Ohio Military & Federal Factbook 2021

Presented by



Ohio's Economic Development Corporation

Table of Contents

Study Overview	2
Ohio Military Facts	3
Impacts by the Numbers	4
State & Regional Impacts	6
Northwest Region	8
Northeast Region	12
Central Region	18
Southwest Region	28
Southeast Region	32
Western Region	36
Jobs Ohio Regional Network	42
The Ohio Aerospace and Defense Pillars and Strategy	46
Map of Ohio Defense Manufacturing Contractors	48
Did You Know?	50
Glossary	51
Acronyms	52

Cover Photo Descriptions/Sources: (Front Cover) NASA Glenn's Neil Armstrong Test Facility Vacuum Chamber, NASA,2012, www.nasa.gov; F-15 Conducts Training Flight, Senior Airman Kregg York, 2020, DVIDS. (Back Cover) AFIT Student Conducts Gas Turbine Engine Tests, Michelle Gigante, 2016, DVIDS.

Letter from the Governor



hio is home to an amazing military and federal sector that contributes to the critical defense of our nation and its advancements in space. This document reflects the indelible, positive economic impact this network creates and in every corner of our state. As Governor, it has been a tremendous honor and a privilege to continue strengthening these installations and

missions. Because of the critical importance that the military is to our state and great nation, our state's economic development organization, JobsOhio, instituted a new Federal and Military Industry Sector. The ability for this new sector to provide focused support to Ohio's many military and federal installations enhances the state's capacity to attract and retain the missions that will continue to propel us forward as leaders in national security, exploration and innovation.

Supporting these installations are a vast network of active-duty military, veterans, civilian employees, federal contractors and their families. These groups are vital, not only to the achievement of our missions, but to the continued economic health of the state. As we continue our strategy to generate more jobs, partnerships, and economic development opportunities throughout Ohio, we remain mindful of the benefits supporting robust programs and services for our individual service members and their families.

The economic impact of our dedicated military and federal community is vast, and the figures in this document speak to the importance of investing in them to ensure Ohio continues to remain the #1 state for military and federal missions, their workforce, families and industry partners.

Very respectfully yours,

mile Dewin

Mike DeWine | Governor

Study Overview

obsOhio commissioned this statewide economic impact study of the Ohio defense-related industries to identify and promote the economic value of the state's defense-related assets. This study employs industry standard econometric forecasting models and publicly available spending data to provide direct, indirect, and induced economic impact estimates at the state and regional level. Estimates were developed for each member region in the JobsOhio Regional Network. The study considers military and federal spending, both on and off installations, which includes military and federal contractors not associated with an installation. as well as benefits received by veterans and military retirees residing in-state, and the operations of each of the Veteran Affairs Medical Centers located across the state. Data was primarily collected from the U.S. Department of Treasury, U.S. Department of Defense (DoD), U.S. Department of Veterans Affairs (DVS), U.S. Department of Homeland Security (DHS), National Aeronautics and Space Administration (NASA), Ohio National Guard, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and the REMI PI+ econometric forecasting model.

In 2020, total military and federal spending in Ohio was roughly \$22.20 billion. As can be seen from the chart to the right, just over 35% of these dollars were transfer payments flowing to the 741,600 veterans and military retirees residing in Ohio. Another 35% came in the form of procurement contracts in support of the state's military installations and the off-installation contractors developing weapons systems, conducting research and development, and providing a litany of other military support services. The remaining 30% of spending went to the men and women serving our nation in the form of annual compensation including active duty, government civilian, National Guardsmen, and reservist stationed throughout the state.

The economic impacts presented in this booklet capture the multiplier effect of military and federal spending flowing through the state's economy. These estimates were generated using the REMI PI+ econometric forecasting model. The model measures the direct, indirect, and induced economic effects of Ohio's military and federal sector as well as the trade flow effects occuring between each of the state's six regions. In total, the 2020 military and federal spending supported an estimated 380,500 jobs, nearly \$40 billion in gross regional product and represents \$69 billion in total economic activity - accounting for nearly 6% of the state's economy.

Ohio Military Facts

Direct Military & Federal Spending, 2020 (Billions of Current USD)

Total Spending = \$22.20 Billion

\$10	
\$7.70 \$5- \$5- \$5- \$5- \$5- \$5- \$5- \$5-	6.81
	ersonnel opensation
Total Statewide Gross Output (Billions of Current USD)	\$69.00
Total Statewide Economic Impact (Billions of Current USD)	\$39.90
Percent of Ohio Economy	5.92%
Statewide Direct Jobs	110,900
Statewide Direct, Indirect, and Induced Jobs	380,500
Buildings Owned by the Military	2,440
Total Acreage (all Installations)	36,322
Plant Replacement Value (Billions of Current USD)	\$21.1
Active Duty Personnel	7,071
Federal Civilian Personnel*	45,098
Military Reserve	11,516
Not set O and	16,413
National Guard	10,413
National Guard Total Veterans Living in Ohio	741,602

* Includes Department of Defense, Coast Guard, Department of Veterans Affairs, and National Aeronautics and Space Administration workers

Impacts by the Numbers



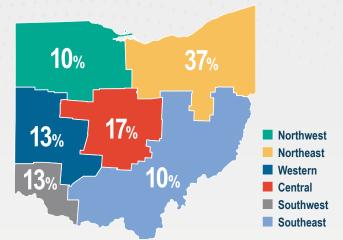
Over 55% of all contracts are concentrated in **2 Industries**



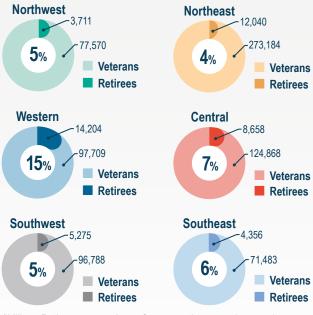




Veteran Distribution by Region



Percentage of Regional Veteran Population that are Military Retirees

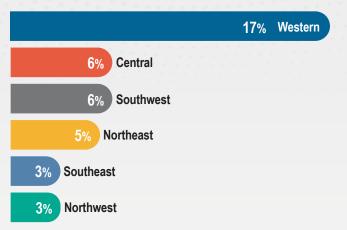


*Military Retirees are a subset of veterans that not only served a term in the military but have also retired from the military and receive additional monetary benefits.

State & Regional Impacts

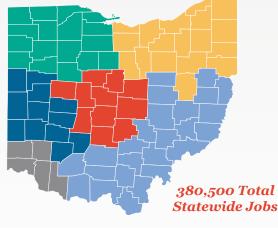
Military & Federal Spending as a Percentage of Each Region's Economy

Percentage of Gross Regional Product



Total Direct, Indirect, and Induced Employment Impacts of Military & Federal Spending

Number of Jobs per Region



Northwest	18,000	Northeast	108,500
Western	103,200	Central	75,900
Southwest	58,600	Southeast	16,300

State Military & Federal Economic Impacts (Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$69.00	5.43%	
Regional Economic Impact	\$39.90	5.92%	
Jobs	380,500	5.37%	
Personal Income	\$31.90	5.24%	
Personal Consumption	\$24.70	4.77%	
Capital Investment	\$9.10	8.21%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$7.70	
Compensation		\$6.81	
Pensions and Transfers		\$7.68	
Total Military & Federal Spe	\$22.20		

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.



