



Aerospace & Defense Ecosystem

July 2020

Reach New Heights in Greater Phoenix

A Top U.S. Hub for Aerospace & Defense

Greater Phoenix has long been a top market in the nation to locate and expand aerospace & defense (A&D) operations. From training thousands of pilots throughout Greater Phoenix during World War II to developing cutting edge space technologies today, the aerospace & defense industry soars in the region. Here are just a few reasons why so many top companies choose Greater Phoenix:

- Key military installations including Luke Air Force Base
- Exceptional satellite/space flight research by both private industry and academia
- Easy access to Southern Arizona's aerospace cluster, including the Yuma Proving Grounds, Tucson Spaceport and Davis-Monthan Air Force Base
- A large and skilled labor pool
- Collaborative universities producing top talent
- Competitive operating costs and a tax environment with a number of available incentives, including Military Reuse Zones
- Numerous airports with connected commercial spaces, including Phoenix Sky Harbor International Airport, Phoenix-Mesa Gateway International Airport, Phoenix-Goodyear Airport, Deer Valley Airport, and Falcon Field



Value Proposition



Large Existing Cluster	Local Innovation	Educated Workforce	Exceptional Talent Pipeline	Competitive Operating Costs
<ul style="list-style-type: none"> • Composed of many of the largest A&D companies in the world • Emerging commercial space sector validates market for aerospace R&D 	<ul style="list-style-type: none"> • Home to top company HQ's like Honeywell Aerospace and AQST • Universities leading the way in developing 	<ul style="list-style-type: none"> • Highly specialized workforce with specialties in a variety of relevant fields • Variety of business operation types equates to a flexible labor pool 	<ul style="list-style-type: none"> • Over 1,900 graduates from relevant programs • More graduates in relevant college level programs than competitor markets, including those with larger industry clusters 	<ul style="list-style-type: none"> • Major competitor markets are up to 25% more expensive than Greater Phoenix • A number of quality incentives to further decrease operating costs

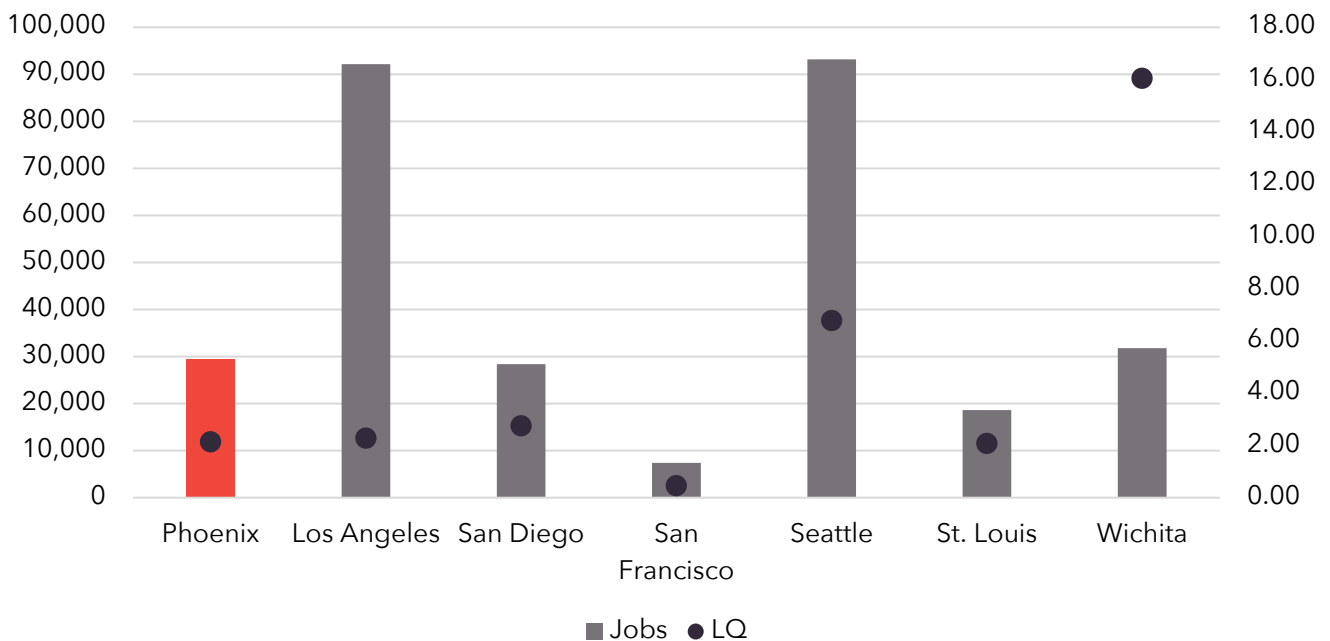
Industry Cluster

Location Quotient or LQ is a measure of market specialization in an industry achieved by comparing the share of that market’s employment in an industry to the national proportion of that industry’s employment. For example, Phoenix’s LQ of 2.13 indicates that the market has 113% higher concentration of the Aerospace & Defense cluster than the nation.

The figures below show the magnitude and specialization of major markets’ workforce in the Aerospace & Defense cluster. As can be seen, Greater Phoenix has a large and highly concentrated workforce that outpaces aerospace hubs like San Diego and St. Louis.

Metro Area	Jobs	Location Quotient
Phoenix	29,507	2.13
Los Angeles	92,177	2.27
San Diego	28,393	2.74
San Francisco	7,380	0.46
Seattle	93,193	6.78
St. Louis	18,615	2.07
Wichita	31,780	16.05

A&D Industry Employment vs. Location Quotient



Industry Cluster

Industry Leaders Soar In Greater Phoenix

Industry-leading firms have critical operations in Greater Phoenix. Whatever the operation type, Greater Phoenix has demonstrated that it has the ecosystem to allow both legacy and emerging aerospace & defense companies to thrive.



Employees: 8,433
Operation: HQ, Manufacturing



Employees: 4,688
Operation: Manufacturing, GSOC



Employees: 3,854
Operation: Innovation Systems HQ



Employees: 3,631
Operation: R&D, Manufacturing



Employees: 650
Operation: HQ, Manufacturing



Employees: 641
Operation: Manufacturing



Employees: 532
Operation: HQ, Manufacturing



Employees: 456
Operation: R&D



Employees: 427
Operation: HQ, Repair



Technologies

Employees: 410
Operation: Communication Systems



Employees: 400
Operation: F-35 Development



Employees: 393
Operation: HQ



Employees: 245
Operation: Primary Operations Center



Employees: 244
Operation: R&D, Manufacturing



Employees: 175
Operation: R&D

Industry Cluster

Industry Highlights

Though these industry leaders may have different operations in Greater Phoenix, each has found success.

Honeywell Aerospace

Headquartered in Phoenix, Honeywell Aerospace employs more than 8,400 in the region. Honeywell's operations in the region include manufacturing, research & development, and office & administrative functions. The company keeps its Connected Aircraft at Phoenix Sky Harbor Airport, where it demonstrates the latest and greatest in advanced aerospace technology. Honeywell has been in the region since it acquired Sperry Aerospace in 1986.

