



Information Technology

Maryland's information technology industry thrives on a concentrated and collaborative environment spurring innovative communities in cybersecurity, information technology, interactive technologies, and communications. A strong network of research and education resources and a highly educated and talented workforce stimulate myriad opportunities for new and expanding businesses. Maryland's 18,717 information technology businesses are annually awarded \$13.0 billion in federal contracts and generate \$77.1 billion in economic activity, making it one of the nation's leaders and a major economic engine for the state.

Major Information Technology Employers in Maryland

Employer	Employment	Product / Service
Northrop Grumman Mission Systems	12,900	HQ / Electronic surveillance products
United State Naval Academy	7,525	Defense/ Education
Verizon Communications	7,375	Telecommunications
Johns Hopkins Applied Physics Laboratory	7,000	R&D systems engineering
Leidos	5,100	Cybersecurity and Custom Computer Programing services
Lockheed Martin Corp.	5,050	HQ / Systems engineering software
Naval Surface Warfare Center, Carderock Division	2,625	Defense technology R&D
General Dynamics Corp.	2,625	Computer related consulting services
DXC Technologies (was CSC)	2,150	IT services
Comcast	2,075	Cable and internet services
Infosys	2,000	Custom Computer Programming Services
National Institute of Standards (NIST)	2,000	Cyber/Quantum/AI
ASRC Federal (Arctic Slope Regional Corp)	1,900	Research and Engineering
KBR Inc	1,800	Technical and scientific research services
Westat	1,750	HQ / Contract research and surveys
CACI, Inc.	1,600	Computer systems design services
Textron Systems	1,500	HQ / Defense systems
Hughes Network Systems	1,200	HQ / Communications systems and equipment
Jacobs Engineering (was KeyW)	1,175	IT services / Cyber
Tenable	500	IT services / Cyber

Note: Numbers are rounded.

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 number one in Cyber Talent Globally per CBRE "Cybersecurity : Global Talent Spotlight," 2024

- Maryland ranks number 3 for Best State for AI jobs Source: Insider Monkey, “Top 5 States AI Jobs,” 2024.
- Maryland ranks number 5 in Cybersecurity Source: Business Facilities Annual Rankings Report, 2023.
- Maryland ranks top 5 in Quantum computing hub - Source: Investment Monitor, “World’s Top 5 Quantum Computing Hubs,”
- Maryland ranks fourth in the Milken Institute’s State Technology and Science Index for 2022, second for research and development inputs and human capital investment, third for technology and science workforce, and seventh for technology concentration and dynamism.
- In the 2024 Business Facilities ranking report, Maryland ranks sixth for cybersecurity growth potential, which is based on the state’s cyber ecosystem, including higher education resources, research labs and innovation centers, employment, and partnerships with national security programs.
- According to the CompTIA’s State of the Tech Workforce 2024 report, Maryland holds a number of high-ranking stats: fifth among the states in median tech occupation wages (\$116,220), third in the ratio of Black or African American Representation (22%), sixth among the states for the highest concentration of tech workers relative to overall employment base (8.0%), ninth for tech job postings, and tenth for tech GSP as a percentage of total GSP (8.9%).
- The University of Maryland, College Park ranks as the eighth-best research institution for quantum computing. The University is home to the one of first quantum computing firms to go public.

Industry Snapshot – Information Technology in Maryland

- Employment (2023) – 124,210 private-sector jobs (127,986 including public-sector)
- Leading subsectors:
 - Computer systems design and related services – 84,767 jobs
 - Telecommunications – 10,117 jobs
 - Computer and electronic product manufacturing – 5,953 jobs
- Business establishments (2023) – 18,717
- Total wages (2023) – \$17.7 billion
- Average salary (2023) – \$138,598
- Gross state product (2023) – \$77.1 billion
- Federal procurement (FY2022) – \$13.0 billion

Sources: Maryland Department of Labor; U.S. Bureau of Economic Analysis; U.S. Census Bureau.

Employment by Occupation

Maryland Employment – May 2023

Selected Occupations	Employment	Location Quotient*	
		Index	Rank
Computer and Information Research Scientists	2,310	3.72	2
Computer and Information Systems Managers	13,570	1.3	6
Computer Network Architects	6,760	2.2	3
Computer Network Support Specialists	8,670	3.1	1
Computer Occupations, All Other	21,560	2.8	2
Computer Programmers	2,980	1.41	9
Computer Systems Analysts	13,800	1.57	5
Database Administrators	1,790	1.33	7
Database Architects	710	0.67	28

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
Information Security Analysts	7,890	2.55	2
Network and Computer Systems Administrators	8,040	1.41	6
Software Developers	30,700	1.05	13
Software Quality Assurance Analysts and Testers	7,440	2.08	2
Web Developers	2,070	1.37	9
Web and Digital Interface Designers	1,260	0.64	19