Jobs - Estimates of the number of full-time and part-time jobs supported by military and federal spending.



Regional Economic Impact - Net-value of goods and services produced by labor and property.



Gross Output - The amount of production, including all intermediate goods purchased as well as value added (compensation and profit).



Personal Income - Income received by persons from all sources, including wages and salaries, benefits, proprietors' income, rental income, and transfer payments.



Personal Consumption - The goods and services purchased by individuals.



Capital Investment - Purchases of residential and nonresidential structures and of equipment and software by private businesses and nonprofit institutions.

Northwest Region

F-16C Fighting Falcon, Toledo ANG. Photo Source: Airman 1st Class Harry Brexel, 2014, www.af.mil.

The Northwest region of Ohio is home to the Joint Systems Manufacturing Center (Lima) as well as the Ohio National Guard units who train at Camp Perry and those attached to the Toledo Express Air National Guard Base. Additionally, more than 77,500 veterans reside in the region, of which 3,700 are military retirees.

Total direct military and federal spending was approximately \$960 million in 2020 - \$240 million in procurement contracts, \$166 million in military and civilian compensation, and \$558 million in pensions & transfers to the region's veterans and military retirees.

Military and federal activities and investment supported roughly 18,000 jobs and \$1.8 billion in regional economic impact, which accounts for 2.62% of the region's economy. Although this spending supports less than 3% of the region's economy, many of the jobs tied to this sector offer wages higher than the state average.



Northwest Region Military & Federal Economic Impacts

(Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$3.30	2.25%	
Regional Economic Impact	\$1.80	2.62%	
Jobs	18,000	2.49%	
Personal Income	\$1.60	2.68%	
Personal Consumption	\$1.30	2.48%	
Capital Investment	\$0.50	3.83%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$0.24	
Compensation		\$0.17	
Pensions and Transfers		\$0.56	
Total Military & Federal Sper	\$0.96		

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.

Northwest Region

Joint System Manufacturing Center – Lima Allen County

Joint System Manufacturing Center (JSMC) is a subordinate unit of the Tank-Automotive & Armaments Command (TACOM) and home to the Program Executive Office Ground Combat System (PEO GCS). JSMC is a U.S. Army Government Owned, Contractor Operated (GOCO)



Army M1A2 SEP v2 Abrams Tank. Photo Source: Albert Jernigan, 2015, 16th Mobile Public Affairs Detachment.

facility operated by General Dynamics Land Systems that provides the Department of Defense (DoD) with the manufacturing, repair, and refurbishment of heavy and light armored combat vehicles. The JSMC specializes in cost effectiveness and responsiveness alongside the private industry, while maintaining control of equipment for preservation of mission readiness. In particular, the JSMC produces combat vehicles and their components for the M1 Abrams Family, the hull structure of the Namer Armored Personnel Carrier, hull structures for the Stryker Family of Vehicles, and MK 46 Naval Weapons Gun Station turrets.

Camp Perry Joint Training Center Ottawa County

Camp Perry is a National Guard training facility and home to the 213th Ordnance Company, the 372d Missile Maintenance Company, the 200th RED HORSE Squadron, U.S. Coast Guard Port Security Unit 309 and the Ohio Naval Militia. Camp Perry's various



A shooter/instructor with the U.S. Army Marksmanship Unit fires his pistol at Camp Perry. *Photo Source: Maj. Michelle Lunato*, 2018, DVIDS.

squadrons come with a multitude of missions including highly mobile engineering, logistics, and construction capabilities and units to patrol Lake Erie and their overwater range. Additionally, Camp Perry hosts a Civilian Marksmanship Program, the National Rifle Matches, and is also home to the second longest shooting range in the country.



A crew chief launches an F-16 Fighting Falcon for a training flight. Photo Source: Airman Hope Geiger, 2017, DVIDS.

Toledo Express Air National Guard Base Lucas County

Located in Swanton, the Toledo Air National Guard Base (ANGB) and its host unit, the 180th Fighter Wing, are currently charged with protecting the homeland through effective combat power and defense support to civil authorities as well as developing Airmen, supporting their families, and



serving in the community. More specifically, the 180th Fighter Wing engages in both the Fighter and Air Sovereignty Missions developing pilots who can defend the U.S. and its allies through air-to-air and air-to-ground operations. These operations are designed to support ground forces and gain control of enemy airspace while protecting American airspace using early detection radar systems and eliminating any threats using F-16 Fighting Falcon aircraft assigned to the Wing.

<image><image>

The Orion spacecraft for the Artemis I mission. Photo Source: NASA/Marvin Smith, 2020, www.nasa.gov.

The 18-county region of Northeast Ohio is home to a variety of military installations, veterans support services, research facilities, and DoD's "Fourth Estate" functions. Military installations include Youngstown Air Reserve Station, Mansfield Lahm Air National Guard Base, and Camp Garfield; veterans support services include the Louis Stokes Cleveland VA Medical Center; research facilities include those at NASA's Glenn Research Center; and, the DoD's Defense Finance Accounting Services located in Cleveland. The region is also home to 37% of the state's veterans with more than 273,000, of which over 12,000 are military retirees.

In all, more than \$5.5 billion in military and federal spending was realized in 2020. Given the region's large veteran population, nearly 50% of this spending came as pensions and transfers to veterans residing in-region; more than 30% came in the form of compensation for the region. Additionally, more than 30% came in the form of compensation for the region's military and civilian employees while 20% went to the procurement contracts performed in the region.

This \$5.5 billion in direct spending translated to roughly 108,500 jobs, \$10.6 billion in regional economic impact, and \$18.3 billion in gross output. These economic impacts constituted approximately 4.5% of the region's total economy in 2020.



Northeast Region Military & Federal Economic Impacts

(Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$18.30	4.20%	
Regional Economic Impact	\$10.60	4.54%	
Jobs	108,500	4.19%	
Personal Income	\$9.00	4.02%	
Personal Consumption	\$6.90	3.67%	
Capital Investment	\$2.50	6.37%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$1.14	
Compensation		\$1.75	
Pensions and Transfers		\$2.63	
Total Military & Federal Sper	\$5.52		

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.

