

# Greater Phoenix Software Ecosystem

MAY 2024

PHOTO BY JEFFREY

# Develop Your Business in Greater Phoenix

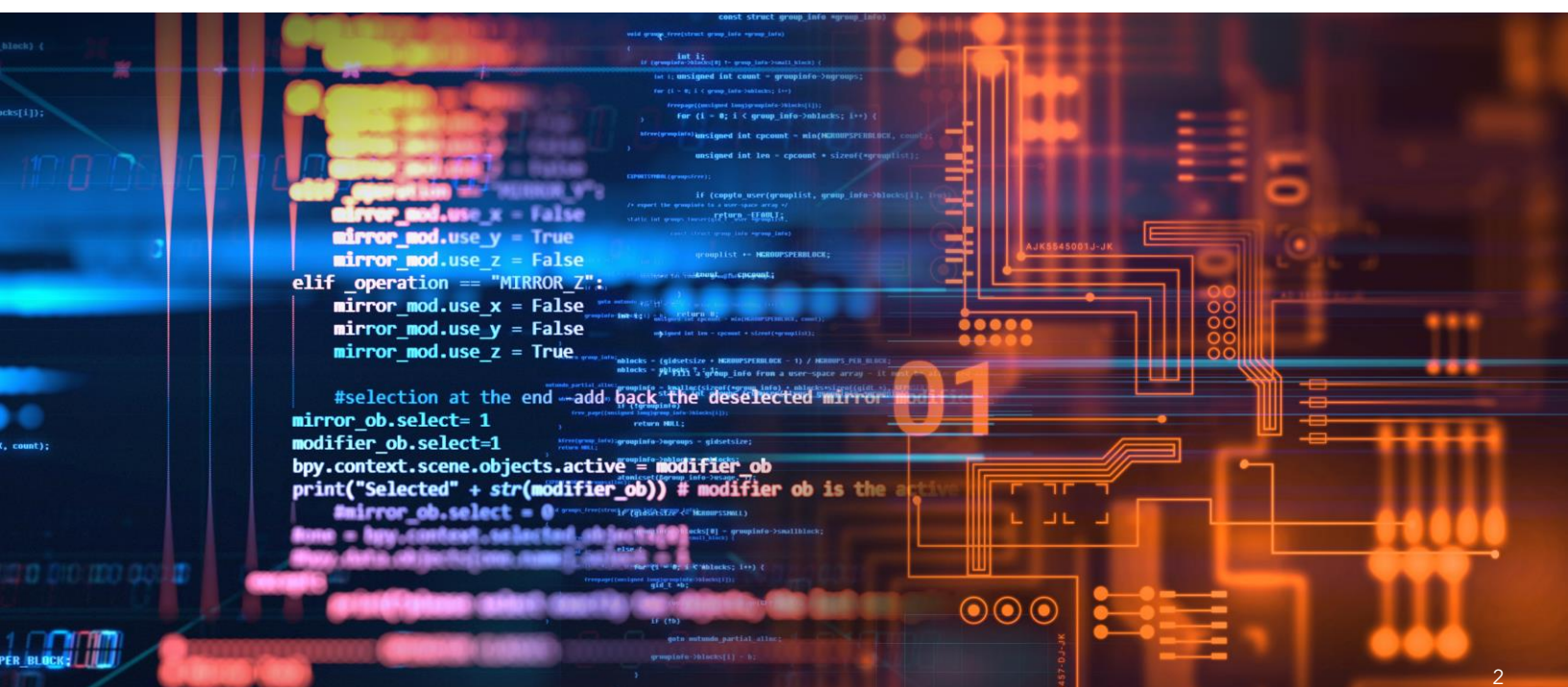
## One of the Nation's Fastest-Growing Tech Hubs

Greater Phoenix is a dynamic and growing software hub. Supported by an expanding group of local and national firms, Greater Phoenix is increasingly being recognized as the place where software firms go to scale.

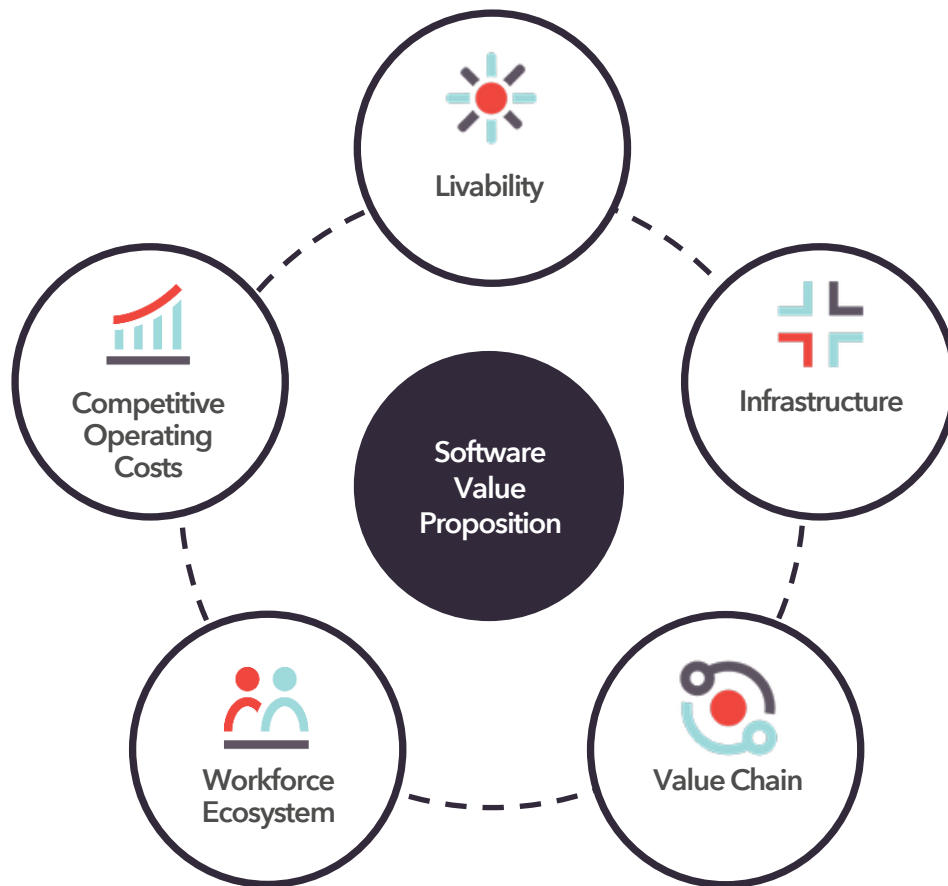
Greater Phoenix is well-positioned to support both new-to-market software companies, as well as the expansion of our existing cluster.

Here are just a few reasons why so many top companies choose Greater Phoenix:

- Large and talented workforce
- Massive education pipeline developing workers with vital skills
- Faster commute times than many peer markets, ensuring easy access to a robust talent pool
- Competitive operating cost and tax environment with several available incentives
- More affordable cost of living for employees and overall better quality of life than peer markets
- Welcoming and supportive region with active trade associations and dynamic networking organizations



# Value Proposition



Infrastructure	Value Chain	Workforce Ecosystem	Competitive Operating Costs	Livability
<ul style="list-style-type: none"> <li>Fast internet connectivity</li> <li>Consistent and reliable power coverage</li> <li>Robust network of data centers</li> <li>Access to a leading domestic and international airport</li> <li>Low risk of natural disasters</li> </ul>	<ul style="list-style-type: none"> <li>Welcoming technology community backed by dynamic firms</li> <li>Growing number of local technology startups</li> <li>Large software and IT offices of Fortune 500 firms</li> </ul>	<ul style="list-style-type: none"> <li>Specialized training programs in universities and community colleges across the state</li> <li>University alignment and partnerships to create job-ready students</li> <li>Growing number of coding schools and bootcamps</li> </ul>	<ul style="list-style-type: none"> <li>Cheaper real estate and benefit costs compared to peer markets</li> <li>Several quality incentives to further decrease operating costs</li> </ul>	<ul style="list-style-type: none"> <li>Lower cost of living than many peer markets</li> <li>Abundance of craft breweries and coffee houses throughout the region</li> <li>More than 300 days of sunshine annually</li> </ul>

# Industry Ecosystem

## Phoenix-Based Firms

Greater Phoenix is home to a dynamic and growing software ecosystem. In addition to many national leaders operating in the region, several software companies are headquartered here.





























