Aerospace & Defense

Maryland is a thriving location for the science of space exploration and satellite technology; position, navigation and timing technologies; and emerging technologies such as uncrewed aerial vehicles and artificial intelligence. Maryland is also home to Baltimore/Washington International Thurgood Marshall Airport, one of the busiest airports in the mid-Atlantic region. 32 other public use airports call Maryland home and provide integral services to citizens throughout the state.

The industry includes Department of Defense-related activities such as biodefense, cybersecurity, avionics, informatics, and ordnance and weapons testing. Fifteen of the world's top 20 aerospace and defense companies have a presence in Maryland, with Lockheed Martin headquartered in the state. Under the most recent Base Realignment and Closure (BRAC) process, Maryland added thousands of jobs, primarily at Aberdeen Proving Ground, Fort Meade, and the Naval National Medical Center at Bethesda. In 2023, Maryland's 12,475 aerospace and defense businesses generated $46.4 billion in economic activity and secured $18.3 billion in federal contracts.

Major Aerospace & Defense Employers in Maryland

Employer	Employment	Product / Service
Fort George G. Meade	53,125	Federal military installation
Naval Air Station Patuxent River	33,500	Military installation
Fort Detrick Campus	18,375	Federal military installation
Aberdeen Proving Ground	13,600	Federal military installation; R&D
Northrop Grumman Mission Systems	12,900	HQ / Electronic surveillance products
Joint Base Andrews Naval Air Facility Washington	11,650	Federal military installation
Naval Support Activity Bethesda	8,475	Medical services
U.S. Naval Academy / Naval Support Activity	7,525	Higher education
Johns Hopkins Applied Physics Laboratory	7,000	R&D systems engineering
Leidos	5,150	Commercial physical research
Lockheed Martin Corp.	5,050	HQ / Systems engineering software
Booz Allen Hamilton	3,625	General Management Consulting Services
Naval Support Facility (NSF) Indian Head	3,300	Federal military installation
National Maritime Intelligence-Integration Office (NMIO)	3,150	Federal maritime intelligence analysis
NASA / Goddard Space Flight Center	3,000	Federal space research
General Dynamics Corp.	2,625	Computer related consulting services
Naval Surface Warfare Center, Carderock Division	2,625	Defense technology R&D
W. L. Gore & Associates	2,400	GORE-TEX® medical products / R&D
Raytheon	2,225	Engineering services

Notes: Numbers are rounded. Employee counts for federal and military facilities exclude contractors to the extent possible; embedded contractors may be included.
Source: Maryland Department of Commerce, December 2022.

Selected Rankings

- Maryland ranks second among the states in the percentage of professional and technical workers (30%) in the workforce

- Maryland ranks 2nd among the states in federal obligations for research and development ($20.7 billion), and 2nd on a per capita basis.
- Maryland has the sixth-highest concentration of computer and information and research scientists in the nation and is fifth for physical scientists. Further, the state ranks fifth in the nation in the concentration of aerospace engineers in the workforce.
- The California-Lexington Park area of Southern Maryland has the highest concentration of Aerospace Engineers nationally by location quotient and the annual mean wage of Aerospace Engineers in the state trails only Washington DC nationally.

Industry Snapshot – Aerospace & Defense in Maryland

- Employment (2023) – 112,962 private sector jobs (161,055 including public sector)
    - Leading subsectors:
        - Computer systems design and related services – 79,485 jobs
        - National security – 40,905 jobs
        - R&D in physical, engineering and life sciences – 17,731 jobs
        - Product & Parts Manufacturing – 17,275 jobs
- Business establishments (2023) – 12,475
- Total private wages (2023) – $21.8 billion
- Average salary (2023) – $135,044
- Gross state product (2023) – $46.4 billion
- Defense procurement (FY2023) – $18.3 billion

Sources: Maryland Department of Labor; U.S. Bureau of Economic Analysis; U.S. Census Bureau, DoD/OLDCC.

Employment by Occupation

Maryland Employment – May 2023

Selected Occupations	Employment	Location Quotient*	
		Index	Rank
Aerospace Engineering and Operations Technologists and Technicians	260	1.39	8
Aerospace Engineers	2,810	2.39	5
Atmospheric and Space Scientists	740	4.52	3
Cartographers and Photogrammetrists	570	2.63	8
Computer and Information Research Scientists	2,310	3.72	2
Computer Network Support Specialists	8,670	3.1	1
Computer Programmers	2,980	1.41	9
Computer Systems Analysts	13,800	1.57	5
Electrical and Electronic Engineering Technologists and Technicians	1,890	1.1	18
Electrical Engineers	3,950	1.21	14
Electronics Engineers, Except Computer	3,110	1.83	3
Materials Engineers	910	2.09	4
Mechanical Engineers	5,600	1.13	13

* Location Quotient indicates concentration of the occupation in Maryland, with national average equal to 1.0. Rank indicates Maryland's rank among the 50 states.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics.