Northeast Region

Glenn Research Center, NASA

Cuyahoga County

The Glenn Research Center, located at Lewis Field in Northeast Ohio, has designed and developed innovative technology for advancing NASA's missions in aeronautics and space exploration since its formation in 1942. The unique facilities at Glenn Research Center enable NASA, other government agencies, and partners in the academic and industrial spaces, to perform specialized research and training. One of these partners includes the Boeing Space Launch System (SLS) responsible for the design, development, and delivery of the hydraulic system in the Core Stage of the SLS, the nation's next human-rated rocket that will transport people and cargo to deep space. Besides their dozen or more missions in research and development. Glenn Research Center also provides high school students with internships and competitive experiences through the Lewis' Educational and Research Collaborative Internship Program (LERCIP) and the annual Dropping in Microgravity Environment competition in which selected teams perform experiments in the Zero Gravity Research Facility. Glenn currently employs over 1,600 federal civilians and over 1,500 contract employees.

Main Gate at NASA Glenn Research Center. Photo Source: NASA/GRC/Marvin Smith, 2012, www.nasa.gov.





VA Northeast Ohio. Photo Source: U.S. Department of Veterans Affairs.

VA Northeast Ohio Cuyahoga County

Headquartered within the Louis Stokes Cleveland VA Medical Center, the 5,497 employees of Northeast Ohio's VA Healthcare System served 111,538 veterans across 21 counties throughout the region in 2020. The 18 care locations in Northeast Ohio include 13 outpatient clinics, two community resource and referral centers, a psychosocial rehabilitation and recovery center, a chronic dialysis center, and an outpatient surgery center. The main focus of the healthcare system is to treat veterans through health promotion and disease prevention by providing comprehensive, seamless health care and social services. Additionally, VA Northeast Ohio supports the future of medicine through strong education, training, and research programs, with the ultimate goal of providing the safest and highest quality health care to our nation's veterans.

Defense Finance Accounting Service Cleveland Cuyahoga County

Situated within the Anthony J. Celebrezze Federal Building, Defense Finance Accounting Service (DFAS) Cleveland is part of one of the world's largest accounting and finance operations. The primary mission of DFAS Cleveland is to provide the best accounting and financial services in support of the Soldiers, Sailors, Marines, Airmen, Guardians, and federal civilians who defend America. With 2,250 operational employees and 400 corporate employes, DFAS Cleveland currently handles pay services for the active and reserve components of all military branches, retirees & annuitants, and federal civilian employees.

Northeast Region

Youngstown Air Reserve Station

Trumbull County

Youngstown Air Reserve Station (YARS) is home to the 910th Airlift Wing and the DoD's only large area fixed-wing aerial spray capability to control disease-carrying insects, pest insects, undesirable vegetation and to disperse oil spills in



Operations plans chief taxis a C-130H Hercules aircraft on the flightline. *Photo Source: Senior Airman Chirstina Russo*, 2020, DVIDS.

large bodies of water. Its C-130 Hercules aircraft are used daily across the Country and around the world to perform tactical and humanitarian airlift, and aerial spray missions. YARS is also home to the Youngstown Civil Air Patrol (CAP), a youth leadership development program centered around aviation and the military.

Mansfield Lahm Air National Guard Base Richland County

At Mansfield ANGB there are several active missions. The focus of the 179th Airlift Wing (179 AW) is Air Mobility, a mission that delivers global air transportation of equipment, supplies, personnel, or dignitaries during times of war and for peace-time training exercises. In addition, the 179 AW also participates in disaster relief efforts and other domestic/overseas emergencies as commanded. A Detachment of the 200th RED HORSE Squadron is also stationed at Mansfield ANGB, standing ready to provide a highly mobile civil engineering response forces that includes heavy repair and construction capabilities to support contingency and special operations missions worldwide.

Airmen depart their home station in a C-130H Hercules. Photo Source: Master Sgt. Joseph Harwood, 2021, DVIDS.



910th Security Forces Squadron member prepares to fire his M4 rifle on a full-distance firing range at Camp James A. Garfield. *Photo Source: Mr. Eric M. White, 2021, DVIDS.*

Camp Garfield

Portage County

Camp Garfield is a National Guard military base and Joint Military Training Center located in Ravenna, Ohio. Camp Garfield's main purpose is to facilitate unit readiness requirements. Its abundance of training assets and state-of-the-art digital training equipment, spread across 21,000 acres, provide for a realistic combat training environment for Pre-Mobilization, Inactive Duty Training, and Annual Training Events. With improved features such as a Fire and Movement Range, Automated Record Fire Range, and Training Aids, Devices, Simulators, and Simulation (TADSS), Camp Garfield has become one of Ohio's premier training installations.

U.S. Coast Guard 9th District

Cuyahoga County

The Ninth Coast Guard District of Ohio is currently located at the Anthony J. Celebrezze Federal Building in Cleveland, OH. The Ninth Coast Guard District, also known as The Guardians of the Great Lakes, is in charge of all Coast Guard Operations amongst the five Great Lakes, the Saint Lawrence Seaway, and large portions of surrounding states that include 6,700 miles of shoreline and 1,500 miles of the international border with Canada. Under the charge of a rear admiral, the roughly 6,000 active duty, reserve, civilian, and auxiliary men and women who comprise the Ninth Coast Guard District are responsible for the delivery of multimission services related to search and rescue, maritime safety and security, environmental protection, maritime law enforcement, aids to navigation, and ice-breaking. Geographically, District Nine is subdivided into five sub-sectors who are then made up of 48 active stations, various Air Stations and Cutters, several Marine Safety Units, and a handful of Aids to Navigation Teams.

Central Region

A KC-135 Stratotanker refuels a C-17 Globemaster III. Photo Source: Master Sgt. Patrick O'Reilly, 2018, Flickr.

The Central Region is made up of 11 counties with several military installations and DoD "Fourth Estate" functions. Military installations include Ohio National Guard Headquarters, Rickenbacker Air National Guard base and several smaller Guard armories. "Fourth Estate" functions include Defense Finance Accounting Service-Columbus, Defense Information System Agency, Defense Logistics Agency Land and Maritime, and Air Force Meteorology and Calibration. The region is also home to the Columbus VA Ambulatory Center which supports the region's 124,900 veterans.

The region received nearly \$3.5 billion in spending during 2020. Spending was spread roughly the same across the three components with procurement contracts constituting just under 30%, compensation at 35% and pensions & transfers making up the remaining 35%.

In terms of military and federal impacts on the economy, these dollars supported nearly 76,000 jobs, \$7.6 billion in regional economic impacts, and \$12.9 billion in gross output. This represents roughly 5.6% of the region's total economy.



Central Region Military & Federal Economic Impacts

(Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$12.90	5.26%	
Regional Economic Impact	\$7.60	5.60%	
Jobs	75,900	5.14%	
Personal Income	\$6.20	5.15%	
Personal Consumption	\$4.70	4.62%	
Capital Investment	\$1.80	8.40%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$0.97	
Compensation		\$1.26	
Pensions and Transfers		\$1.22	
Total Military & Federal Sper	\$3.45		

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.

