AREA
Albuquerque Regional Economic Alliance

2024 MARKET REPORT

AEROSPACE IN GREATER ALBUQUERQUE, NEW MEXICO

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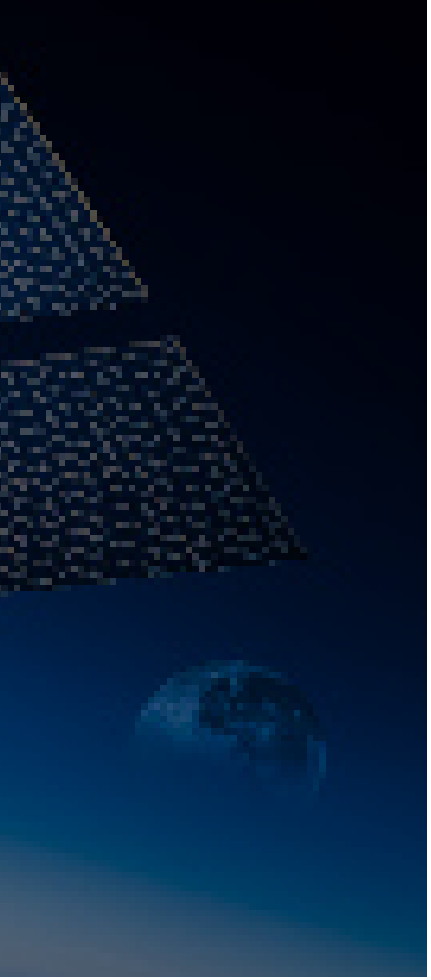
INTRODUCTION

In Greater Albuquerque, New Mexico, a strong pool of qualified talent, a competitively priced operating environment with access to world-class innovation assets allow Greater Albuquerque to compete as a location of choice for high-quality aerospace, directed energy and aviation operations.

With low commercial and industrial real estate costs, a corporate income tax of 5.9 percent, and no inventory tax, companies operating in the aviation and aerospace industries can tap into a low-cost operating environment with tax deductions on gross receipts.



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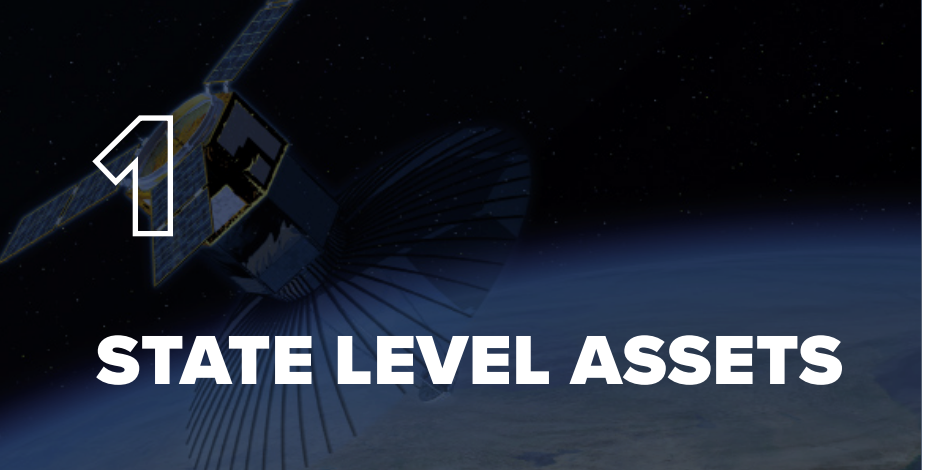


1 STATE LEVEL ASSETS

MARKET LANDSCAPE

New Mexico has long been at the forefront of innovation with a unique set of intellectual capital assets. These assets, along with high concentrations of relevant talent, one of-a-kind testing facilities, and a world-class manufacturing climate have put the state at the leading edge of the rapidly growing space industry.

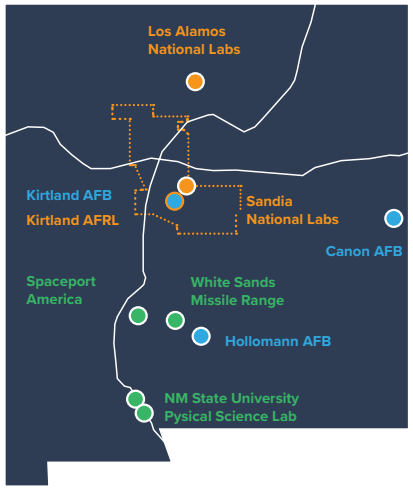
Capturing the largest share of aerospace employment in the state of New Mexico, aerospace industries ***thrive*** in Greater Albuquerque.