# Industry Ecosystem

## National Companies

Many leading national software companies have substantial operations in Greater Phoenix. Below is a sample of major firms that have a presence in the region.

The logo for Alpha10X, featuring the word "ALPHA" in bold black uppercase letters followed by "10X" in a lighter black font.The logo for Amazon Web Services (AWS), consisting of the lowercase letters "aws" in a dark blue font with a curved orange arrow underneath.The logo for Brightcove, featuring the word "BRIGHTCOVE" in bold black uppercase letters with a registered trademark symbol.The logo for Gainsight, with "Gainsight" in a blue sans-serif font and a small blue "t" at the end.The logo for Mindbody, featuring a stylized orange and red circular icon followed by the word "MINDBODY" in black uppercase letters with a registered trademark symbol.The logo for Newfold Digital, featuring a stylized orange and grey geometric icon followed by the word "newfold" in orange lowercase letters and "digital" in grey lowercase letters below it.The logo for Opendoor, with the word "Opendoor" in a blue sans-serif font.The logo for PayPal, featuring a blue "P" icon followed by the word "PayPal" in a blue sans-serif font.The logo for Realtor.com, with "realtor.com" in a red serif font and a registered trademark symbol.The logo for SAP, featuring the word "SAP" in white uppercase letters inside a blue parallelogram shape with a registered trademark symbol.The logo for Sendoso, with the word "Sendoso" in an orange sans-serif font.The logo for Square, featuring a black square icon with a white square inside, followed by the word "Square" in a black sans-serif font.The logo for Turo, with the word "TURO" in black uppercase letters inside a black-outlined arrow shape pointing to the right.The logo for Uber, with the word "Uber" in a black sans-serif font.The logo for Upgrade, featuring a green "U" icon followed by the word "upgrade" in a green sans-serif font.The logo for Weebly, with the word "weebly" in a blue, rounded, lowercase sans-serif font.The logo for Workiva, with the word "workiva" in a green sans-serif font.The logo for Yelp, with the word "yelp" in a black sans-serif font followed by a red starburst icon.The logo for Zelle, with the word "Zelle" in a purple sans-serif font.The logo for ZipRecruiter, featuring a green office chair icon followed by the word "ZipRecruiter" in a black sans-serif font with a registered trademark symbol.The logo for Zocdoc, featuring a yellow circle with a blue "Z" inside, followed by the word "Zocdoc" in a blue sans-serif font.

# Industry Ecosystem

## Cybersecurity Firms

Greater Phoenix has a rich ecosystem of cybersecurity companies. Listed below is a sampling of cybersecurity firms that have a presence in the region, some of which were founded locally and others scaled into the region efficiently.





# Ecosystem Network

## Greater Phoenix Technology Organizations & Support Network



### StartupAZ

StartupAZ helps innovative startup companies improve their performance and connections while inspiring generosity and philanthropy within their communities. The organization's goal is to provide support and resources to founders in the critical stages of company building. Since its formation in 2015, StartupAZ has supported more than 120 early-stage founders and has raised over \$300 million in capital.



### #yesphx

#yesphx is the go-to resource for startups and technology companies in Greater Phoenix entering the market or looking to grow. It works to amplify the sector, unify the players in the space and be a generous community for entrepreneurs.



### AI Salon

AI Salon is a global community for AI founders and builders, investors, and partners to connect and collaborate. It creates events and conversations for AI players to come together in open communication and collectively leverage the transformative power of generative AI.



### Arizona Innovation Challenge

The Arizona Innovation Challenge is a business plan competition designed to advance innovation and technology commercialization in Arizona. The competition awards \$1.5 million annually, one of the largest amounts available for any challenge of its kind in the U.S. Winners are also enrolled in the Arizona Commerce Authority's mentor-led accelerator and receive exposure to investors, business executives and startup CEOs.



### Arizona Technology Council

The Arizona Technology Council is the largest trade association for technology companies in the state. With more than 750 members, the organization hosts events, provides networking opportunities, hosts a job board, and advocates on behalf of technology companies.

# Ecosystem Network

## Greater Phoenix Technology Organizations & Support Network



### Freeway

Freeway is an independent, community-led group in Arizona that helps founders successfully capitalize their startup. It is designed for early stage tech founders, investors and partners.



### Venture Madness by Invest Southwest

Since 1992, Venture Madness by Invest Southwest has helped emerging growth companies raise more than \$1 billion in capital by connecting investors with ventures. It does its work through memberships, partnerships, programs and event initiatives that provide valuable insights and education on topics important to fostering the ecosystem.



### Phoenix Startup Week

Phoenix Startup Week is a six-day event featuring sessions, mentoring, competitions, debates, panels, happy hours and networking as it gathers the region's startup community into one space.



### PHX FWD

PHX FWD works to help Greater Phoenix become a top software hub by strengthening ecosystem support and providing a foundation for companies through partnerships with groups like Freeway, Arizona Venture Development Corp (AVC), StartupAZ and The Journey Venture Studio.



### Venture Café Phoenix

Venture Café Phoenix connects innovators and entrepreneurs with accessible, high-impact weekly programming. It welcomes innovators of every expertise, experience level and identity, and collaborates with a wide range of moderators and educators to lead programs.



# Tech & VC Ecosystem

Greater Phoenix is home to:

**13,000+**

*Tech companies*

**770+**

*Software companies*

**280+**

*Startup companies*

## Venture Capital Market Overview

	Q1 2023 through Q1 2024
Greater Phoenix VC funding	\$1.9B
Greater Phoenix average VC deal size*	\$18.9M
Number of deals	121
Capital Sources: VC firms with a fund manager living in AZ (as of 2023)	28

## Select Tech-Focused Venture Community



*Enterprise, Software, Consumer, Climate Tech, Bio/Health Tech*



*Technology, Sector Agnostic*



**GRAYHAWK**  
CAPITAL

*B2B SaaS (Various Verticals)*



*B2B SaaS, Consumer, Device/Hardware/IoT, Marketplace*

# Tech & VC Ecosystem

## Venture Capital Deal Highlights

Greater Phoenix has an innovation ecosystem with many growing companies. Below are examples of software funding deals that involve companies headquartered in Greater Phoenix.



**Scottsdale**

\$5.4M Seed round

May 2023



**Peoria**

\$21M Series A round

April 2024



**Scottsdale**

\$500M unknown Series round

January 2023



**Phoenix**

\$2.5M Seed round

August 2023



**Gilbert**

\$16M Series A round

September 2023



**Gilbert**

\$20M Series A round

November 2023



**Scottsdale**

\$5.65M Seed round

January 2024



**Tempe**

\$50M Series C round

August 2023



**Phoenix**

\$3.3M Seed round

February 2024



**Scottsdale**

\$4.6M Seed round

September 2023



**Tempe**

\$2.5M Unknown Series round

March 2024



**Scottsdale**

\$6.3M Seed round

April 2023

# Local Innovation

## Incubators & Accelerators

Greater Phoenix has a strong support network for software companies. Listed below are some of the region's incubators and accelerators, spaces that can be used by companies as they grow. Many of these spaces offer additional services to help connect, integrate and build new companies in the ecosystem.

