEGMENT, FY19-23

Autonomous Vehicles Human-Machine Interfaces Robotics



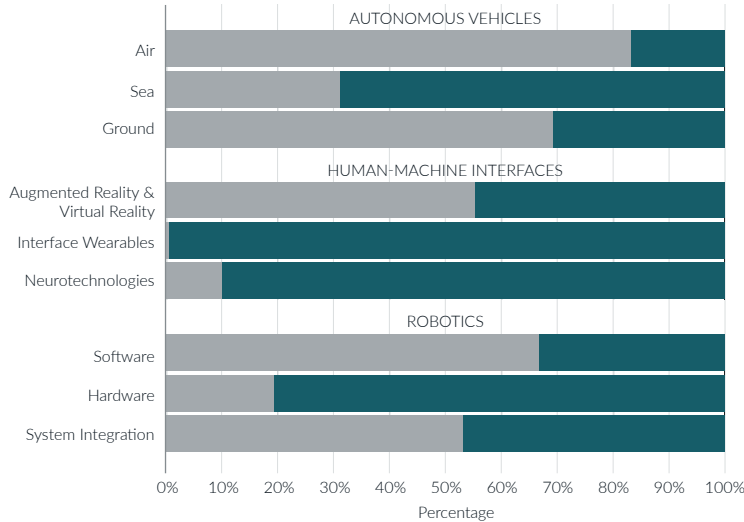
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

Top 20% of Awarded Dollars 60-80% of Awarded Dollars 40-60% of Awarded Dollars
20-40% of Awarded Dollars Lowest 20% of Awarded Dollars



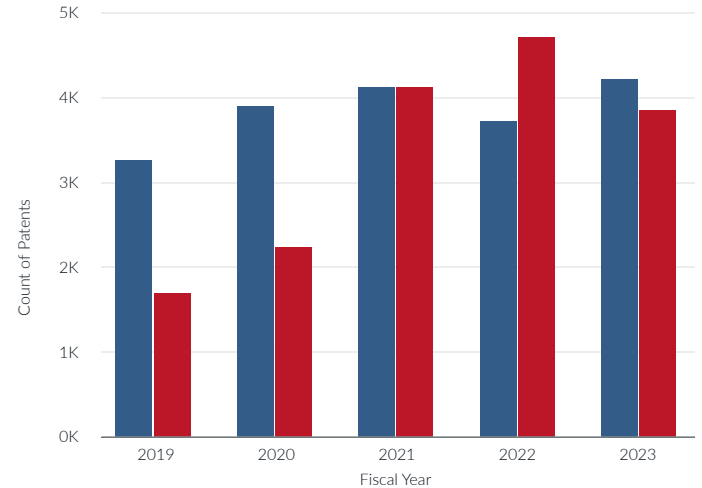
TECHNOLOGY MATURITY BY SPEND, FY19-23

NON-R&D R&D



YOY PATENTS GRANTED, FY19-23






United States China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
General Atomics Technologies Corp.	\$483.5 M	▽ 55.6%
AeroVironment Inc. (AVAV)	\$319.4 M	△ 226.6%
Northrop Grumman Corp. (NOC)	\$246.9 M	▽ 54.8%
Boeing Co. (BA)	\$166.2 M	△ 28.9%
Kratos Defense & Security Solutions, Inc.	\$154.6 M	△ 259.0%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

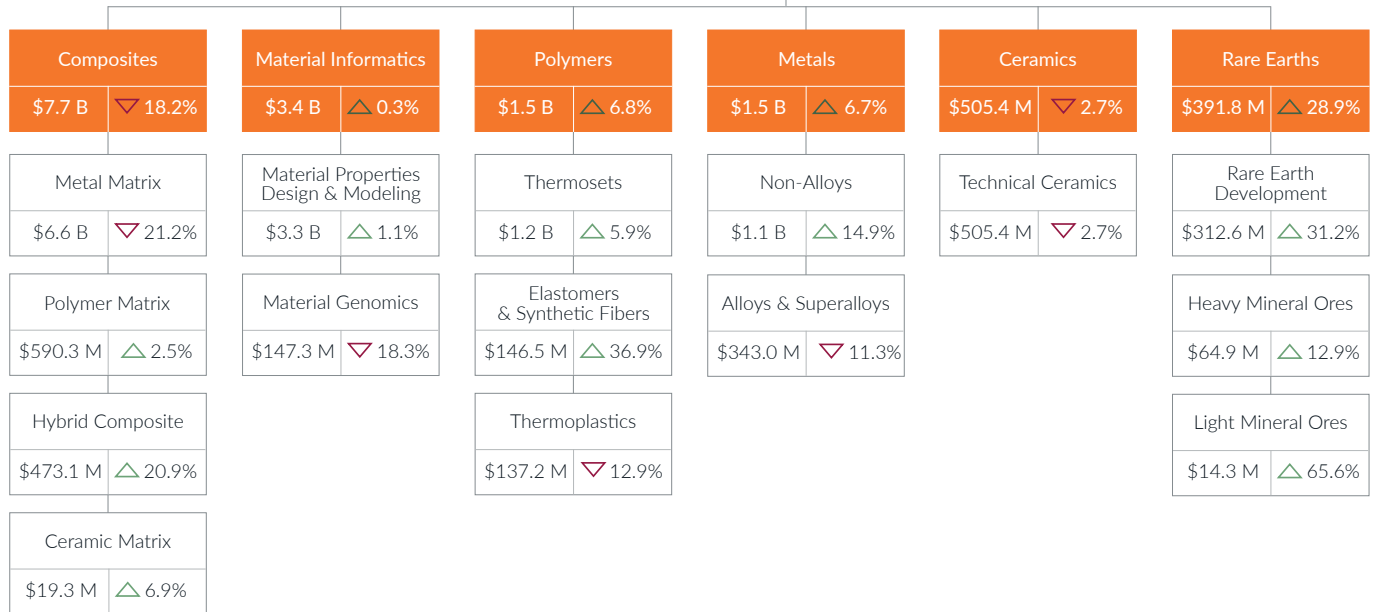
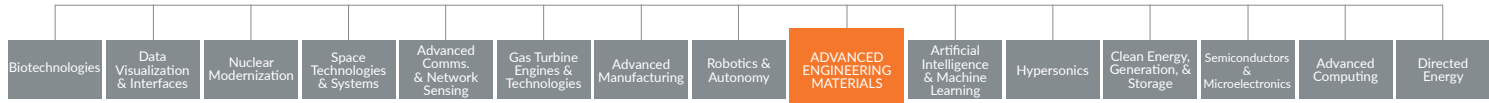
COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 United Kingdom	167	△ 62.1%
 China	158	△ 83.7%
 France	90	△ 150.0%
 India	80	△ 122.2%
 Japan	74	△ 19.4%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Program Executive Office of Aviation	\$620.7 M	122
Naval Air Systems Command	\$446.1 M	143
Air Force Lifecycle Management Center WII, F4FDAC MAUS Division	\$239.9 M	164
National Institute of Neurological Disorders and Stroke (NIH)	\$205.8 M	577
Naval Sea Systems Command HQ	\$195.1 M	80

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
San Diego County, CA	\$724.2 M	D-50
Ventura County, CA	\$333.5 M	D-26
Sacramento County, CA	\$140.7 M	D-06
Fairfax County, VA	\$140.0 M	D-11
St. Louis County, MO	\$104.2 M	D-01



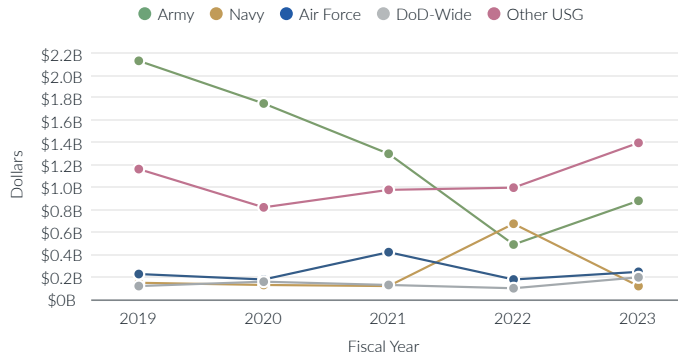
LEGEND

Segment/Subsegment	
FY19-23	△ +/- CAGR
Obligation Total	

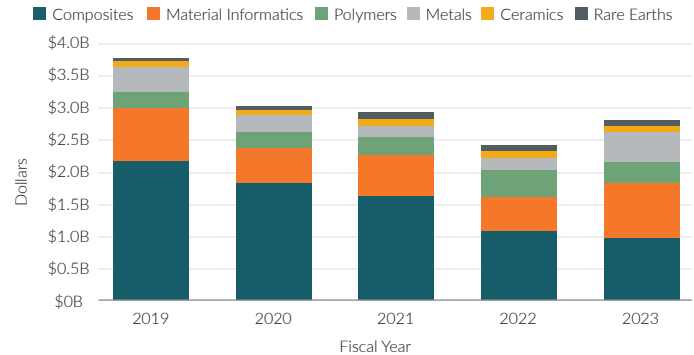
ADVANCED ENGINEERING MATERIALS

Advanced Engineering Materials are increasingly crucial to national security, providing enhanced protection, durability, and performance across various platforms. These materials, including composites, ceramics, and metamaterials, are deployed in aircraft, naval vessels, personal armor, and infrastructure, offering superior strength, lightweight properties, and resilience. Research focuses on developing materials with tailored properties for stealth, energy efficiency, and environmental resistance.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



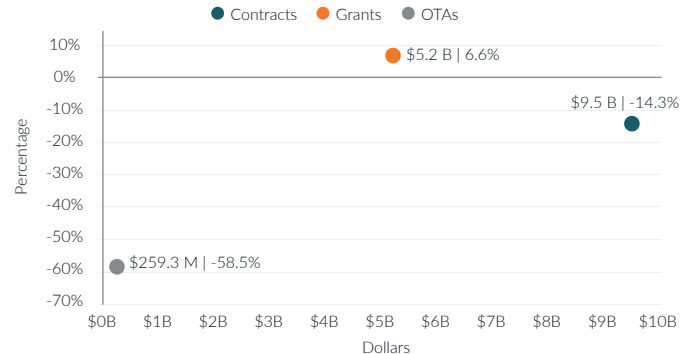
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

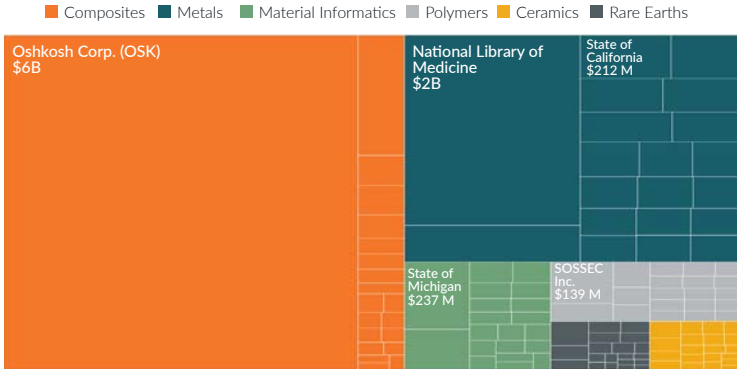
METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	2,439	1,125	△ 12.2%
Subcontractors	209	18	▽ 55.0%
Tier 1	1,470	926	△ 18.5%
Tier 1 Supplier Breakdown			
U.S.	740	426	△ 8.7%
Allied	237	167	△ 12.8%
Other	401	265	△ 29.3%
Adversarial	92	68	△ 13.3%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	34.7	△	3.4%
Competitiveness Score	12.9	△	1.6%

TECHNOLOGY PROCUREMENT VELOCITY, FY19-23

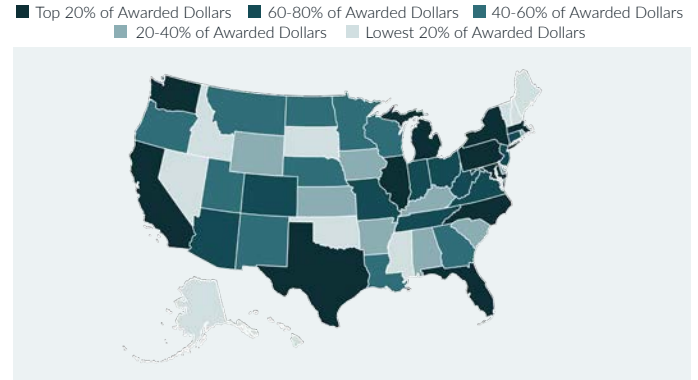


ADVANCED ENGINEERING MATERIALS

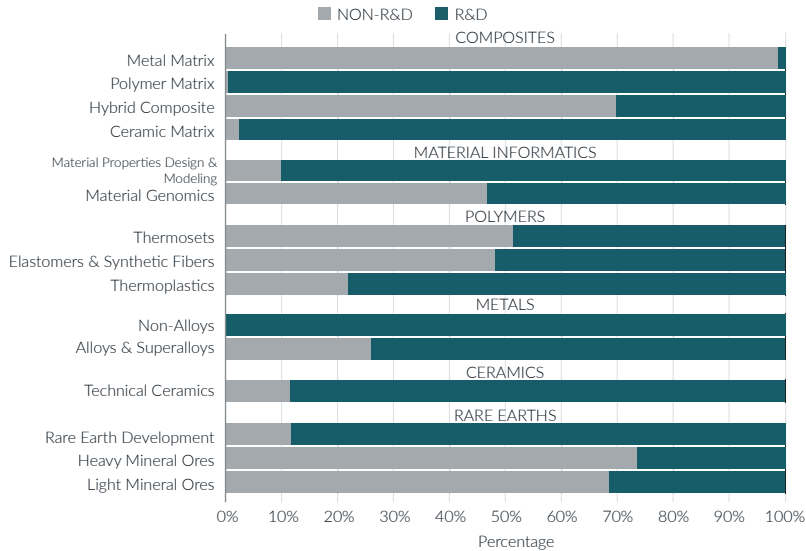
TOP 20 AWARDEES BY SEGMENT, FY19-23



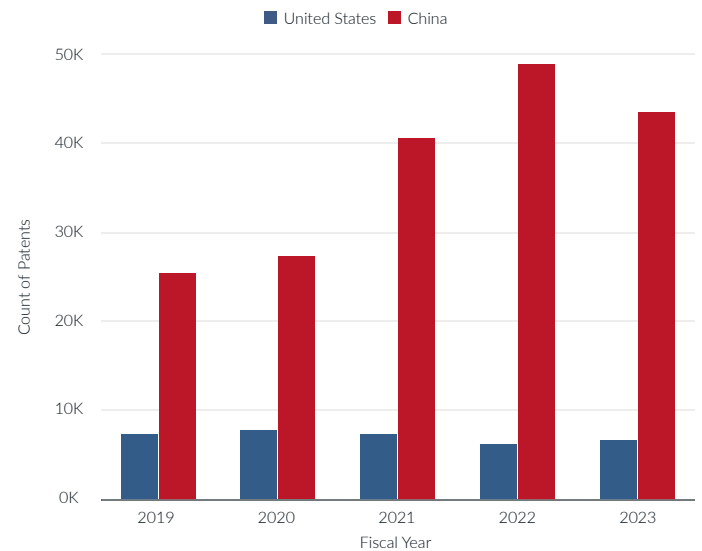
PLACE OF PERFORMANCE CONCENTRATION, FY19-23



TECHNOLOGY MATURITY BY SPEND, FY19-23








YOY PATENTS GRANTED, FY19-23



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Oshkosh Corp. (OSK)	\$756.0 M	▽ 13.7%
State of Michigan	\$85.8 M	△ 1.2%
6K INC.	\$50.0 M	— N/A
Northrop Grumman Corp. (NOC)	\$47.4 M	△ 4,238.0%
Arconic Corp.	\$34.8 M	— N/A

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

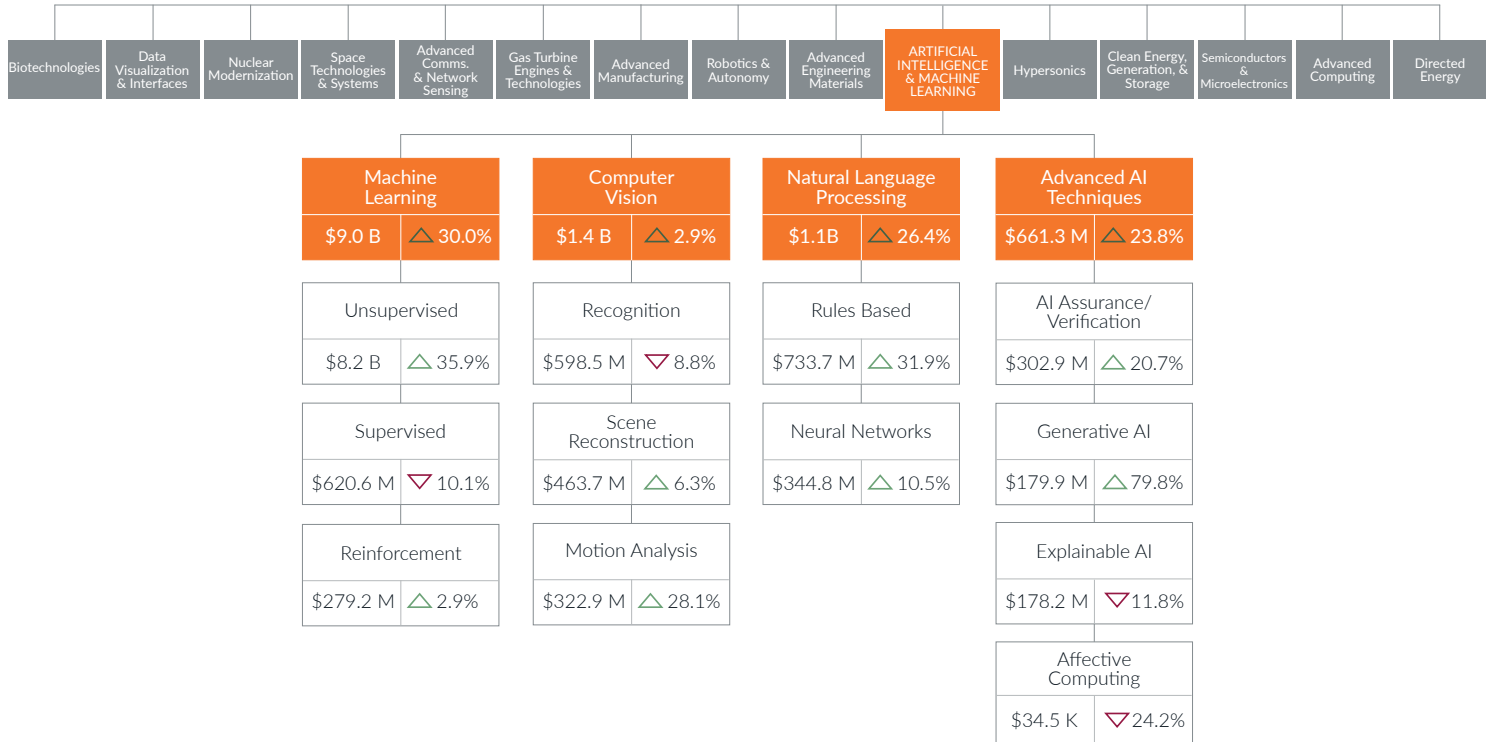
COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	66	△ 10.0%
 India	55	△ 120.0%
 United Kingdom	50	△ 42.0%
 Canada	36	△ 20.0%
 Japan	31	△ 55.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Program Executive Office, Combat Support & Combat Service Support, W6DW Selfridge	\$635.2 M	205
Federal Highway Administration, Office of the Chief Financial Officer	\$136.5 M	312
U.S. Army Tank-automotive and Armaments Command, W4GG HQ	\$121.6 M	98
Department of Energy, Office of Science	\$78.5 M	278
Defense Finance and Accounting Service, Columbus Center	\$56.8 M	3

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Winnebago County, WI	\$756.0 M	R-06
Santa Barbara County, CA	\$75.3 M	D-24
Greene County, OH	\$62.8 M	R-10
Essex County, MA	\$58.1 M	D-06
Forsyth, NC	\$45.4 M	R-05



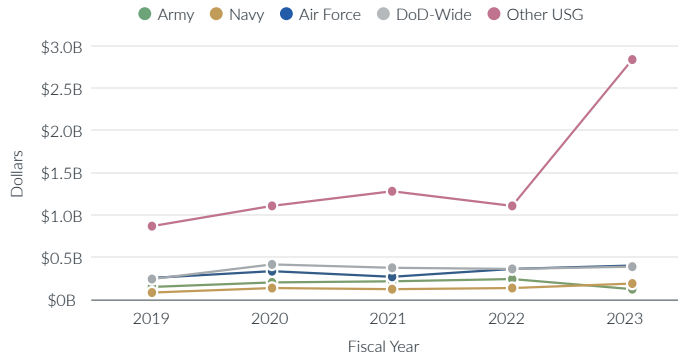
LEGEND

Segment/Subsegment	
FY19-23	
Obligation Total	▲ +/- CAGR

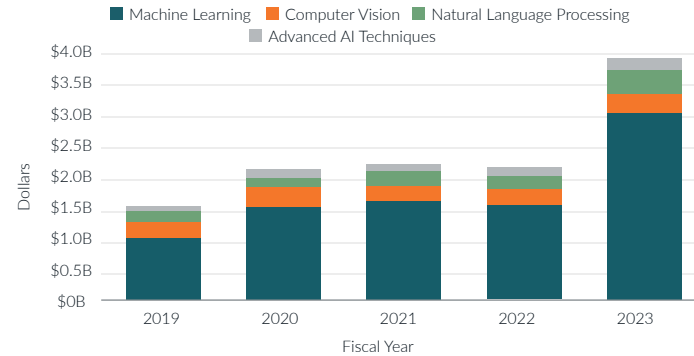
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Artificial Intelligence (AI) and Machine Learning (ML) capabilities accelerate decision-making and operational efficiency. These technologies are deployed across various domains, including intelligence analysis, surveillance, autonomous systems, and predictive maintenance. AI-driven algorithms improve data processing and situational awareness, while ML enhances pattern recognition and predictive analytics. Research focuses on developing robust, ethical AI systems for combat simulation, threat assessment, and logistics optimization.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