Air Force Research Laboratory (AFRL)
Located in Albuquerque, New Mexico, the Air Force Research Laboratory (AFRL) is a scientific research organizaiton dedicated to leading the nation's discovery, development, and integration of war-fighting technologies for air, space and cyberspace. With a combined budget of over $384 million, the two directorates support space research development at Kirtland AFB in New Mexico.

The Space Vehicles Directorate is the U.S. Air Force's Center of Excellence for space technology research and development. Its mission is to develop and transition high pay-off space technologies to provide the military with space-based capabilities

The Directed Energy Directorate transitions technologies in four core technical competencies: laser systems, high-power electromagnetics, weapons modeling and simulation, and directed energy and electro-optics for space superiority.

The Space and Missiles Center
The Space and Missiles Center is the development center of the Air Force Space Command and has its Advanced Systems and Development Directorate at Kirtland AFB in New Mexico. SMC is responsible for the Global Positioning System (GPS), military satellite communications, defense meteorological satellites, space launch and range systems, satellite control networks, space-based infrared systems and space situational awareness capabilities.



• • • Greater Albuquerque MSA

3 Air Force Bases

3 National Labs

4 Aerospace Testing Facilities with access to Restricted Airspace

Space Rapid Capabilities Office (RCO)
The Space Rapid Capabilities Office (RCO) is located at Kirtland AFB in New Mexico and seeks to quickly develop and produce prototypes. The mission of the Space RCO is to (1) to contribute to the development of low–cost rapid reaction payloads, busses, launch, and launch control capabilities in order to fulfill joint military operational requirements for on-demand space support and reconstitution; (2) to coordinate the execution of space rapid capabilities across the DOD with respect to planning, acquisition, and operations; and (3) to rapidly develop and field new classified space capabilities.

Sandia National Laboratories
Located in Albuquerque, N.M., Sandia National Laboratories is a major driver for innovation within the region and the state. Aligned to space technologies, the Space Mission program delivers sensing solutions to address a wide range of complex, national security issues in space. In addition, Surveillance and Reconnaissance (S&R) designs, tests, and integrates cutting-edge technology to demonstrate, field, and support high-impact S&R systems for the end-user.

Los Alamos National Laboratory
Los Alamos National Laboratory applies world-changing science and technology to current and emerging national and global security challenges. Today, the Intelligence and Space Research Division continues the laboratory's legacy of ensuring our nation's security, discovering the processes that govern space environments, studying the composition of planetary bodies, and capturing the most distant, most powerful cosmic explosions.

Source: New Mexico Partnership

SPACEPORT AMERICA

Spaceport America is a world-class facility providing unique and compelling advantages for testing and commercial operations. The facility is located in Southern New Mexico, is adjacent to the U.S. Army White Sands Missile Range (WSMR) and has already attracted some of the most respected companies in the space industry, including Virgin Galactic, its anchor tenant.

Restricted Airspace
Spaceport America provides access to both the National Airspace System (NAS) and 6,000 square miles of restricted airspace from surface to unlimited. This unique environment creates a quiet zone with minimal commercial aviation traffic that reinforces privacy and allows the safe testing of new designs with fewer regulatory delays.

Perfect Climate
The warm and stable climate in southern New Mexico is ideal for aerospace operations, with an annual average of 340 days of flyable skies and less than 10 inches of precipitation. High elevation and low humidity reduce corrosion and permit year-round outdoor work. Current winds aloft are forecast with on-site SODAR and radiosonde capabilities.

Flexible Services
Streamlined policies and exemplary partnerships with U.S. Army White Sands Missile Range and other organizations allow for unique abilities to source equipment, materials and capabilities on an á la carte basis at preferred rates.

Privacy & Security
Because of the remote location, there is minimal public exposure and protection for proprietary technology. Conduct operations safely and securely, and release information on your terms—or not at all. Meanwhile, armed security force, EMT-qualified firefighters, and IT Security team are available 24/7.

Communications
Spaceport America facilities are connected by high-speed fiber optic cable and remote areas of the campus can be connected using a point-to-point air fiber backhaul. Because of the proximity to White Sands Missile Range, spaceport personnel can facilitate access to radio frequencies typically reserved for Department of Defense applications when required for specific missions.