- Arizona International Soft Landing Experience (AISLE)
- ASU Chandler Innovation Center
- ASU ScaleU
- ASU Venture Devils
- Avenue Business Center
- AZ TechCelerator
- BioAccel
- Center For Entrepreneurial Innovation (CEI)
- Chandler Innovations
- Coplex
- FABRIC
- Fennemore Craig Venture Accelerator
- Flinn Foundation Entrepreneurship Program
- Game CoLab
- Growth Nation
- High Tide
- House of Genius
- HUUB
- LaunchPoint
- MAC6 Leadership Academy
- MacroTechnology Works
- Moonshot at NACET
- Recreate Now
- StartupAZ Collective
- SEED SPOT
- Stealthmode Partners
- Tallwave
- The Journey Venture Studio



# Local Innovation

## Coworking Spaces

Greater Phoenix has a strong support network of coworking spaces for entrepreneurs and startups. Many of these spaces offer additional services to help connect and integrate new companies into the ecosystem.

- 1951 @ SkySong
- 850PBC
- AZ CoWork
- Chefs Shared Kitchen
- Co+HOOTS
- Cooper Crossing
- CoWorkArizona
- CoWorking on 15th Ave
- Elevate Coworking
- Executivehub
- Expansive - Chandler, Mesa, Phoenix
- EZ Spaces
- Fusion on First
- Gainey Ranch
- Galvanize
- GangPlank- Queen Creek
- Gateway Executive Suites
- Grid.Works
- HeatSync Labs
- StartUpPHX
- ignite sparked by BBB
- Industrious
- InnovationHub @ GoodyearAZ
- Kenect Phoenix
- Lux Office - Avondale
- Lux Office - Scottsdale
- Mac6 - Coworking Space
- Mac6 - Manufacturing Space
- THINKspot
- Novel Coworking Group - Heard Building, Phoenix
- Novel Coworking Group - Midtown, Phoenix
- Office Evolution
- Phoenix Forge Makerspace
- Perimeter83
- Premier Coworking
- Regus - Arizona, Mesa - Dobson
- Regus - Arizona , Scottsdale - Raintree Corporate Center
- Regus - Arizona , Scottsdale- Scottsdale Financial Center III
- Spaces
- Start @ West-MEC
- The Department
- Society Workspaces
- Thrive Coworking for Women
- Union WorkSpace
- WeWork - 101 N. 1st Ave
- WeWork - 2425 E. Camelback Ave
- WeWork - The Watermark
- Workpliciti
- Workuity- Biltmore
- Workuity- Chandler

# FinTech Sandbox

Following the example set by the United Kingdom, on March 22, 2018, Arizona became the first state in the U.S. to create a Regulatory Sandbox Program (RSP). This RSP allows financial services companies to test innovative products and technology in market for up to 24 months without obtaining a license or other authorizations that might otherwise be required.

This program encourages the development of emerging industries like FinTech, blockchain and cryptocurrencies throughout the state.

## Three things to know about the Sandbox Program

### 1. Loans and transactions

Sandbox participants may make consumer lender loans (up to \$15,000 per individual loan and \$50,000 per consumer) or provide products or services as a money transmitter (up to \$2,500 per transaction and \$25,000 per consumer).

### 2. Arizona user base capped at 10,000

User base for FinTech product is capped at 10,000 customers. However, the attorney general may allow companies in the sandbox to transact with up to 17,500 customers if the company is financially solvent and has proper risk management protocols in place.

### 3. Limitless participants

There is no limit on the number of participants in the sandbox at any one time. The program ends on July 1, 2028.

## Recent Sandbox Participants

Company	Date Joined	Description
GiveCorporation Inc.	March 2023	Software providing merchant services with innovative state-of-the-art fraud detection.
Yield Park, LLC	March 2022	Cash management tool utilizing digital dollar custodians and decentralized finance protocols.
Valley of the Sun Mint, LLC (dba Satoshiware)	March 2022	Hardware bitcoin wallets called Satoshi Coins that are pre-loaded with fractional bitcoin.
Cryptoenter Corp.	July 2021	A blockchain-based platform integrated with banks to provide bank customers with cryptocurrency exchange and transfers.
MO Technologies USA, LLC	February 2020	An online platform that allows consumers to apply for an interest-free cash advance line of credit.
WithClutch, LLC	January 2020	Technology and a business model for refinancing motor vehicle retail installment contracts.

For more information, visit [www.gpec.org/sandbox](http://www.gpec.org/sandbox).

# Talent Pipeline

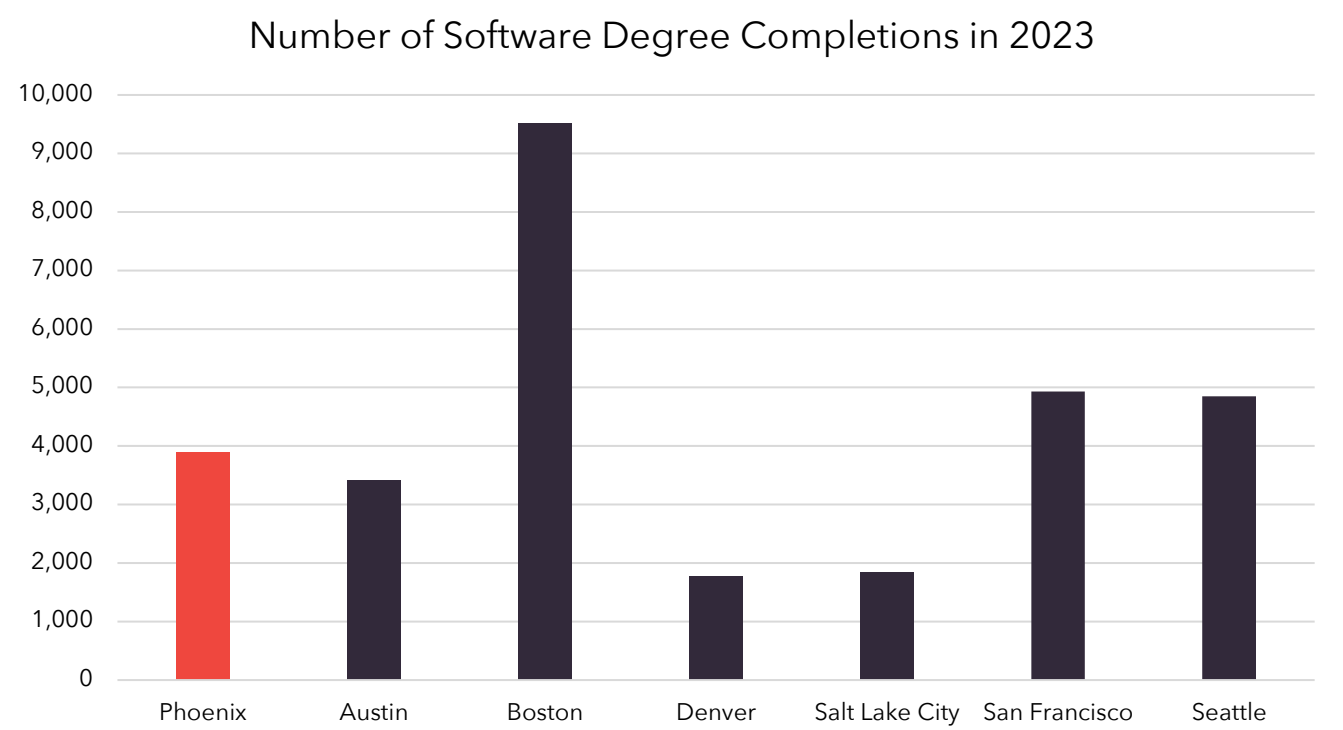
## Greater Phoenix Talent Pipeline

Greater Phoenix’s education institutions are committed to supplying the workforce needed to enable companies to scale in the region. Below are the total number of non-distance program completions at colleges and universities in Greater Phoenix for computer engineering, information technology, computer and software engineering, and computer science. The region produced over 3,800 graduates in these fields during the 2022-23 school year, more than Austin, Denver or Salt Lake City. Comparison data for peer markets has been provided below.