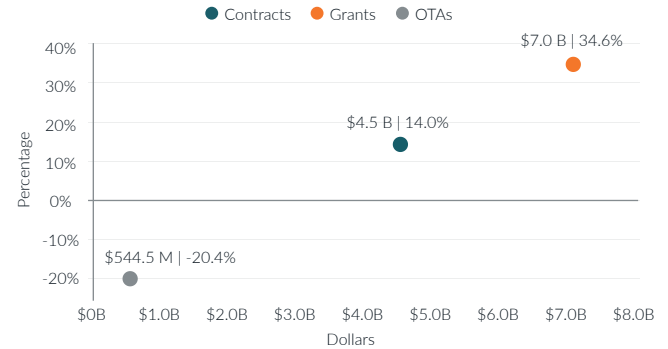
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	1,685	1,010	△ 35.2%
Subcontractors	278	18	▽ 73.5%
Tier 1	1,225	833	△ 64.9%
Tier 1 Supplier Breakdown			
U.S.	665	402	△ 19.3%
Allied	173	138	△ 74.7%
Other	330	248	△ 93.8%
Adversarial	57	45	△ 221.4%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	31.2	△	2.6%
Competitiveness Score	43.9	△	8.9%

TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

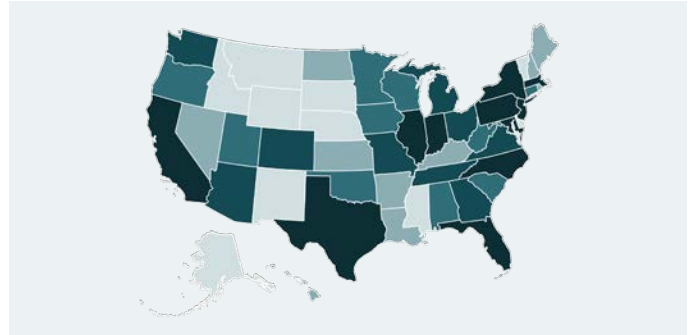
TOP 20 AWARDEES BY SEGMENT, FY19-23

Machine Learning Computer Vision Advanced AI Techniques Natural Language Processing



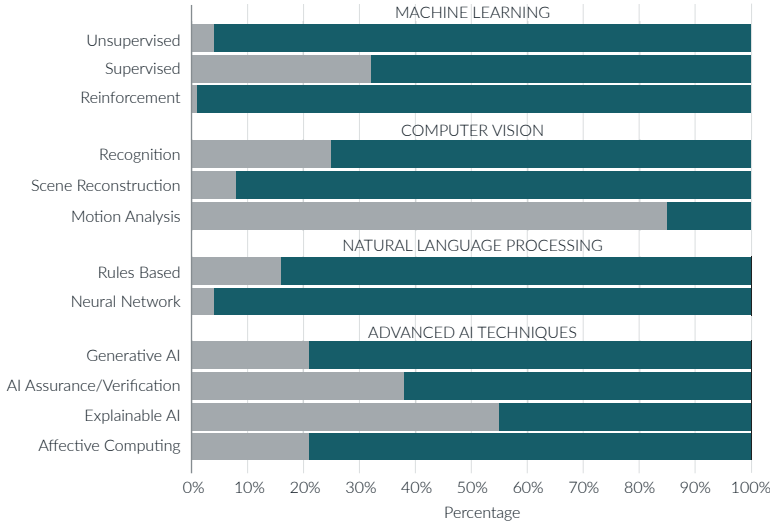
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

Top 20% of Awarded Dollars 60-80% of Awarded Dollars 40-60% of Awarded Dollars
20-40% of Awarded Dollars Lowest 20% of Awarded Dollars



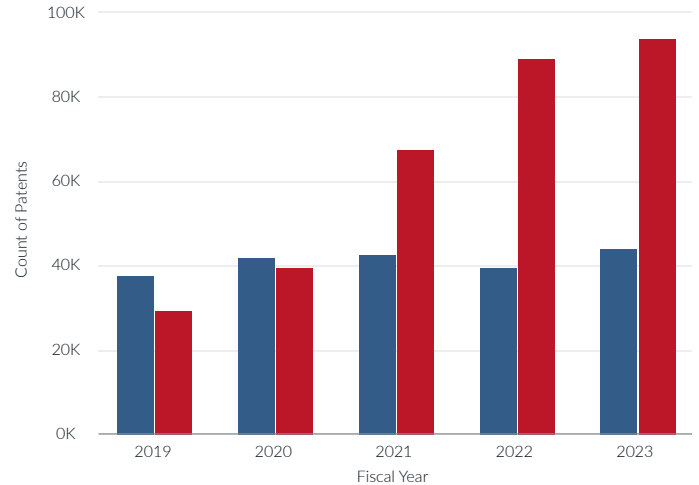
TECHNOLOGY MATURITY BY SPEND, FY19-23

NON-R&D R&D



YOY PATENTS GRANTED, FY19-23



United States China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
ASGN Inc. (ASGN)	\$131.3 M	△ 22.5%
Johns Hopkins University	\$61.9 M	△ 108.8%
State of California	\$50.1 M	△ 191.5%
Forward Slope Inc.	\$43.0 M	△ 158.9%
General Dynamics Corp. (GD)	\$39.7 M	▽ 16.2%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

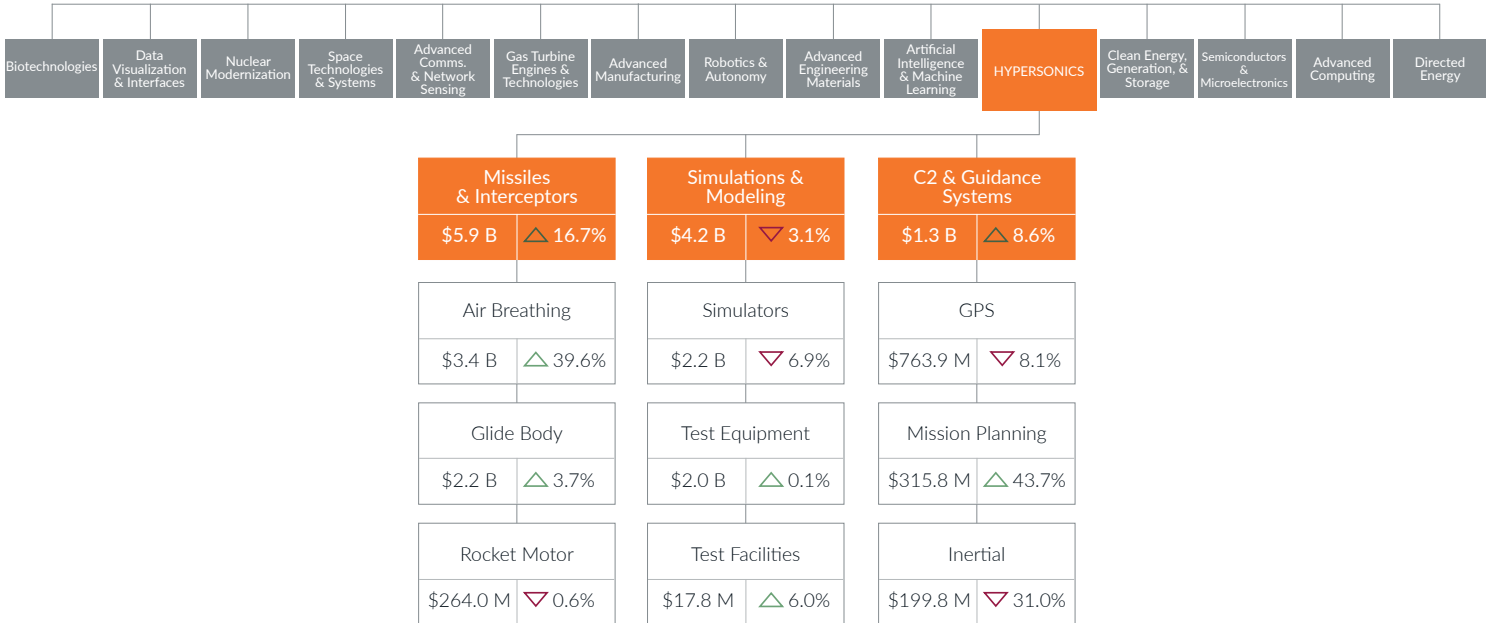
COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 United Kingdom	46	△ 56.7%
 China	45	△ 221.4%
 South Korea	41	△ 10.8%
 Taiwan	37	△ 117.6%
 Canada	31	△ 47.6%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
National Geospatial-Intelligence Agency, ATTN: MS S84 - OCS	\$93.7 M	20
Defense Advanced Research Projects Agency	\$83.3 M	163
Naval Sea Systems Command HQ	\$67.8 M	32
Air Force Research Laboratory RGF, F4FBEQ	\$65.7 M	172
National Institute of General Medical Sciences	\$62.7 M	242

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Suffolk County, MA	\$369.9 M	D-7
San Diego County, CA	\$309.8 M	D-50
Fairfax County, VA	\$307.4 M	D-11
Dutchess County, NY	\$154.6 M	R-19
Beaver County, PA	\$140.1 M	D-12



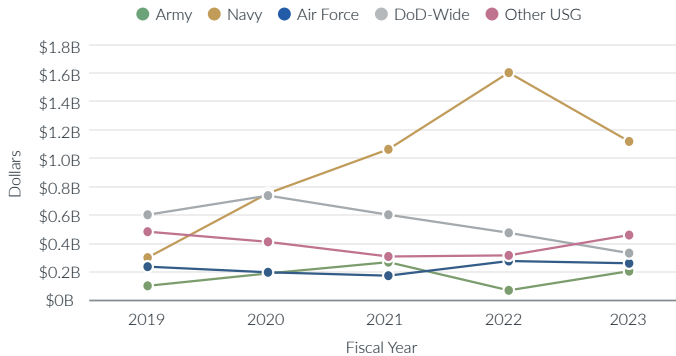
LEGEND

Segment/Subsegment	
FY19-23	
Obligation Total	△ +/- CAGR

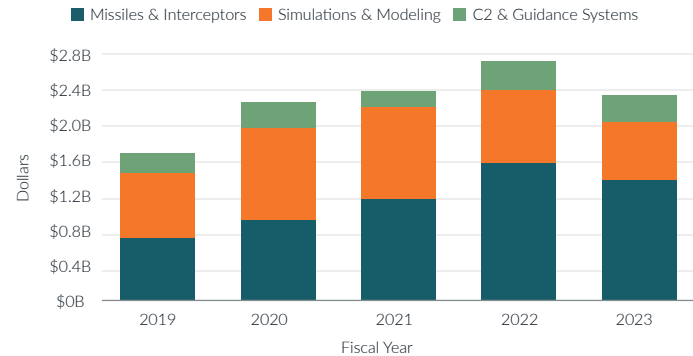
HYPERSONICS

Hypersonics focuses on technology that travels at speeds greater than Mach 5. This capability allows the U.S. to develop missiles that can strike swiftly and with high precision, significantly reducing adversarial reaction time. The integration of advanced simulation, modeling, and command and control (C2) guidance systems enhances the accuracy and effectiveness of these weapons. Hypersonic technology not only alters the strategic calculus by ensuring rapid response and enhanced penetration capabilities against heavily defended targets, but also plays a major role in deterrence strategy.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



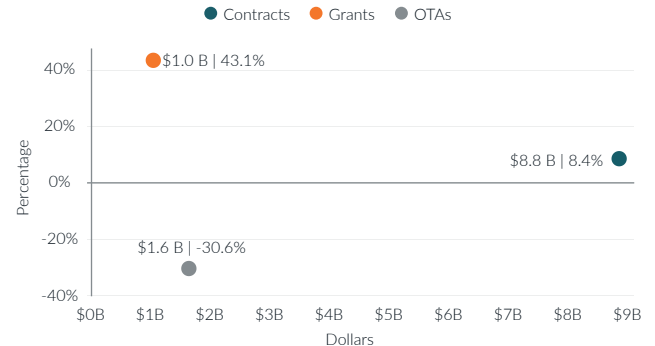
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	1,312	700	△ 32.3%
Subcontractors	348	83	△ 56.6%
Tier 1	910	506	△ 20.0%
Tier 1 Supplier Breakdown			
U.S.	624	326	△ 34.7%
Allied	137	76	△ 2.7%
Other	129	94	△ 30.6%
Adversarial	20	10	▽ 33.3%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	32.0	△ 0.4%	
Competitiveness Score	1.0	△ 2.6%	

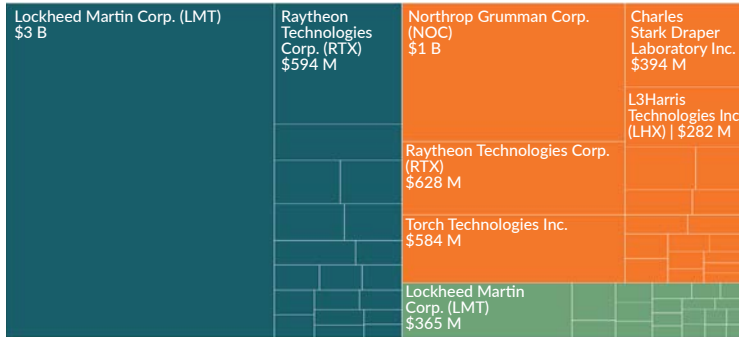
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



HYPERSONICS

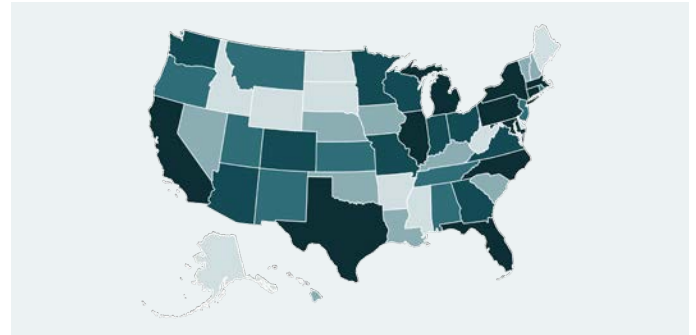
TOP 20 AWARDEES BY SEGMENT, FY19-23

Missiles & Interceptors Simulations & Modeling C2 & Guidance Systems



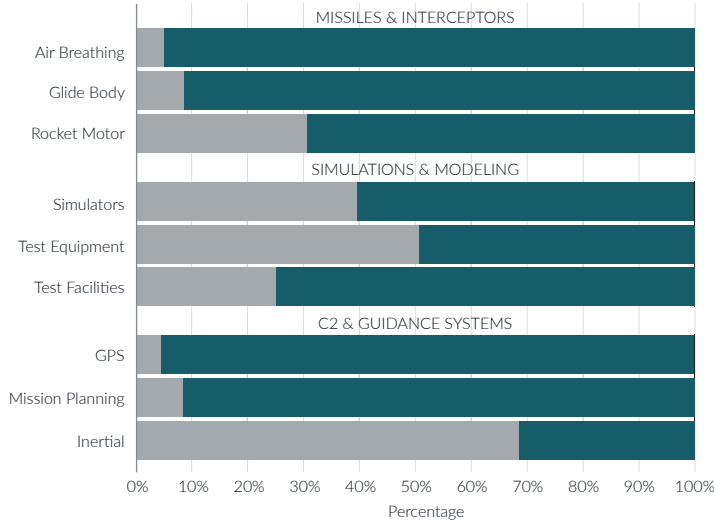
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

Top 20% of Awarded Dollars 60-80% of Awarded Dollars 40-60% of Awarded Dollars
20-40% of Awarded Dollars Lowest 20% of Awarded Dollars



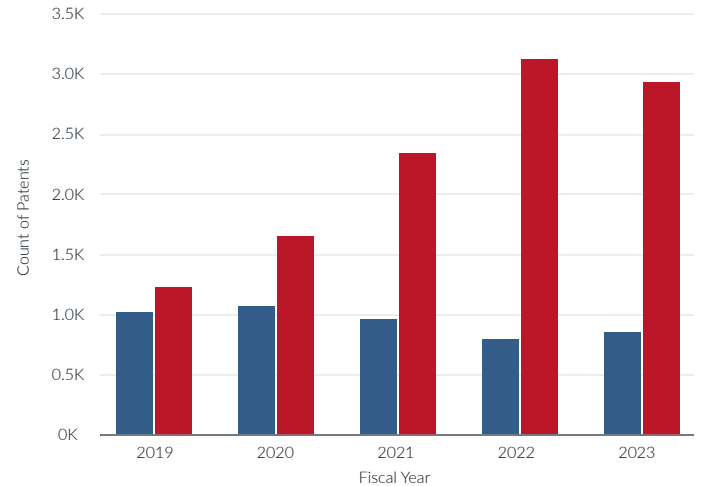
TECHNOLOGY MATURITY BY SPEND, FY19-23

NON-R&D R&D



YOY PATENTS GRANTED, FY19-23






United States China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Lockheed Martin Corp. (LMT)	\$886.7 M	▽ 27.1%
Charles Stark Draper Laboratory Inc.	\$251.5 M	△ 76.4%
Raytheon Technologies Corp. (RTX)	\$180.9 M	▽ 37.7%
NTSI LLC	\$36.6 M	— N/A
Northrop Grumman Corp. (NOC)	\$29.7 M	▽ 89.5%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 Japan	24	△ 100.0%
 United Kingdom	23	▽ 4.2%
 Canada	14	▽ 13.0%
 Australia	13	△ 18.2%
 Sweden	13	— N/A

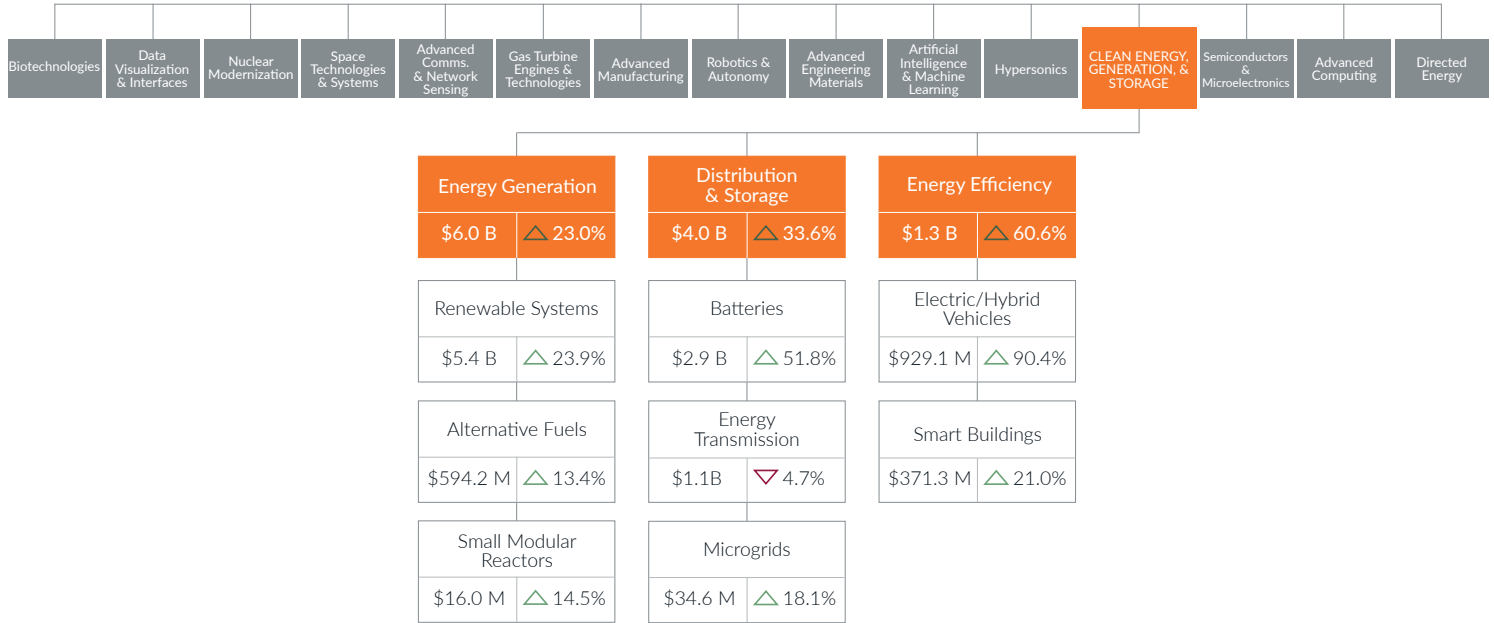
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Strategic Systems Programs	\$969.3 M	71
Program Executive Office Missiles and Space W6DV, Redstone	\$163.7 M	20
Missile Defense Agency	\$152.8 M	106
Defense Advanced Research Projects Agency	\$119.7 M	110
Naval Air Systems Command	\$105.5 M	115

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Douglas County, CO	\$707.1 M	D-07
Madison County, AL	\$279.0 M	R-05
Middlesex County, MA	\$269.8 M	D-07
Pima County, AZ	\$155.8 M	D-07
Los Angeles County, CA	\$45.7 M	D-43

CLEAN ENERGY, GENERATION, & STORAGE



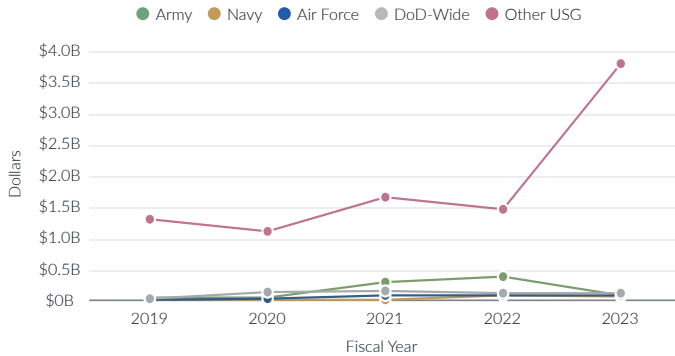
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	▲ +/- CAGR