NORTHROP GRUMMAN

Northrop Grumman recently expanded its regional footprint in Greater Phoenix through its acquisition of Orbital ATK - now Northrop Grumman Innovation Systems. The company has large facilities in Chandler, where it builds propulsion devices for rockets, and in Mesa, where it builds and distributes munitions. The company employs more than 3,800 in the region and remains on the cutting edge of propulsion technologies. Northrop Grumman continues to invest in Greater Phoenix, breaking ground on a Gilbert expansion in January 2020.

BOEING

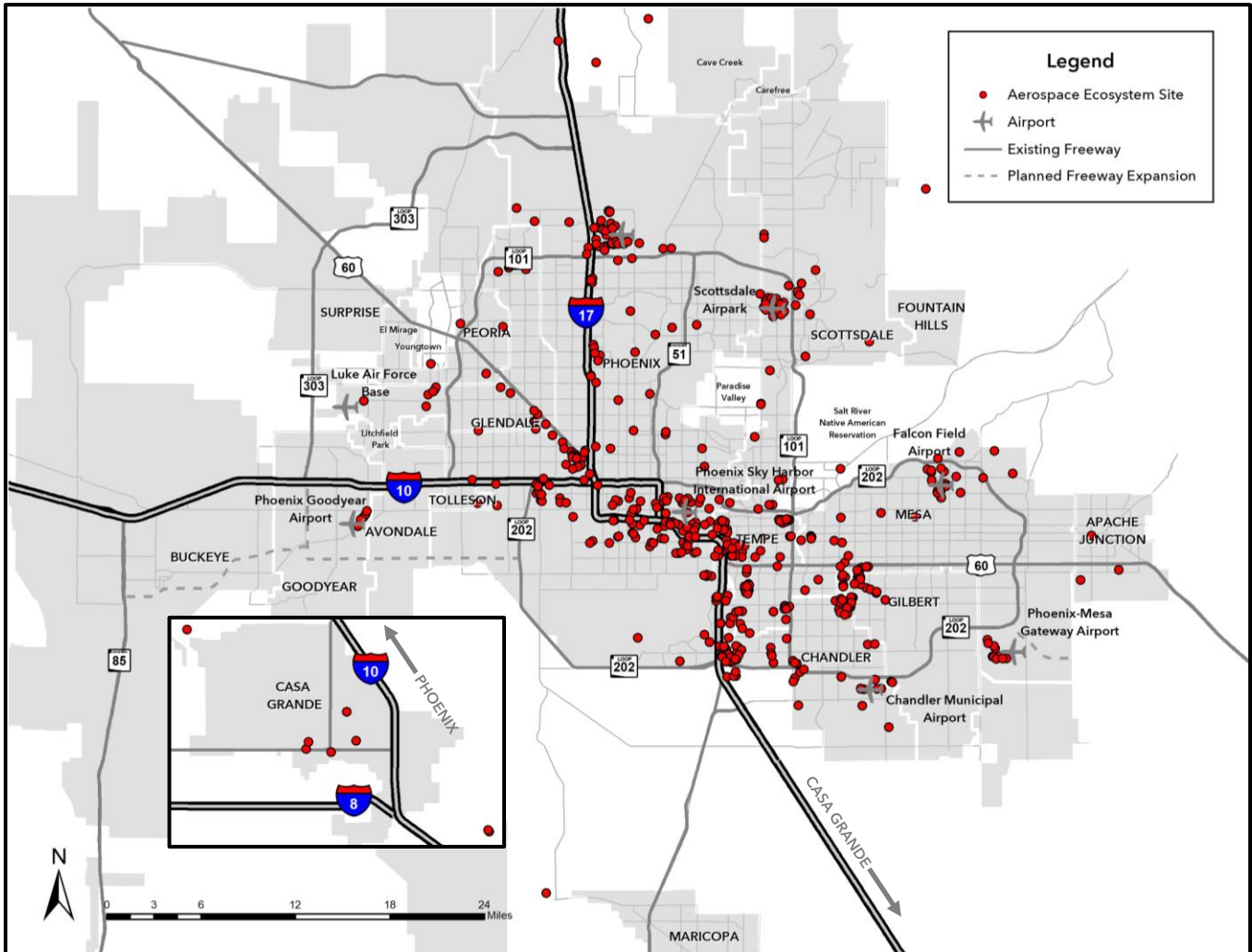
Boeing, a global leader in both commercial and military aerospace, manufactures its Apache attack helicopter in Mesa. In addition, the company has its Global Security Operations Center and other critical functions, including development, at its Mesa facility. In 2017, the company announced they would be moving jobs from Seattle to Mesa. Boeing employs 4,600 people in Greater Phoenix.

LOCKHEED MARTIN

From its time developing information systems and global solutions at what is now Phoenix-Goodyear Airport to supporting F-35 operations at Luke Air Force Base in Glendale, Lockheed Martin has a long history in Greater Phoenix. Luke Air Force Base is the premier international training facility for F-35 operations, and as such, Lockheed Martin employs approximately 400 in the region.

Industry Cluster

The map below shows the locations of companies in the aerospace ecosystem throughout Greater Phoenix. It also highlights the locations of airports that these firms tend to cluster around. The ecosystem used for this map is defined by the 2019 MAG Employer Database.



Industry Cluster

The table below breaks out the firms seen on the map on the previous page by NAICS 6-Digit industry type. Only industries with five or more firms are shown in the table.

Industry	Firms
Machine Shops	62
Engineering Services	31
Aircraft Engine and Engine Parts Manufacturing	30
Other Aircraft Parts and Auxiliary Equipment Manufacturing	28
Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	20
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	18
Aircraft Manufacturing	14
Flight Training	11
Other Support Activities for Air Transportation	11
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	10
Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	8
Other Electronic Component Manufacturing	8
Semiconductor and Related Device Manufacturing	8
Testing Laboratories	8
All Other Plastics Product Manufacturing	7
Computer Systems Design Services	7
Other Electronic Parts and Equipment Merchant Wholesalers	7
Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	6
Electroplating, Plating, Polishing, Anodizing, and Coloring	5
Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	5
Industrial Supplies Merchant Wholesalers	5
Other Airport Operations	5
Other Electronic and Precision Equipment Repair and Maintenance	5
Other Measuring and Controlling Device Manufacturing	5
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	5
Sheet Metal Work Manufacturing	5
Temporary Help Services	5
All Others	232

High-Growth Space Sector

Greater Phoenix and Arizona at-large are rapidly becoming centers of growth in space technology through leveraging the long-established aerospace infrastructure. Home to a diverse and growing ecosystem, advanced R&D, and top-tier higher education, Greater Phoenix and Arizona are launching the next generation of aerospace firms to new heights.

Arizona is on the cutting edge of space technology development, as testing regularly occurs at both the Tucson Space Port and the Yuma Proving Ground. The Tucson Space Port, located at Tucson International Airport, is home to World View Enterprises, a space technology company that is a leader in the emerging stratospheric economy. The Yuma Proving Ground is a U.S. Army Facility near the city of Yuma. Home to some of the most advanced research & development testing the Department of Defense and private sector are undertaking, the Yuma Proving Ground has a hotbed of activity. AQST Space Systems Group recently moved their headquarters to Mesa in Greater Phoenix, and a manufacturing operation to Yuma to be near the proving ground.