Certificates	Associate’s	Bachelor’s	Master’s	Doctor’s
524	396	1,357	1,526	80

## Competitive Markets' Talent Pipeline

In Greater Phoenix, the number of software-related non-distance degree completions rose by 60% between 2022 and 2023. The talent pool for the software sector in the Phoenix metro surpasses competitive markets such as Austin, Denver and Salt Lake City.





# Talent Pipeline

## Universities

Arizona has three four-year public universities: Arizona State University in Tempe, Northern Arizona University in Flagstaff and the University of Arizona in Tucson. ASU has top-ranked engineering and technology programs, with its Ira A. Fulton School of Engineering undergraduate program ranking in the top 20% of programs by U.S. News & World Report. Many of its 350 faculty members have been honored with the highest awards in their fields. The engineering school provides almost 32,000 students per year with advanced knowledge on challenges in energy, health, sustainability, education and security. It offers a wide range of innovative programs like E2 Camps, engineering residential communities, undergraduate research, student organizations and Engineering Projects in Community Service (EPICS), to help prepare students for occupations in the future.

ASU, NAU and UA each have a full range of engineering and engineering technology/technician related programs. Examples of software programs include software engineering, computer engineering, electrical and electronics engineering, computer science, information technology and others. There were 5,224 non-distance engineering graduates in 2023 from Arizona State University, which included 1,835 graduates in computer science, 903 graduates in computer and electrical engineering, 604 graduates in information technology and 346 graduates in software engineering.

University	Type	City	Total Enrollment*	Total Graduates*
Arizona State University	4-yr Public	Tempe	79,593	20,996
Northern Arizona University	4-yr Public	Flagstaff	23,453	5,655
University of Arizona	4-yr Public	Tucson	52,629	11,914
<b>Total</b>	-	-	<b>155,675</b>	<b>38,565</b>

\*Non-distance, except for UA's total graduates

# Talent Pipeline

## Notable Programs in Software-related Fields

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### Arizona State University

Arizona State University (ASU) is committed to partnering with corporate, education and government organizations to produce a skilled software and IT workforce. ASU has three schools closely related to software:

- School of Computing and Augmented Intelligence
- School of Electrical, Computer and Energy Engineering
- The Polytechnic School

In addition, ASU's New College of Interdisciplinary Arts and Sciences offers a 24-week cybersecurity bootcamp. Through an immersive hands-on curriculum, students learn fundamental cybersecurity methods through practical exercises.

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### University of Arizona

Several colleges at the University of Arizona (UArizona) offer programs related to software and IT.

- College of Applied Science and Technology (Applied Computing, Cyber Operations)
  - College of Engineering (Computer Science and Engineering, Software Engineering)
  - College of Science (Computer Science)
  - Eller College of Management (Cybersecurity, Enterprise Information Security, Management Information Systems)
- 



### Grand Canyon University

Grand Canyon University is a private Christian university committed to training the next generation of working professionals.

- Computer Science (Emphasis: B.S. in Big Data Analytics, Business Entrepreneurship, Game and Simulation Development & M.S. in Computer Science and Data Science)
- Information Technology (B.S., M.S., & Certificate programs), Information Technology with an Emphasis in Cybersecurity (B.S.)

# Talent Pipeline

## Notable Programs in Software-related Fields



### University of Advancing Technology

Based in Tempe, the mission of University of Advancing Technology (UAT) is to educate students in advancing technology. UAT offers over 20 technology degrees in such fields as:

- Business & Innovation
- Creation & Simulation
- Cyber Security
- Digital Arts
- Game Studies
- Software Engineering



### Maricopa Community Colleges

The Maricopa Community Colleges (MCCCD) includes 10 colleges throughout Greater Phoenix. MCCCD had over 85,000 students and conferred 24,178 degrees during the 2022-2023 period. Some selected majors include:

- Artificial Intelligence & Machine Learning
- Data Analytics & Programming
- Information Security
- Mobile App Development
- Network & Systems Administration
- Programming & Systems Analysis
- Video Game Production
- Web Design/Development



### Embry-Riddle Aeronautical University

Embry-Riddle's satellite campus in Prescott, Arizona, offers the following computer and technology-related programs:

- Computer Engineering
- Cyber Intelligence & Security
- Data Science
- Information Systems Security
- Information Technology Management
- Management Information Systems
- Simulation science, Games, & Animation
- Software engineering

# Talent Pipeline

## Notable Coding Schools & Programs in Greater Phoenix

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### Galvanize



Galvanize is a hybrid education, training and coworking space offering an organic learning environment and coursework in software engineering, coding and data science. Members and students can jumpstart or advance careers in tech through learning, collaboration and professional networking with startups and large firms.

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### Per Scholas



With over 20 schools United States, including one in Phoenix, Per Scholas offers a variety of coding and technology focused programs. Its tuition-free training combines business professional skills development with hands-on technical instruction for high demand jobs. Programs include software engineering, IT support and TEKsystems courses.

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### Phoenix Coding Academy



Phoenix Coding Academy, an innovative specialty small school focused on computer coding and multiple technology pathways through an inquiry-based instructional design, is one of the first public high schools of its kind. Its coding-related courses include Exploring Computer Science, Networking & Cybersecurity, and Software Development.

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### Woz U



An online multi-pronged education as a service platform with offerings in software development, front-end and back-end, full-stack web development, cybersecurity, and big data. Woz U works to reduce the growing tech skills gap by making its programs available to universities and private organizations via institutional partnerships.

# Tech Jobs

## Booming High-Tech Job Market

Greater Phoenix is one of the most rapidly expanding high-tech job markets in the nation. With over 100,000 tech employees, metro employment has grown 15% over the last five years. Even with that growth, Phoenix employers can attract skilled tech workers at relatively lower costs.

## Tech Talent Job Growth, 2018-2023

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**21%**

*Greater Phoenix*

**11%**

*United States*

## StartupAZ Collective Job Board

The StartupAZ jobs board serves as a platform for connecting talent with startups in the region. Job seekers can browse through a comprehensive collection of job listings across various functions and industries, providing seamless accessibility for individuals of all backgrounds. It contributes to building a strong startup ecosystem where talent and innovation converge, driving mutual growth and success.

For more information, please visit: <https://jobs.startupaz.org/jobs>

## Pipeline AZ

Pipeline AZ is a strategic workforce platform that helps students and job seekers connect their passions and experiences with rewarding opportunities. Through this platform, individual skills, interests and experiences are matched with local companies' skills and experience needs. Pipeline AZ has a network focusing on technology and cybersecurity careers.

For more information, please visit: <https://pipelineaz.com/>

# Innovation at ASU

## Arizona State University Embraces Artificial Intelligence

At Arizona State University (ASU), the integration of artificial intelligence into education and research is a cornerstone of its innovative approach. ASU's commitment to advancing AI technology and its applications ensures that students and faculty are at the forefront of this dynamic field, ready to make significant contributions to AI development and implementation.

### OpenAI Collaboration

In January 2024, ASU announced it would be the first higher education institution to collaborate with OpenAI. This partnership brings the advanced capabilities of ChatGPT Enterprise into higher education, enabling faculty, staff and student researchers to explore the potential of generative AI. In alignment with this partnership, the AI Innovation invites individuals to submit innovative uses of ChatGPT Enterprise that align with three areas of concentration: enhancing student success, forging new avenues for innovative research and streamlining organizational processes.



### Center for Human, Artificial Intelligence, and Robot Teaming

ASU's Center for Human, Artificial Intelligence, and Robot Teaming (CHART) is at the forefront of a new science: the intersection of humans, AI and robots. By combining insights from computer science, robotics, law, art and social science, CHART creates human-machine systems that will revolutionize national security through innovative teaming strategies.