Unmanned Aerial Systems Testing
For unmanned aerial systems (UAS) customers, Spaceport America will facilitate a streamlined path toward experimental or type certification and/or COA through a special partnership with nearby New Mexico State University Physical Science Laboratory UAS Flight Test Center. By flying initially in restricted airspace, customers can reduce the risk of flight tests on new and unproven designs.

Source: Spaceport America

2

INDUSTRY CLUSTER PRESENCE

In Greater Albuquerque, aerospace cluster industries employ 16,000 and is nearly 3x more concentrated regionally than within the Nation. These industries have enjoyed comfortable expansions thanks to the unique assets anchored within the region. In fact, growth within cluster industries increased by 12.3 percent (1,758 jobs) from 2018 to 2023, outpacing the national growth rate of 5.2 percent.

Contributing over $2 billion to regional GDP, job growth within these industries continue to position Greater Albuquerque as a location of choice, with density of qualified skills and occupational presence.

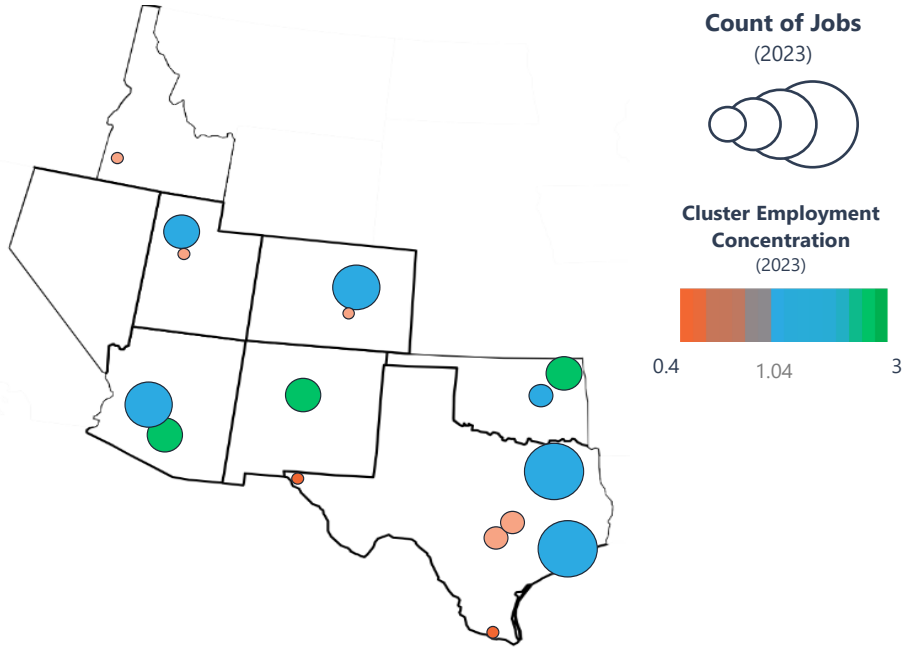
Shown below, with access to strong federal and private sector assets, Greater Albuquerque holds the second highest location quotient for metropolitan areas in the Southwest with populations of more than 500,000.

Metro Area	2018 Jobs	2023 Location Quotient
Tucson, AZ	17,123	2.95
Albuquerque, NM	**15,105**	**2.71**
Tulsa, OK	16,840	2.20
Dallas, TX	85,613	1.41
Phoenix, AZ	37,638	1.17
Oklahoma City, OK	10,737	1.14
Salt Lake City, UT	11,484	1.12
Houston, TX	53,259	1.11
Denver, CO	20,694	0.97
Boise City, ID	2,957	0.69
San Antonio, TX	12,183	0.68
Provo, UT	2,988	0.54
Austin, TX	7,332	0.53
Colorado Springs, CO	1,789	0.52
McAllen, TX	1,868	0.42
El Paso, TX	1,843	0.39
Southwestern Peer Total	321,767	
United States	2,218,015	