Arizona's Space Leaders

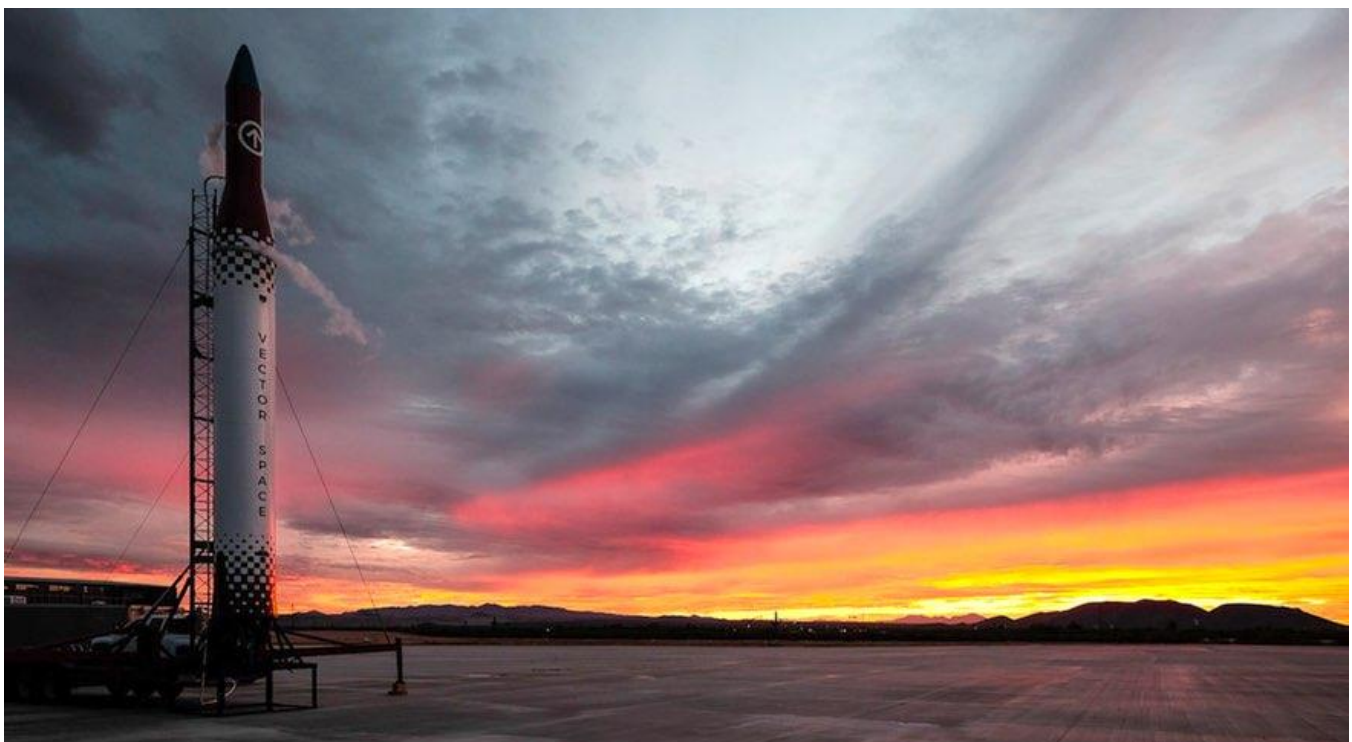


Image Credit: Vector Space Systems

Labor Analysis

The labor pool in each metro for relevant occupations in all industries has been provided below. It should be noted that several of these markets have large information technology sectors, which explains disproportionately larger counts of software developers and computer systems analysts.

Occupation	Phoenix	Los Angeles	San Diego	San Francisco	Seattle	St. Louis	Wichita
Software Developers, Applications	13,240	30,469	11,149	44,212	54,113	7,809	925
Assemblers and Fabricators, All Other, Including Team Assemblers	12,051	40,203	8,994	19,686	10,718	7,557	3,499
Computer Systems Analysts	9,911	19,104	5,787	15,078	14,047	7,001	549
Software Developers, Systems Software	7,812	23,044	8,355	17,381	15,544	3,742	391
First-Line Supervisors of Production and Operating Workers	7,295	19,484	4,359	5,465	8,499	5,463	1,726
Inspectors, Testers, Sorters, Samplers, and Weighers	6,302	23,588	4,994	5,880	8,611	4,589	2,756
Aircraft Mechanics and Service Technicians	4,290	6,102	4,799	2,919	6,353	1,956	1,321
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	3,972	13,385	4,616	5,059	3,249	2,717	637
Electrical Engineers	3,241	8,302	3,852	4,244	4,217	2,270	383
Machinists	3,228	16,834	4,240	3,538	7,087	4,054	1,558
Industrial Engineers	3,098	10,365	3,888	2,691	5,755	3,415	1,214
Mechanical Engineers	2,955	9,793	3,875	3,335	5,005	1,839	710
Logisticians	2,763	8,853	6,458	3,303	7,138	2,932	607
Architectural and Engineering Managers	2,636	10,053	3,729	6,465	3,079	1,563	401
Industrial Production Managers	2,463	7,846	1,771	2,632	1,866	1,791	434
Aerospace Engineers	2,127	4,524	1,881	1,956	5,626	630	1,923
Computer-Controlled Machine Tool Operators, Metal and Plastic	1,151	6,521	1,382	802	1,634	1,872	982
Aerospace Engineering and Operations Technicians	736	445	936	500	430	74	362
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	666	1,667	1,012	46	6,710	515	7,135
Avionics Technicians	334	851	945	441	1,738	386	766
Total	90,270	261,432	87,023	145,634	171,420	62,176	28,281

Labor Analysis

The table below shows the annual median wage for relevant occupations in the selected regions. Labor costs in Greater Phoenix are comparable to or less than peer markets.