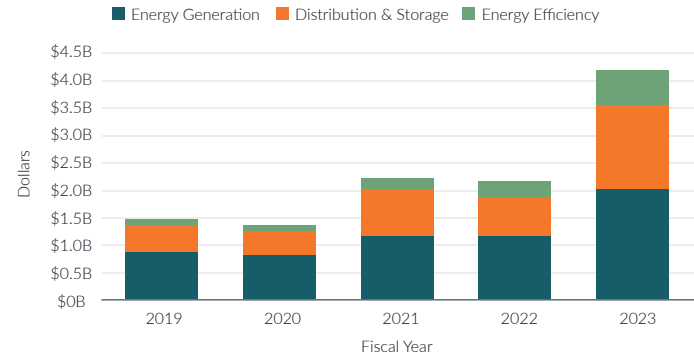
CLEAN ENERGY, GENERATION, & STORAGE

The U.S. military's engagement with Clean Energy, Generation, and Storage technologies enhances operational resilience, reduces logistics vulnerabilities, and promotes sustainability. This commitment spans solar, wind, geothermal, and biofuel energy sources, alongside advanced battery storage systems, to power bases, reduce fossil fuel dependency, and support forward-deployed troops. Research and deployment focus on integrating renewable energy technologies into military infrastructure, vehicles, and portable power systems.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



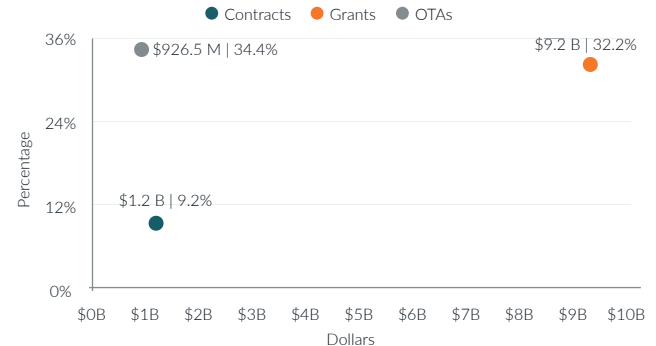
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	4,020	2,953	△ 162.7%
Subcontractors	38	4	▽ 60.0%
Tier 1	1,073	800	△ 42.3%
Tier 1 Supplier Breakdown			
U.S.	516	371	△ 24.1%
Allied	192	143	△ 40.2%
Other	312	249	△ 66.0%
Adversarial	53	37	△ 105.6%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	29.3	▽ 0.5%	
Competitiveness Score	14.6	▽ 1.3%	

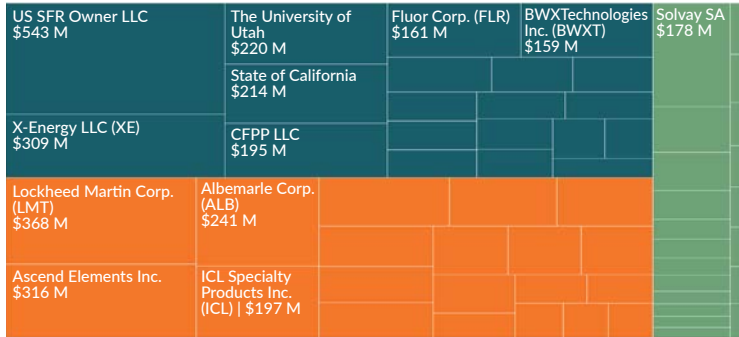
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



CLEAN ENERGY, GENERATION, & STORAGE

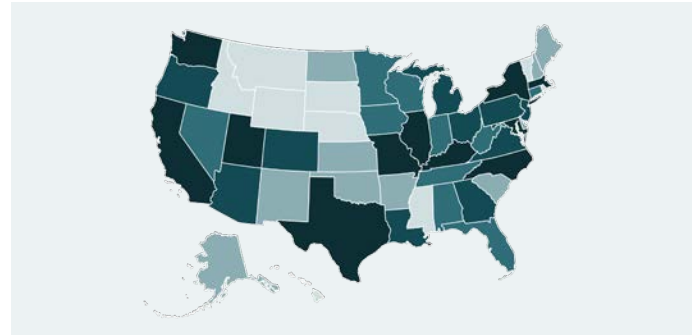
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Energy Generation ■ Distribution & Storage ■ Energy Efficiency



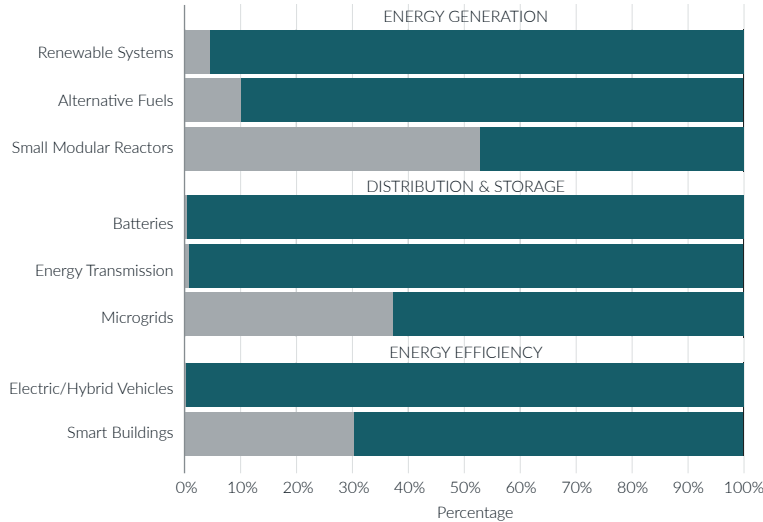
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars ■ 60-80% of Awarded Dollars ■ 40-60% of Awarded Dollars
■ 20-40% of Awarded Dollars ■ Lowest 20% of Awarded Dollars



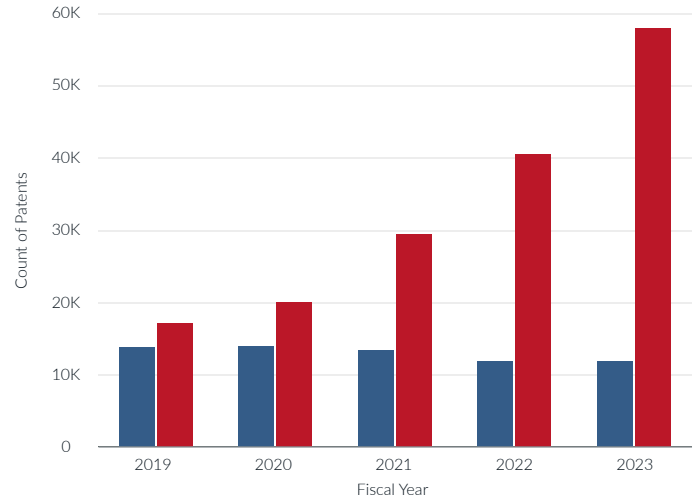
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23

■ United States ■ China








CLEAN ENERGY, GENERATION, & STORAGE

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
US SFR Owner LLC	\$380.7 M	△ 2,138.3%
Ascend Elements Inc.	\$316.2 M	— N/A
Albemarle Corp. (ALB)	\$239.6 M	— N/A
ICL Specialty Products Inc. (ICL)	\$197.3 M	— N/A
Solvay SA (SLVYY)	\$178.2 M	— N/A

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 India	54	△ 260.0%
 China	36	△ 100.0%
 United Kingdom	36	△ 24.1%
 Canada	35	△ 16.7%
 Japan	30	△ 25.0%

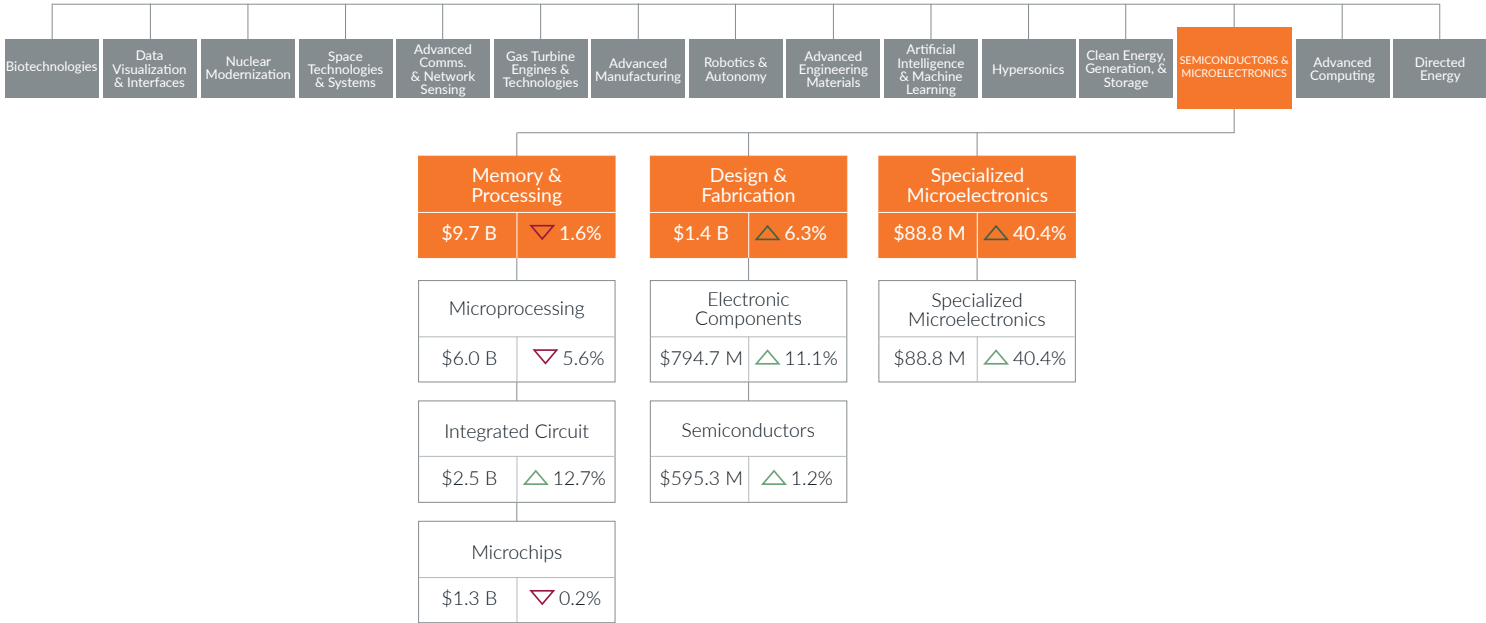
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Office of Manufacturing and Energy Supply Chains	\$1.1 B	8
Office of Clean Energy Demonstrations	\$419.8 M	15
Office of Business Programs	\$299.1 M	2,460
Office of Nuclear Energy	\$295.2 M	41
Office of Energy Efficiency and Renewable Energy	\$212.5 M	613

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
King County, WA	\$395.9 M	D-07
Christian County, KY	\$316.6 M	R-01
St. Louis County, MO	\$197.3 M	D-01
Forsyth County, GA	\$178.2 M	R-06
Cleveland County, NC	\$149.7 M	R-10

SEMICONDUCTORS & MICROELECTRONICS



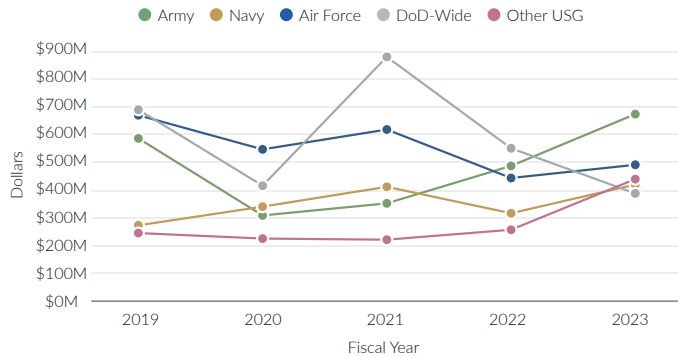
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	△ +/- CAGR

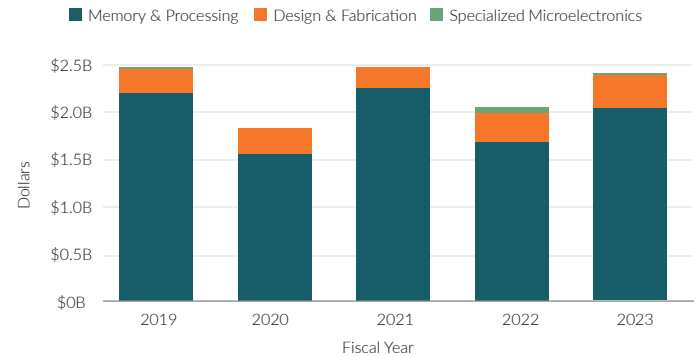
SEMICONDUCTORS & MICROELECTRONICS

Semiconductors and Microelectronics underpin nearly every technology related to national security, acting as the nervous system for advanced communication, navigation, and all critical weapons systems. These technologies enable superior computational speed, efficiency, and miniaturization of devices, crucial for modern warfare demands. As global semiconductor competition intensifies, maintaining a leading edge in these technologies is imperative for national security and technological dominance.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



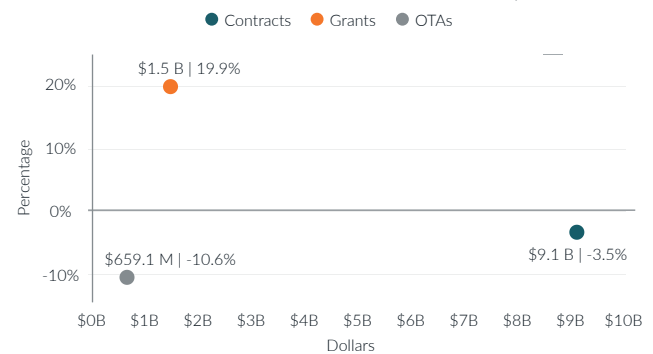
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	3,050	1,455	△ 5.0%
Subcontractors	482	39	▽ 68.0%
Tier 1	2,436	1,663	△ 92.3%
Tier 1 Supplier Breakdown			
U.S.	1,127	665	△ 35.7%
Allied	381	277	△ 91.0%
Other	737	593	△ 117.2%
Adversarial	191	128	△ 184.4%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	39.8	▽ 1.1%	
Competitiveness Score	24.7	△ 0.8%	

TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



SEMICONDUCTORS & MICROELECTRONICS

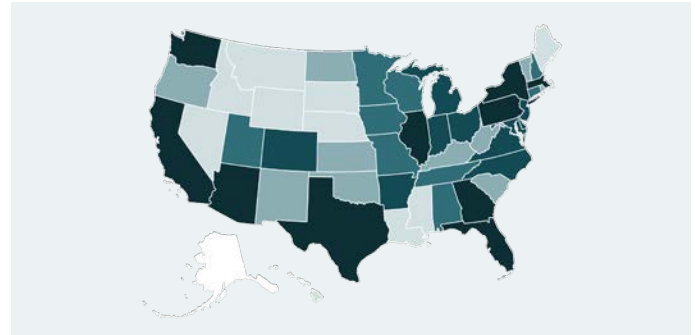
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Memory & Processing
 ■ Design & Fabrication
 ■ Specialized Microelectronics



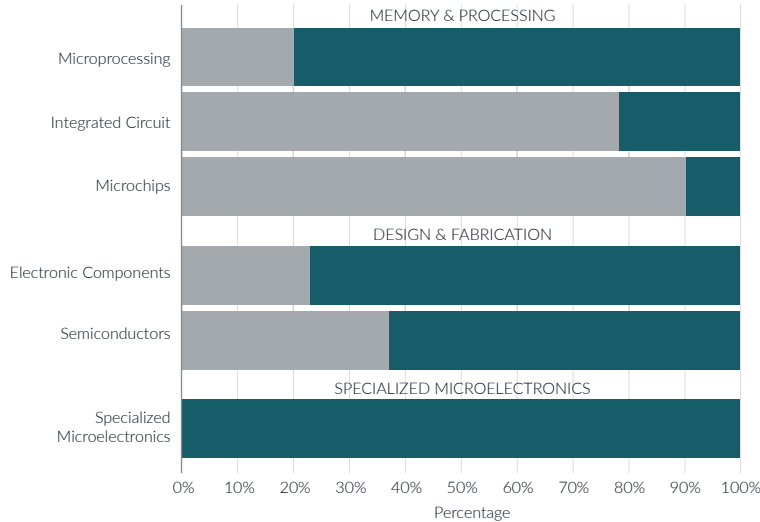
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars
 ■ 60-80% of Awarded Dollars
 ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars
 ■ Lowest 20% of Awarded Dollars



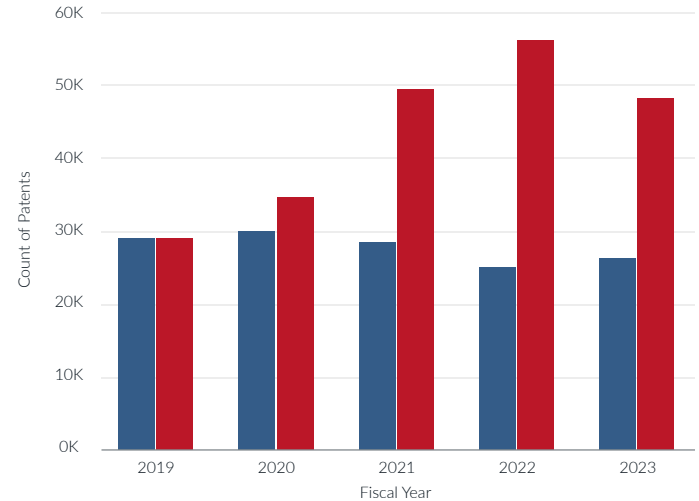
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D
 ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States
 ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Raytheon Technologies Corp. (RTX)	\$790.4 M	△ 36.7%
Northrop Grumman Corp. (NOC)	\$329.4 M	△ 35.7%
BAE Systems PLC (BAESY)	\$110.0 M	△ 12.9%
Institute For Defense Analyses	\$104.3 M	— N/A
GlobalFoundries Inc. (GFS)	\$99.2 M	▽ 7.3%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

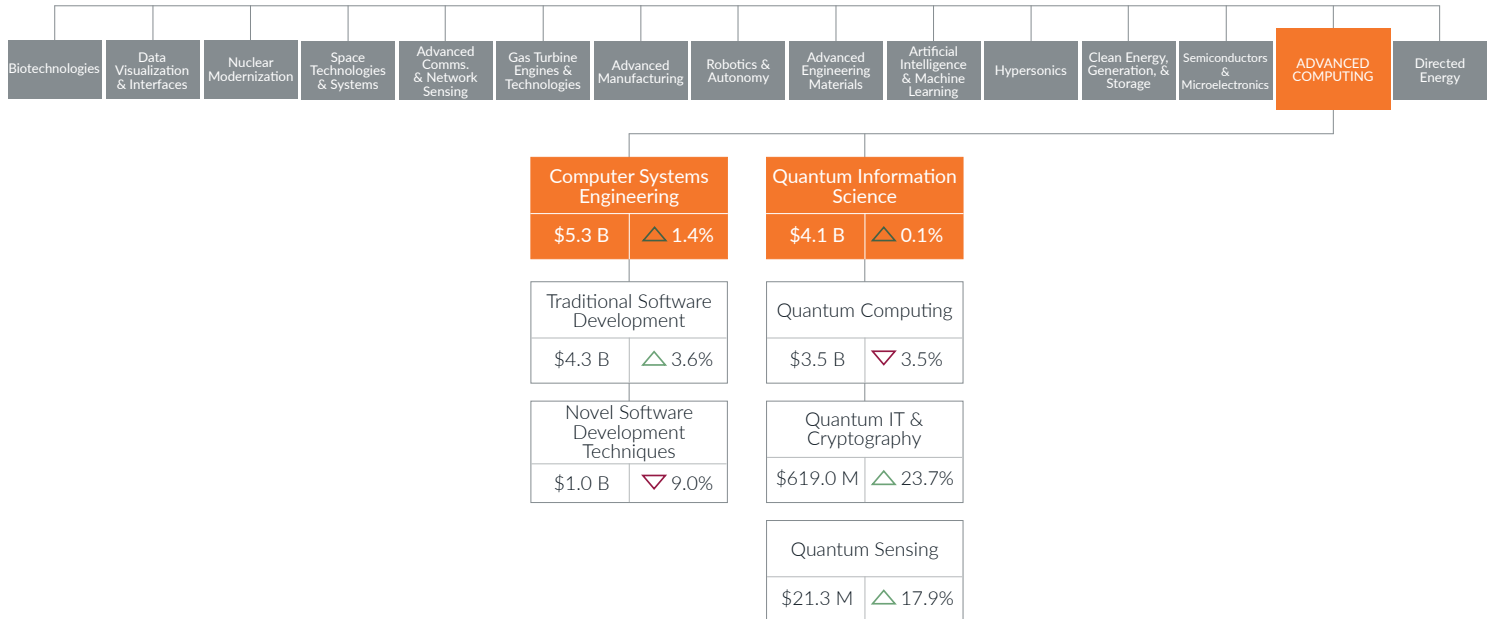
COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 Taiwan	150	△ 82.9%
 China	126	△ 186.4%
 Japan	100	△ 58.7%
 United Kingdom	86	△ 79.2%
 India	69	△ 430.8%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Program Executive Office Missiles and Space W6DV, Redstone	\$611.4 M	54
Department of the Air Force F2TSJA SMC GP	\$232.3 M	75
Defense Microelectronics Activity	\$124.5 M	75
NAVSUP Weapon Systems Support	\$118.4 M	2,078
OUSD Acquisition & Sustainment	\$90.1 M	12

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Collin County, TX	\$333.0 M	R-03
Los Angeles County, CA	\$191.3 M	D-36
Pima County, AZ	\$171.3 M	D-07
Anne Arundel County, MD	\$128.7 M	D-03
Middlesex County, MA	\$112.8 M	D-03



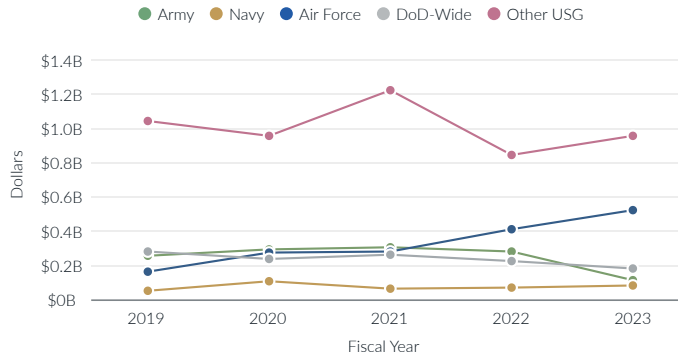
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	△ +/- CAGR