Note: city names reflect metro areas

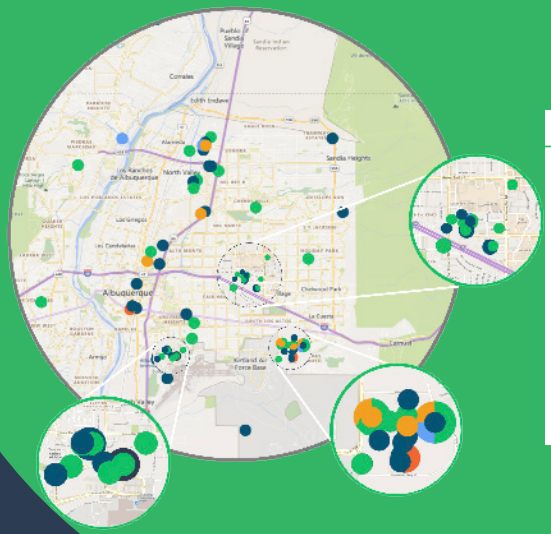
Lightcast Q1 2024 with author calculations

2023 Job Counts and Concentration



1Location Quotient: Location quotients (LQ) are a useful way of quantifying how concentrated a particular industry, cluster, or occupation is in a region as compared to a larger geographic area. An LQ of 1 is equally concentrated within both areas. An LQ of 1.5 indicates that the smaller geographic region is 50% more concentrated regionally, and an LQ of 2 indicates the geographic region is twice as concentrated regionally.

MAJOR EMPLOYERS



Legend

- Computer Systems Design
- Custom Computer Programming
- Education Institute
- Engineering Services
- Kirtland Airforce Base
- Research and Development
- Sandia National Labs
- Sandia Science and Technology Park

EMPLOYER	Emp. Estimate
Kirtland Air Force Base	33,000
Sandia National Labs	14,000
Blue Halo	400
SolAero Technologies Corp	230
Eclipse Aerospace	200
BAE Systems	180
Aerospace Corp	180
Fiore Industries, Inc.	160
Boeing	160
AeroParts Manufacturing	100

Lightcast Q1 2024 with author calculations

INVESTING IN ALBUQUERQUE

IN 2023, New Mexico Gov. Michelle Lujan Grisham and Star Scientific Ltd. Global Group Chair Andrew Horvath announced that the Australia-based green hydrogen research and development company has chosen New Mexico as the location for its first North American operation.

> *We were impressed by their whole-of-government approach to manufacturing, logistics, higher education and research and their vision for the role that hydrogen will play in their future. We were equally impressed that they had holistically planned important human details such as housing for families that will work at our facility, education incentives for their children and lifestyle and leisure infrastructure. There is also an infectious 'can do' attitude which appeals to we Australians very much.*

STAR SCIENTIFIC

- Andrew Horvath
  Star Scientific Ltd. Global Group Chair

INDUSTRY CLUSTER

With 16,000 people employed in 2023, the aerospace industry cluster within the Albuquerque MSA maintains a significant regional presence. Shown below, sub-industries that complement this presence are highlighted. As shown, these industries hold a notable footprint within the region and have experienced significant growth over the past five years. Most recently, the mix of industries shown below have experienced 12.5 percent job growth 2018-2023.

The table below highlights the employment levels for 6–digit NAICS industries alongside 5-year job growth scenarios within the Albuquerque MSA.

Top Sub-Industries in Aerospace

Description	2018	2019	2020	2021	2022	2023	5-year Job Growth (%)
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	12,528	13,498	13,966	14,107	14,386	14,826	18.3%
Other Support Activities for Air Transportation	406	437	314	334	477	530	30.6%
Industrial Machinery and Equipment Merchant Wholesalers	394	406	373	367	367	369	-6.5%
Aircraft Engine and Engine Parts Manufacturing	99	99	121	161	197	209	110.2%
Fabricated Structural Metal Manufacturing	173	190	185	188	201	194	11.6%
Industrial Supplies Merchant Wholesalers	188	215	160	152	174	180	-4.4%
Other Aircraft Parts and Auxiliary Equipment Manufacturing	152	166	166	142	142	143	-6.0%
Ornamental and Architectural Metal Work Manufacturing	158	151	157	147	132	124	-21.2%
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	502	387	224	132	107	107	-78.6%
Sheet Metal Work Manufacturing	83	81	81	81	96	104	25.7%
Aircraft Manufacturing	182	122	100	87	67	64	-65.0%
All Other Miscellaneous Electrical Equipment and Component Manufacturing	68	48	18	75	55	44	-35.1%
Metal Window and Door Manufacturing	117	123	113	74	57	44	-62.6%
Plate Work Manufacturing	28	36	37	31	28	25	-12.9%
Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	7	6	5	6	7	10	35.1%
Other Communications Equipment Manufacturing	1	8	2	3	4	3	158.2%
Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	1	2	5	2	4	1	11.6%
Battery Manufacturing	17	17	21	6	2	0	-98.1%
Top 10 Employment Industries	**14,682**	**15,631**	**15,747**	**15,813**	**16,278**	**16,785**	**14.3%**
Total, All industries	**15,105**	**15,991**	**16,047**	**16,097**	**16,501**	**16,976**	**12.4%**
Top Employment Industries as a share of Total Employment, All Aerospace Cluster Industries	**97.2%**	**97.7%**	**98.1%**	**98.2%**	**98.7%**	**98.9%**	