Occupation	Phoenix	Los Angeles	San Diego	San Francisco	Seattle	St. Louis	Wichita
Software Developers, Applications	\$100,749	\$113,607	\$110,926	\$137,675	\$130,408	\$97,939	\$92,097
Assemblers and Fabricators, All Other, Including Team Assemblers	\$28,717	\$29,549	\$31,429	\$36,385	\$36,834	\$36,814	\$32,766
Computer Systems Analysts	\$89,056	\$93,932	\$93,122	\$117,262	\$99,761	\$89,228	\$67,665
Software Developers, Systems Software	\$98,900	\$124,484	\$114,670	\$135,478	\$123,400	\$103,103	\$86,880
First-Line Supervisors of Production and Operating Workers	\$55,334	\$59,362	\$67,725	\$72,420	\$73,625	\$61,779	\$61,368
Inspectors, Testers, Sorters, Samplers, and Weighers	\$37,692	\$39,770	\$44,262	\$45,258	\$59,506	\$42,230	\$50,594
Aircraft Mechanics and Service Technicians	\$64,387	\$70,928	\$64,813	\$76,326	\$68,286	\$65,132	\$59,665
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$37,855	\$30,805	\$34,216	\$34,447	\$40,313	\$32,780	\$33,813
Electrical Engineers	\$101,724	\$110,073	\$101,608	\$113,849	\$116,063	\$99,494	\$82,787
Machinists	\$47,342	\$43,842	\$42,661	\$54,681	\$53,098	\$45,807	\$39,890
Industrial Engineers	\$90,269	\$101,338	\$94,099	\$109,501	\$110,368	\$91,103	\$80,878
Mechanical Engineers	\$90,144	\$98,322	\$95,763	\$113,512	\$94,830	\$86,011	\$79,495
Logisticians	\$70,705	\$80,270	\$81,515	\$77,438	\$85,270	\$74,959	\$73,598
Architectural and Engineering Managers	\$132,706	\$164,007	\$158,517	\$167,795	\$155,059	\$146,039	\$125,555
Industrial Production Managers	\$93,686	\$107,919	\$103,771	\$123,036	\$128,068	\$102,556	\$93,813
Aerospace Engineers	\$105,112	\$133,035	\$105,019	\$125,750	\$110,698	\$112,505	\$104,499
Computer-Controlled Machine Tool Operators, Metal and Plastic	\$32,628	\$39,124	\$44,845	\$39,793	\$67,802	\$40,161	\$43,981
Aerospace Engineering and Operations Technicians	\$66,170	\$70,734	\$63,378	\$57,499	\$88,950	\$74,504	\$67,823
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$53,181	\$47,439	\$43,742	\$81,222	\$58,780	\$88,062	\$52,623
Avionics Technicians	\$65,726	\$67,263	\$66,435	\$83,666	\$68,241	\$64,050	\$61,245

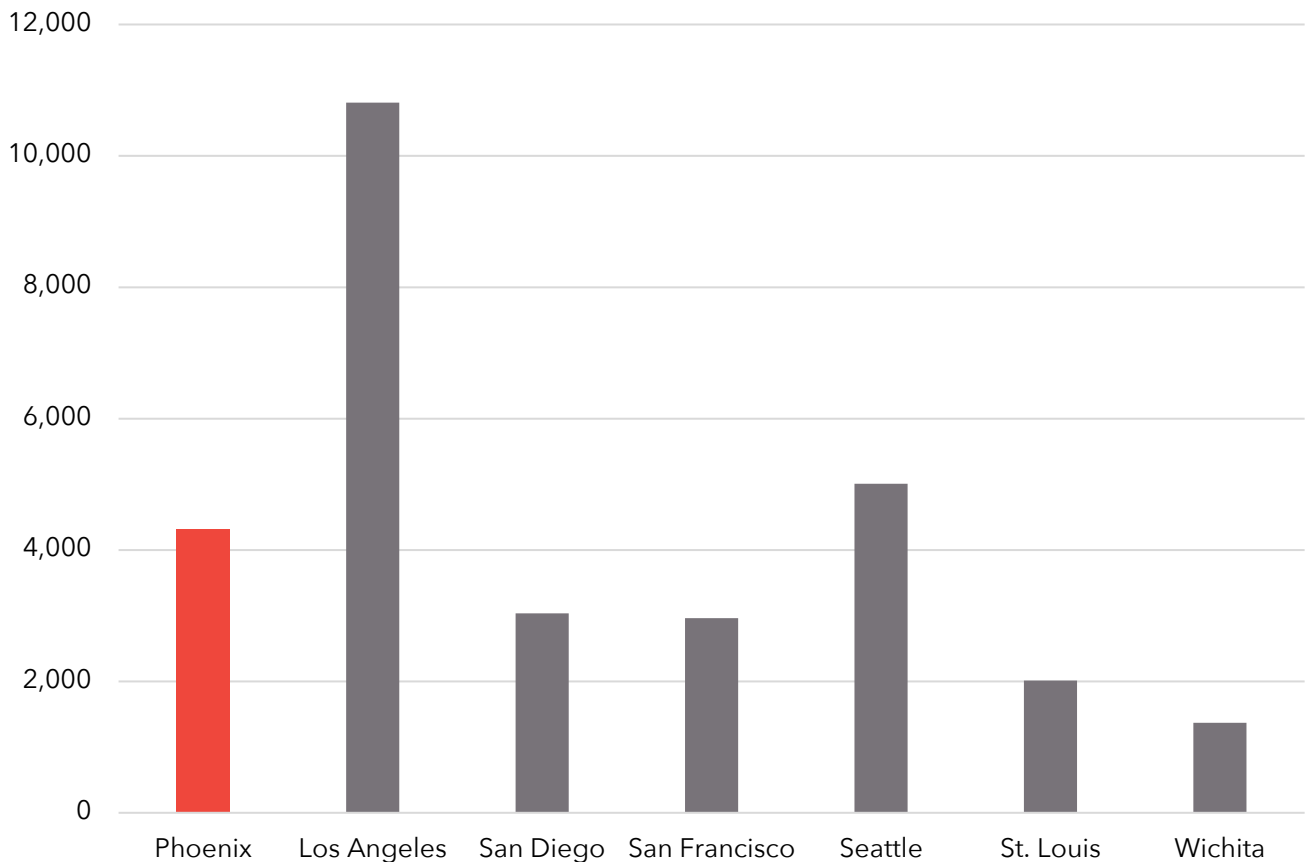
Talent Pipeline

Greater Phoenix Talent Pipeline

Below are total numbers of non-distance program completions at Greater Phoenix colleges and universities for programs relevant to Aerospace & Defense. The region produced over 4,000 graduates in these fields during the 2017 to 2018 school year. Comparison data for peer markets has been provided below.

Certificate	Associate	Bachelor	Master	Doctor
770	1,144	1,352	762	131

2018 Graduates by Region



Talent Pipeline

Arizona State University (ASU)



As a top research university, ASU is one of the handful of universities that have the capacity to build space-ready hardware for NASA and is currently involved in 12 NASA missions. In fact, ASU has been tasked with leading the Psyche Mission, which began in 2017 with plans to launch in 2023. ASU also has one of the largest engineering programs in the country, with programs both on its main Tempe campus and its Polytechnic campus at Phoenix-Mesa Gateway International Airport.

ASU offers a wide variety of degree programs in areas that are relevant to aerospace & defense. These programs include:

Polytechnic Campus

- Aeronautical Management Technology (Unmanned Aerial Systems)
- Aviation
- Engineering- focus areas in electrical systems, mechanical engineering systems, manufacturing engineering

Tempe Campus

- Aerospace Engineering- focus areas in aeronautics, astronautics and autonomous vehicle systems
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering
- Software Engineering



University	Type	City	2018 Engineering Enrollment	2018 A&D Graduates	2018 Total Graduates
Arizona State University	4-yr Public	Tempe	16,159	2,251	20,253

Talent Pipeline

University of Arizona (U of A)



U of A is a leader in aerospace, space, and engineering. As a top-tier research institution, U of A is also one of the handful of universities that have the capacity to build space-ready hardware for NASA and is the only place in the world capable of building the mirrors for the Giant Magellan Telescope. In addition, U of A is the 11th ranked university in the world for space science, according to U.S. News and World Report's 2020 college rankings.