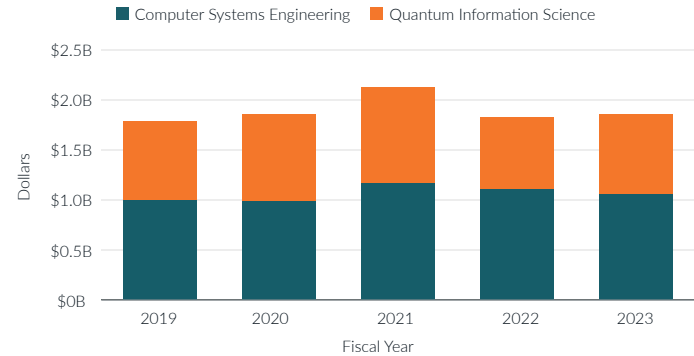
ADVANCED COMPUTING

Advanced Computing technologies underpin areas like artificial intelligence, quantum computing, and cybersecurity, driving innovations in autonomous systems, threat assessment, and secure communications. Research and deployment span from supercomputing for complex simulations and modeling to edge computing for real-time data processing in field operations.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



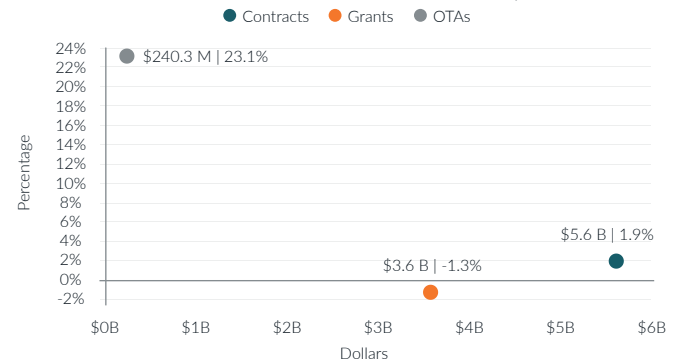
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	1,223	682	▽ 0.2%
Subcontractors	179	14	▽ 65.0%
Tier 1	1,590	1,149	△ 3.9%
Tier 1 Supplier Breakdown			
U.S.	702	496	△ 2.5%
Allied	331	237	▽ 0.4%
Other	457	337	△ 1.2%
Adversarial	100	79	△ 5.3%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	31.3	△ 0.4%	
Competitiveness Score	9.4	▽ 1.5%	

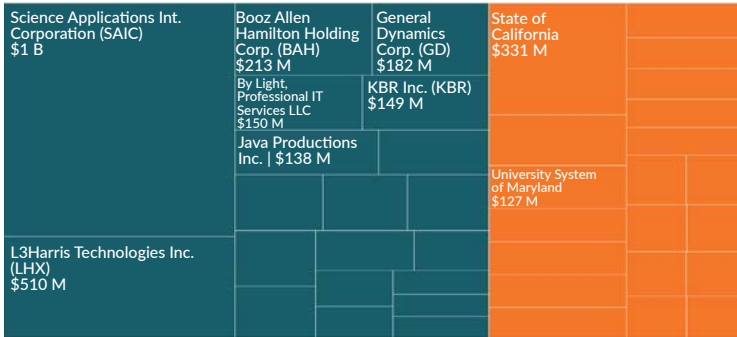
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



ADVANCED COMPUTING

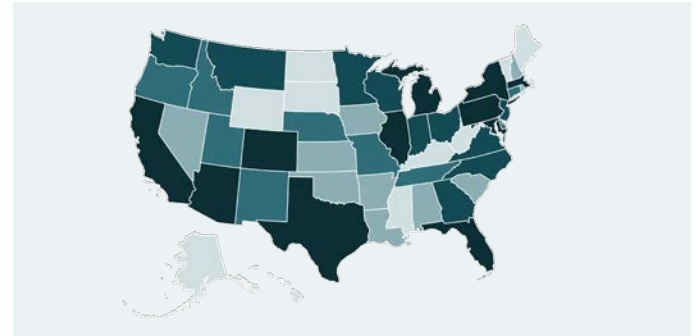
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Computer Systems Engineering ■ Quantum Information Science



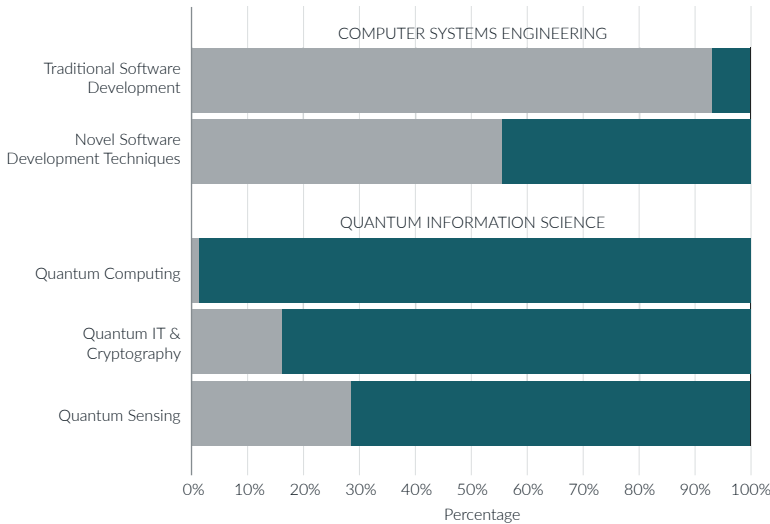
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars ■ 60-80% of Awarded Dollars ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars ■ Lowest 20% of Awarded Dollars



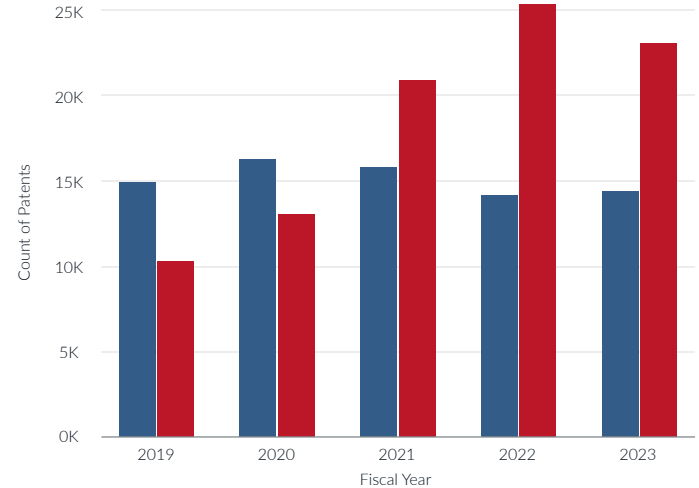
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Science Applications Int. Corp. (SAIC)	\$230.0 M	△ 6.2%
KBR Inc. (KBR)	\$124.7 M	△ 357.3%
World Wide Technology Holding Co. LLC	\$40.2 M	△ 1,148.3%
CACI Int. Inc. (CACI)	\$38.2 M	△ 148.1%
AECOM (ACM)	\$35.1 M	▽ 12.8%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 United Kingdom	85	— N/A
 China	79	△ 5.3%
 South Korea	46	△ 4.6%
 Japan	42	▽ 2.3%
 Sweden	39	△ 5.4%

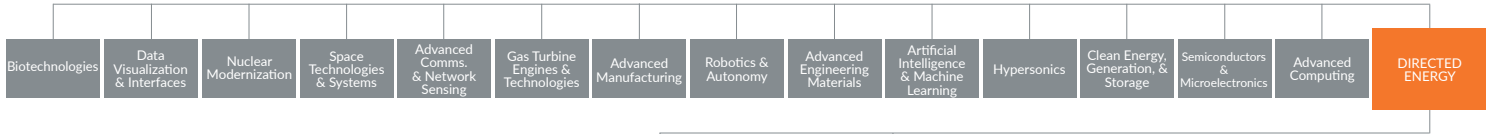
TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Air Force Lifecycle Management Center HNI, F2B0BK	\$186.2 M	32
Department of Energy, Office of Science	\$132.4 M	355
Department of the Air Force, ACCTG DISB STA NR 503000	\$121.4 M	14
Defense Advanced Research Projects Agency	\$80.3 M	120
Air Force Research Laboratory AFOSR, F4FGA0	\$56.6 M	188

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Fairfax County, VA	\$313.1 M	D-11
District of Columbia, DC	\$163.7 M	D-DC
Hampton City County, VA	\$123.1 M	D-03
Prince Georges County, MD	\$60.7 M	D-04
Los Angeles County, CA	\$59.2 M	D-28

DIRECTED ENERGY



Directed Energy Systems		Assisting Technologies	
\$3.0 B	△ 1.3%	\$2.2 B	▽ 18.0%
Lasers		Source	
\$1.8 B	▽ 1.5%	\$1.4 B	▽ 25.4%
Sonic Plasma		Storage Power	
\$866.3 M	△ 1.7%	\$587.8 M	▽ 0.1%
High-Powered Microwaves (HPM)		Beam Control	
\$339.5 M	△ 14.8%	\$170.3 M	▽ 13.4%
Particle Beams			
\$6.2 M	△ 9.4%		

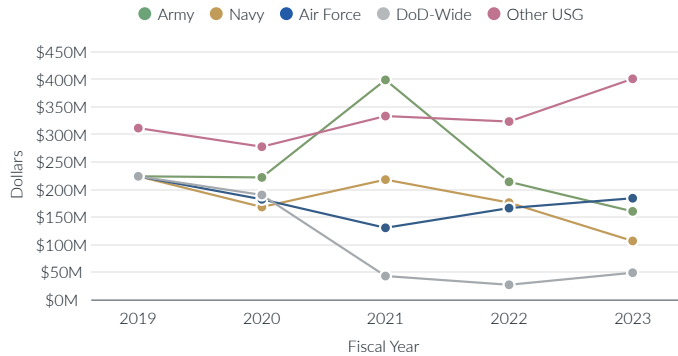
LEGEND

Segment/Subsegment	
FY19-23 Obligation Total	△ +/- CAGR

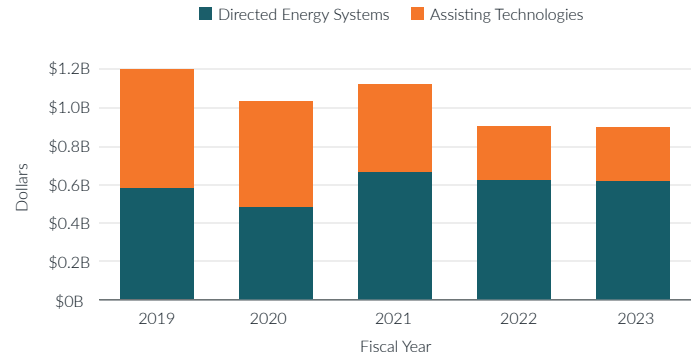
DIRECTED ENERGY

Directed Energy technologies offer precise, rapid-response capabilities against diverse threats. By integrating concentrated electromagnetic energy technology such as lasers, high-powered microwaves, and particle beams, these systems target and combat enemy assets. They are central to U.S. weapons development, providing innovative, non-lethal options that complement offensive armaments. Programs utilizing this technology include THOR, CHIMERA, SHIELD, and ODIN, among others.

YOY SPEND BY GOVERNMENT AGENCY, FY19-23



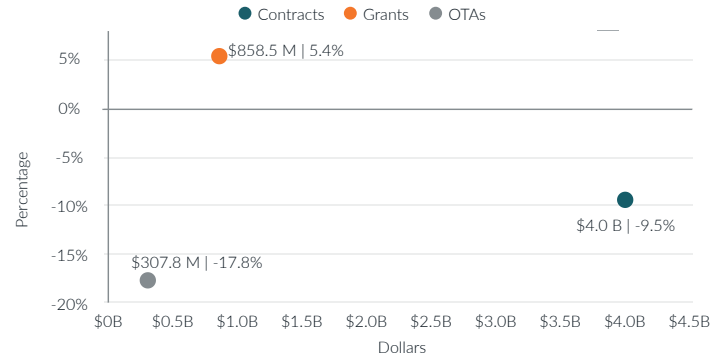
YOY SPEND BY SEGMENT, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	979	466	△ 11.8%
Subcontractors	224	26	▽ 51.9%
Tier 1	801	310	▽ 38.4%
Tier 1 Supplier Breakdown			
U.S.	481	197	▽ 29.9%
Allied	124	53	▽ 41.1%
Other	164	46	▽ 60.7%
Adversarial	32	14	▽ 48.2%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	27.8	△ 0.9%	
Competitiveness Score	3.3	△ 2.3%	

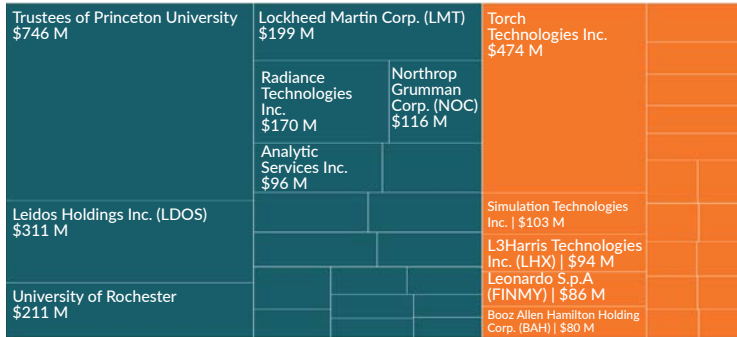
TECHNOLOGY PROCUREMENT VELOCITY, FY19-23



DIRECTED ENERGY

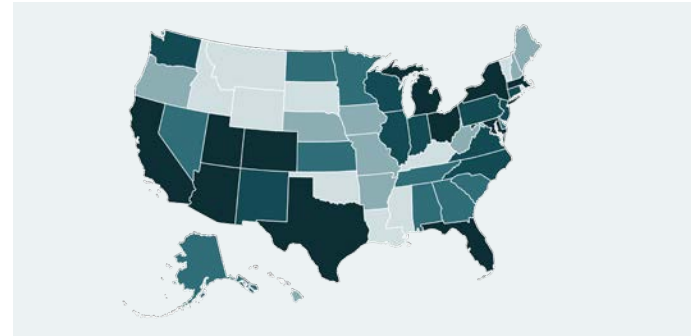
TOP 20 AWARDEES BY SEGMENT, FY19-23

■ Directed Energy Systems ■ Assisting Technologies



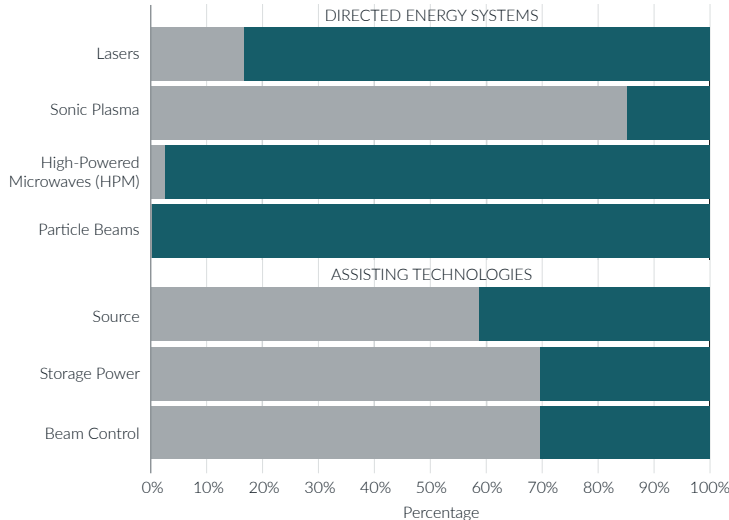
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars ■ 60-80% of Awarded Dollars ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars ■ Lowest 20% of Awarded Dollars



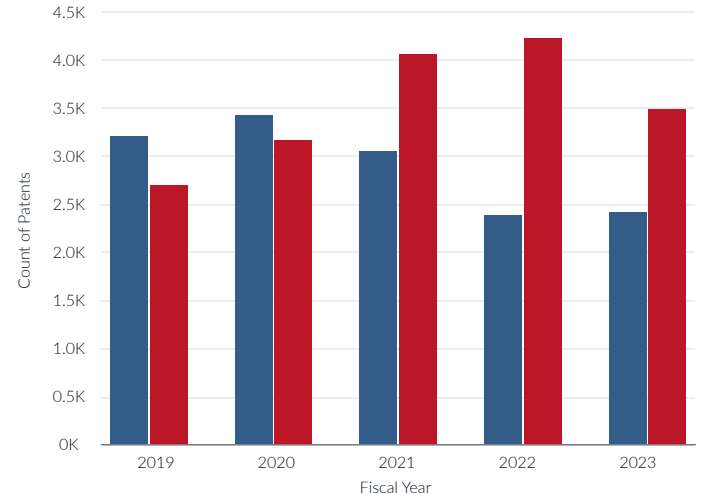
TECHNOLOGY MATURITY BY SPEND, FY19-23

■ NON-R&D ■ R&D



YOY PATENTS GRANTED, FY19-23






■ United States ■ China



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Trustees of Princeton University	\$0.2 B	△ 2.6%
University of Rochester	\$97.4 M	△ 17.4%
Radiance Technologies Inc.	\$57.9 M	△ 5.8%
Leidos Holdings Inc. (LDOS)	\$52.5 M	▽ 15.0%
Lockheed Martin Corp. (LMT)	\$23.4 M	▽ 4.9%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 Japan	24	△ 100.0%
 United Kingdom	23	▽ 4.2%
 Canada	14	▽ 12.5%
 Australia	13	△ 18.2%
 Sweden	13	— N/A

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Department of Energy, Office of Science	\$6.2 B	118
Air Force Research Laboratory RDF	\$452.8 M	12
National Nuclear Security Administration's Weapons Activities	\$271.6 M	31
U.S. Army Space and Missile Defense Command Huntsville, W4T8	\$202.7 M	34
Naval Sea Systems Command HQ	\$175.6 M	21

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

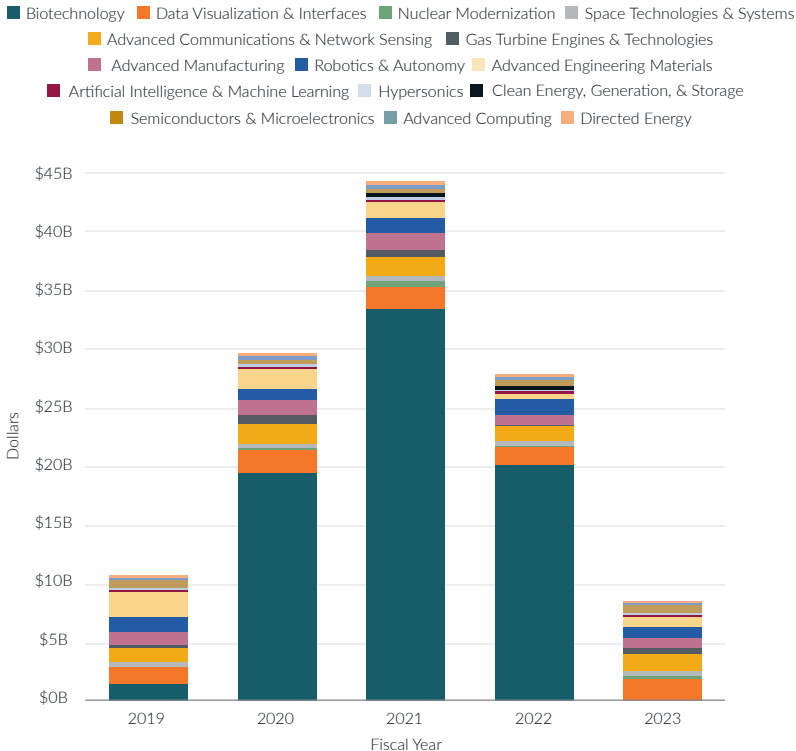
COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Middlesex County, NJ	\$160.9 M	D-12
Monroe County, NY	\$98.0 M	D-25
Madison County, AL	\$88.8 M	R-05
Fairfax County, VA	\$53.7 M	D-11
Bernalillo County, NM	\$46.7 M	D-01

MILITARY DEPARTMENTS

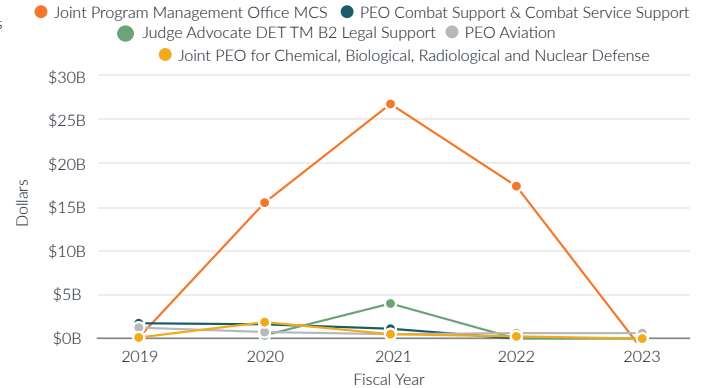
DEPARTMENT OF THE ARMY: CRITICAL TECHNOLOGIES

Over the past five years we see the Department of the Army work through billions of dollars of Biotechnology spending driven by efforts to combat the COVID-19 pandemic between FY20 and FY22. Army priorities include the development and integration of artificial intelligence, robotics, and autonomous systems to enhance decision-making, reduce soldier burden; advanced networking and communications technologies to enable secure, reliable, and resilient connectivity; and modernization of its weapon systems, including next-generation combat vehicles.