Lightcast Q1 2024 with author calculations

3 OCCUPATIONAL PRESENCE AND WAGES

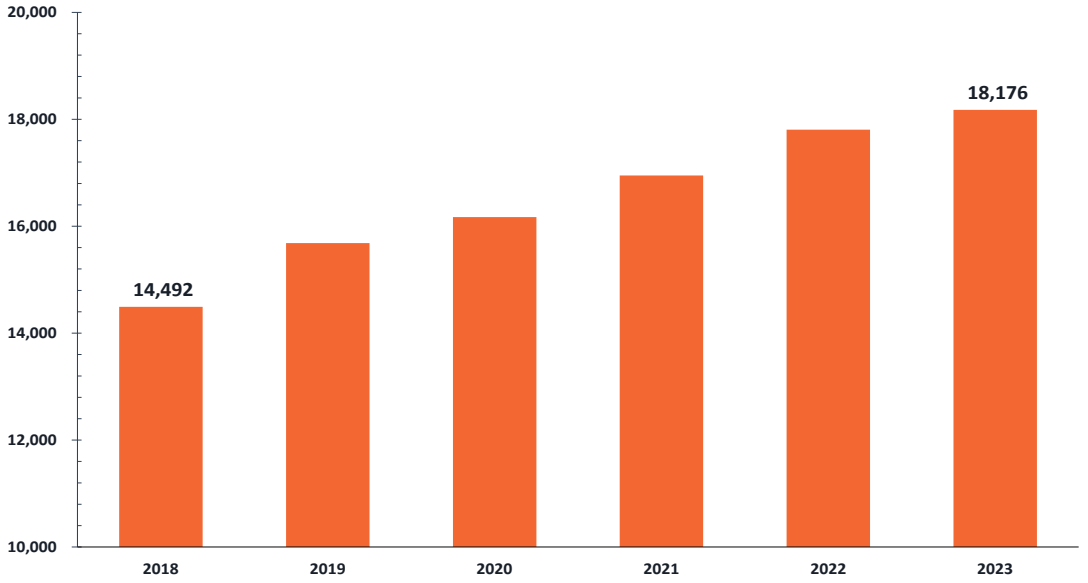
GREATER ALBUQUERQUE IS A HOTSPOT FOR SKILLED TALENT that supports aerospace research, development and manufacturing for aerospace, electronics and semiconductors.

FIVE-YEAR GROWTH OVERVIEW

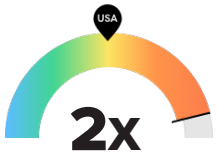
In Greater Albuquerque, innovation anchors opportunity and drives growth within aerospace industry sectors.

Shown below, the region's mix of specialized talent which supports a variety of aerospace operations has expanded 25 percent over the last five-years. Historical growth within these occupations has deepened Greater Albuquerque's concentrations of relevant talent. Shown below, select occupations are well above national averages for employment concentration.