Central Region

Defense Finance Accounting Service Columbus Franklin County

Located on the Defense Supply Center Columbus (DSCC) installation, DFAS Columbus is the Center of Excellence for Acquisition Accounting, the largest customer mission area within DFAS. When it comes to large purchases within the DoD, DFAS Columbus makes both the contract payments and performs all related accounting processes. In addition to Acquisition Accounting, DFAS Columbus also hosts the key functions in Travel Pay and Accounting Operations in the following areas: Accounts Payable, Accounts Receivable, Accounts Maintenance, Control and Departmental Reporting, Customer Call Center, and System Operations. Major Defense agencies' accounting and related vendor pay work are also located at DFAS Columbus. Overall, the centralized organizational structure and managerial oversight of the entire end-to-end process provide DFAS Columbus with significant procedural efficiencies.

Defense Finance and Accounting Service general ledger branch division chief discusses a report with DFAS General Ledger branch chief during the Army's mock fiscal yearend closeout at the Maj. Gen. Emmett J. Bean Federal Center. Photo Source: Mark R. W. Orders-Woempner, 2021, DVIDS.



VA Central Ohio Franklin County

Located at the Chalmers P. Wylie Ambulatory Care Center in Columbus, the VA Central Ohio Healthcare System improves the health of our nation's veterans by providing exceptional and personalized care. Whether that be surgery, diagnostics,



VA Central Ohio. Photo Source: U.S. Department of Veterans Affairs.

fitness, or rehabilitation, it is the VA Central Ohio's mission to improve the health and well-being of all men and women who have proudly served our country. In addition to the main facility in Columbus, VA Central Ohio offers services in community-based outpatient clinics located in Grove City, Marion, Newark, and Zanesville. In addition to being the leader in veteran health care excellence, VA Central Ohio's business drivers include quality, financial integrity, patient satisfaction, and employee satisfaction.

Defense Information System Agency

Franklin County

The Columbus branch of the Defense Information

System Agency (DISA) is part of a larger entity of DISA that spans 25 states and 7 countries, employing roughly 19,000 people. DISA's main responsibilities include the planning, engineering, acquiring, testing, fielding, operations, and assurance of information-sharing capabilities. DISA provides the Department of Defense and national



leadership with command-and-control solutions and a global enterprise infrastructure. With the ultimate goal of becoming the trusted connection and protection for the warfighter in cyberspace, DISA's mission is to conduct Department of Defense Information Network's operations for the joint warfighter to enable lethality across all warfighting domains in defense of the United States.

Central Region

Defense Logistics Agency Land and Maritime Franklin County

Based in Columbus, Ohio, Defense Logistics Agency (DLA) Land and Maritime is part of the greater DLA which serves as our nation's combat logistics support agency by managing the endto-end global defense supply chain for the six military services, 11 combatant commands, other federal/state/local agencies, and allied nations. DLA responsibilities include the procurement and transportation of items for the DoD and other customers, the direct contract ordering of items needed by the military, and the disposition of excess military property and equipment. DLA Land and Maritime, in particular, manages the supply chain for groundbased and maritime weapons systems' repairs parts, small arms parts, and fluid-handling systems. DLA's overarching mission is to deliver readiness and lethality to warfighters and support the nation with quality, proactive, and global logistics.

Representatives from U.S. Army Forces Command and U.S. Army Tank-automotive and Armaments Command visited the Defense Supply Center Columbus to meet with Defense Logistics Agency Land and Maritime. *Photo Source: Charles Morris, 2019, DVIDS.*





121st Air Refueling Wing, Ohio dedicates one of its KC-135 Stratotankers. Photo Source: Defense Visual Information Distribution Service.

Rickenbacker Air National Guard Base

Franklin County

Home to the 121st Air Refueling Wing (ARW), and several other missions, Rickenbacker ANGB and the host Wing's primary objective is to provide in-flight refueling, using the KC-135 Stratotanker, to extend the flying range of an array of air-based capabilities for the U.S. Armed Forces and allied nations. At Rickenbacker, the homeland defense mission entails the provision of life-saving capabilities in the event of a national emergency resulting from natural or manmade disasters. Rickenbacker's third mission provides weather forecasts that allow commanders to maximize resources by using accurate and relevant battle-space information.

Central Region

Air Force Metrology and Calibration

Licking County

The Air Force Metrology and Calibration's (AFMETCAL) main mission is to acquire and sustain precision measurement capabilities while operating a worldwide calibration network to ensure accurate, reliable, and safe air and space systems performance. To



achieve this, AFMETCAL manages metrology and calibration for the Air Force to ensure systems are accurate, uniform, reliable, and traceable to the National Institute of Standard and Technology (NIST). Additionally, AFMETCAL is responsible for the development, acquisition, and sustainment of Air Force Primary Reference Standards and Base Reference Standards for both the Air Force Primary Standards Laboratory (AFPSL) and Precision Measurement Equipment Laboratories (PMELs) worldwide. AFMETCAL also provides the central management and day to day support of PMELs worldwide which include dealing with facility logistics, staffing, contracting, and financial issues as well as programmatic policy and guidance responsibilities.

88th Logistics Readiness Squadron precision measurement equipment laboratory lead technician mounts a power sensor on a splitter for calibration test reading. Photo Source: Michelle Gigante, 2017, DVIDS.



Boeing Guidance Repair Center

Licking County

Located in Heath, Boeing's Ohio headquarters, the Guidance Repair Center's core business activities include the repair of guidance and navigation electronics for the U.S. Department of Defense. Specific operations and missions include the repair and maintenance of the Minuteman III Intercontinental Ballistic Missile guidance system, as well as the assembly, integration, and testing of the Minuteman III Flight Test, Telemetry, and Termination System. Further



Minuteman III guidance system. Photo Source: Tim Evanson, 2012, Wikimedia.

operations include the repair and maintenance of the avionics and navigation systems found on most U.S. Air Force aircraft, the production and repair of several aircraft subsystems, and the repair and maintenance of the U.S. Navy's Trident navigation system, Electrostatically Suspended Gyro Navigator (ESGN), and Stable Platform Housing for the strategic nuclear submarine fleet.



Central Region

Ohio Army National Guard

Franklin County



16th Engineer Brigade

The 16th Engineer Brigade provides command and control of assigned subordinate units/teams. They assist maneuver and support brigades by executing, coordinating, and directing mobility, counter-mobility, and survivability tasks and providing support to general engineering missions. They enable tailored force packages to be applied to a specific mission group, focused logistics, and constructive force protection. Finally, it reinforces engineers in maneuver brigade combat teams.



37th Infantry Brigade Combat

The 37th Infantry Brigade Combat Team's mission is to provide command, control and supervision of the operation of the brigade and attached units.