YOY SPEND BY CRITICAL TECHNOLOGY, FY19-23



YOY CRITICAL TECH SPEND BY TOP OFFICES, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	4,015	2,002	△ 20.2%
Subcontractors	1,581	144	▽ 43.5%
Tier 1	3,607	1,897	△ 57.2%
Tier 1 Supplier Breakdown			
U.S.	2,202	800	△ 19.1%
Allied	516	370	△ 37.6%
Other	740	596	△ 72.3%
Adversarial	149	131	△ 70.1%

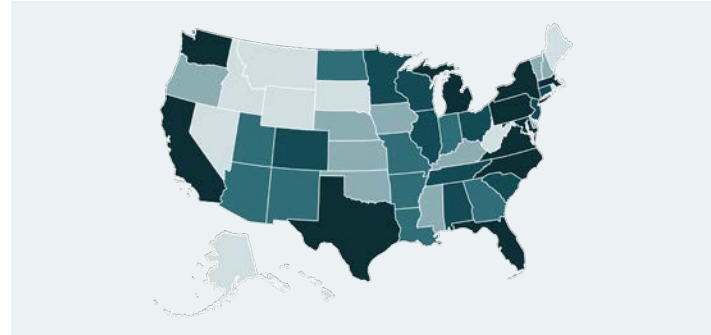
DEPARTMENT OF THE ARMY: CRITICAL TECHNOLOGIES

TOP 20 CRITICAL TECHNOLOGY AWARDEES, FY19-23



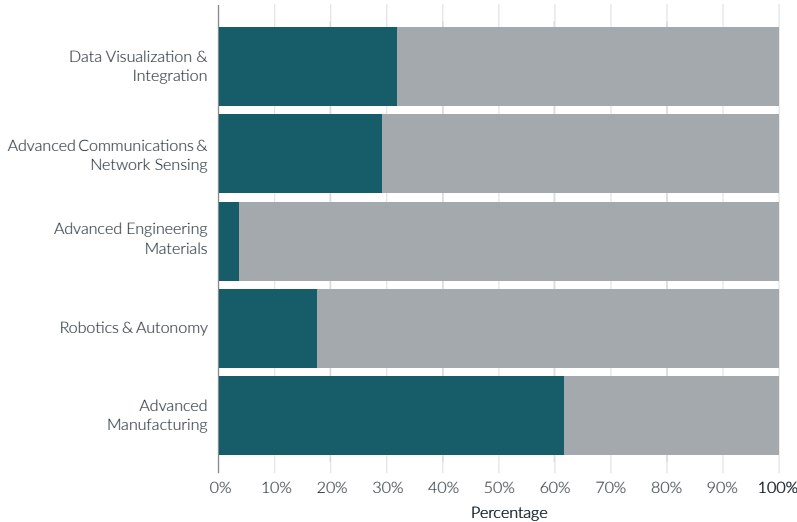
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

- Top 20% of Awarded Dollars
- 60-80% of Awarded Dollars
- 40-60% of Awarded Dollars
- 20-40% of Awarded Dollars
- Lowest 20% of Awarded Dollars



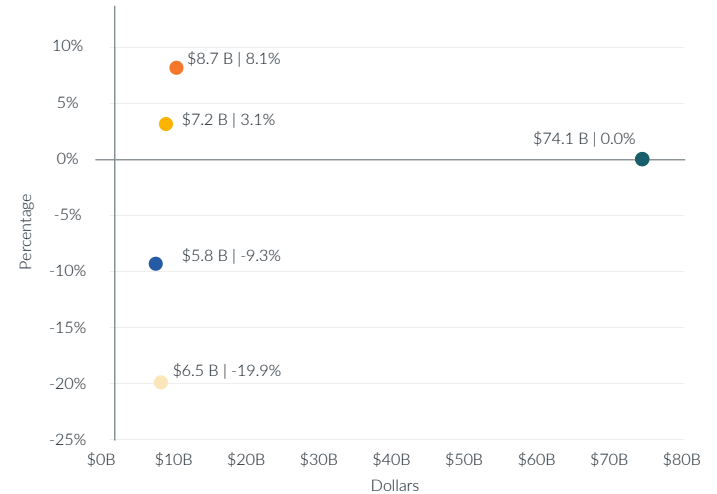
TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23

- R&D
- NON-R&D



TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23

- Biotechnology
- Data Visualization & Interfaces
- Advanced Communications & Network Sensing
- Advanced Engineering Materials
- Robotics & Autonomy








DEPARTMENT OF THE ARMY: CRITICAL TECHNOLOGIES

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Oshkosh Corp. (OSK)	\$757.0 M	△ 126.2%
General Dynamics Corp. (GD)	\$720.4 M	△ 103.9%
Microsoft Corp. (MSFT)	\$619.1 M	△ 898.1%
Raytheon Technologies Corp. (RTX)	\$488.0 M	△ 31.1%
AeroVironment Inc. (AVAV)	\$394.1 M	△ 201.4%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	147	▽ 17.0%
 United Kingdom	110	▽ 17.9%
 India	71	▽ 15.5%
 Japan	66	▽ 35.9%
 Australia	51	△ 2.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Program Executive Office Missiles and Space W6DV, Redstone	\$1.2 B	255
Program Executive Office, Combat Support & Combat Service Support, W6DW Selfridge	\$698.0 M	246
Program Executive Office of Aviation	\$634.9 M	159
Program Executive Office Solider Belvoir, W6DS	\$603.4 M	14
U.S. Army Tank-automotive and Armaments Command, W4GG HQ	\$299.3 M	18

NOTABLE DEFENSE ACCELERATORS

FUNDING PROGRAM	LOCATION
Army Applications Lab	Austin, TX
Army Research Lab	Adelphi, MD
xTechsearch	Arlington, VA
Army SBIR/STTR	Arlington, VA
Army Rapid Capabilities & Critical Technologies Office	Redstone Arsenal, AL

DEPARTMENT OF THE ARMY: PROGRAM HIGHLIGHT - AMPV

The Armored Multi-Purpose Vehicle (AMPV) is to replace the aging M113 armored personnel carrier. Based on the Bradley Fighting Vehicle chassis, the AMPV will come in five variants: General Purpose, Medical Evacuation, Medical Treatment, Mortar Carrier, and Mission Command.

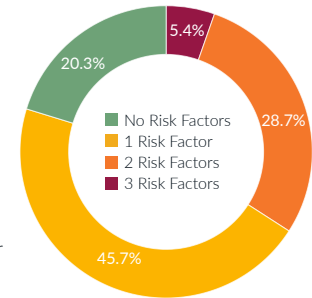
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Noble Supply & Logistics LLC 149	Basic Rubber and Plastics Co. 77		Cavanaugh Government Group LLC 46	Greene Metal Products Inc. 45
	Kampi Components Co. Inc. 43		Equipment Parts Sales 32	Alamo Aircraft Supply Inc. 29
Boeing Co. (BA) 128	Statz Corp. 27	Birmingham Fastener & Supply Inc. 24	Cummins Inc. 24	Century Fasteners Corp. 24
	Supplycore Inc. 25	Echelon Supply & Service Inc. 23	HEICO Corp. 23	Midwest Military Farmers LLC 20
Dialogic Corp. 85	Engineering & Software System Solutions Inc. 25	LOC Performance Products 23	World Wide Fittings Inc. 19	Spec Tech USA Inc. 19
			Meg Technologies Inc. 19	Blade Industrial Products Inc. 19

PROGRAM PART CRITICALITY

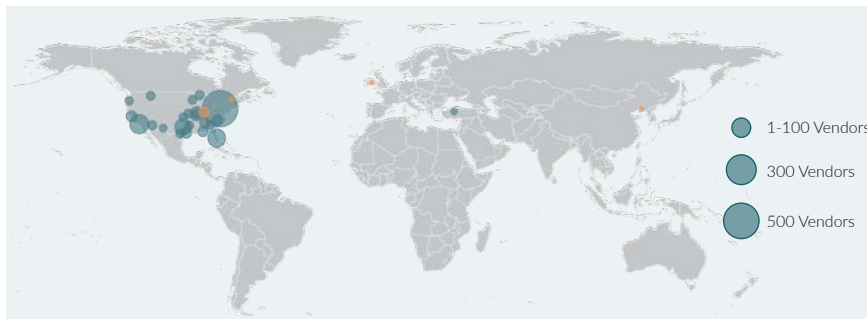
The three risk factors evaluated in this analytic include:

- Parts that have no reported inventory
- Parts that do not have more than one supplier
- Parts that have a longer than average lead time for replacement



GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	8	72.7%
Turkey	3	27.3%

DEPARTMENT OF THE ARMY: PROGRAM HIGHLIGHT - HAWK FAMILY

The Hawk family variants include the UH-60L, UH-60M, HH-60G Pave Hawk (combat search and rescue), and the MH-60 Seahawk (naval version), each designed for specific mission requirements, including transport, medical evacuation, cargo lift, and special operations.

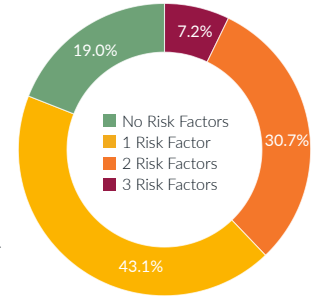
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Lockheed Martin Corp. (LMT) 5,192	Noble Supply & Logistics LLC 1,901		Berkshire Hathaway Inc. 1,185	
	Fastener Distribution Holdings LLC 940	Kampi Components Co. Inc. 924	Wolverine Intermediate Holding II Corp. 845	
Boeing Co. (BA) 4,869	Dialogic Corp 755	HEICO Corp. 658	Science Applications Int. Corp. (SAIC) 604	Raytheon Technologies Corp. (RTX) 600
	Defense Support Services Inc. 718	Jamaica Bearings Co. Inc. 569	DBR Industries Inc. 527	Triman Industries Inc. 520
	AAR Corp. 686	Peerless Aerospace Fastener Corp. 539	Jolen Services Inc. 496	NYLE LLC 492
		Blade Industrial Products Inc. 533		

PROGRAM PART CRITICALITY

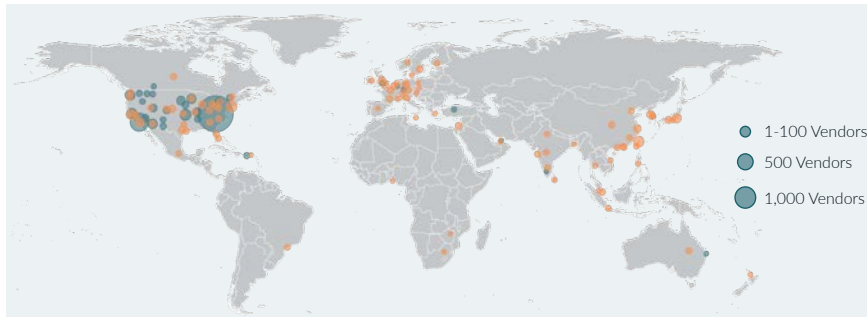
The three risk factors evaluated in this analytic include:

- Parts that have no reported inventory
- Parts that do not have more than one supplier
- Parts that have a longer than average lead time for replacement



GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



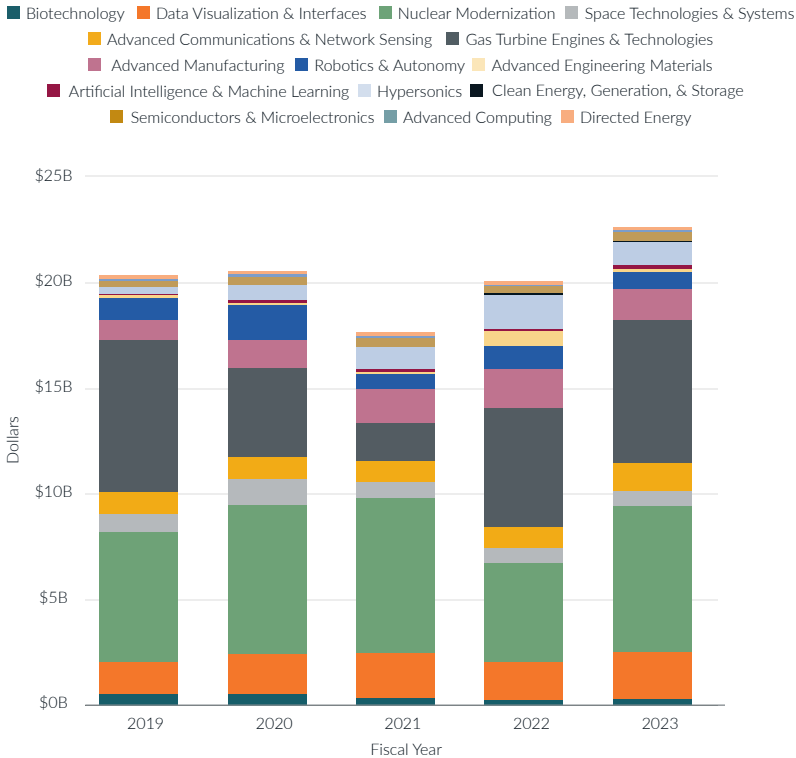
TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	26	54.2%
United Kingdom	9	18.8%
Turkey	6	12.5%
Germany	3	6.3%
United Arab Emirates	1	2.1%

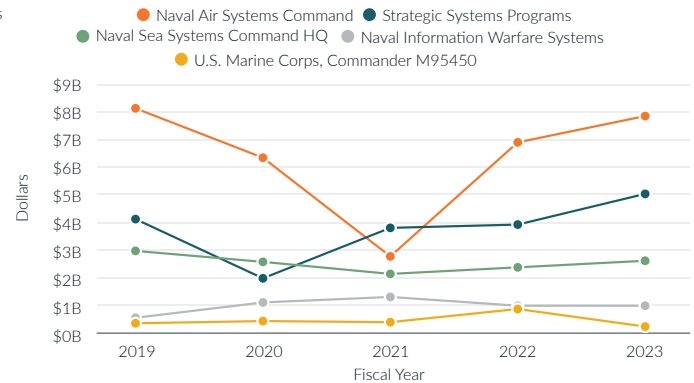
DEPARTMENT OF THE NAVY: CRITICAL TECHNOLOGIES

The Department of the Navy, which includes the U.S. Marine Corps for this analysis. Over the past five years, Navy has seen the most increase in Advanced Manufacturing and Data Visualization & Interface, while Nuclear Modernization continues to be largest spend allocation at \$31.8B. Additional technology areas of priority include unmanned systems, directed energy weapons, hypersonic missiles, artificial intelligence, and cyber warfare capabilities to enhance the Navy's ability to project power.

YOY SPEND BY CRITICAL TECHNOLOGY, FY19-23



YOY CRITICAL TECH SPEND BY TOP OFFICES, FY19-23

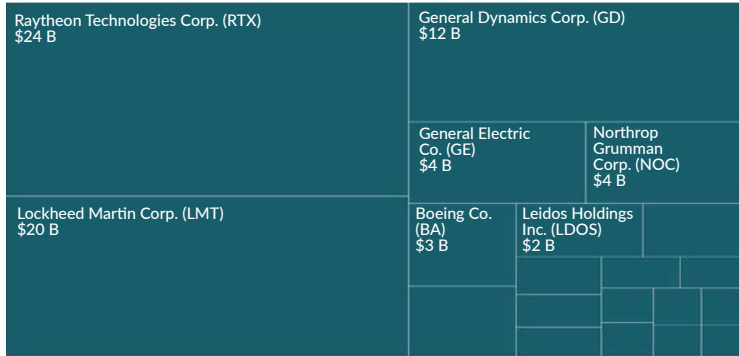


SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	5,841	2,575	△ 7.2%
Subcontractors	1,986	204	▽ 60.8%
Tier 1	5,252	2,096	▽ 24.4%
Tier 1 Supplier Breakdown			
U.S.	2,862	900	▽ 32.7%
Allied	780	379	▽ 27.0%
Other	1,258	674	▽ 24.1%
Adversarial	352	143	▽ 40.7%

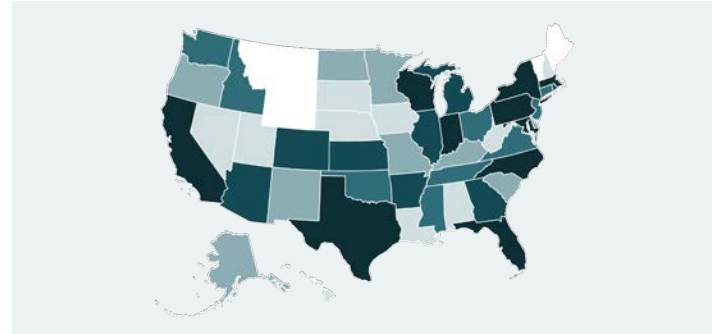
DEPARTMENT OF THE NAVY: CRITICAL TECHNOLOGIES

TOP 20 CRITICAL TECHNOLOGY AWARDEES, FY19-23



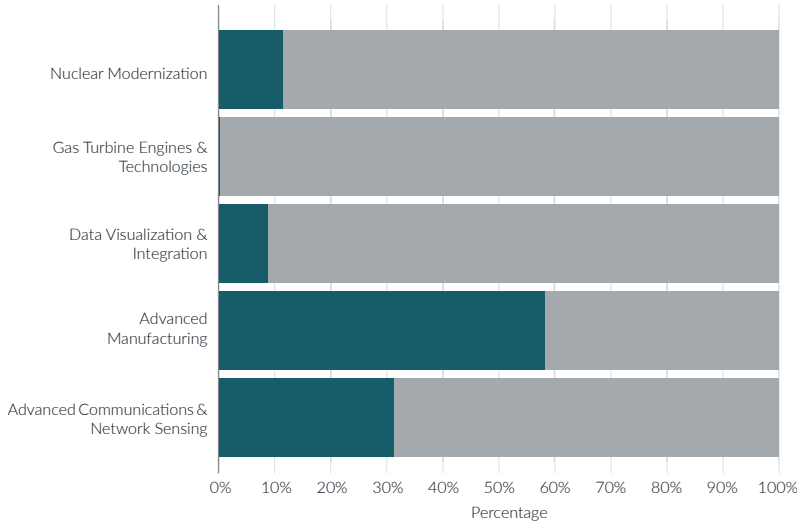
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

■ Top 20% of Awarded Dollars
 ■ 60-80% of Awarded Dollars
 ■ 40-60% of Awarded Dollars
 ■ 20-40% of Awarded Dollars
 ■ Lowest 20% of Awarded Dollars



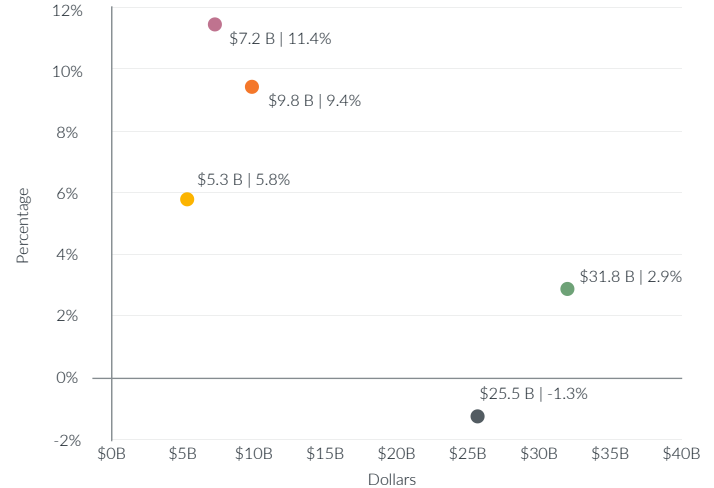
TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23

■ R&D
 ■ NON-R&D



TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23






● Nuclear Modernization
 ● Gas Turbine Engines & Technologies
 ● Data Visualization & Interfaces
 ● Advanced Manufacturing
 ● Advanced Communications & Network Sensing



TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Raytheon Technologies Corp. (RTX)	\$6.0 B	△ 5.4%
Lockheed Martin Corp. (LMT)	\$3.7 B	△ 9.2%
General Electric Co. (GE)	\$1.2 B	△ 267.6%
General Dynamics Corp. (GD)	\$1.0 B	▽ 13.4%
Leidos Holdings Inc. (LDOS)	\$689.3 M	△ 33.9%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	142	▽ 40.6%
 United Kingdom	133	▽ 20.8%
 Taiwan	128	▽ 6.6%
 Japan	118	▽ 11.3%
 South Korea	81	▽ 19.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Naval Air Systems Command	\$7.8 B	752
Strategic Systems Programs	\$5.0 B	1,847
Naval Sea Systems Command HQ	\$2.6B	4,847
Naval Information Warfare Systems Command	\$968.8 M	966
NAVSUP Weapon Systems Support	\$506.6M	734

NOTABLE DEFENSE ACCELERATORS

FUNDING PROGRAM	LOCATION
NavalX	Arlington, VA
Naval Research Lab	Washington, DC
Marine Innovation Unit	Newburgh, NY
Office of Naval Research Global	Arlington, VA
Navy Tech Transfer	Arlington, VA

DEPARTMENT OF THE NAVY: PROGRAM HIGHLIGHT - SSN-774

The Virginia-class submarines, including SSN-774, are designed to replace the older Los Angeles-class fast attack submarines. They incorporate stealth technologies, surveillance capabilities, and special warfare enhancements making it a critical asset for the U.S. Navy's undersea warfare dominance.