U of A offers a wide variety of degree programs in areas that are relevant to aerospace & defense. These programs include:

Tucson Campus

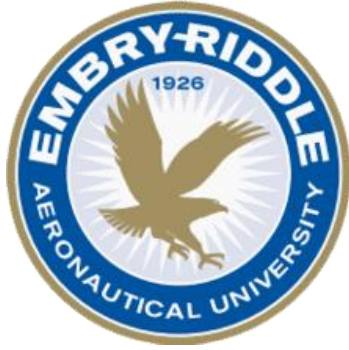
- Aerospace Engineering
- Mechanical Engineering
- Physics and Space Sciences, which includes access to the university's Lunar and Planetary Laboratory (LPL), which was integral to the Phoenix Mars Mission and OSIRIS-Rex.



University	Type	City	2018 Engineering Enrollment	2018 A&D Graduates	2018 Total Graduates
University of Arizona	4-yr Public	Tucson	3,694	585	6,917

Talent Pipeline

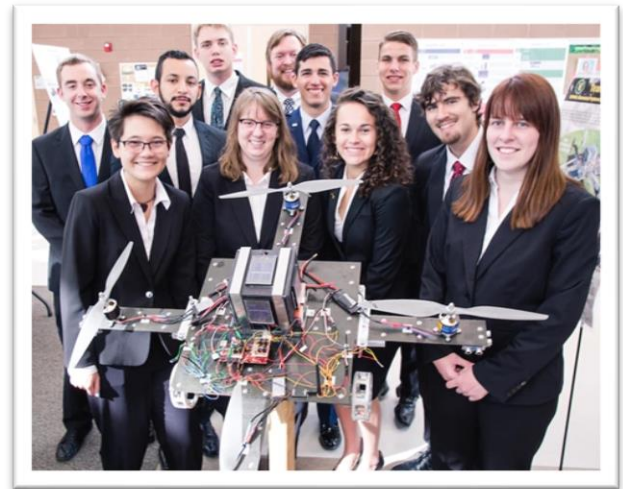
Embry-Riddle Aeronautical University



Embry-Riddle Aeronautical University, located in Prescott, Arizona, is a world leader in aerospace education. Aerospace and Aeronautical Astronautical Engineering programs at its Prescott campus are ranked #1 in the nation among undergraduate institutions by U.S. News and World Report for 2019. The university's focus on the skies prepares its students to be valuable contributors in both aerospace & defense industry sectors.

Embry-Riddle offers a wide variety of degree programs in areas that are relevant to aerospace & defense. These programs include:

- Aerospace Engineering, which equips students with skills to solve even the most complex challenges in design, propulsion and systems for aircraft and/or spacecraft.
- Unmanned Aircraft Systems, which focuses on commercial and civil applications, trains students on both the practical use of unmanned aircraft as well as the use and analysis of data collected by said aircraft.



University	Type	City	2018 Engineering Enrollment	2018 A&D Graduates	2018 Total Graduates
Embry-Riddle Aeronautical University	4-yr Private	Prescott	1,103	286	454

Talent Pipeline

Additional Higher Education Leaders in Greater Phoenix



University Of Phoenix

The largest private university in the United States focused on business curriculum. The learning model of the university is designed to provide an active, engaging, learning environment that allows for practical application of knowledge and skills



Grand Canyon University

Arizona's premier private Christian university with over 200 academic programs and more than 20,000 on-campus students enrolled. GCU's engineering programs include electrical and mechanical engineering.



University Of Advancing Technology

More than 800 students enrolled, primarily in technology-focused programs, including computer science. UAT's mission is to educate students in advancing technology who innovate for our future.



Talent Pipeline

Notable Coding Schools & Programs in Greater Phoenix



General Assembly

With 20 schools worldwide, including one in Phoenix, the school offers a variety of coding and technology focused programs. From part-time to full-time, online and in person.

- Software Engineering
- User Experience Design
- Data Science
- Python
- JavaScript



Galvanize

Galvanize offers both full- and part-time curriculum in web development and data science. Immersive course offerings produce job-ready graduates.

- Full stack
- JavaScript
- Python



DevMountain

DevMountain is an industry-leading coding school with expert faculty who are passionate about sharing their craft and empowering the next wave of programmers, entrepreneurs, and designers.

- IOS development
- Salesforce development
- Software Quality Assurance
- User Experience Design
- Web development

Talent Pipeline

K-12 Stem Initiatives

The Arizona STEM Network, led by the Science Foundation of Arizona, leads a number of initiatives and brings together educators of all levels to improve STEM education in the Arizona K-12 system, improving the quality of Arizona's talent pipeline in the long term. Among these is the HELIOS STEM Schools pilot program that develops a system to provide the infrastructure, resources and metrics needed to improve educational outcomes in STEM fields.

Several major local employers in the cluster have supported K-12 initiatives in Arizona in the past, including:

- Honeywell recently funded and presented productions of "FMA Live! Forces in Motion," an award-winning interactive science and engineering educational experience to a number of Arizona middle schools starting in March of 2016.
- Boeing has an ongoing joint venture with Mesa Public Schools on the "flight center" program. Started in 1998, the program has provided core curriculum learning applied to aviation to approximately 3,800 fifth graders every year.
- General Dynamics' Mission Systems business line has provided the eCrew program to STEM interested students participating in the Scottsdale and Gilbert Boys and Girls Club branches since 2010. eCrew is an 11-week intensive STEM learning program.

This is just a sample of the many ways local A&D operations are involved in improving the talent pipeline for the region.



Operating Cost Analysis

The Annual Business Operating Cost Analysis has been prepared using the following parameters as an estimate for A&D product development in competitor markets. Component and custom analyses to match your company's operations can be provided upon request.

Assumptions

- \$20,000,000 personal property investment
- 50,000 square foot Industrial Manufacturing, Lease
- Utilities (per month):
 - Electricity: 40W, 10,00KWh
 - Water/Wastewater: 3,000cf, 5/8 meter
- 150 jobs (Bureau of Labor Statistics equivalent occupations)