174th Air Defense Artillery Brigade The 174th Air Defense Artillery Brigade's mission is to command and coordinate the operations of subordinate air defense artillery battalions and other assigned and attached units in the theater army.

Honor Guard members of the Ohio National Guard present the Colors at the honoree ceremony during Military Appreciation Day at the 42nd Annual Memorial Tournament.





73rd Troop Command

The 73rd Troop Command provides command, control and support of subordinate units during premobilization (peacetime) training and nondeployed (steady state)/domestic operations in order to maintain readiness and mission-essential task list proficiency for eventual mobilization/ deployment in agreement with the adapted sustainable readiness model.



Special Troops Command (Provisional) Special Troops Command (STC) supports Ohio Army National Guard units through all phases of sustainment, restoration, and modernization, so that units are ready to mobilize in support of contingency operations and in support of the National Military Strategy. STC provides support to all Ohio Army National Guard units when called by the governor. The STC provides organized, trained, and equipped units to protect life, property and to preserve peace. STC Soldiers participate in national, state and local programs that support our communities.

Photo Source: Defense Visual Information Distribution Service.



Southwest Region

A team of Tactical Critical Care Evacuation Team students transport a critically injured 'patient mannequin during a TCCET exercise. Photo Source: Marisa Alia-Novobilski, 2018, DVIDS.

The Southwest Region is home to the Cincinnati VA Medical Center, the Great Lakes U.S. Army Corps of Engineers (USACE), and the Blue Ash Air National Guard Station. In 2020, the region received \$4.2 billion in direct military and federal spending. Approximately 70% or \$2.8 billion was from procurement contracts performed in-region, representing the largest share of procurement contracts in the state. Of the \$2.8 billion performed in-region, the General Electric Company performed just over \$1.8 billion with the vast majority being performed in the aerospace industry.

Nearly \$1 billion went to pensions and transfers in support of the 96,800 veterans and military retirees residing in-region. The remaining \$400 million in direct spending flowed to the region's federal civilians working at the Cincinnati VA Medical Center and the USACE as well as the handful of Guardsmen and reservists connected to the Blue Ash Air National Guard Station and Ohio National Guard facilities.

The \$4.2 billion in direct spending supported 58,600 jobs, \$6.7 billion in regional economic impact, and \$12.3 billion in gross output. This spending accounted for 5.7% of the region's economy and nearly 9% of all capital investment.



Southwest Region Military & Federal Economic Impacts

(Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$12.30	5.72%	
Regional Economic Impact	\$6.70	5.72%	
Jobs	58,600	5.34%	
Personal Income	\$5.00	5.06%	
Personal Consumption	\$3.80	4.46%	
Capital Investment	\$1.40	8.99%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$2.83	
Compensation		\$0.40	
Pensions and Transfers		\$0.98	
Total Military & Federal Sper	\$4.21		

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.

Southwest Region

Cincinnati VA Medical Center

Hamilton County

Unlike other VA medical centers within Ohio, the Cincinnati VA Medical Center consists of two divisions located in Cincinnati, OH and Fort Thomas, KY, serving 17 counties in Ohio, Kentucky, and Indiana with six Community Based Outpatient Clinics. Within



Cincinnati VA Medical Center. Photo Source: U.S. Department of Veterans Affairs.

the Cincinnati campus, there are three additional locations which include the Eye Center, Vet Center, and Mental Health Outreach Community Division. The Cincinnati VA Medical Center is an affiliated teaching hospital, providing a full range of patient care services, with state-of-the-art technology, medical education, and research. The Medical Center provides an array of primary care, dentistry, specialty outpatient services, and tertiary care in areas of medicine, surgery, psychiatry, physical medicine, rehabilitation, and neurology. Additionally, the Cincinnati VA Medical Center serves as a referral center for PTSD and offers multiple residential programs for treatment. The Medical Center also has an active affiliation with the University of Cincinnati College of Medicine and is connected both physically and functionally to the University, with over 500 fellows, residents, and students trained there.

U.S. Army Corps of Engineers, Great Lakes and Ohio River Division

Hamilton County

The Great Lakes and Ohio River Division of the USACE, which uses the Project Management Business Process (PMBP) and operates in tandem with seven other USACE districts as a Regional



The USACE Chicago District hosted the Great Lakes Inspection Tour. *Photo Source: Vanessa Villarreal, 2021, www.lrc.usace.army.mil.*

Business Center, provides project management, engineering, and contracting services across the full spectrum of operations in support of our national interests. USACE's mission is to deliver vital public and military engineering services, partnering in peace and wartime to strengthen our nation's security, energize the economy, and reduce risks from disasters. Some of the division's responsibilities include keeping the Ohio River system navigable, protecting the shorelines of the five Great Lakes, operating multiple dams, maintaining nine hydropower plants, employing an Emergency Management Team, cleaning up radiological waste, operating/maintaining inland navigation channels, and restoring/ creating/preserving wetlands. They also support Army and Air Force installations, providing technical construction support, and conducting research and development in technologies that protect the nation's environment and enhance quality of life.

Blue Ash Air National Guard Station

Lucas County

Blue Ash Air National Guard Station is home to the 123rd Air Control Squadron (123 ACS), a mobile control and reporting element equipped with air surveillance radar, generators, tactical vehicles, point-to-point, ground-to-air, and satellite communications capabilities. Operationally, the 123 ACS provides Command and Control to assist ground force commanders in control of regional airspace while also directing joint-service aircraft and assisting in the planning, requesting, coordinating, and controlling of close air operations, intelligence gathering and airlift.

123rd Call to Duty Ceremony at Blue Ash Air National Guard Station. Photo Source: Staff Sgt. Amber Mullen, 2020, DVIDS.



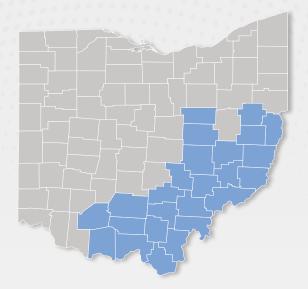
Southeast Region

Zanesville ANGB airmen and soldiers with Army C-RAM intercept weapon in Afghanistan. Photo Source: Staff Sgt. Trevor Rhynes, 2018, ANG Public Affairs.

The Southeast region is home to the Chillicothe VA Medical Center, Zanesville Air National Guard base, and the Camp Sherman Joint Training Center. The region is also home to nearly 71,500 veterans and military retirees.

In 2020, the region received approximately \$1.2 billion in direct spending, of which 80% went to support the region's veterans and military retirees through pensions and transfer payments. The remaining \$260 million went toward operations at the Chillicothe VA Medical Center and local National Guard facilities.

This spending supported 16,300 jobs, generated \$1.6 billion in regional economic impact and \$2.8 billion in gross output. Given the vast majority of direct spending was realized as pensions and transfers, personal income in-region was greater than the regional economic impact as personal income is inclusive of federal transfers.