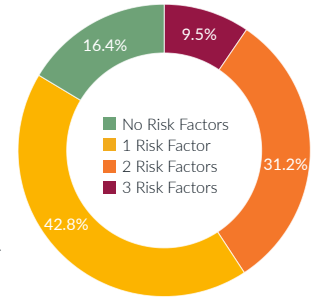
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Kampi Components Co. Inc. 863	Boeing Co. (BA) 652	NYLE LLC 491	Blade Industrial Products Inc. 480
Noble Supply & Logistics LLC 797	General Dynamics Corp. (GD) 473	DBR Industries Inc. 471	Fastener Distribution Holdings LLC 447
	Larkos Packing and Distribution Inc. 438	ADS Tactical Inc. 406	JGils LLC 393
Science Applications Int. Corp. (SAIC) 778	Phoenix Trading Inc. 420	Murar, Florence 336	Berkshire Hathaway Inc. 352
	HEICO Corp. 416	Jo-Kell Inc. 335	Dialogic Corp. 323
			Basic Rubber & Plastics Co. 312
		BEK Inc. 297	

PROGRAM PART CRITICALITY

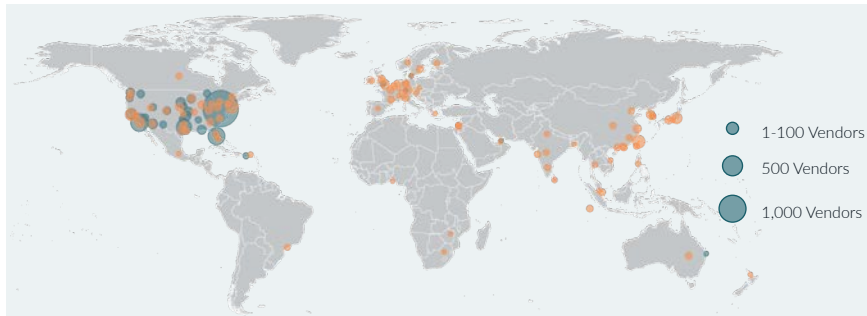
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- Parts that have a longer than average lead time for replacement



GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	12	63.2%
United Kingdom	3	15.8%
United Arab Emirates	1	5.3%
Australia	1	5.3%
Germany	1	5.3%

DEPARTMENT OF THE NAVY: PROGRAM HIGHLIGHT - DDG-51

The Arleigh Burke-class destroyer (DDG-51) program has been in production since 1988, with the ships serving as multi-mission surface combatants capable of conducting a variety of operations, including peacetime presence, crisis management, sea control, and power projection.

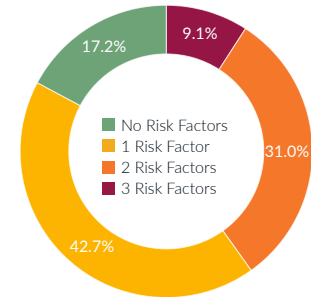
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Karnpi Components Co. Inc. 3,140	Larkos Packing and Distribution Inc. 1,589	NYLE LLC 1,423	JGils LLC 1,363
	HEICO Corp. 1,315	Noble Supply & Logistics LLC 1,287	Science Applications Int. Corp. (SAIC) 1,154
Boeing Co. (BA) 1,714	Berkshire Hathaway Inc. 1,075	Triman Industries Inc. 867	Blade Industrial Products Inc. 690
		Jo-Kell Inc. 781	DBR Industries Inc. 626
Phoenix Trading Inc. 1,591	SIT Corp. 941	Jolen Services Inc. 692	Fastener Distribution Holdings LLC 622
			TNL Sales LLC 650
			Lockheed Martin Corp. (LMT) 620
			General Electric Co. (GE) 588

PROGRAM PART CRITICALITY

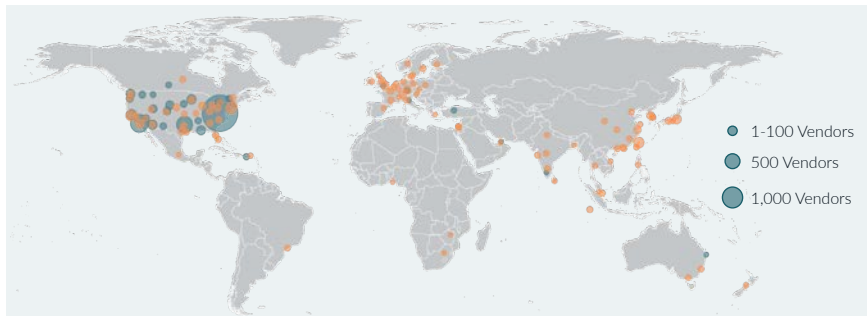
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GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



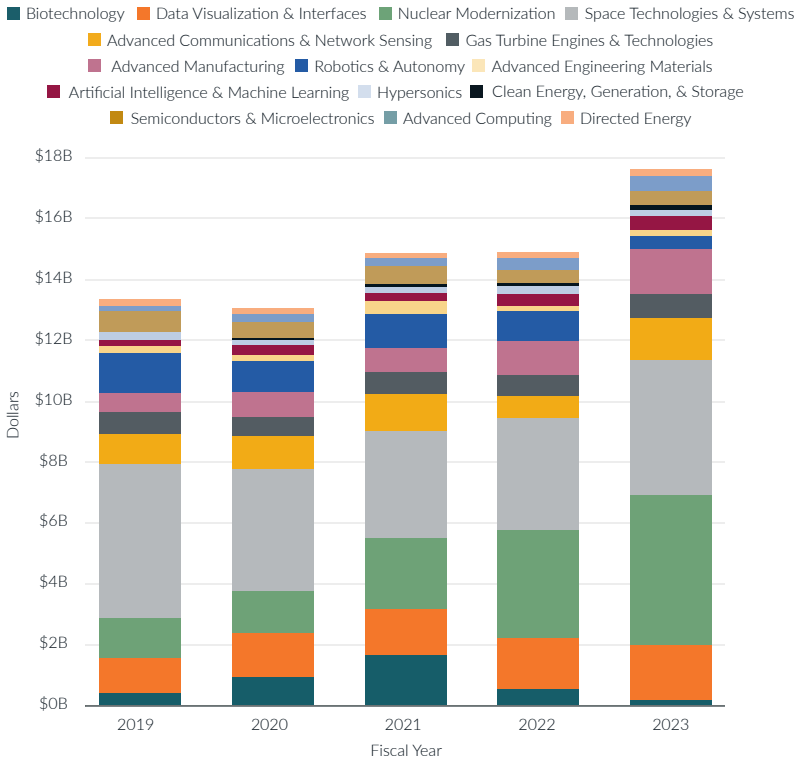
TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	32	68.1%
United Kingdom	5	10.6%
Germany	3	6.4%
Turkey	3	6.4%
United Arab Emirates	1	2.1%

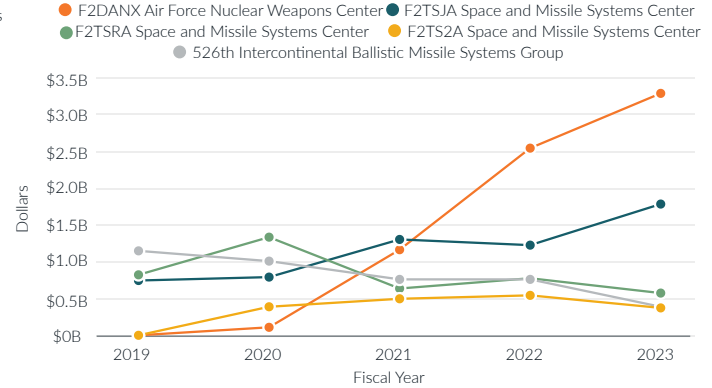
DEPARTMENT OF THE AIR FORCE: CRITICAL TECHNOLOGIES

The Department of the Air Force, which includes Space Force for this analysis, has seen a significant spending increase over the past five years, driven by the Air Force Nuclear Weapons Center (AFNWC). Major organizations within this office include both Minuteman III Systems Directorate and the Sentinel Systems Directorate. Within the critical technology landscape we also see prioritization of Space Technologies & Systems, Advanced Communications & Network Sensing, Data Visualization & Interfaces as well as a growing segment of Advanced Manufacturing.

YOY SPEND BY CRITICAL TECHNOLOGY, FY19-23



YOY CRITICAL TECH SPEND BY TOP OFFICES, FY19-23

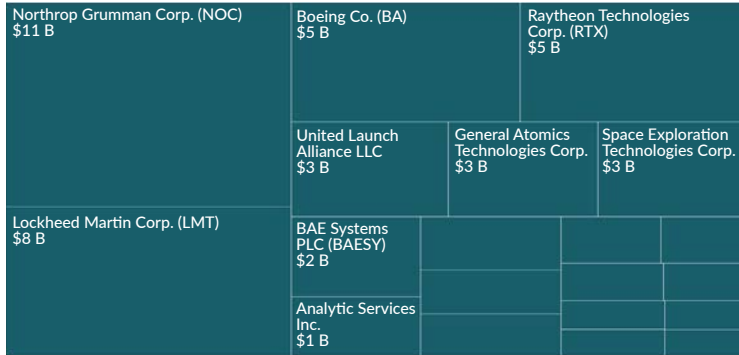


SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	4,015	2,002	△ 20.2%
Subcontractors	1,581	144	▽ 43.5%
Tier 1	2,167	1,780	△ 57.2%
Tier 1 Supplier Breakdown			
U.S.	2,202	800	△ 19.1%
Allied	516	370	△ 37.6%
Other	740	596	△ 72.3%
Adversarial	149	131	△ 70.1%

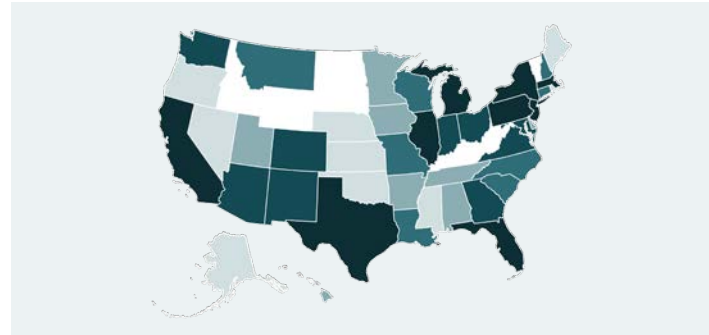
DEPARTMENT OF THE AIR FORCE: CRITICAL TECHNOLOGIES

TOP 20 CRITICAL TECHNOLOGY AWARDEES, FY19-23



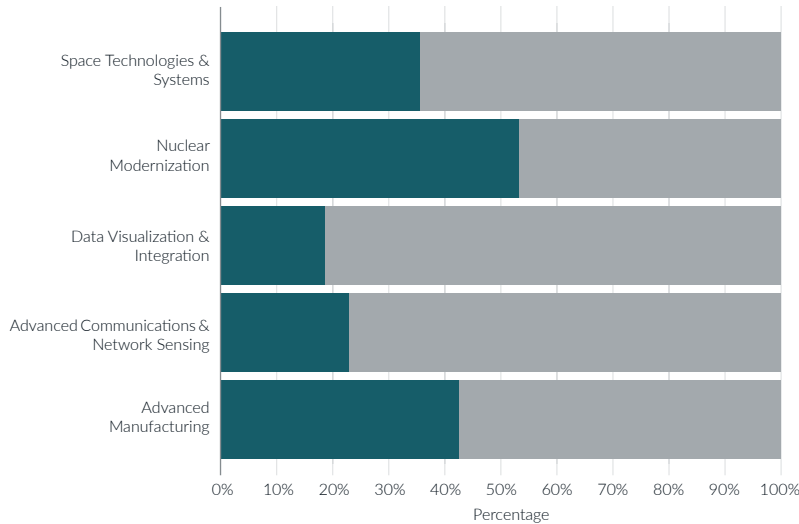
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

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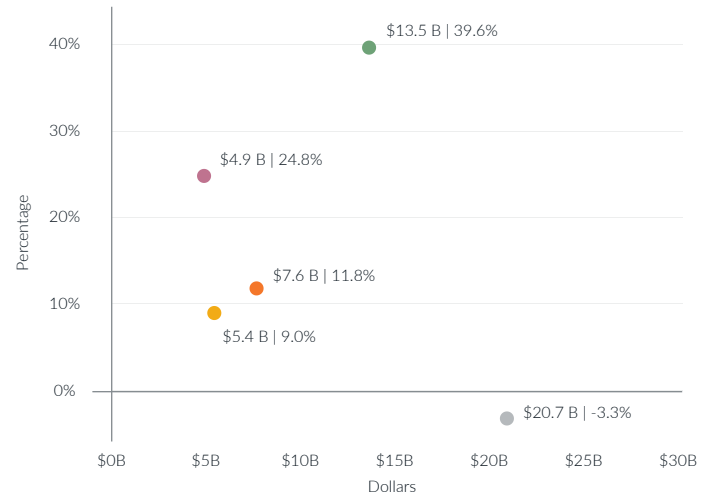
TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23

- R&D
- NON-R&D



TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23

- Space Technologies & Systems
- Nuclear Modernization
- Data Visualization & Interfaces
- Advanced Communications & Network Sensing
- Advanced Manufacturing








DEPARTMENT OF THE AIR FORCE: CRITICAL TECHNOLOGIES

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Northrop Grumman Corp. (NOC)	\$3.5 B	△ 33.5%
Lockheed Martin Corp. (LMT)	\$2.0 B	△ 14.9%
Boeing Co. (BA)	\$1.5 B	△ 85.4%
Space Exploration Technologies Corp.	\$898.2 M	△ 56.6%
Raytheon Technologies Corp. (RTX)	\$734.5 M	▽ 12.5%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	130	△ 68.8%
 United Kingdom	121	△ 24.7%
 Taiwan	114	△ 280.0%
 Japan	96	△ 100.0%
 South Korea	60	△ 30.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Air Force Nuclear Weapons Center NX, F2DANX	\$3.3 B	142
Space and Missile Systems Center GP, F2TSJA	\$1.8 B	186
Space and Missile Systems Center MC, F2TSJA	\$579.3 M	135
U.S. Space Force SDA, F1AFM1	\$452.9 M	18
Air Force Lifecycle Management Center HBS, F2BDBD	\$391.6 M	13

NOTABLE DEFENSE ACCELERATORS

FUNDING PROGRAM	LOCATION
AFWERX	Washington, DC
Air Force Research Laboratory	Wright-Patterson AFB, OH
SPACEWERX	Los Angeles, CA
Catalyst Accelerator	Colorado Springs, CO
STRIKEWERX	Barksdale AFB, LA

DEPARTMENT OF THE AIR FORCE: PROGRAM HIGHLIGHT - MINUTEMAN III

The Minuteman III is an intercontinental ballistic missile (ICBM) operated by the United States Air Force as a key component of the nation's nuclear triad. First deployed in 1970, the Minuteman III has undergone several upgrades to improve its reliability, accuracy, and survivability.

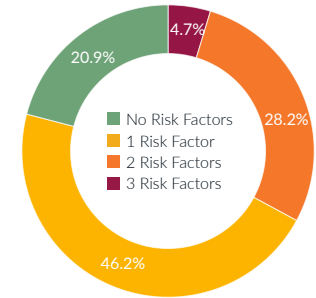
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Boeing Co. (BA) 1,546	Berkshire Hathaway Inc. 527	Dialogic Corp. 338	Science Applications Int. Corp. (SAIC) 375
Noble Supply & Logistics LLC 657	Fastener Distribution Holdings LLC 374	Kampi Components Co. Inc. 303	Jolen Services Inc. 258
	NYLE LLC 232	Blade Industrial Products Inc. 204	Wolverine Intermediate Holding II Corp. 201
Lockheed Martin Corp. (LMT) 564	Defense Support Services Inc. 231	Engineering & Software System Solutions Inc. 186	HEICO Corp. 178
	Benchmark Connector Corp. 220	Birmingham Fastener & Supply Inc. 181	DBR Industries Inc. 178
			Aero-Electric Connector Inc. 177

PROGRAM PART CRITICALITY

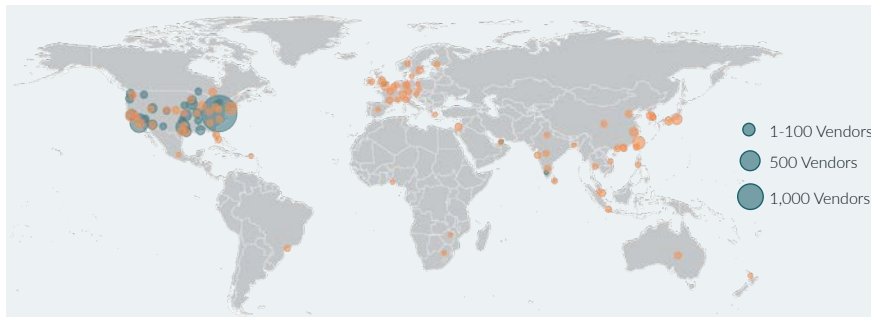
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GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	14	73.7%
Turkey	2	10.5%
United Arab Emirates	1	5.3%
United Kingdom	1	5.3%
India	1	5.3%

DEPARTMENT OF THE AIR FORCE: PROGRAM HIGHLIGHT - B-21

The B-21 Raider stealth bomber is being developed by the United States Air Force and Northrop Grumman. It is intended to replace the aging B-1 Lancer and B-2 Spirit bombers, with improved stealth capabilities, range, and payload capacity.

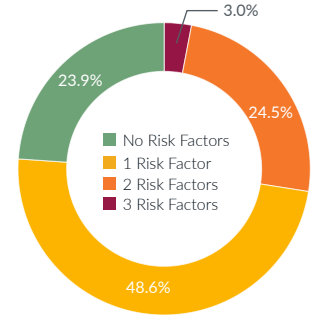
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Boeing Co. (BA) 397	Wolverine Intermediate Holding II Corp. 119	Fastener Distribution Holdings LLC 71	Lockheed Martin Corp. (LTM) 70	
	Defense Support Services Inc. 66	Spec Tech USA Inc. 61	Berkshire Hathaway Inc. 60	
	Engineering & Software System Solutions Inc. 52	Adept Technology Inc. 44	DBR Industries Inc. 43	Birmingham Fastener & Supply Inc. 41
Noble Supply & Logistics LLC 151	Proponent Inc. 50	Blade Industrial Products Inc. 40	HEICO Corp. 40	Peerless Aerospace Fastener Corp. 33
	Meg Technologies Inc. 50	Dialogic Corp. 40	TPS Aviation Inc. 40	Insulation Sources Inc. 32

PROGRAM PART CRITICALITY

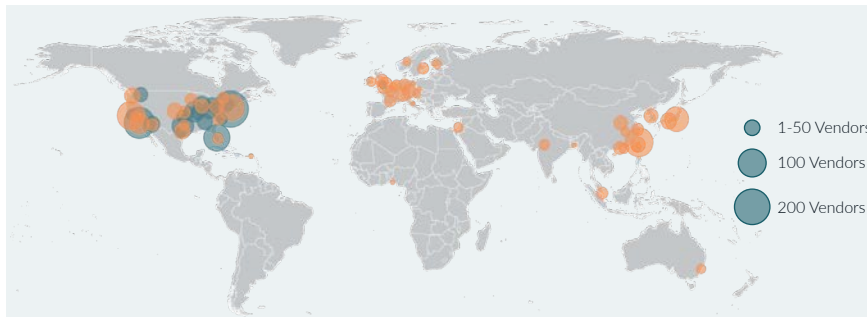
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- Parts that have a longer than average lead time for replacement



GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
United Kingdom	2	100.0%

JOINT PROGRAM HIGHLIGHT - F-35

The F-35 Lightning II comes in three variants: the F-35A for conventional takeoff and landing, the F-35B for short takeoff and vertical landing, and the F-35C for carrier-based operations. The F-35 program is one of the most complex and ambitious programs in the DoD's history.

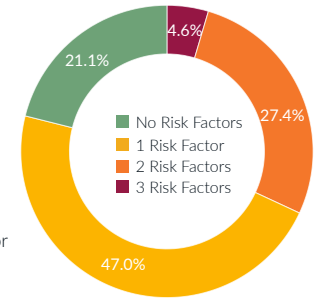
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Boeing Co. (BA) 697	Science Applications International Corp. (SAIC) 203	Dialogic Corp. 140		Lockheed Martin Corp. (LMT) 137
	Wolverine Intermediate Holding II Corp. 133	Kampi Components Co. Inc. 132	Spec Tech USA Inc. 113	
	Blade Industrial Products Inc. 112	Galaxy Die and Engineering Inc. 96	Defense Support Services Inc. 94	DBR Industries Inc. 91
Noble Supply & Logistics LLC 289	NYLE LLC 109	Engineering & Software System Solutions Inc. 87	SZY Holdings LLC 79	Fastener Distribution Holdings LLC 79
	Hydraulics International Inc. 105	Meg Technologies Inc. 80	Cavanaugh Government Group LLC 78	HEICO Corp. 76

PROGRAM PART CRITICALITY

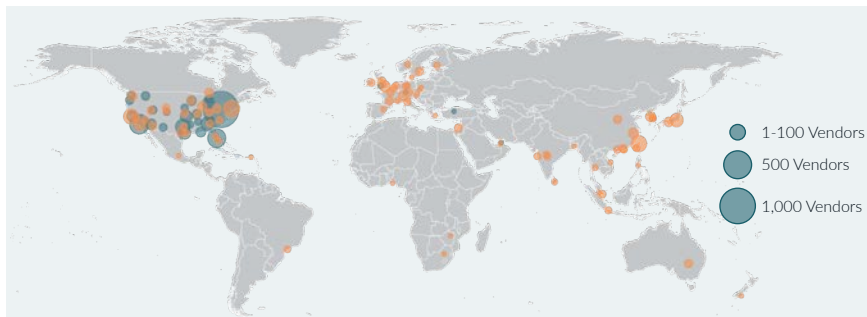
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GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



TOP 5 FOREIGN SUPPLIER COUNTRIES

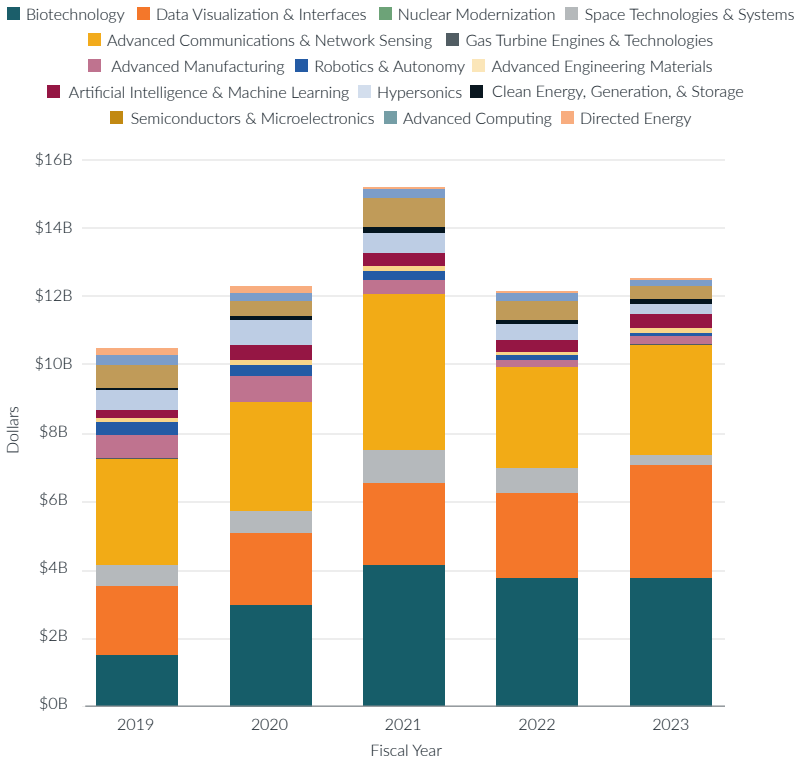
COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	9	60.0%
United Kingdom	2	13.3%
Turkey	2	13.3%
United Arab Emirates	1	6.7%
Germany	1	6.7%

DEPARTMENT OF DEFENSE AGENCIES

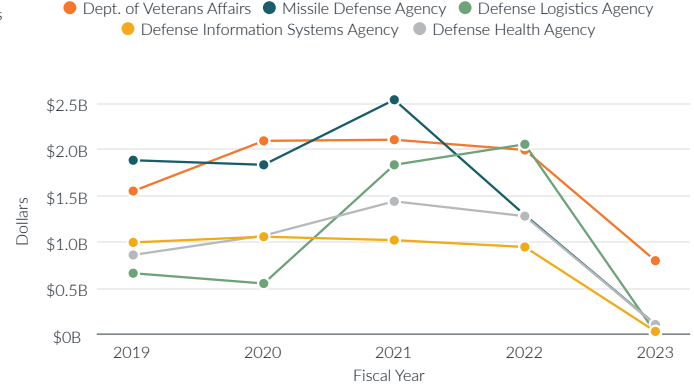
DEPARTMENT OF DEFENSE AGENCIES: CRITICAL TECHNOLOGIES

The analytics in this section examine the following agencies: Defense Advanced Research Project Agency, Defense Information Systems Agency, Defense Threat Reduction Agency, Missile Defense Agency, Defense Health Agency, Defense Logistics Agency, Department of Veterans Affairs, and U.S. Special Operations Command. These agencies operate fully within the defense sector and provide direct support to the military departments and their assets across the globe.