### Artificial Intelligence Programs

- M.S. in Artificial Intelligence in Business
- M.S. in Robotics and Autonomous Systems (AI)
- B.S. in Artificial Intelligence
- MBA: Concentration in AI
- Certificate: Artificial Intelligence in Business



# Research & Development

## Greater Phoenix's Thriving Cybersecurity Sector

### ASU Global Security Initiative (GSI)

The Global Security Initiative (GSI) produces mission-relevant approaches and decision support tools to address some of the world's most vexing and complicated security challenges. As ASU's hub for global security research, it leverages the world-class expertise of ASU faculty and GSI's connections with the global defense, security, development and diplomacy communities to take new approaches toward the world's wicked problems. The results are tools, technologies and systems that are impactful, timely and useful to policymakers and implementers.

GSI houses the Center for Cybersecurity and Trusted Foundations that focuses on the areas of binary exploitation, competitive hacking, cyber education, dark web market behaviors, machine learning, reverse engineering, web/mobile security and workforce development. The center works closely with both industry and government to deal with real-world challenges on cybersecurity.

Source: <https://globalsecurity.asu.edu/>

### UArizona Wireless Network and Cybersecurity Research Lab

The Wireless Network and Cybersecurity Research Lab is a UArizona lab that is focused on conducting research in wireless and cybersecurity. The lab emphasizes wireless networks performance modeling and optimization, wireless and spectrum security, privacy-preserving big data analytics, and cyber-physical system security.

Source: <http://wiser.arizona.edu/>



# Research & Development

## Greater Phoenix's Thriving Cybersecurity Sector

### Arizona Cyber Warfare Range

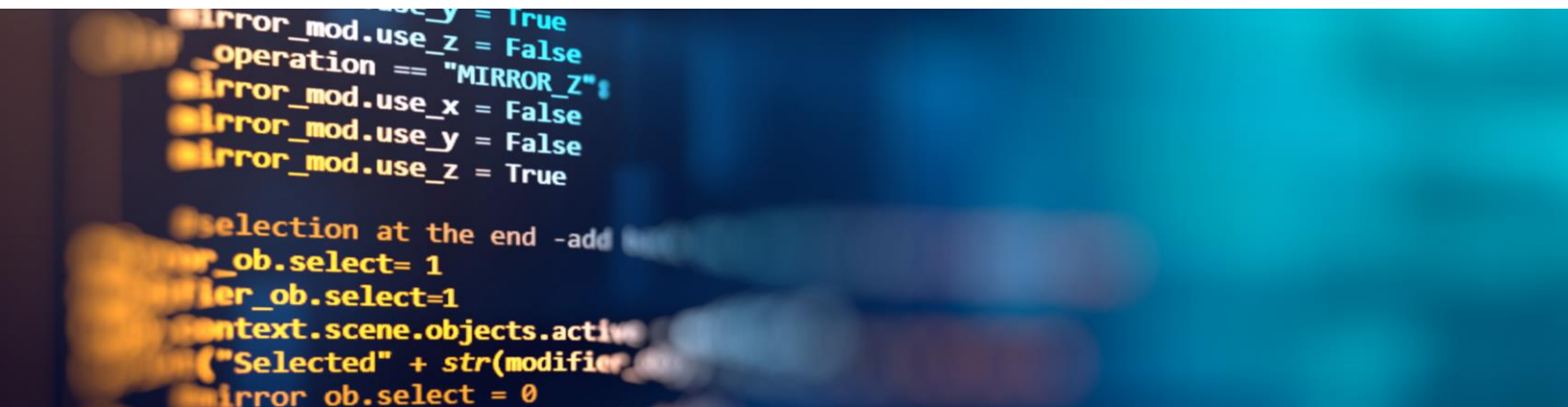
The Cyber Warfare Range develops a cybersecurity workforce through self-paced training, organic mentoring and real-life experience. Hands-on exercises serve everyone from beginners to tenured professionals through real-world operations. Participants learn Computer Network Attack/Hacking, Computer Network Attack, Computer Network Defense and Digital Forensics. There is no cost to add your company's technology to the Cyber Warfare Range for testing. The Cyber Warfare Range has three locations in Arizona: Tempe, Tucson, and a controlled range at an undisclosed location in which a security clearance is required for access.

Source: <https://www.azcwr.org/>

### U.S. Army Network Enterprise Technology Command

The mission of the U.S. Army Network Enterprise Technology Command (NETCOM) is to lead the global operations of the Department of Defense Information Networks, which ensures freedom of action in cybersecurity while denying the same to our adversaries. NETCOM is headquartered at Fort Huachuca, Arizona and provides information technology services for all network communications. The operation employees nearly 15,000 soldiers, civilians and contract personnel around the world.

Source: <https://www.army.mil/Netcom>



# Labor Analysis

## Labor Pool

The table below shows employment for the following occupations in the selected metros.

Occupation	Phoenix	Austin	Boston	Denver
General and Operations Managers	69,086	45,467	84,528	26,210
Software Developers	29,353	27,186	50,831	27,788
Computer and Information Systems Managers	11,138	10,012	20,645	8,509
Computer Systems Analysts	9,896	8,688	11,578	6,855
Network and Computer Systems Administrators	4,452	4,969	6,447	6,935
Computer Occupations, All Other	4,317	10,451	8,053	4,741
Computer Network Architects	3,623	2,292	3,982	7,220
Software Quality Assurance Analysts and Testers	2,891	3,689	5,362	4,394
Information Security Analysts	2,880	2,400	4,061	3,501
Computer Programmers	2,315	1,031	3,460	1,006
Computer Network Support Specialists	1,707	1,938	1,828	2,687
Web Developers	1,498	1,001	3,705	1,541
Database Administrators	1,317	1,332	1,836	1,385
Web and Digital Interface Designers	1,155	1,395	2,021	1,807
Database Architects	897	834	1,385	1,471
<b>Total</b>	<b>146,527</b>	<b>122,684</b>	<b>209,722</b>	<b>106,050</b>

# Labor Analysis

## Labor Pool (Cont.)

The table below shows employment for the following occupations in the selected metros.

Occupation	Phoenix	Salt Lake City	San Francisco	Seattle
General and Operations Managers	69,086	29,901	44,478	35,841
Software Developers	29,353	14,455	82,725	76,069
Computer and Information Systems Managers	11,138	4,385	26,525	13,308
Computer Systems Analysts	9,896	2,139	10,802	16,238
Network and Computer Systems Administrators	4,452	1,629	5,760	5,130
Computer Occupations, All Other	4,317	2,114	20,401	12,643
Computer Network Architects	3,623	1,067	4,241	3,487
Software Quality Assurance Analysts and Testers	2,891	1,729	8,117	8,835
Information Security Analysts	2,880	896	4,628	4,133
Computer Programmers	2,315	1,161	4,851	3,030
Computer Network Support Specialists	1,707	698	2,316	2,895
Web Developers	1,498	691	2,808	3,789
Database Administrators	1,317	452	1,739	1,436
Web and Digital Interface Designers	1,155	702	7,083	6,343
Database Architects	897	1,604	1,709	2,539
<b>Total</b>	<b>146,527</b>	<b>63,623</b>	<b>228,184</b>	<b>195,717</b>

# Labor Analysis

## Median Wage

Greater Phoenix has a robust talent pool at an affordable cost. Median wages of many software-related jobs in the Greater Phoenix are significantly lower than peer markets.