Southeast Region Military & Federal Economic Impacts

(Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$2.80	2.91%	
Regional Economic Impact	\$1.60	3.16%	
Jobs	16,300	3.50%	
Personal Income	\$1.80	4.29%	
Personal Consumption	\$1.60	4.20%	
Capital Investment	\$0.60	4.92%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$0.07	
Compensation		\$0.19	
Pensions and Transfers		\$0.92	
Total Military & Federal Sper	\$1.18		

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.

Southeast Region

Chillicothe VA Medical Center

Ross County

Situated on 308 acres of rural land and a beautiful campusstyle facility, Chillicothe VA Medical Center provides acute and chronic mental health services, primary and secondary medical services, extended care, a wide range of nursing home care services, and serves as a chronic mental health referral center for other VA facilities in southern Ohio. Additionally, there are active ambulatory care services, individual mental health services, specialty medical services, and specialized women veterans clinics located onsite. The Chillicothe VA Medical Center also operates six Community Based Oupatient Clinics (CBOCs) throughout southeast Ohio. Community-based programs include Home Based Primary Care (HBPC), Care Coordination, Mental Health Intensive Case Management (MHICM), Community Nursing Home and a Community Residential Care Program. In terms of affilliations, a collection of in-state (Ohio) and out-of-state universities have partnered with Chillicothe VA Medical Center for the purposes of education, training, and research.

Chillicothe VA Medical Center. Photo Source: U.S. Department of Veterans Affairs.



Zanesville Air National Guard Base

Muskingum County

On the Zanesville ANGB, the 220th Engineering Installation Squadron (220 EIS), a group of highly skilled guardsmen, are primarily focused on remaining ready to deploy worldwide to install and engineer ground communications-electronic systems as well as to remove and relocate old or outdated systems. Additionally, they are trained and equipped to deliver emergency and programmed mobile communications, as well as on-site system maintenance and modifications. The men and women of 220 EIS must adapt and respond to the communications information needs of community, state, and nation.

Camp Sherman Joint Training Center Ross County

Similar to Camp Garfield and Camp Perry, Camp Sherman has been purposed as one of the state's Joint Training Centers as of 2009. Camp Sherman first found prestige as one of the earliest and the third largest training camp in the nation during World War I. Today, men and women of the Ohio Army National Guard prepare for state and federal missions outside and within the 35,000 square feet readiness center. Additionally, Camp Sherman provides training support to non-DOD law enforcement agencies and is available to local youth and educational programs.

Soldiers in the Reserve Component Warrant Officer Candidate School take aim at their targets in the Engagement Skills Trainer at Camp Sherman Joint Training Center. *Photo Source: Spc. Brian Johnson, 2013, DVIDS.*



Western Region

445th Aeromedical Evacuation Squadron checks vitals of patients on 445th AW C-17 Globemaster III during training exercise. Photo Source: Master Sgt. Patrick O'Reilly, 2021, DVIDS.

The Western Region is comprised of 12 counties and is home to Wright-Patterson Air Force Base, the Dayton VA Medical Center, and Springfield Air National Guard Base. In 2020, more than 97,500 veterans called the region home. With more than 14,200 military retirees, the region has the highest percentage of retirees at nearly 30%.

The region received nearly \$7 billion in total military and federal spending with more than \$3 billion in compensation to the region's military and civilian workers, \$2.5 billion in procurement contracts, and nearly \$1.4 billion in pensions & transfers.

Military and federal spending within the region surrounding Dayton supported just over 103,000 jobs and accounted for approximately \$11.6 billion in regional economic impact, and \$19.4 billion in gross output. These impacts translate to roughly 17% of the region's total economy. The vast majority of military and federal activities in this region can be attributed to the presence of Wright-Patterson Air Force Base, one of the largest Air Force bases in the country, and the largest single-site employer in Ohio.



Western Region Military & Federal Economic Impacts

(Billions of Current USD)

Total Economic Impacts	Direct, Indirect, and Induced	Percentage of Total Economy	
Gross Output	\$19.40	14.79%	
Regional Economic Impact	\$11.60	17.12%	
Jobs	103,200	13.96%	
Personal Income	\$8.30	13.08%	
Personal Consumption	\$6.40	11.87%	
Capital Investment	\$2.30	22.86%	
Direct Military & Federal Spending (Billions of Current USD)			
Procurement		\$2.46	
Compensation		\$3.04	
Pensions and Transfers		\$1.38	
Total Military & Federal Spending		\$6.88	

Source: U.S. Department of Defense, U.S. Department of Veterans Affairs, U.S. Department of Treasury, U.S. Department of Homeland Security, National Aeronautical and Space Administration, U.S. Bureau of Economic Analysis, REMI PI + v2.4.6 (build 5713) Note: Values may not sum due to rounding.

Western Region

Wright-Patterson Air Force Base Greene County

Home to 15 different Air Force units, more than 100 associate units, and over 30,000 employees (including military, civilians, and contractors), Wright-Patterson Air Force Base (WPAFB) is the largest single-site employer within in the State of Ohio. WPAFB sits on more than 8,000 acres of land (12.5 square miles), maintains two runways, and supports roughly 47,000 aircraft sorties annually.

With such an enormous facility and employee base, WPAFB fulfills countless missions and purposes. The base is headquarters to a vast, worldwide logistics system, a world-class laboratory research function, and is the foremost acquisition and development center in the U.S. Air Force. Additionally, dozens of associate organizations, representing the Air Force and Department of Defense, can be found at WPAFB. Due to a wide range of economic activities including shopping, childcare, barbers, housing areas, a medical center, etc., some might consider WPAFB to be more akin to a medium-sized city than a military installation. WPAFB's host unit, the 88th Air Base Wing, performs the overarching installation management, maintaining infrastructure, training and deploying expeditionary Airmen in support of joint operations, and defending the base and its people.

A few of the major units at WPAFB include Headquarters Air Force Materiel Command (AFMC), Air Force Life Cycle Management Center (AFLCMC), Air Force Research Laboratory (AFRL), National Air and Space Intelligence Center (NASIC), the 445th Airlift Wing, Air Force Institute of Technology (AFIT), Air Force Installation Contracting Center (AFICC), and the National Museum of the Air Force. The responsibilities of these units are comprised of: weapon systems research and preparedness, aircraft and parts procurement, warfighting technology research and development, defense intelligence, medical support, mission support, defense-related education, acquisition solutions, and maintaining the oldest aviation museum in the world. Being the birthplace of aerospace, many major advances in aviation technology can be traced to WPAFB over the years. Because of its rich history in aviation, it is the underlying mission of WPAFB to continue to be the home and future for aerospace developments, to "keep 'em flying faster, higher, farther and safer than man has ever flown before."