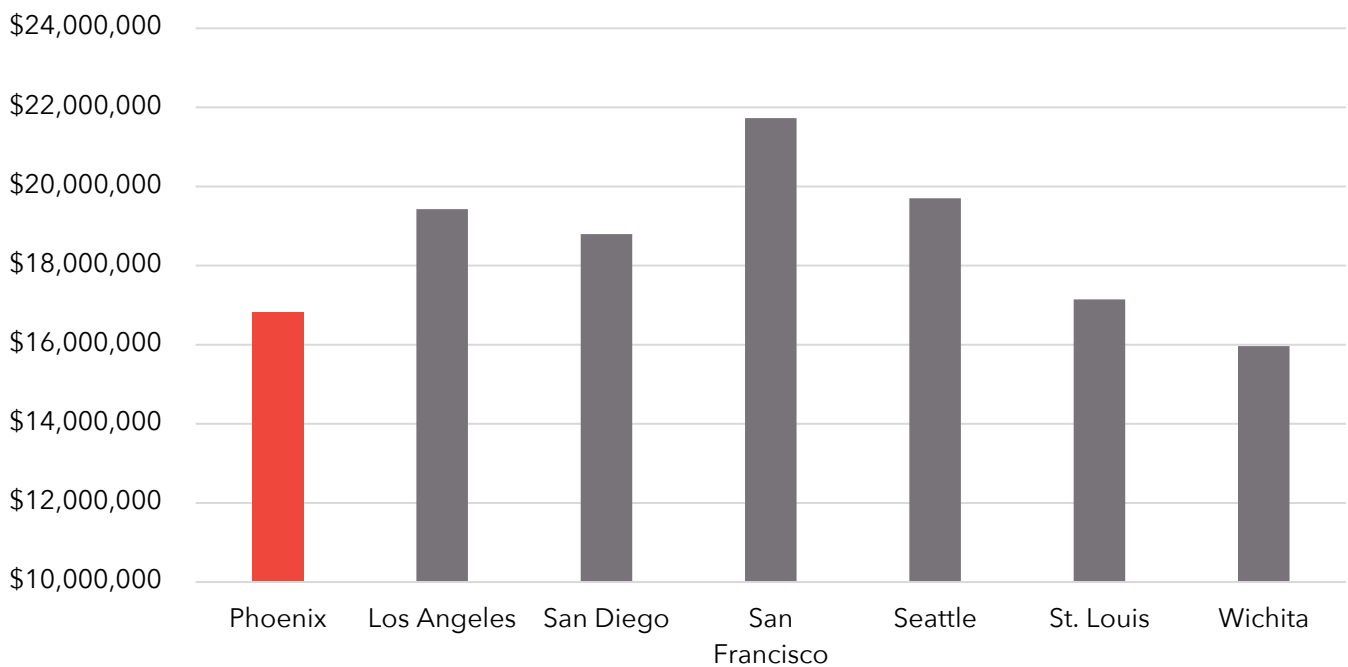
Occupations	Employment
Team Assemblers	20
Aircraft Mechanics and Service Technicians	20
Aerospace Engineers	20
Software Developers, Systems Software	20
Industrial Engineers	15
Mechanical Engineer	12
Electrical Engineers	12
First-Line Supervisors of Production Workers	10
Software Developers, Applications	10
Computer Systems Analysts	10
Industrial Production Managers	1
Total	150

Operating Cost Analysis

Annual Operating Cost

Metro	Employee Payroll	Fringe And Mandated Benefits	Utilities	Real Estate Payments	Property Tax	Total Operating Cost	Index
Phoenix	\$12,925,767	\$3,097,679	\$20,106	\$342,000	\$438,120	\$16,823,672	100.0%
Los Angeles	\$14,909,486	\$3,744,711	\$25,059	\$516,000	\$233,400	\$19,428,656	115.5%
San Diego	\$14,335,589	\$3,602,679	\$42,107	\$588,000	\$227,200	\$18,795,575	111.7%
San Francisco	\$16,258,907	\$4,080,295	\$32,972	\$1,122,000	\$236,000	\$21,730,173	129.2%
Seattle	\$14,961,576	\$4,080,794	\$13,964	\$466,500	\$178,895	\$19,701,729	117.1%
St. Louis	\$13,083,766	\$3,247,807	\$13,484	\$209,000	\$590,761	\$17,144,818	101.9%
Wichita	\$12,177,615	\$2,952,963	\$16,929	\$208,500	\$607,500	\$15,963,508	94.9%

Operating Cost by Region



Tax Environment

Arizona Tax Environment vs. Competitor Markets

Arizona has a very competitive tax and fringe/mandated benefits environment compared to other major A&D markets.

Metro	Sales Tax Rate	Corporate Income		Inventory Tax?	Unemployment Insurance			Workers Comp. (Rate Per \$100 Payroll)
		Tax Rate	Basis		Rate (As % Of Payroll)	Wage Base	Max. Payment	
Phoenix	8.60%	4.90%	Net Income	No	2.00%	\$7,000	\$140	\$1.30
Los Angeles	9.50%	8.84%	Net Income	No	3.40%	\$7,000	\$450	\$2.87
San Diego	7.75%	8.84%	Net Income	No	3.40%	\$7,000	\$450	\$2.87
San Francisco	8.50%	8.84%	Net Income	No	3.40%	\$7,000	\$450	\$2.87
Seattle	10.10%	0.48%	Gross Receipts	No	1.00%	\$52,700	\$790	\$1.87
St. Louis	7.73%	4.00%	Net Income	No	2.38%	\$11,500	\$320	\$1.68
Wichita	7.50%	7.00%	Net Income	No	2.70%	\$14,000	\$488	\$1.15



Statutory Incentives

Statutory Incentives

Even with the highly competitive tax environment in Greater Phoenix and Arizona, there are several tax incentives that can be utilized to mitigate operating costs. Some of the most relevant to the A&D industry are listed below. Please note that this is not a comprehensive list of all incentives available within the state of Arizona. Additionally, it should be noted that this document is only a guide for potential incentives. Actual incentives will depend on actual project parameters and varying program qualifications and requirements as determined by the Arizona Commerce Authority.

Quality Jobs Tax Credit

Quality jobs provides tax credits to employers creating a minimum number of net new quality jobs and making a minimum capital investment in Arizona. The Quality Jobs Tax Credit offers up to \$9,000 of Arizona income or premium tax credits over a three-year period for each net new quality job. The tax credit is equal to \$3,000 per qualified employment position, employed for each full taxable year of continuous employment for three years. If the allowable tax credit exceeds the income or premium tax liability, any unused amount may be carried forward for up to five consecutive taxable years. Employers must cover 65% of employee health insurance premium costs. Additional program qualifications are listed below.

\$9K

\$9,000 corporate income tax credits per job (\$3,000/employee/year)

10K

Capped at 10,000 jobs per year

65%

Employer must offer to pay at least 65% of employee health insurance premium

Urban

Min. New Jobs	County Median Wage	Maricopa	Min. Capex
25	100%	\$38,009	\$5,000,000
25	125%	\$47,511	\$2,000,000
25	150%	\$57,014	\$1,000,000
25	200%	\$76,018	\$500,000

Rural

Min. New Jobs	County Median Wage	Pinal	Min. Capex
5	100%	\$37,040	\$1,000,000
5	125%	\$46,300	\$500,000
5	150%	\$55,560	\$100,000

Statutory Incentives

Qualified Facilities Refundable Tax Credit

- Targets manufacturing facilities, including those focusing on research and development or headquarters locations
- Offers refundable income tax credit equal to the lesser of:
 - 10% of the qualifying capital investment, or
 - \$20,000 per net new full-time employment position at the facility, or
 - \$30,000,000 per taxpayer
- Requires wages of greater than 125% of the state median wage for production occupations in urban areas (\$43,680); 100% in rural areas (\$34,944)
- At least 65% of benefits package covered by employer
- Minimum investment of \$250,000

Military Reuse Zones (MRZ)

- Established in 1992 to minimize the impact of military base closures, both Arizona-designated MRZs are in Greater Phoenix: Phoenix-Mesa Gateway and Goodyear Airports. Businesses located in MRZs are subject to the following benefits:
 - Transaction Privilege Tax Exemption - Exemption from transaction privilege tax on contracts for certain types of construction at an MRZ
 - Property Reclassification - Both real and personal property can be reclassified from Class 1 (18% assessment ratio) to Class 6 (5% assessment ratio), which may result in property tax savings of up to 72.2% for a period of five years

Foreign Trade Zones (FTZ)

- Designated areas where imports can be stored without full customs formalities
- In Arizona, property is reclassified from Class 1 to Class 6, lowering assessment ratio from 18% to 5%
- Property tax savings of up to 73%
- FTZ properties are eligible to claim additional depreciation on personal property to further lower tax liability

Additional Depreciation Factor

Companies can elect to use additional depreciation to fully depreciate their property more quickly. By using additional depreciation, a company's property will be valued at 25% of its scheduled depreciated value (25% * depreciation factor * property value) and 100% by year six (100% * depreciation factor * property value).