Occupation	Phoenix	Austin	Boston	Denver
General and Operations Managers	\$94,279	\$102,960	\$121,874	\$133,381
Software Developers	\$126,019	\$131,616	\$140,833	\$133,914
Computer and Information Systems Managers	\$166,640	\$170,369	\$181,808	\$174,588
Computer Systems Analysts	\$103,349	\$105,721	\$115,923	\$109,264
Network and Computer Systems Administrators	\$96,903	\$101,170	\$104,967	\$103,080
Computer Occupations, All Other	\$96,848	\$101,832	\$114,481	\$115,421
Computer Network Architects	\$122,483	\$146,162	\$157,211	\$133,751
Software Quality Assurance Analysts and Testers	\$98,695	\$101,885	\$123,770	\$116,603
Information Security Analysts	\$116,363	\$113,335	\$129,980	\$122,687
Computer Programmers	\$96,619	\$104,502	\$115,663	\$92,372
Computer Network Support Specialists	\$68,142	\$65,633	\$82,674	\$82,001
Web Developers	\$62,515	\$97,975	\$102,227	\$60,331
Database Administrators	\$108,417	\$92,606	\$123,834	\$120,314
Web and Digital Interface Designers	\$95,450	\$100,083	\$109,056	\$100,235
Database Architects	\$126,632	\$149,666	\$155,555	\$136,922

# Labor Analysis

## Median Wage (Cont.)

Greater Phoenix has a robust talent pool at an affordable cost. Median wages of many software-related jobs in the Greater Phoenix are significantly lower than peer markets.

Occupation	Phoenix	Salt Lake City	San Francisco	Seattle
General and Operations Managers	\$94,279	\$94,338	\$143,238	\$134,647
Software Developers	\$126,019	\$115,806	\$176,161	\$168,547
Computer and Information Systems Managers	\$166,640	\$167,695	\$220,797	\$213,082
Computer Systems Analysts	\$103,349	\$89,366	\$140,873	\$135,777
Network and Computer Systems Administrators	\$96,903	\$90,001	\$127,657	\$111,370
Computer Occupations, All Other	\$96,848	\$93,937	\$133,447	\$137,124
Computer Network Architects	\$122,483	\$137,800	\$170,349	\$172,160
Software Quality Assurance Analysts and Testers	\$98,695	\$82,088	\$134,074	\$130,164
Information Security Analysts	\$116,363	\$105,629	\$159,391	\$151,352
Computer Programmers	\$96,619	\$89,858	\$110,739	\$193,888
Computer Network Support Specialists	\$68,142	\$75,032	\$88,660	\$92,289
Web Developers	\$62,515	\$62,211	\$141,323	\$116,728
Database Administrators	\$108,417	\$94,610	\$121,081	\$132,058
Web and Digital Interface Designers	\$95,450	\$104,371	\$162,930	\$112,119
Database Architects	\$126,632	\$149,428	\$169,219	\$156,536



# Operating Cost Analysis

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

## Assumptions

- \$500,000 personal property investment
- 10,000 square foot space in Central Business District (CBD)
- Utilities (per month): Included in Lease
- 50 jobs (Bureau of Labor Statistics equivalent occupations)

Occupations	Employment
Software Developers, Applications	15
Web Developers	15
Software Developers, Systems Software	10
Computer Network Architects	5
Computer and Information Systems Managers	2
Computer Network Support Specialists	2
General and Operations Managers	1
<b>Total</b>	<b>50</b>

# Operating Cost Analysis

## Annual Operating Cost

Metro	Employee Payroll	Fringe and Mandated Benefits	Real Estate Payments	Property Tax	Total Operating Cost	Index
Phoenix	\$5,350,000	\$1,158,250	\$302,800	\$230	\$6,811,280	100.0%
Austin	\$6,264,427	\$1,357,749	\$686,800	\$9,875	\$8,318,850	122.1%
Boston	\$6,382,312	\$1,381,157	\$722,900	\$12,340	\$8,498,709	124.8%
Denver	\$6,451,355	\$1,403,736	\$380,700	\$12,272	\$8,248,064	121.1%
Salt Lake City	\$5,852,784	\$1,342,883	\$354,400	\$5,269	\$7,555,336	110.9%
San Francisco	\$7,885,311	\$1,720,647	\$811,400	\$9,300	\$10,426,658	153.1%
Seattle	\$6,649,058	\$1,474,557	\$534,200	\$4,489	\$8,662,304	127.2%

## Total Operating Cost

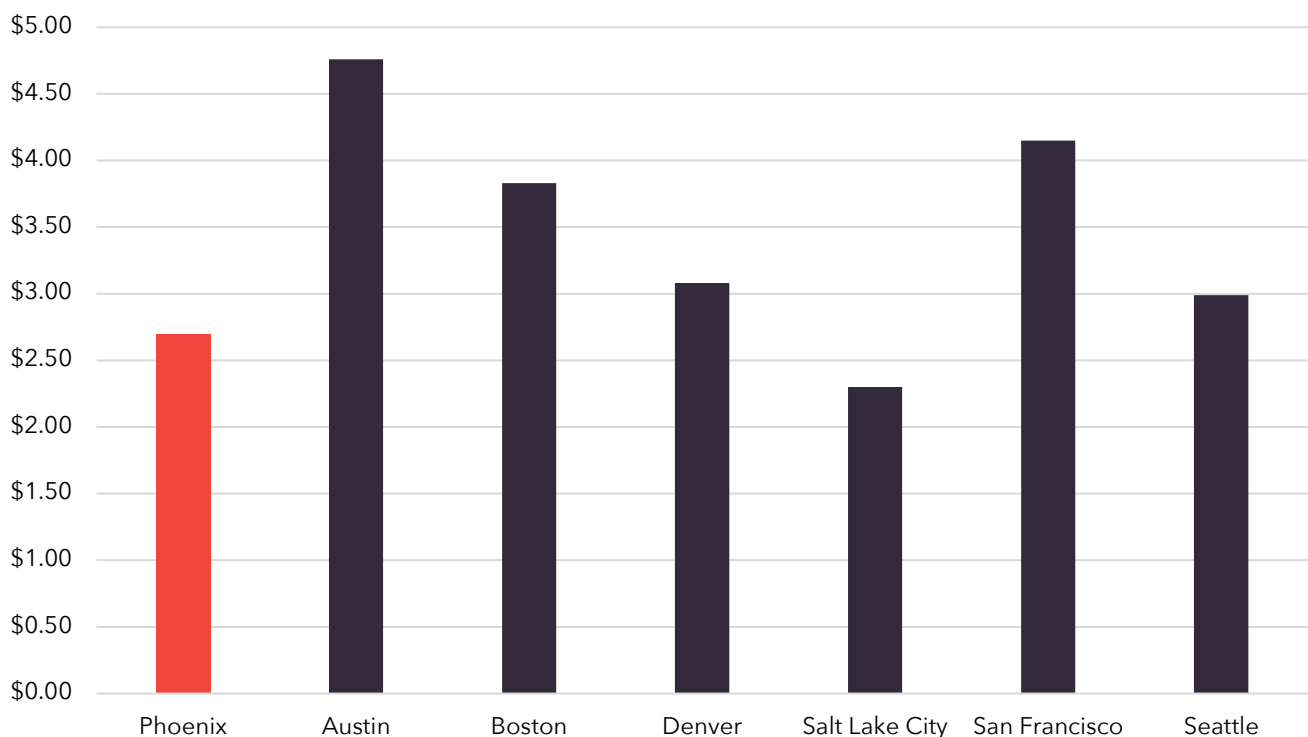


# Operating Cost Analysis

## Real Estate Costs

Metro	Suburban Class A Office Market Rent/SF	Suburban Class A Office Cost Index	CBD Office Market Rent/SF	CBD Office Cost Index	Office Vacancy Rates
Phoenix	\$2.92	100%	\$2.70	100%	16.00%
Austin	\$4.21	144%	\$4.76	176%	16.60%
Boston	\$4.36	149%	\$3.83	142%	11.70%
Denver	\$2.83	97%	\$3.08	114%	16.40%
Salt Lake City	\$2.53	86%	\$2.30	85%	10.60%
San Francisco	\$4.94	169%	\$4.15	154%	21.80%
Seattle	\$3.51	120%	\$2.99	111%	15.00%