Job Growth, 2018-2023

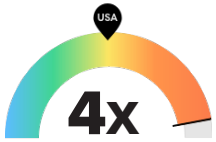


Electrical Engineering Technicians



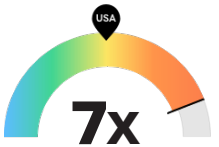
National Average

Computer & Information Research Scientists



National Average

Material Engineers



National Average

Lightcast Q1 2024 with author calculations

OCCUPATIONAL PRESENCE

28%

Growth in Engineering Talent

32%

Growth in Computer and Technical Talent

13%

Growth in Skilled Production Talent

Occupation Description		2018	2023	5-Year Job Growth	Avg. Hourly Earnings	Avg. Annual Job Openings
Skilled Engineering Talent						
Aerospace Engineers		399	386	-3.3%	$60.98	26
Computer Hardware Engineers		1,242	1,873	50.8%	$57.12	213
Electrical Engineers		1,181	1,238	4.9%	$62.95	93
Industrial Engineers		377	595	57.8%	$49.82	48
Materials Engineers		291	389	34.0%	$73.27	36
Mechanical Engineers		1,084	1,429	31.9%	$61.12	122
Engineers, All Other		1,120	1,354	20.9%	$62.06	111
	Cohort Total	**5,693**	**7,265**	**27.6%**		
Skilled Computer and Technical Talent						
Computer and Information Systems Managers		486	670	37.8%	$61.95	54
Information Security Analysts		435	1,113	155.6%	$59.28	116
Computer and Information Research Scientists		313	413	32.0%	$62.98	38
Computer Network Architects		286	344	20.4%	$59.93	24
Computer Programmers		519	469	-9.6%	$37.70	45
Software Developers		1,267	1,642	29.6%	$48.87	117
Software Quality Assurance Analysts and Testers		394	251	-36.4%	$40.20	27
	Cohort Total	**3,701**	**4,902**	**32.4%**		
Skilled Production Talent						
Aerospace Engineering and Operations Technologists and Technicians		72	46	-36.0%	$30.96	12
Electrical and Electronic Engineering Technologists and Technicians		628	616	-2.0%	$38.39	78
Electro-Mechanical and Mechatronics Technologists and Technicians		20	15	-24.9%	$26.21	5
Industrial Engineering Technologists and Technicians		129	248	92.1%	$37.25	35
Mechanical Engineering Technologists and Technicians		86	122	42.1%	$38.97	15
Calibration Technologists and Technicians		70	60	-13.5%	$23.67	9
Engineering Technologists and Technicians, Except Drafters, All Other		1,069	984	-7.9%	$36.76	127
Avionics Technicians		14	3	-80.7%	$24.42	3
Aircraft Mechanics and Service Technicians		273	566	107.3%	$21.73	58
	Cohort Total	**2,360**	**2,660**	**12.7%**		
Primary Production and Maintenance						
Sheet Metal Workers		322	328	1.7%	$23.45	35
Industrial Machinery Mechanics		665	826	24.1%	$24.78	89
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers		50	9	-81.5%	$21.30	10
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers		254	621	145.0%	$16.09	83
Engine and Other Machine Assemblers		11	3	-75.7%	$16.43	3
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic		50	84	67.3%	$14.97	11
Machinists		306	335	9.5%	$23.28	38
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic		200	123	-38.5%	$15.23	27
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders		25	36	43.3%	$19.77	6
Inspectors, Testers, Sorters, Samplers, and Weighers		662	823	24.2%	$21.36	110
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders		192	162	-15.9%	$20.16	21
	Cohort Total	**2,738**	**3,349**	**22.3%**		
Regional Total, All Cohorts		**14,492**	**18,176**	**25.4%**		

Lightcast Q1 2024 with author calculations

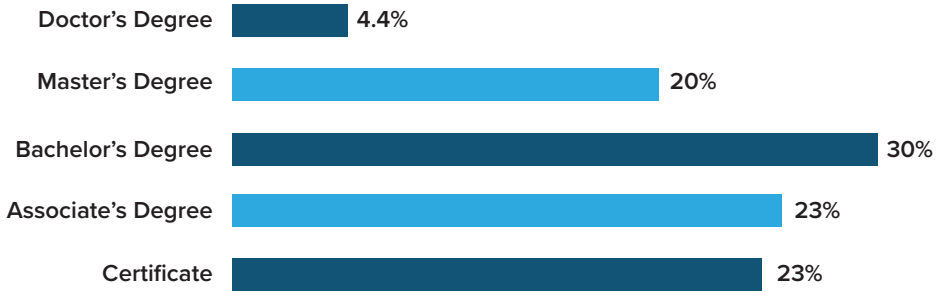
4

TALENT DEVELOPMENT

Helping to fuel the region's specialization in aerospace, secondary-education pipelines provide a direct connection to employment for the future workforce.

Within the State of New Mexico, 2,400 students graduate within programs closely linked to aerospace industries, 46 percent coming from the institutions within Greater Albuquerque.