Western Region

Dayton VA Medical Center Montgomery County

The Dayton Veteran Affairs Medical Center (VAMC) has served veterans for over 150 years, providing a full range of health care through medical, surgical, mental health (inpatient and outpatient), home and community health programs, geriatric (nursing home), physical medicine and therapy services, neurology, oncology, dentistry, and hospice care. Besides its 351 total operating beds, the Medical Center offers a variety of unique programs and services supporting geriatric evaluation and management, respite, Alzheimer's, home-based primary care, residential and outpatient PTSD, substance abuse, homelessness, sleep disorders, and women's health. To date the Dayton VAMC has contracts with Wright-Patterson Air Force Base and 11 area hospitals in addition to offering services in four community-based outpatient clinics in Lima, Middletown, Springfield, and Richmond (Indiana). Dayton VAMC's two primary missions are to provide Veterans a continuum of care that is accessible, value-added, cost-effective, and of the highest quality within an environment of outstanding education and research, and promote a culture that supports and develops a caring, compassionate, competent, and qualityoriented workforce. Moreover, as an indication of the medical center's importance, the VA opted to co-locate its history office on this VAMC's campus.

U.S. Air Force Senior Airman shakes hands with an Army veteran during a Valentines for Veterans event at the Dayton VA Medical Center. *Photo Source: Michelle Gigante, 2018, DVIDS.*





Airmen with the 178th Wing participated in an Expeditionary Skills Rodeo at Springfield-Beckley ANG Base. Photo Source: Senior Airman Amber Wong, 2019, DVIDS.

Springfield-Beckley Air National Guard Base Clark County

On the Springfield-Beckley ANG Base there are four missions executed by three units: the 178th Wing, the 251st Cyberspace Engineering Installation Group, and the 269th Combat Communications Squadron. The 178th Wing is responsible for both the Flying Remotely Piloted Aircraft (RPA) and the Intelligence, Surveillance and Reconnaissance (ISR) missions. While operating the MQ-9 Reaper, the 178th provides close air support, air interdiction, ISR, and attack to eliminate threats when present. The diverse capabilities of RPAs allow for minimized danger and extended time over targets during Combat Search and Rescue (CSAR) operations. The 178th Wing gathers information regarding the enemy's movements, enabling mission success for commanders who must stay three steps ahead of enemy behaviors. The 251st employs programming and hardware advantages in order to detect and repel cyber-attacks on our computer systems and infrastructure, accomplishing the Cyber Systems part of the ISR efforts. The 269th's Ground Support & Combat Communications mission enables the deployment, operations, and maintenance of strategic emergency communications during war and state-declared emergencies. Additionally, the 371st Sustainment Brigade is located in Clark County and provides command and control for all subordinate units of the sustainment brigade, synchronizes current and future sustainment operations for the Expeditionary Sustainment Command (ESC) and Theater Sustainment Command (TSC).



JobsOhio Network One Firm. One State.



The JobsOhio Regional Network is comprised of six economic development partners and the key to the state's economic success. Each region's unique strengths, perspective, and experience come together to strategically serve companies.

JobsOhio in partnership with these six economic development organizations works to attract and grow domestic and international business partners and connect them to the thriving industries that operate in each of these regions, the advantageous infrastructure that Ohio has to offer and the unparalleled workforce that make companies successful. This Ohio economic development association, spearheaded by JobsOhio, works together to fulfill this mission and increase economic development initiatives that help Ohio thrive.



Southeast Region: Adams, Athens, Belmont, Carroll, Coshocton, Gallia, Guernsey, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Lawrence, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Vinton, and Washington counties.



Central Region: Delaware, Fairfield, Franklin, Knox, Licking, Logan, Madison, Marion, Morrow, Pickaway, and Union counties.



Western Region: Auglaize, Champaign, Clark, Clinton, Darke, Fayette, Greene, Mercer, Miami, Montgomery, Preble, and Shelby counties.



Southwest Region: Brown, Butler, Clermont, Hamilton, and Warren counties.



Northwest Region: Allen, Crawford, Defiance, Fulton, Hancock, Hardin, Henry, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams, Wood, and Wyandot counties.



Northeast Region: Ashland, Ashtabula, Columbiana, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas, and Wayne counties.



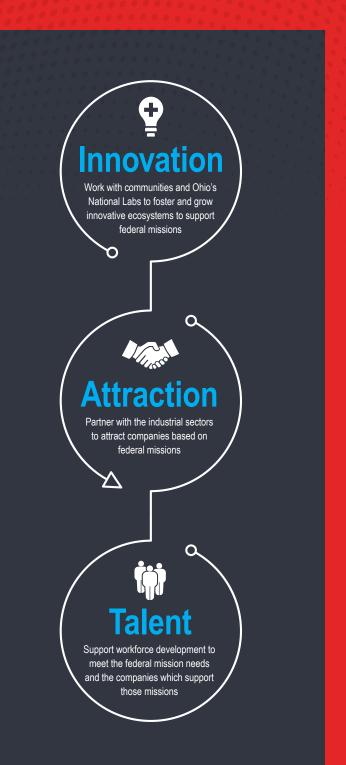
Proudly Supporting Our Nation's Military and Federal Installations



Ohio has a history of military and veteran support woven into its fabric, including that for military families, communities, and notable service leaders.

From innovative companies to staple military and federal installations, important work is happening in Ohio related to U.S. defense missions. In Ohio, you can work with thousands of suppliers and partner with Agility Prime companies. You can collaborate with top universities doing research and development for the military and NASA. Private companies in Ohio can compete for federal contracts, connect with military installations, and support nearby military and NASA customers.

Innovation, industry partnerships, talent, and a statewide dedication to our nation's military and federal installations make Ohio ideal for supporting missions and people that serve our country.



The Ohio Aerospace and Defense Pillars

- Preserve, Protect, Defend and Expand the Federal Aerospace and Defense Installations
- Increase the Research Portfolio and State-wide Synergies of Ohio's National-Level Laboratories

★ Work with JobsOhio to:

- Preserve & Expand Ohio's Aerospace and Defense Industry
- Aggressively Attract Jobs, Mission, and Companies to Ohio
- Maintain and Grow the Workforce (Government and Community)
 - University-Educated
 - Craftsman-Trained

The Strategy – ONE VOICE

Rapidly Expand Knowledge of Ohio's Attributes

- Educate Internal (to Ohio) on Aerospace and Defense
 - Fight the "I didn't know you did that here!" paradigm
 - Increase Advocacy Pool everyone is an advocate
- ★ Raise the External Profile of Ohio
 - Inject Ohio into the Boardrooms of the World

Aggressively Seek New Mission and Industry

- Preservation and Growth of AFMC and NASA Locations
- New Mission = Community, Resources and Workforce
- New Industry = Ecosystem Attraction
 - Identify Industry problems and Ohio's solution before the board knows there is a problem
 - Engagement responsive to an RFI is too late
- ★ Invest and develop Key Technological Thrusts