* 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

- DataTribe - Builds and launches successful product companies. Starts relationships with seed stage companies by making an investment and accepting them in The Foundry
- National Security Agency (NSA), Defense Information Systems Agency, and the U.S. Cyber Command.
- National Institute of Standards and Technology (NIST) – Supports U.S. innovation through research, measurements, standards, business services, and other programs.
- University of Maryland Baltimore County – One of the top ten in the nation among most innovative schools (U.S. News) and home to the Center for Information Security and Assurance.
- University of Maryland College Park –A top-ranked university in computer science and information systems, and in preparing cybersecurity professionals.
- Baltimore Cyber Range – Advanced cyber security training facility utilizing a hyper-realistic virtual network environment, advanced network tools and real-world attack scenarios.
- Maryland Innovation & Security Institute (MISI) – Non-profit dedicated to advancing cyber security innovation and collaboration.
- National Quantum Lab - UMD is home to the National Quantum Lab in Maryland or Q-Lab, which offers flexible training in practical quantum computing.
- Quantum StartUp Foundry - Quantum Startup Foundry, dedicated to quantum innovation, brings entrepreneurs together with industry and government customers, investors, technical mentors, leading-edge research and IP, and quantum-specific infrastructure.
- Quantum Technology Center, located at the University of Maryland in its new \$67 million dollar home.
- The Idea Factory - offers an interdisciplinary lens on quantum computing.
- Other quantum research centers at UMD include the Quantum Materials Center (QMC) and the Condensed Matter Theory Center.
- Mid-Atlantic Quantum Alliance - Rooted at UMD, is an inclusive community designed to accelerate innovation across the range of quantum technologies.
- Artificial Intelligence Interdisciplinary Institute at Maryland
- Center for Equitable Artificial Intelligence and Machine Learning Systems - Morgan State has many initiatives focused on ensuring inclusivity in AI. The University also offers AI Machine Learning Bootcamp, a comprehensive training course.
- Data Science and AI Institute - located at Johns Hopkins University, focuses on research and education in data science, machine learning, and artificial intelligence across
- Center for Applied AI (C4AI) at UMBC Training Center - formed to help organizations and individuals meet the challenge of applying artificial intelligence (AI) and related exponential technologies to complex, real world problems and use-cases in diverse fields.

- UMBC Training Centers - premier provider of professional and technical training for individuals, businesses, non-profit organizations, and government agencies. UMBC Training Centers is an affiliate organization of the University of Maryland, Baltimore County (UMBC).
- BWTech - Focused on commercializing cutting-edge technology and bio-life science innovations from UMBC research and Maryland entrepreneurs. Work with businesses at all stages of maturity. Offer premium workspaces, services, educational programs, expert mentorship, and access to key industry resources, empowering entrepreneurs to transform their innovative ideas into successful, sustainable businesses, and fostering local economic growth.
- Maryland Tech Council -collaborative community that is actively engaged in building strong technology and life science industries by supporting the efforts of individual members. They are the largest technology and life sciences trade association in the state of Maryland and provide value by giving members a forum to learn, share, and connect.
- Cyber Association - Trusted community for companies that view cybersecurity as a strategic issue. We provide an ecosystem through advocacy, education, and growing the cyber community.
- UpSurge -Ecosystem builder for Baltimore Tech. We're building a thriving tech ecosystem for innovators, founders, and talent, by strengthening its culture and connectivity and mobilizing regional and national assets around Baltimore startups.

Programs & Incentives

- Build Our Future Grant Pilot Program - Provides grants for infrastructure projects to advance innovation and growth in eligible technology sectors. Grants may be awarded to private companies, nonprofit entities, local governments, or colleges and universities.
- Business Telework Assistance Grant - Provides grants of up to \$25,000 to help businesses expand telework capabilities for their employees and help applicants purchase the equipment necessary to develop and implement telework policies, including hardware, software, and technical services.
- Data Center Maryland Sales and Use Tax Exemption Incentive Program - Data centers that locate or expand in Maryland and create new full-time positions may receive an exemption from Maryland sales and use tax on the purchase of qualified data center personal property.
- Employer Security Clearances Costs (ESCC) Tax Credit - Provides income tax credits for expenses related to federal security clearance costs, construction of Sensitive Compartmented Information Facilities (SCIFs) and first-year leasing costs for small businesses doing security-based contract work.
- Partnership for Workforce Quality (PWQ) - Provides matching training grants and support services targeted at improving the competitive position of small and mid-sized manufacturing and technology companies.
- Maryland Innovation Investment Tax Credit - IITC fosters the growth of Maryland's technology sectors by incentivizing investment in early-stage companies with the goal of increasing the number of companies developing innovative technologies in Maryland, increasing overall investments in current and emerging technology sectors, and increasing the number of individual investors actively investing in Maryland technology companies. IITC provides an income tax credit equal to 33% of an eligible investment in a Qualified Maryland Technology Company (QMTC) up to \$250,000 in tax credits, or 50% of an eligible investment in a QMTC up to \$500,000 in tax credits if the QMTC is located in Allegany, Dorchester, Garrett or Somerset County.
- TEDCO Funding Programs (Various) - TEDCO (Maryland Technology Development Corporation) manages a variety of programs to help for-profit Maryland companies in their effort to develop and commercialize new technology-based products.

Contact for assistance:

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