Graduate Output (2022)



1,344
Total Completions

47%
Completions 2 years or less

24%
Advanced Degrees

Program Output	Emp. Completions 2022
Engineering	456
Computer and Information Sciences	322
Mechanic and Repair Technologies	196
Mathematics and Statistics	94
Precision Production	95
Physical Sciences	146
Engineering Technologies	35
Regional Total	**1,344**

Lightcast Q1 2024 with author calculations

Central New Mexico Community College

538
Total Aerospace Completions

54%
Certificate Completions

46%
Associate's Degree Completions

As the largest community college in the state of New Mexico, Central New Mexico Community College (CNM) is ranked #1 among peers for associate degree and certificates for Hispanics and Native Americans. With innovative programs like its CNM Ingenuity program, CNM offers accelerated approaches to education and job training in key workforce areas, as well as wrap-around support for entrepreneurs and cooperative ventures that foster economic development and job creation in the region.

PROGRAM SPOTLIGHT

Unmanned Aircraft Systems (UAS)

Within the Advanced Technology Center at CNM, the Unmanned aircraft systems (UAS) program gives students direct access to industry standards.

This program introduces the fundamentals of UAS safety and regulation and emphasizes the use of UAS for high-precision measurement and mapping and other applications including construction management, surveying, marketing and others.

ADVANCED TECHNOLOGY CENTER

80,000
square feet
state-of-the-art laboratory and classroom space.

THE UNIVERSITY OF NEW MEXICO

720
Total Aerospace Completions

52%
Bachelor's Degree Completions

43%
Master's Degrees + Completions

The University of New Mexico is a comprehensive, Carnegie designated Research 1 University and offers a degree in aerospace engineering which prepares students to be leaders in research, design, construction and analysis of aircraft, satellites, manned and unmanned space and aerial vehicles, and the systems they incorporate.

INNOVATION

COSMIAC

COSMIAC is an innovative research center at The University of New Mexico (UNM) in Albuquerque, NM. COSMIAC serves as a Tier-2 Research Center at the School of Engineering offering 15,000 square feet of innovation research space including a cleanroom and laboratories.

COSMIAC promotes innovation, including collaborative efforts with government, business and academic institutions on grant and contract proposals. Some of COSMIAC's customers include the US Air Force, NASA, Leidos, Northrop Grumman and SAIC.

COSMIAC: Key Areas of Specialization

- Agile Manufacturing
- C-UAS
- Embedded and Reconfigurable Systems
- RF Systems/Propagation
- Small Satellite Development
- Space Radiation Effects Mitigation
- Virtual Reality and Augmented Reality

5 OPERATIONAL COST COMPARISON

INVESTMENT PROFILE

Center for Aerospace Tech and Computer Systems Design

The following investment profile has been prepared based on a hypothetical production facility, reflective of the following requirements.