### CBD Market Rent/SF



# Taxes & Incentives

## Arizona Tax Environment vs. Competitor Markets

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

Metro	City Sales Tax Rate	Corporate Income		Inventory Tax	Unemployment Insurance			Workers Comp. (Rate per \$100 Payroll)
		State Tax Rate	Basis		Rate (As % of Payroll)	Wage Base	Max. Weekly Benefit	
Phoenix	8.60%	4.90%	Net Income	No	2.00%	\$8,000	\$320	\$0.87
Austin	8.25%	0.75%	Taxable Margin	Yes	2.70%	\$9,000	\$577	\$0.88
Boston	6.25%	8.00%	Net Income	Yes	1.87%	\$15,000	\$1,033	\$1.05
Denver	8.81%	4.40%	Net Income	No	1.53%	\$23,800	\$710-\$781*	\$0.93
Salt Lake City	7.75%	4.85%	Net Income	No	0.00%-7.00%**	\$47,000	\$746	\$0.86
San Francisco	8.63%	8.84%	Net Income	No	3.40%	\$7,000	\$450	\$2.26
Seattle	10.25%	0.48%	Gross Receipts	No	0.00%-5.40%**	\$68,500	\$1,019	\$1.31

Source: Applied Economics Metrocomp Tool, May 2024; Oregon Dept. of Consumer and Business Services, "Workers' Comp. Premium Rate Ranking", 2022; U.S. DOL, "Significant Provisions of State Unemployment Insurance Laws", January, 2024.

\*The lower amount shown is based on HQWs and the higher amount shown is based on total BPWs.

\*\*The "Rate (As % of Payroll)" refers to new employer's unemployment insurance (UI) contribution rate in a particular state. The Utah and Washington rates vary across new employers and are based on industry average.



# Taxes & 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. Please note that this is not a comprehensive list of all incentives available in the state of Arizona. Additionally, it should be noted that this is only a guide for potential incentives. Actual incentives will depend on project parameters and varying program qualifications and requirements as determined by the Arizona Commerce Authority.

### Quality Jobs Tax Credit

The Quality Jobs Tax Credit program awards \$9,000 of tax credits over three years for qualifying companies. The chart below highlights minimum qualifying capital expenditure and wage rate in an urban area, while the texts describe additional program parameters.

## \$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%	\$46,331	\$5,000,000
25	125%	\$57,914	\$2,500,000
25	150%	\$69,497	\$1,000,000
25	200%	\$92,662	\$500,000

#### Rural

Min. New Jobs	County Median Wage	Pinal	Min. Capex
5	100%	\$43,680	\$1,000,000
5	125%	\$54,600	\$500,000
5	150%	\$65,520	\$100,000

### R&D Tax Credit

- This incentive supports increased research and development activities conducted in this state, including research conducted at a state university and funded by the company
- Credit amount is 24% of first \$2.5 million in qualifying expenses plus 15% of the qualifying expenses in excess of \$2.5 million.
- Qualifying small companies (less than 150 full-time employees) can apply to make their credit refundable (up to 75% of its current year excess R&D credit).
- Any unused credit can be carried forward for 15 years.



## Parks & Recreation



# Livability

## Cost of Living

Greater Phoenix is more affordable for companies and the people that make them successful. Across major buckets of expenses, Greater Phoenix is less expensive than most competitive markets.

Metro	Grocery Items	Utilities	Transportation	Health Care	Misc. Goods & Services	Composite Index	Index
Phoenix	103.1	101.2	99.8	87.7	101.7	104.3	100.0%
Austin	97.1	98.6	93.9	94.7	93.7	97.9	93.9%
Boston	104.0	149.0	113.8	123.6	116.1	144.3	138.4%
Denver	100.8	89.7	91.6	107.0	106.4	107.6	103.2%
Salt Lake City	98.3	92.5	101.1	89.7	105.1	108.1	103.6%
San Francisco	122.8	161.2	147.1	123.9	117.5	169.6	162.6%
Seattle	112.5	102.6	130.1	127.4	120.6	144.0	138.1%

Source: C2ER Cost of Living Index, 2024 Q1

## Housing

Greater Phoenix's housing market remains affordable relative to competing markets.

Metro	Median Home Value	Index	Median Rent	Index
Phoenix	\$460,783	100.0%	\$1,887	100.0%
Austin	\$470,662	102.1%	\$1,782	94.4%
Boston	\$694,705	150.8%	\$3,082	163.3%
Denver	\$597,619	129.7%	\$2,046	108.4%
Salt Lake City	\$548,423	119.0%	\$1,707	90.4%
San Francisco	\$1,187,716	257.8%	\$3,040	161.1%
Seattle	\$752,995	163.4%	\$2,211	117.1%

Source: Zillow Home Value Index (ZHVI) & Zillow Observed Rent Index (ZORI), April 2024

## Personal Income Tax

Greater Phoenix has the lowest personal income tax of those states that have a personal income tax across all income levels. With its affordable cost of living and low taxes rates, income goes further in Greater Phoenix.

State	\$50,000	\$150,000	\$270,000	\$500,000	\$1 Million or More
Arizona	2.50%				
Texas	N/A				
Massachusetts	5.00%				9.00%
Colorado	4.40%				
Utah	4.65%				
California	6.00%	10.30%	10.30%	12.30%	13.30%
Washington	7.00% on capital gains income only				

Source: Tax Foundation 2024

# Livability

## Coffee & Craft Beer

Greater Phoenix's craft beer and coffee culture is creative, dynamic and growing. The list below is a sample of the variety of craft beverage makers in the region.

### Craft Breweries

8 Bit Aleworks  
12 West Brewing  
Arizona Wilderness  
Beer Research Institute  
Bone Haus Brewing  
Brewing Company  
Cider Corps  
Desert Eagle Brewing Company  
Desert Monks Brewing Company  
Fate Brewing Company  
Flying Basset Brewing  
Four Peaks Brewing Company  
Goldwater Brewing Company  
Grand Avenue Brewing Company  
Helton Brewing Company  
Huss Brewing Company  
Lochiel Brewing

Lucidi Distillery  
North Mountain Brewing Company  
O.H.S.O Brewery & Distillery  
Old Ellsworth Brewing Company  
Oro Brewing Company  
Pedal Haus Brewery  
Peoria Artisan Brewery  
PHX Beer Co.  
Saddle Mountain Brewing Company  
SanTan Brewing Company  
Shop Beer Co.  
Sonoran Brewing  
State 48 Brewery  
Sunup Brewing  
The Perch Brewery  
Uncle Bear's Brewery  
Wren House Brewing

### Craft Coffee

A Shot of Java  
Belhaus  
Berdena's  
Bergies Coffee Roast House  
Blue House Coffee  
Cartel Roasting Co.  
Copper Star Coffee  
Driftwood Coffee  
Fair Trade Cafe  
Fillmore Coffee Co.  
Giant Coffee  
Gold Bar Espresso  
Jobot Coffee  
King Coffee  
Lola Coffee

Lost Dutchman Coffee Roasters  
Lux Central  
Maverick Coffee  
Nami  
Peixoto Coffee Roasters  
Press Coffee  
Provision Coffee  
Regroup Coffee + Bicycles  
Royal Coffee  
Serafina Coffee Roasters  
Songbird Coffee & Tea House  
The Refuge Cafe  
Urban Beans  
Ziggi's Coffee