YOY SPEND BY CRITICAL TECHNOLOGY, FY19-23



YOY CRITICAL TECH SPEND BY TOP SUB-AGENCIES, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	4,015	2,002	△ 20.2%
Subcontractors	1,581	144	▽ 43.5%
Tier 1	2,167	1,780	△ 57.2%
Tier 1 Supplier Breakdown			
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Allied	516	370	△ 37.6%
Other	740	596	△ 72.3%
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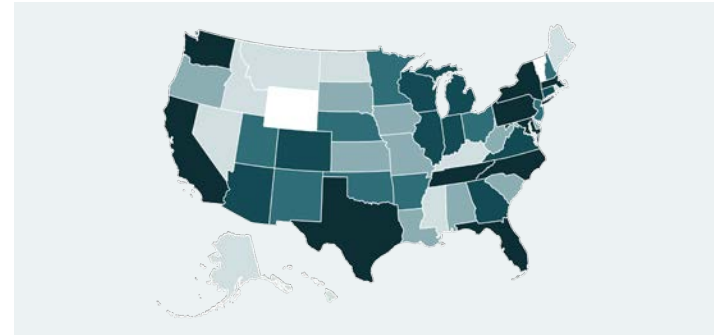
DEPARTMENT OF DEFENSE AGENCIES: CRITICAL TECHNOLOGIES

TOP 20 CRITICAL TECHNOLOGY AWARDEES, FY19-23

Boeing Co. (BA) \$5 B	Booz Allen Hamilton Holding Corp. (BAH) \$2 B	Raytheon Technologies Corp. (RTX) \$2 B	Analytic Services Inc. \$1 B
	Abbott Laboratories (ABT) \$1 B	ASGN Inc. (ASGN) \$1 B	Citigroup Inc. \$1 B
Leidos Holdings Inc. (LDOS) \$3 B	L3Harris Technologies Inc. (LHX) \$1 B	Torch Technologies Inc. \$891 M	Lockheed Martin Corp. (LMT) \$874 M
Northrop Grumman Corp. (NOC) \$2 B	General Dynamics Corp. (GD) \$941 M		
	Jacobs Engineering Group Inc. (J) \$939 M		

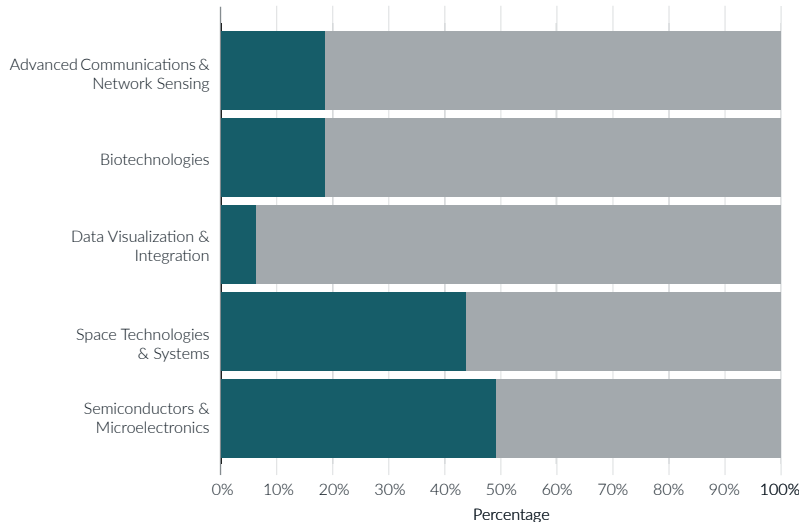
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

- Top 20% of Awarded Dollars
- 60-80% of Awarded Dollars
- 40-60% of Awarded Dollars
- 20-40% of Awarded Dollars
- Lowest 20% of Awarded Dollars



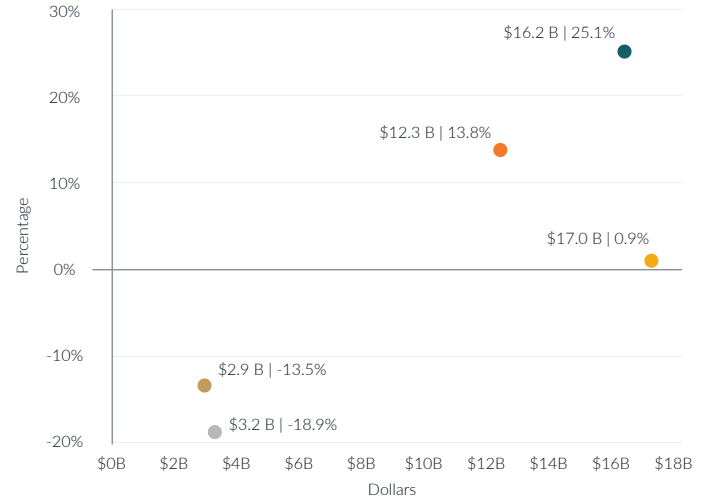
TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23

- R&D
- NON-R&D



TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23

- Advanced Communications & Network Sensing
- Biotechnology
- Data Visualization & Interfaces
- Space Technologies & Systems
- Semiconductors & Microelectronics








DEPARTMENT OF DEFENSE AGENCIES: CRITICAL TECHNOLOGIES

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Leidos Holdings Inc. (LDOS)	\$739.4 M	△ 51.3%
Booz Allen Hamilton Holding Corp. (BAH)	\$449.3 M	△ 46.5%
Boeing Co. (BA)	\$332.4 M	▽ 48.5%
General Dynamics Corp. (GD)	\$307.2 M	△ 90.2%
International Business Machines Corp. (IBM)	\$256.5 M	△ 103.4%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	311	△ 38.2%
 United Kingdom	242	△ 28.7%
 Japan	167	△ 16.8%
 India	163	△ 46.9%
 Taiwan	133	△ 15.7%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Missile Defense Agency	\$1.1 B	604
Technology Acquisition Center NJ (36C10B)	\$891.0 M	293
Defense Advanced Research Projects Agency	\$790.4 M	961
Defense Information Systems Agency	\$690.6 M	16,821
Defense Logistics Agency, Troop Support	\$649.9 M	753

NOTABLE DEFENSE ACCELERATORS

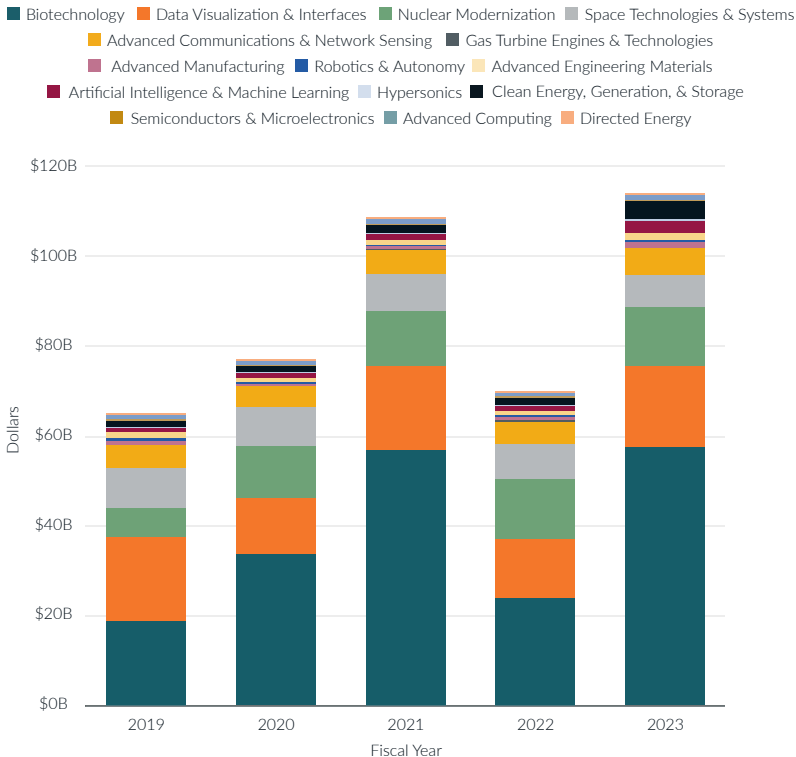
FUNDING PROGRAM	LOCATION
Defense Innovation Unit	Mountain View, CA
DEFENSEWERX	Niceville, FL
National Security Innovation Network	Arlington, VA
Defense Innovation Marketplace	Fort Belvoir, VA
SOFWERX	Tampa, FL

INTERAGENCIES

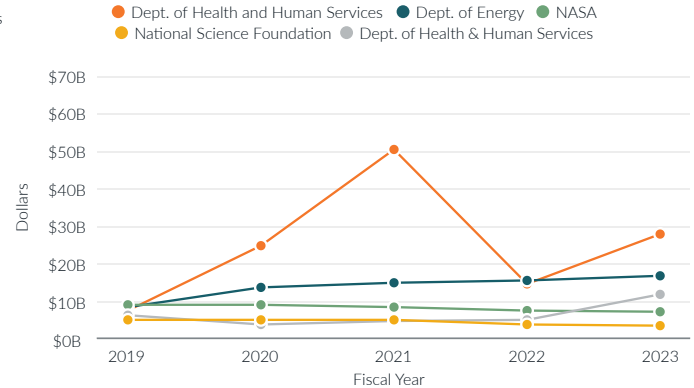
INTERAGENCIES: CRITICAL TECHNOLOGIES

The analytics in this section examine the following agencies: Department of Energy, Department of Homeland Security, Department of Justice, Department of State, General Services Administration, Department of Health & Human Services, National Aeronautics & Space Administration, and the National Science Foundation. While these agencies do not formally operate in the defense sector, they are civilian agencies that are critical contributors to national security efforts and priorities.

YOY SPEND BY CRITICAL TECHNOLOGY, FY19-23



YOY CRITICAL TECH SPEND BY TOP AGENCIES, FY19-23

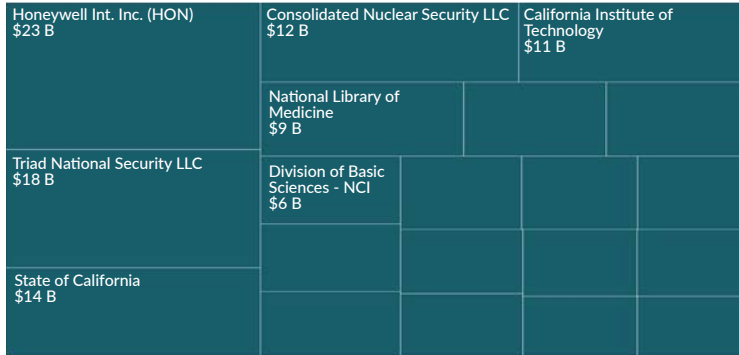


SUPPLY CHAIN OVERVIEW, FY19-23

METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	7,508	3,827	△ 6.6%
Subcontractors	1,140	160	△ 39.1%
Tier 1	5,171	3,923	△ 31.8%
Tier 1 Supplier Breakdown			
U.S.	2,484	1,499	△ 16.1%
Allied	988	859	△ 42.0%
Other	1,361	1,247	△ 47.1%
Adversarial	338	318	△ 40.1%

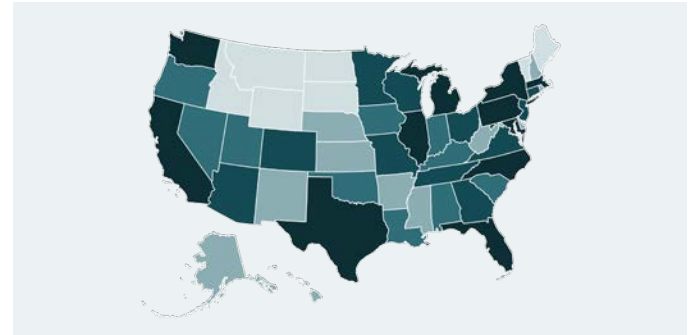
INTERAGENCIES: CRITICAL TECHNOLOGIES

TOP 20 CRITICAL TECHNOLOGY AWARDEES, FY19-23



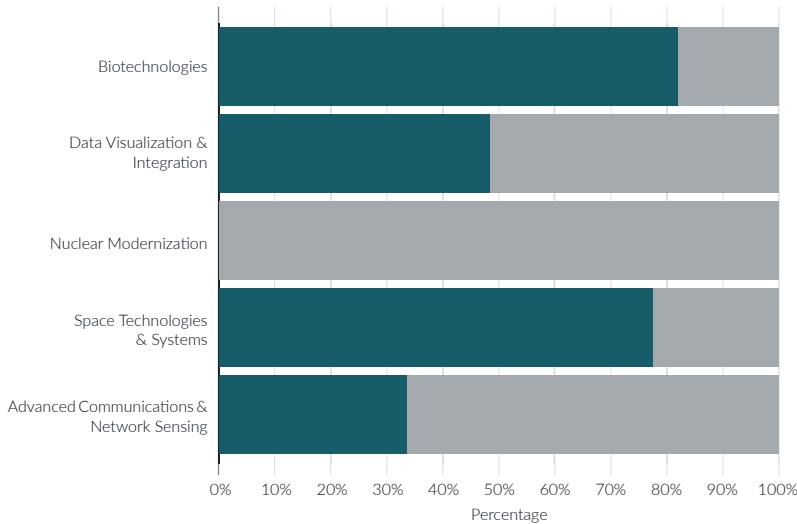
PLACE OF PERFORMANCE CONCENTRATION, FY19-23

- Top 20% of Awarded Dollars
- 60-80% of Awarded Dollars
- 40-60% of Awarded Dollars
- 20-40% of Awarded Dollars
- Lowest 20% of Awarded Dollars



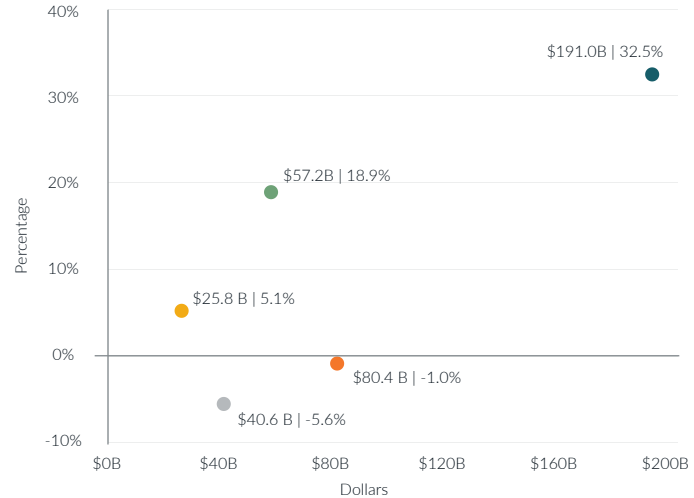
TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23

- R&D
- NON-R&D



TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23

- Biotechnology
- Data Visualization & Interfaces
- Nuclear Modernization
- Space Technologies & Systems
- Advanced Communications & Network Sensing








INTERAGENCIES: CRITICAL TECHNOLOGIES

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Honeywell Int. Inc. (HON)	\$4.7 B	▽ 7.3%
Triad National Security LLC	\$4.3 B	△ 13.9%
Consolidated Nuclear Security LLC	\$3.3 B	▽ 13.3%
Analytic Services Inc.	\$1.7 B	— N/A
State of California	\$1.6 B	△ 14.7%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 China	361	△ 49.2%
 United Kingdom	300	△ 21.0%
 Japan	245	△ 36.1%
 Canada	181	△ 47.2%
 India	175	△ 82.3%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
National Nuclear Security Administration's Weapons Activities	\$13.2 B	211
Biomedical Advanced Research and Development Authority	\$4.4 B	264
Center for Surveillance, Epidemiology, and Laboratory Services	\$2.4 B	2,180
Marshall Space Flight Center (NASA)	\$1.9 B	301
National Institute of Neurological Disorders and Stroke (NIH)	\$1.6 B	4,318

NOTABLE ACCELERATORS

FUNDING PROGRAM	LOCATION
Convergence Accelerator (NSF)	Alexandria, VA
InnovationX (HHS)	Washington, DC
Commercialization Accelerator Program (DHS)	Washington, DC
Innovative Advanced Concepts (NASA)	Washington, DC
Energy Program for Innovation Clusters (DoE)	Washington, DC

SCORECARD GUIDES & ORGANIZATION INDEX

CRITICAL TECHNOLOGIES GUIDE

SPEND

FY19-23 and FY23 Awarded Amounts with the share of spend the technology is allocated along with compound annual growth rate (CAGR)

OTA- & GRANT-BASED

Spend on OTAs & Grants from FY19-23, and the percentage of the total segment's awarded dollars from FY19-23

RANK		SEGMENT	SPEND			CONTRACT-BASED		OTA- & GRANT-BASED		
FY24	FY23		FY19-23 SPEND	CAGR	FY23 SPEND	FY23 SHARE	FY19-23 SPEND	% OF SPEND	FY19-23 SPEND	% OF SPEND
1	1	Biotechnologies	\$286.9 B	△ 28.3%	\$61.2 B	35.1%	\$97.8 B	20.0%	\$189.1 B	62.6%
2	3	Data Visualization & Interfaces	\$118.8 B	△ 2.4%	\$27.3 B	15.7%	\$68.9 B	14.1%	\$49.8 B	16.5%

RANK

Segments are ranked by greatest to least FY24, in comparison to FY23 by factors that include spend, CAGR, overall share, and velocity.