Building Type: Class A Office
Building Sq. Ft.: 20,000
Status: Lease

Payroll Costs

6.6%

Less than Peer Average

Real Estate Costs

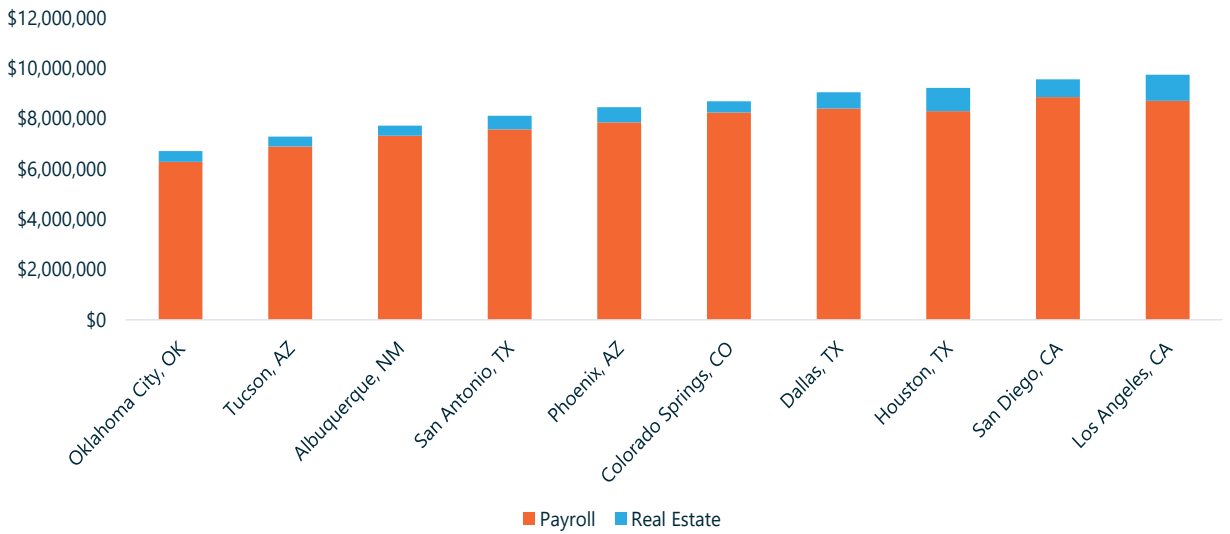
34.4%

Less than Peer Average

Workforce Profile

Skilled Computer and Technical Talent	
Software Developers and Software Quality Assurance Analysts	15
Computer Programmers	10
Computer Network Support Specialists	20
Computer Systems Analysts	10

Office and Administrative Management	
Information Systems Managers	5
Project Administrators	5
General Operations Managers	2
Sales Representative	2
Bookkeeping, Accounting, and Auditing Clerks	2
Accountants and Auditors	2
Human Resource Specialists	2
Total Workforce	**75**



	ABQ	TUCSON	DALLAS	PHOENIX	OKLAHOMA CITY	HOUSTON	SAN ANTONIO	LOS ANGELES	COLORADO SPRINGS	SAN DIEGO
Payroll	$7,322,587	$6,895,554	$8,403,460	$7,852,049	$6,282,381	$8,299,879	$7,571,559	$8,708,174	$8,242,433	$8,854,200
Real Estate	$402,400	$391,800	$643,800	$603,000	$430,600	$924,000	$546,800	$1,035,400	$445,000	$710,400
Total	**$7,724,987**	**$7,287,354**	**$9,047,260**	**$8,455,049**	**$6,712,981**	**$9,223,879**	**$8,118,359**	**$9,743,574**	**$8,687,433**	**$9,564,600**

Lightcast Q1 2024 with author calculations

Note: The above chart only includes costs associated with labor and real estate. It does not include costs factors for property taxes, employee benefits, or transportation costs. As such figures should not be interpreted as total annual operating cost. Labor costs are a function of median hourly earnings for each occupation and assumes 2,080 hours/year.

6

BUSINESS RESOURCES

THE HIGH WAGE JOB TAX CREDIT

A taxpayer who is an eligible employer may apply for and receive a tax credit for each new high-wage economic-base job. The credit amount equals 8.5% of the wages and benefits paid for each new economic-base job created, up to $12,750 per job.

TECHNOLOGY JOBS AND R&D TAX CREDIT

Employers conducting qualified research at a qualified facility and making qualified expenditures of no more than $5 million in New Mexico is eligible to claim the basic technology jobs and research and development tax credit of 5 percent against the taxpayer's compensating tax, withholding tax or gross receipts tax, excluding local option gross receipts tax. The tax credit will double to 10 percent for expenditures in facilities located in rural New Mexico.

MANUFACTURING INVESTMENT TAX CREDIT

New Mexico tax law provides for a credit equal to 5 percent of the value of qualified equipment and other property used directly and exclusively in a manufacturing operation. The credit can be applied against compensating tax, gross receipts tax and withholding tax. Gross receipts tax acts very much like a sales tax; the Albuquerque rate is 7.750 percent

LOCAL ECONOMIC DEVELOPMENT ACT (LEDA)

The Local Economic Development Act allows the state and local governments to offer limited, discretionary financial participation in qualified economic development projects. These funds are targeted toward private sector, economic–base businesses, that can demonstrate additional funding is needed to close a competitive cost gap. LEDA discretionary funds can only be used for reimbursement of eligible expenditures tied to land, building(s) and/or infrastructure. LEDA funds cannot be used for equipment or working capital.

INDUSTRIAL REVENUE BOND (IRB)

New Mexico's property taxes are among the lowest in the nation for both real and personal property. Property taxes can be further abated using an Industrial Revenue Bond (IRB).

JOB TRAINING INCENTIVE PROGRAM (JTIP)

The New Mexico Job Training Incentive Program is a highly flexible state program that provides on–the–job training. Customized training may be provided by post–secondary educational institutions, company trainers, or outside trainers.

AREA
Albuquerque Regional Economic Alliance

LEARN MORE

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