Assets & Resources

- Aberdeen Proving Ground (APG) – Army Research, Development and Testing Command; Army C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance).
- Maryland Defense Technology Commercialization Center (DefTech) – Resources for companies and entrepreneurs interested in commercializing technology developed at APG.
- Army Research Laboratory – The Army's basic and applied research laboratory.
- Fort George G. Meade – National Security Agency; Defense Information Systems Agency; U.S. Cyber Command.
- Naval Air Station Patuxent River – Naval Air Systems Command; Naval Air Warfare Center, Aircraft Division.
- NASA Goddard Space Flight Center – The largest earth and space science research organization in the world.
- Space Telescope Science Institute - Operated by the Association of Universities for Research in Astronomy (AURA), STScI helps humanity explore the universe with advanced space telescopes and ever-growing data archives.
- NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) – Provides secure and timely access to global environmental data and information from satellites and other sources to promote and protect the nation's security, environment, economy, and quality of life.
- Johns Hopkins University Applied Physics Laboratory – Research center with expertise in air and missile defense, national security, space and satellites, and undersea warfare.
- University of Maryland College Park – A top-ranked school in aerospace engineering; home to the Glenn L. Martin Wind Tunnel.
- University of Maryland UAS Research and Operations Center – UAV test site stands at the forefront of UAS rulemaking, commercialization, and national airspace integration.
- USMSM MATRIX Lab - High-tech research and education facility with unique features built to advance autonomy and uncrewed systems.

New & Expanding Businesses

- L3Harris Technologies, Inc. (Anne Arundel County) – Global aerospace and defense technology company, announced plans to expand with an additional 45,000 square feet in Hanover, and adding 90 new jobs in three years.
- Smartronix, Inc. (St. Mary's County) – Company that provides Cloud, engineering, and IT services, bought Virginia-based Datastrong, adding 75 jobs for a total of 1,200 jobs.
- Oceaneering International, Inc. (Anne Arundel County) – Company that develops innovative technology and equipment for the energy, renewables, aerospace, and defense industries, is expanding its operations in and creating more than 135 new full-time jobs and adding approximately 24,000 square feet of office space.
- Salisbury-Ocean City Wicomico Regional Airport (Wicomico County) – is adding an 8,000-square-foot hangar for the SBY UAS Center for Innovation for testing and certification of unmanned aircraft systems.
- RADA Technologies (Montgomery County) – Company that produces electronics for the aerospace and defense industries is planning a new headquarters, including R&D and manufacturing operations, anticipating 80 new jobs through 2023.
- Coherent Technical Services (St. Mary's County) – Engineering and technology services company that works with DoD, NASA, and other customers is opening a 40,000-square-foot fabrication and prototyping facility and anticipates hiring at least 35 new employees.

- L2 Defense (Baltimore County) – Rapidly growing firm that provides technical and training expertise to the defense and national security industries has signed a lease for 8,200 square feet.
- Northrop Grumman (Cecil County) – Global security company is expanding its manufacturing operations and plans to add 175 new jobs over the next five years. The facility, which manufactures rocket motors for space launch and military applications, was formerly Orbital ATK.
- Systems Engineering Group (SEG) (Howard County) – Subsidiary of Telephonics Corp. and leading provider of combat, radar, and missile systems engineering and analysis has hired 40 new employees in Columbia, with additional growth expected.
- Chesapeake Technology International (St. Mary's County) – Systems engineering and support operation for military, space-based, and electronic warfare systems opened a new headquarters near the county airport.
- The Aerospace Corporation (Prince George's County) – Federally funded research and development center with 20 locations nationwide leased 12,000 square feet in Greenbelt.
- Mistral Group (Baltimore County) – Bethesda-based firm providing solutions to the U.S. market through adaptation and integration of Israeli defense technologies has opened a new manufacturing facility resulting in 50 new jobs.
- Wilcoxon Sensing Technologies (Frederick County) – Manufacturer of sensing and vibration equipment for the defense and other industries moved their 40,000-square-foot headquarters to Frederick.
- Nammo Energetics Indian Head (Charles County) – Norwegian missile manufacturer announced plans to open a production facility for rocket motors and warheads at the Naval Surface Warfare Center Indian Head, creating 130 jobs over five years and investing $30 million.
- ELTA North America (Howard County) – Israeli defense giant ELTA announced plans to triple its footprint in Maryland by adding up to 50 new jobs and signed a lease for 21,500 square feet.
- Envistacom (Frederick County) – Research and development facility dedicated to the development and production of high-speed computer hardware for defense capabilities. This new facility will employ as many as 50 new positions.
- Rocket Labs (Baltimore County – Space satellite manufacturer operating out of 113,000 SF former Lockheed Martin facility and supporting 65 new jobs.

Programs & Incentives

- Maryland Technology Development Corporation (TEDCO) – Facilitates technology transfer from academic and federal labs into the private sector with seed funding, technical assistance, and entrepreneurial support programs.
- Maryland Aerospace and Technology Commission (MATC) - Created to promote innovation in the fields of space exploration and commercial aerospace opportunities, including the integration of space, aeronautics, and aviation industries into the economy of the State.
- Maryland Advanced Air Mobility (MAAM) Council - Engages with the advanced air mobility industry, regulators, local governments, and other relevant parties regarding the operation of advanced air mobility technologies in Maryland.
- Research & Development Tax Credit – Credit for R&D expenses for certified businesses.
- Innovation Investment Tax Credit – Refundable tax credit for investment in qualified seed and early stage technology companies in designated industries, including cybersecurity.

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