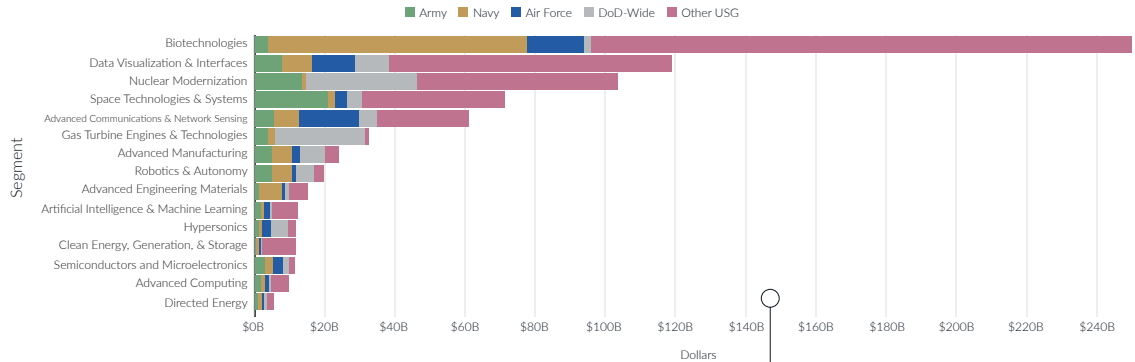
FY23 SPEND

FY23 Awarded Amount

CONTRACT-BASED

Formal contract spend from FY19-23, and the percentage of the total segment's awarded dollars from FY19-23

SEGMENT SPEND BY GOVERNMENT AGENCIES, FY19-23



SEGMENT SPEND BY GOVERNMENT AGENCIES, FY19-23

Total spend for each individual segment from FY19-23, split by each MILDEP, DoD-Wide, and all other government agencies

ORGANIZATION KEY

Prime Contractor

Organization that is directly awarded a contract, grant, or OTA by a federal agency

Subcontractor

Organization that is formally recorded as performing a portion of the contracted work awarded to a prime contractor

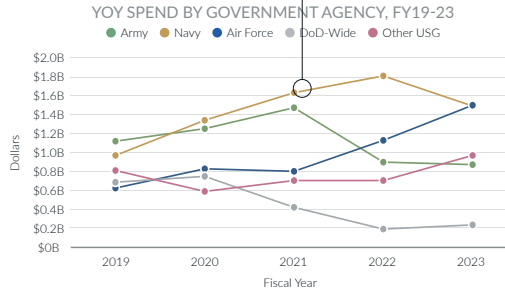
Tier 1 Supplier

Organization that provides a product or service directly to the prime contractor or subcontractor yet may or may not be involved in the performance of an awarded contract

Note: Adversarial countries include: Afghanistan, China, Cuba, Iran, North Korea, Russia, Syria, and Venezuela

YOY SPEND BY GOVERNMENT AGENCY, FY19-23

Total spend for each individual segment from FY19-23, split by each MILDEP, DoD-Wide, and all other government agencies



SUPPLY CHAIN OVERVIEW, FY19-23

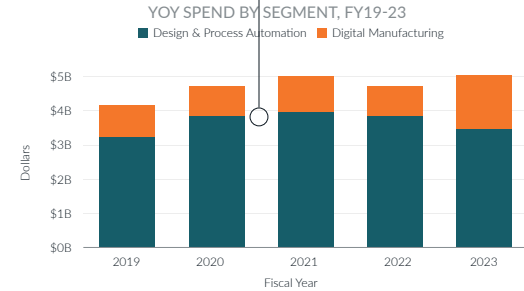
METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	3,671	1,818	△ 30.4%
Subcontractors	821	75	▽ 42.3%
Tier 1	2,637	1,600	△ 122.4%
Tier 1 Supplier Breakdown			
U.S.	1,468	676	△ 51.6%
Allied	436	326	△ 132.9%
Other	601	480	△ 158.1%
Adversarial	132	118	△ 227.8%
INDICATOR	SCORE MAX 100	YOY % CHANGE	
Risk Score	31.9	▽ 2.0%	
Competitiveness Score	30.9	△ 6.0%	

SUPPLY CHAIN OVERVIEW, FY19-23

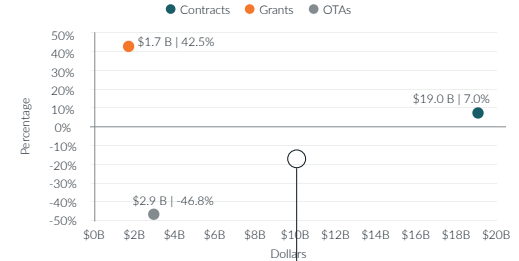
A table showing the respective technology's Prime Contractor, Subcontractor, and Tier 1 Supplier counts for FY19-23, FY23 and YOY % change from FY22-23

YOY SPEND BY SEGMENT, FY19-23

Year-over-year awarded amount by technology segment, FY19-23



TECHNOLOGY PROCUREMENT VELOCITY, FY19-23

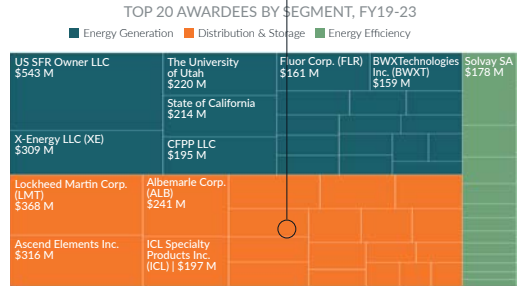


TECHNOLOGY PROCUREMENT VELOCITY, FY19-23

Compound annual growth rate compared to total spend from FY19-23 combined, by contracts, grants, and OTAs for each segment

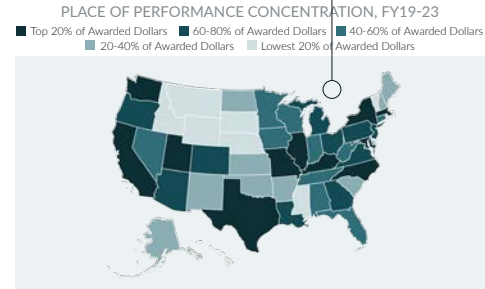
TOP 20 VENDORS BY SEGMENT, FY19-23

Market size & award distribution of each technology segment's top 20 vendors, FY19-23

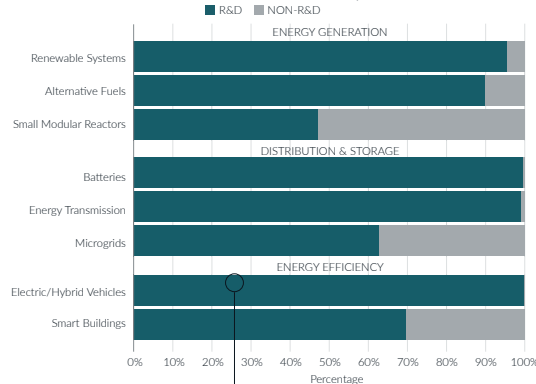


PLACE OF PERFORMANCE CONCENTRATION FY19-23

Heat map of the U.S. showing which states were awarded dollars; broken out by quintiles. For example, dark blue states represent the top spenders among all states for that technology, which means that of all the states ranked by how much they spend, and the dark blue ones are in the top 20%.



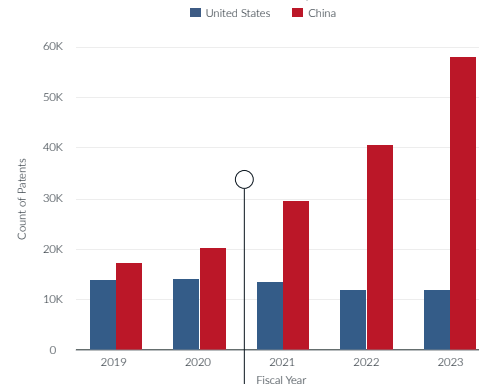
TECHNOLOGY MATURITY BY SPEND, FY19-23



TECHNOLOGY MATURITY BY SPEND, FY19-23

Percentage breakdown of R&D vs. Non-R&D awards by subsegment, FY19-23

YOY PATENTS GRANTED, FY19-23



YOY PATENTS GRANTED, FY19-23

YoY count of patents granted to a U.S. inventor by a U.S. patent office by subsegment vs. YoY count of patents granted to a Chinese inventor by a Chinese patent office by subsegment, FY19-23

TOP AWARDEES BY AWARDED AMOUNT, FY23

List of the top 5 awardees by FY23 awarded amount






TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Honeywell Int. Inc. (HON)	\$5.7 B	△ 3.5%
Triad National Security, LLC	\$4.5 B	△ 13.9%
Northrop Grumman Corp. (NOC)	\$3.3 B	△ 35.9%
Consolidated Nuclear Security, LLC	\$3.3 B	▽ 13.3%
Lockheed Martin Corp. (LMT)	\$2.8 B	△ 35.6%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

List of the top 5 foreign countries by count of FY23 supply chain connections

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
 United Kingdom	98	▽ 19.0%
 China	82	▽ 18.8%
 Japan	54	▽ 47.6%
 India	49	▽ 5.8%
 Sweden	40	▽ 11.15%

ORGANIZATION KEY

Awardee

Organization that is directly awarded a contract, grant, or OTA by a federal agency

Tier 1 Foreign Supplier

Non-U.S. organization that provides a product or service directly to the prime contractor or subcontractor yet may or may not be involved in the performance of an awarded contract

Funding Office

Office submitting the requisitions for supplies and services as well as providing the funds for contracting

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
National Nuclear Security Administration's Weapons Activities	\$13.1 B	115
Strategic Systems Programs	\$4.3 B	1,810
Air Force Nuclear Weapons Center	\$3.3 B	142
Naval Air Systems Command	\$1.1 B	51
Naval Undersea Warfare Center Division Newport	\$805.5 M	2,938

TOP PLACES OF PERFORMANCE BY AWARDED AMOUNT, FY23

COUNTY, STATE	FY23 AWARDED	TOP DISTRICT
Los Alamos County, NM	\$4.3 B	D-03
Bernalillo County, NM	\$4.1 B	D-01
Andersen County, TN	\$3.3 B	R-03
Weber County, UT	\$2.9 B	R-01
Jackson County, MO	\$1.6 B	D-05

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

List of the top 5 U.S. funding offices by FY23 awarded amount

TOP PLACES OF PERFORMANCE BY AWARD AMOUNT, FY23

List of the top 5 U.S. counties by FY23 awarded amount, as well as the top congressional district related to that geolocation

ORGANIZATION KEY

Prime Contractor

Organization that is directly awarded a contract, grant, or OTA by a federal agency

Subcontractor

Organization that is formally recorded as performing a portion of the contracted work awarded to a prime contractor

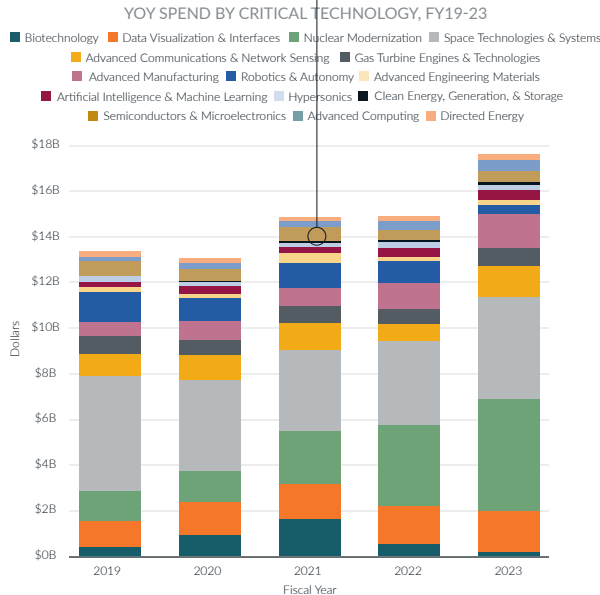
Tier 1 Supplier

Organization that provides a product or service directly to the prime contractor or subcontractor yet may or may not be involved in the performance of an awarded contract

Note: Adversarial countries include: Afghanistan, China, Cuba, Iran, North Korea, Russia, Syria, and Venezuela

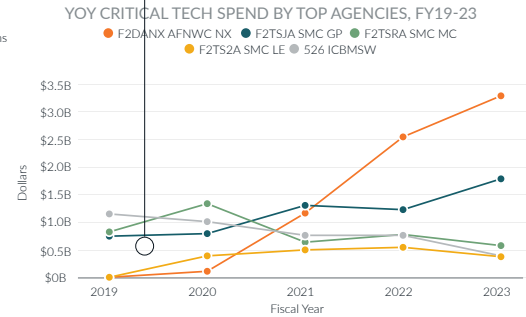
YOY SPEND BY CRITICAL TECHNOLOGY, FY19-23

Year-over-year awarded amount by technology segment for the respective MILDEP, FY19-23



YOY CRITICAL TECH SPEND BY TOP AGENCIES, FY19-23

Year-over-year awarded amounts by funding office for the respective MILDEP, FY19-23



SUPPLY CHAIN OVERVIEW, FY19-23

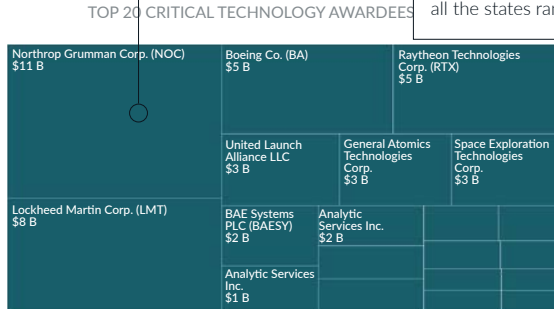
METRIC	TOTAL COUNT	FY23 COUNT	YOY % CHANGE
Total Prime Contractors	4,015	2,002	△ 20.2%
Subcontractors	1,581	144	▽ 43.5%
Tier 1	2,167	1,780	△ 57.2%
Tier 1 Supplier Breakdown			
U.S.	2,202	800	△ 19.1%
Allied	516	370	△ 37.6%
Other	740	596	△ 72.3%
Adversarial	149	131	△ 70.1%

SUPPLY CHAIN OVERVIEW, FY19-23

A table showing the respective MILDEP's Prime Contractor, Subcontractor, and Tier 1 Supplier counts for FY19-23, FY23, and YOY % change from FY22-23

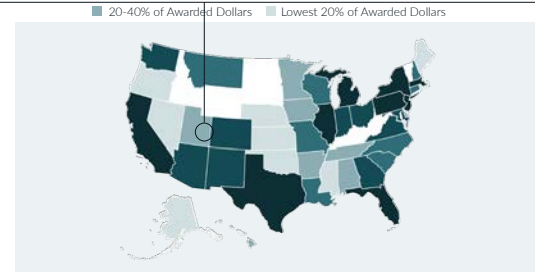
TOP 20 CRITICAL TECHNOLOGY AWARDEES, FY19-23

Market size & award distribution of each MILDEP's top 20 vendors, FY19-23

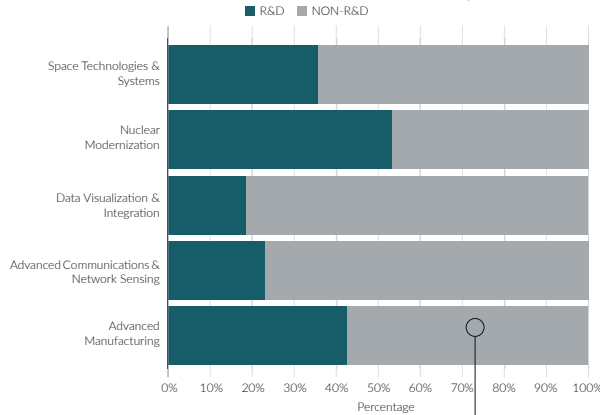


PLACE OF PERFORMANCE CONCENTRATION FY19-23

Heat map of the U.S. showing which states were awarded dollars; broken out by quintiles. For example, dark blue states represent the top spenders among all states for that technology, which means that of all the states ranked by how much they spend, and the dark blue ones are in the top 20%.



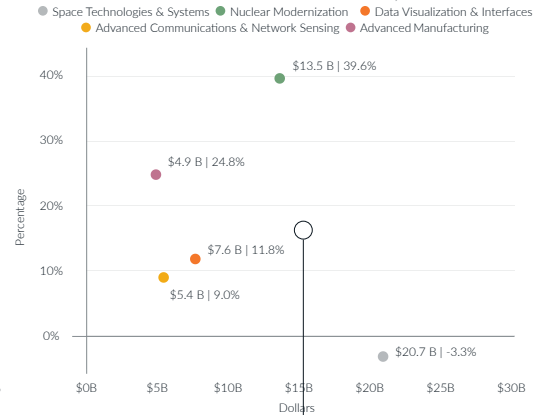
TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23



TOP 5 CRITICAL TECHNOLOGY MATURITY BY SPEND, FY19-23

Percentage breakdown of R&D vs. Non-R&D awards by sub-subsegment for the 5 largest segments in each MILDEP, FY19-23

TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23



TOP 5 CRITICAL TECHNOLOGY VELOCITY, FY19-23

Compound annual growth rate compared to respective MILDEP spend from FY19-23 combined, by top 5 segments

ORGANIZATION KEY

Awardee

Organization that is directly awarded a contract, grant, or OTA by a federal agency

Tier 1 Foreign Supplier

Non-U.S. organization that provides a product or service directly to the prime contractor or subcontractor yet may or may not be involved in the performance of an awarded contract

Funding Office

Office submitting the requisitions for supplies and services as well as providing the funds for contracting

Defense Accelerator

Federally funded programs that are centered around helping concepts or start-ups grow and scale within the defense technology ecosystem

TOP AWARDEES BY AWARDED AMOUNT, FY23

List of the top 5 awardees in the agency ecosystem by FY23 awarded amount

TOP AWARDEES BY AWARDED AMOUNT, FY23

AWARDEE	FY23 AWARDED	YOY % CHANGE
Northrop Grumman Corp. (NOC)	\$3.5 B	△ 33.5%
Lockheed Martin Corp. (LMT)	\$2.0 B	△ 14.9%
Boeing Co. (BA)	\$1.5 B	△ 85.4%
Space X	\$898.2 M	△ 56.6%
Raytheon Technologies Corp. (RTX)	\$734.5 M	▽ 12.5%

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

List of the top 5 foreign countries by count of FY23 supply chain connections

TOP FOREIGN COUNTRIES BY SUPPLIERS, FY23

COUNTRY	SUPPLIER COUNT	YOY % CHANGE
China	130	△ 68.8%
United Kingdom	121	△ 24.7%
Taiwan	114	△ 280.0%
Japan	96	△ 100.0%
South Korea	60	△ 30.0%

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

OFFICE	FY23 AWARDED	AWARD COUNT
Air Force Nuclear Weapons Center NX, F2DANX	\$3.3 B	142
Space and Missile Systems Center GP, F2TSJA	\$1.8 B	186
Space and Missile Systems Center MC, F2TSJA	\$579.3 M	135
U.S. Space Force SDA, F1AFM1	\$452.9 M	18
Air Force Lifecycle Management Center HBS, F2BDBD	\$391.6 M	13

TOP FUNDING OFFICES BY AWARDED AMOUNT, FY23

List of the top 5 U.S. funding offices by FY23 awarded amount

NOTABLE DEFENSE ACCELERATORS

FUNDING PROGRAM	LOCATION
AFWERX	Washington, DC
Air Force Research Lab	Wright-Patterson AFB, OH
SPACEWERX	Los Angeles, CA
Catalyst Accelerator	Colorado Springs, CO
STRIKEWERX	Barksdale AFB, LA

NOTABLE DEFENSE ACCELERATORS

List of 5 notable DoD entities that identify emerging technologies from the academic and the venture communities that can address DoD problems in innovative ways

TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Market size & distribution of parts supplied for each Program's top 20 procurement vendors, FY19-23

PROGRAM PART CRITICALITY

Percentage of parts with zero, one, two, or three risk factors. Risk factors are a combination of: DLA stock on hand reported to be zero; Total procurement vendors is one or less; and Lead time is greater than the average for parts within the program

ORGANIZATION KEY

Procurement Vendor

Organization that is currently or has in the past supplied a part to the relevant program

Tier 1 Supply Chain Connection

A documented connection, often an activity or supporting organization that is related to the procurement vendor

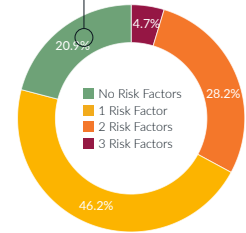
TOP 20 PROCUREMENT VENDORS BY COUNT OF PARTS SUPPLIED

Boeing Co. (BA) 1,546	Berkshire Hathaway Inc. 527	Dialogic Corp. 338	Science Applications Int. Corp. (SAIC) 375
	Fastener Distribution Holdings LLC 374	Kampi Components Co. Inc. 303	Jolen Services Inc. 258
Noble Supply & Logistics LLC 637	NYLE LLC 232	Blade Industrial Products Inc. 204	Wolverine Intermediate Holding II Corp. 201
	Defense Support Services Inc. 231	Engineering & Software System Solutions Inc. 186	HEICO Corp. 178
Lockheed Martin Corp. (LMT) 564	Benchmark Connector Corp. 220	Birmingham Fastener & Supply Inc. 181	DBR Industries Inc. 178
			Aero-Electric Connector Inc. 177
			Spec Tech USA Inc. 194

PROGRAM PART CRITICALITY

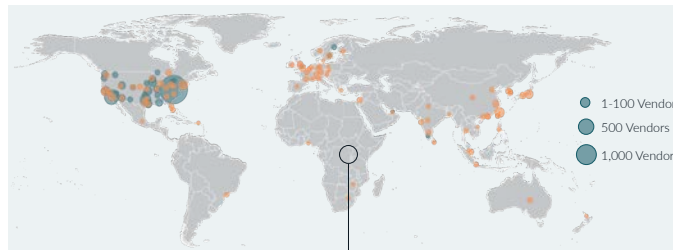
The three risk factors evaluated in this analytic include:

- Parts that have no reported inventory
- Parts that do not have more than one supplier
- Parts that have a longer than average lead time for replacement



GLOBAL SUPPLIER FOOTPRINT

■ Procurement Vendors ■ Tier 1 Supply Chain Connections



GLOBAL SUPPLIER FOOTPRINT

Details the volume and locations of procurement vendors along with their tier 1 supply chain connections

TOP FOREIGN SUPPLIER COUNTRIES

COUNTRY	PROCUREMENT VENDOR COUNT	% OF FOREIGN SUPPLIER BASE
Canada	14	73.7%
Turkey	2	10.5%
United Arab Emirates	1	5.3%
United Kingdom	1	5.3%
India	1	5.3%

TOP FOREIGN SUPPLIER COUNTRIES

List of the top foreign countries by count of Procurement Vendors

ORGANIZATION INDEX

ORGANIZATION	PAGE
6K INC.	43
AAR Corp.	73
Abbot Laboratories (ABT)	10,87
Adept Technology Inc.	83
ADS Tactical Inc.	77
AECOM (ACM)	63
Aero-Electric Connector Inc.	82
AeroVironment Inc. (AVAV)	31,38,39,71
AFWERX	81
Air Force Lifecycle Management Center HBS, F2BDBD	31,35,39,63,81
Air Force Nuclear Weapons Center	19,81
Air Force Research Laboratory	47,63,67,81
Alamo Aircraft Supply Inc.	72
Albemarle Corp. (ALB)	54,55
Analytic Services Inc.	10,11,26,66,70,80,87,92
Andon Health Co. Ltd.	11,70
Arconic Corp.	43
Ascend Elements Inc.	54,55
ASGN Inc. (ASGN)	46,47,87
AstraZeneca PLC (AZN)	10,70
BAE Systems PLC (BAESY)	34,58,59,80
Basic Rubber and Plastics Co.	72,77
BEK Inc.	77
Benchmark Connector Corp.	82
Berkshire Hathaway Inc.	73,77,78,82,83
Biomedical Advanced Research and Development Authority	11,92
Birmingham Fastener & Supply Inc.	72,82,83

ORGANIZATION	PAGE
Blade Industrial Products Inc.	72,73,77,78,82,83,84
Boeing Co. (BA)	22,26,30,31,34,35,38,39, 72,73,75,77,78,80,81,82,83, 84,87,88
Booz Allen Hamilton Holding Corp. (BAH)	15,26,27,62,66,87,88
BWXTechnologies Inc. (BWXT)	54
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CACI Int. Inc. (CACI)	26,27,63
CAE Inc. (CAE)	34
California Institute of Technology	22,23,91
Catalyst Accelerator	81
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Center for Global Health (CDC)	11
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CFPP LLC	54
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DEFENSEWERX	88
Department of Energy, Office of Science	43,63,67
Department of the Air Force (ACCTG DISB STA NR 503000)	63
Department of the Air Force (F2TSJA SMC GP)	23,59
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