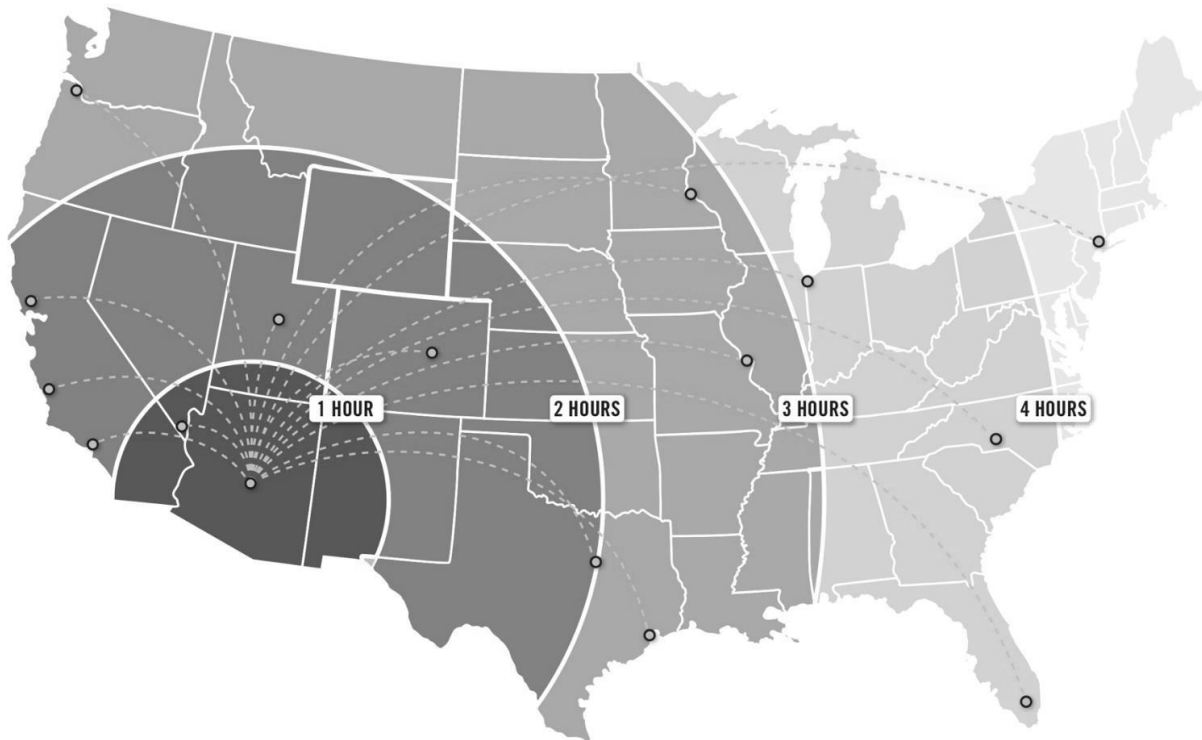
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
25%	41%	57%	73%	89%	100%

Key Infrastructure

Greater Phoenix Airport Access

Skybridge at Phoenix-Mesa Gateway International Airport:

- An air logistics hub to ship high-value goods directly to consumers through a bonded facility incorporating Mexican and U.S. customs – will be the first of its kind in the interior U.S. for air freight activities.
- Ideally situated within the Southwestern U.S. to not only meet growing e-commerce and airport logistics demands in the Phoenix metropolitan area but also to serve as a direct carrier to and from consumers in Mexico and across the nation.
- In addition, the proximity to ASU's Polytechnic Campus creates opportunities for partnerships to attract and retain workforce talent within the airport.



Phoenix Sky Harbor International Airport:

- 43 million passengers annually
- 1,200 daily domestic and international flights
- Over 800 tons of cargo handled daily

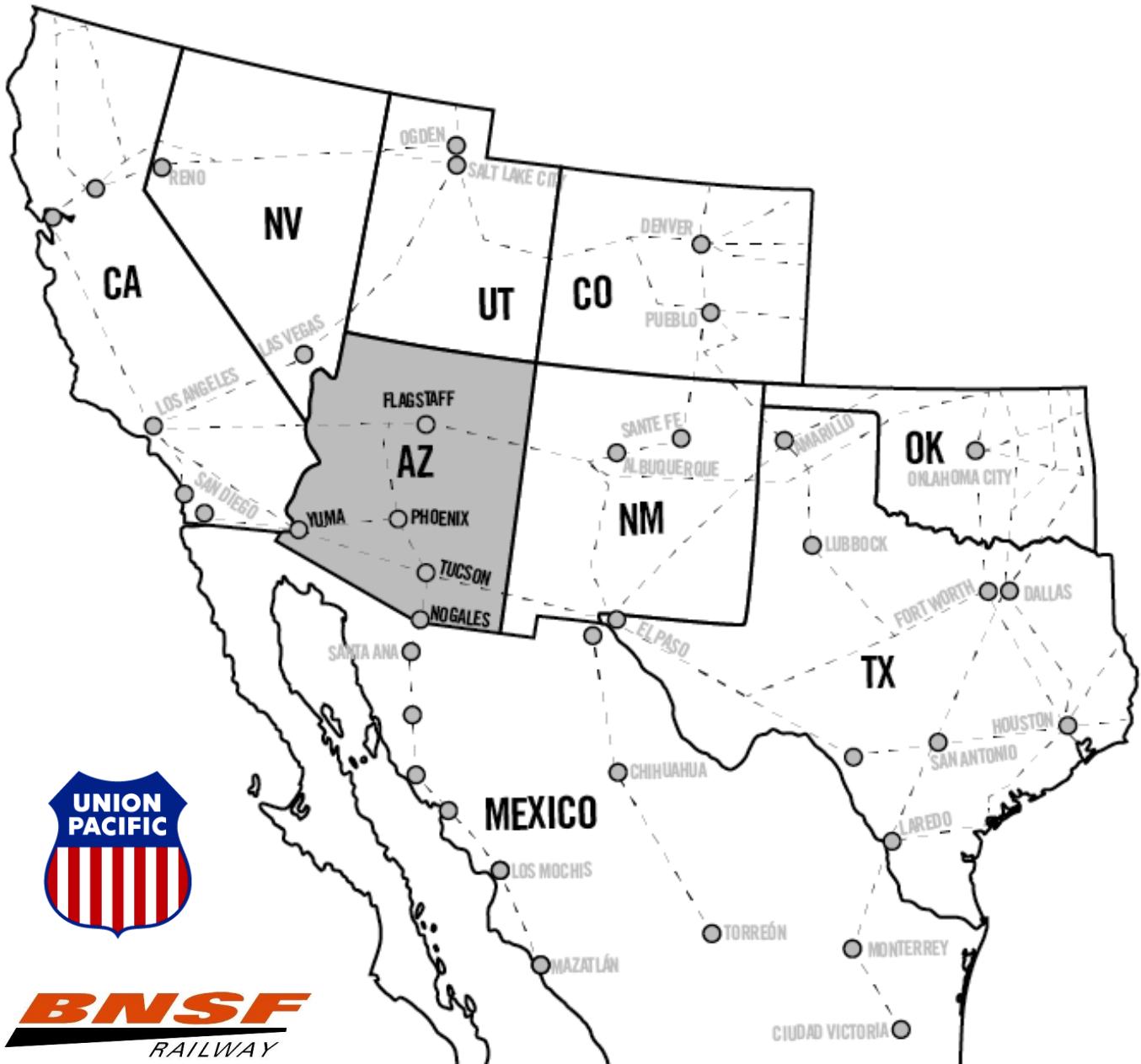
Major Cargo Carriers from Sky Harbor:

- | | |
|---------------------|----------------------|
| • Amazon Prime Air | • DHL |
| • American Airlines | • FedEx |
| • Ameriflight | • Southwest Airlines |
| • British Airways | • United |
| • Delta Airlines | • UPS |

Key Infrastructure

Regional Rail Access

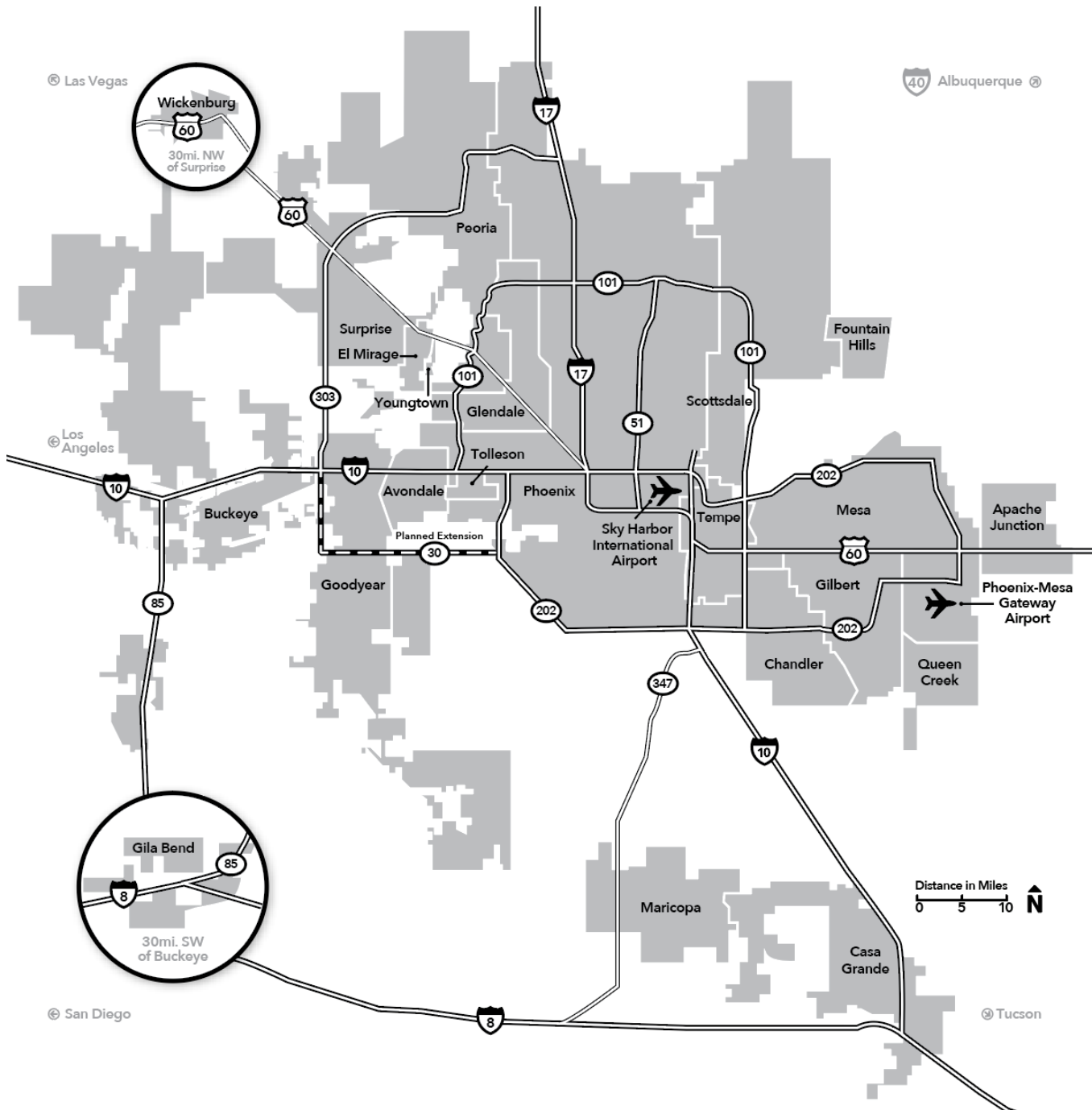
Greater Phoenix is served by two major railroads, Union Pacific and BNSF. The map below displays all major rail lines throughout the Southwest.



Key Infrastructure

Greater Phoenix Regional Highway Map

The map below displays existing and planned highway infrastructure in Greater Phoenix. The region's highways are well-planned and provide easy access to all the major submarkets in the region. In addition, proximity to Interstates 8 and 40 mean that access to California markets is seamless.



Appendix A

Aerospace & Defense Industry Cluster Definition

Aerospace & Defense, as a complex and diverse sector, covers a wide variety of specializations and supply lines. The table below outlines the NAICS Industry codes used in our Industry Cluster Analyses.

NAICS	Description
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing
336411	Aircraft Manufacturing
336412	Aircraft Engine and Engine Parts Manufacturing
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing
336414	Guided Missile and Space Vehicle Manufacturing
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers
488111	Air Traffic Control
488119	Other Airport Operations
488190	Other Support Activities for Air Transportation
517410	Satellite Telecommunications

Rankings & Recognition

#1

Phoenix was ranked #1 Fastest Growing City by population in Business Facilities' 2019 Metro Rankings Report

#1

Arizona State University named America's Most Innovative University 5 years in a row by US News

#3

Sky Harbor International Airport ranked 3rd in the Wall Street Journal's "The Best of the Biggest Airports"

Top Tier

APS and SRP rank as top business service providers by J.D. Power and Associates for reliability

Top 10

In 2019, Arizona was ranked in the top 10 best states to start a business by WalletHub

Top 10

Greater Phoenix is ranked in the top 10 for low catastrophic and natural disaster risk

Top 20

In 2018, two cities within the region were listed in the top 20 happiest cities in the nation

Top 20

Arizona ranked in the top 20 states for doing business in 2019

Greater Phoenix Greater Together

People. Place. Technology.