Develop Advantageous Alliances

- ★ Identify Mission Partners and Federal Agencies
- ★ Inextricably Link Mission, Agency and Location

Map of Ohio Defense Manufacturing Contractors

Military Facilities

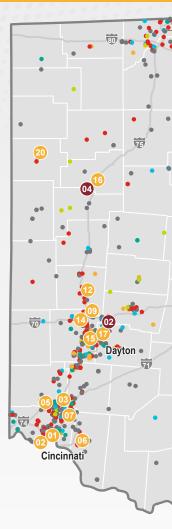
- 01 Camp James A. Garfield (JMTC)
- 02 Wright-Patterson AFB
- 03 Defense Supply Center Columbus
- 04 Joint Systems Manufacturing Center
- 05 Youngstown Air Reserve Station

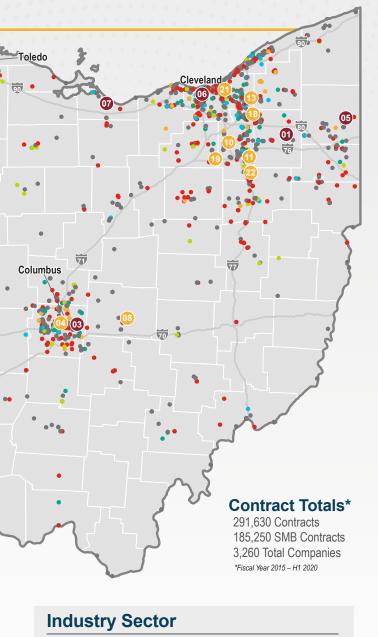
Federal Aerospace Research Facilities

MASA Glenn Research CenterNASA Plum Brook

Top Defense Contractor Locations

- On General Electric Company
- 02 GE Rolls-Royce Fighter Engine
- 03 CFM International, Inc.
- 04 Battelle Memorial Institute
- 05 Northrop Grumman Corporation
- 06 L-3Harris Technologies
- 07 The Wornick Company
- 08 The Boeing Company
- 09 GE Aviation Systems
- 10 Veyance Technologies
- 11 Lockheed Martin Corporation
- 12 Goodrich Corporation
- 13 HDT Expeditionary System
- Integrated Procurement Technologies
- 15 Raytheon Company
- General Dynamics Land Systems
- 10 DRS Advanced ISR
- 18 Safran Electrical & Power
- 19 Parker Hannifin
- 20 Eaton Corp.
- 21 Arconic
- 22 Collins Aerospace





- Advanced Manufacturing
- Aerospace & Aviation
- Automotive

Source: USASPENDING.gov

- Healthcare
- IT & Services
- Other

Did You Know?



The Ohio Army National Guard is the *fifth largest* in the United States

The Ohio Air National Guard is the second largest in the United States





Wright-Patterson Air Force Base is the *largest* single-site employer in the State of Ohio

The Youngstown Air Reserve is the **only unit** in the DoD that performs aerial spray





NASA Glenn Research Center serves a vital role in our **continued exploration** of the moon

Glossary

Term	Definition
Capital Investment	Purchases of residential and nonresidential structures and of equipment and software by private businesses and nonprofit institutions.
Direct Economic Impact	Direct impact includes all direct effects the organization has on the region due to the organization's operations.
Fourth Estate	Refers to DoD agencies not directly tied to a military service; includes, amongst others, the Defense Logistics Agency and the Defense Information Systems Agency.
Gross Output	The amount of production, including all intermediate goods purchased as well as value added (compensation and profit).
Indirect Economic Impact	The indirect impact includes the impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money is spent outside of the local economy, either through imports or by payments to value added.
Induced Economic Impact	The response by an economy to an initial change (direct effect) that occurs through re-spending of income received by a component of value added. This money is recirculated through the household spending patterns causing further local economic activity.
Jobs	Estimates of the number of full-time and part-time jobs supported by military and federal spending.
Personal Consumption	The goods and services purchased by individuals.
Personal Income	Income received by persons from all sources, including wages and salaries, benefits, proprietors' income, rental income, and transfer payments.
Regional Economic Impact	Net-value of goods and services produced by labor and property.

Definitions sourced at https://www.uab.edu/impact/definitions.

Acronyms

Acronym	Definition
123 ACS	123rd Air Control Squadron
179 AW	179th Air Wing
220 EIS	220th Engineering Installation Squadron
AFICC	Air Force Installation Contracting Center
AFIT	Air Force Institute of Technology
AFLCMC	Air Force Life Cycle Management Center
AFMC	Air Force Materiel Command
AFMETCAL	Air Force Meteorology and Calibration
AFPSL	Air Force Primary Standards Laboratory
AFRL	Air Force Research Laboratory
ANG	Air National Guard
ANGB	Air National Guard Base
ARW	Air Refueling Wing
САР	Civil Air Patrol
CBOCs	Community Based Outpatient Clinics
CSAR	Combat Search and Rescue
DFAS	Defense Finance Accounting Service
DHS	U.S. Department of Homeland Security
DISA	Defense Information System Agency
DLA	Defense Logistics Agency
DoD	U.S. Department of Defense
DSCC	Defense Supply Center Columbus
DVS	U.S. Department of Veterans Affairs
ESC	Expeditionary Sustainment Command
ESGN	Electrostatically Suspended Gyro Navigator
GOCO	U.S. Army Government Owned, Contractor Operated

Acronym	Definition
HBPC	Home Based Primary Care
ISR	Intelligence, Surveillance and Reconnaissance
JSMC	Joint System Manufacturing Center
LERCIP	Lewis' Educational and Research Collaborative Internship Program
MHICM	Mental Health Intensive Case Management
NASA	National Aeronautics and Space Administration
NASIC	National Air and Space Intelligence Center
NIST	National Institute of Standard and Technology
PEO GCS	Program Executive Office Ground Combat System
PMBP	Project Management Business Process
PMELs	Precision Measurement Equipment Laboratories
PTSD	Post-traumatic Stress Disorder
REMI	Regional Economic Models, Inc.
RPA	Remotely Piloted Aircraft
SLS	Space Launch System
STC	Special Troops Command
TACOM	Tank-Automotive & Armaments Command
TADSS	Training Aids, Devices, Simulators, and Simulation
TSC	Theater Sustainment Command
USACE	U.S. Army Corps of Engineers
VA	Veterans Affairs
VAMC	Veteran Affairs Medical Center
WPAFB	Wright-Patterson Air Force Base
YARS	Youngstown Air Reserve Station



Ohio's Economic Development Corporation

Connect with us!

Great things are happening in Ohio, learn more about how you can be a part of it.

contact@jobsohio.com 1.614.215.9322 ■ 1.866.727.8713 (toll free) 41 S High St #1500, Columbus, OH 43215