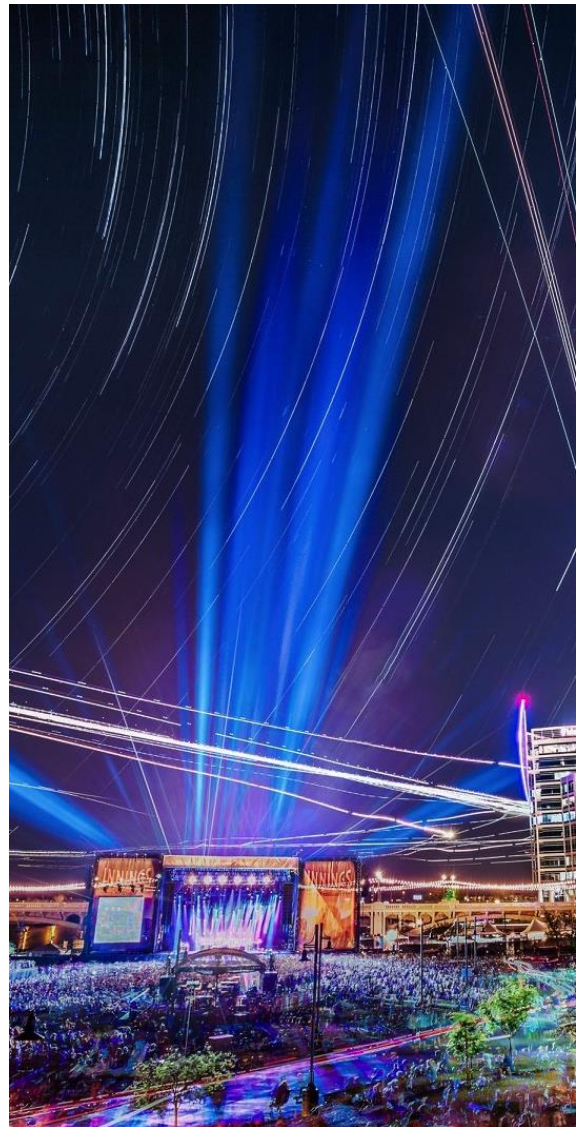


# Livability

## Music, Events & Culture

Greater Phoenix is home to an exciting and diverse music scene, some of the nation's most iconic events, and a culture all its own. The list below displays many of the region's unique events and amenities.

Arizona Classic Jazz Festival  
 Arizona Fall League  
 Arizona Hip Hop Festival  
 Arizona Opera  
 ArtLink's First Fridays Art Walk  
 ASU Gammage  
 Ballet Arizona  
 Barrett-Jackson Auction - Scottsdale  
 Country Thunder Arizona  
 Decadence Arizona  
 Desert Botanical Garden  
 Fiesta Bowl  
 FORM Arcosanti  
 Four Peaks Oktoberfest  
 Heard Museum  
 Innings Festival  
 Major League Baseball Spring Training  
 McDowell Mountain Music Festival (M3F)  
 Mesa Arts Center  
 Musical Instrument Museum  
 Orpheum Theater - Phoenix  
 PGA WM Phoenix Open  
 Phoenix Art Museum  
 Phoenix Symphony  
 Phoenix Unknown: World Food and Music Night Market  
 Phoenix Zoo  
 Pot of Gold Music Festival  
 Rock 'n' Roll Running Series  
 Scottsdale Arts Festival  
 Scottsdale Museum of Contemporary Art  
 South Mountain Park/Preserve  
 Super Bowl LVII  
 WestWorld of Scottsdale  
 Wickenburg Gold Rush Days



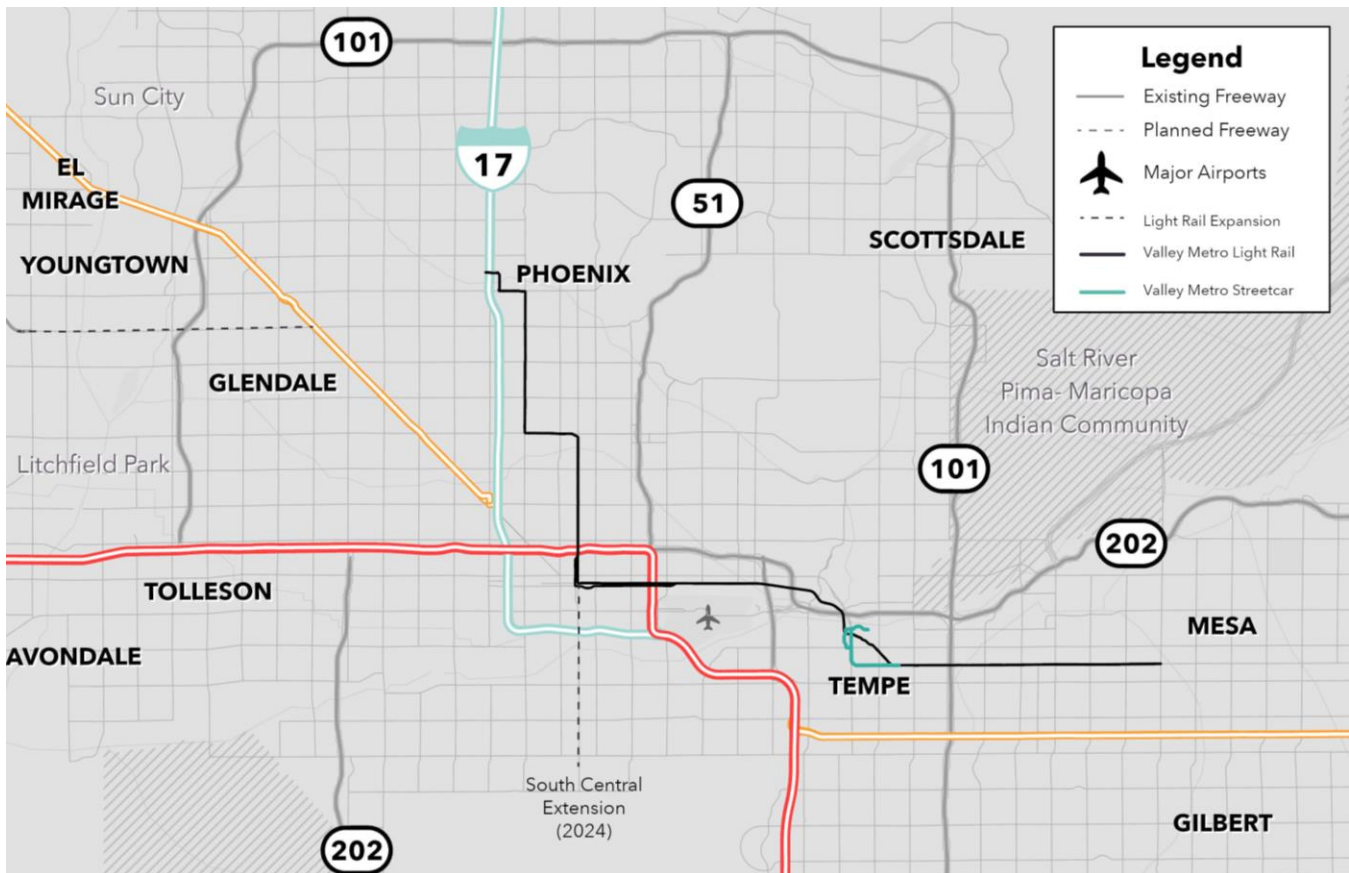
# Livability

## Commute Times & Light Rail

Companies that move to the region comment on the access to workforce and the proximity to customers. An important aspect of this is the region's commute times, which are shorter than competitor markets, that enable employees to spend more time enjoying their lifestyle and less time in traffic. The region has a modern freeway system and an expanding light rail that ensures a robust talent supply no matter where a business is located.

Metro	Average Commute Times	Yearly Commute	Index
Phoenix	25.8 minutes	9.3 days	100.0%
Austin	26.4 minutes	9.5 days	102.3%
Boston	30.1 minutes	10.9 days	116.7%
Denver	26.8 minutes	9.7 days	103.9%
Salt Lake City	22.8 minutes	8.2 days	88.4%
San Francisco	30.2 minutes	10.9 days	117.1%
Seattle	28.5 minutes	10.3 days	110.5%

Source: ACS 2022 1-Year Estimates





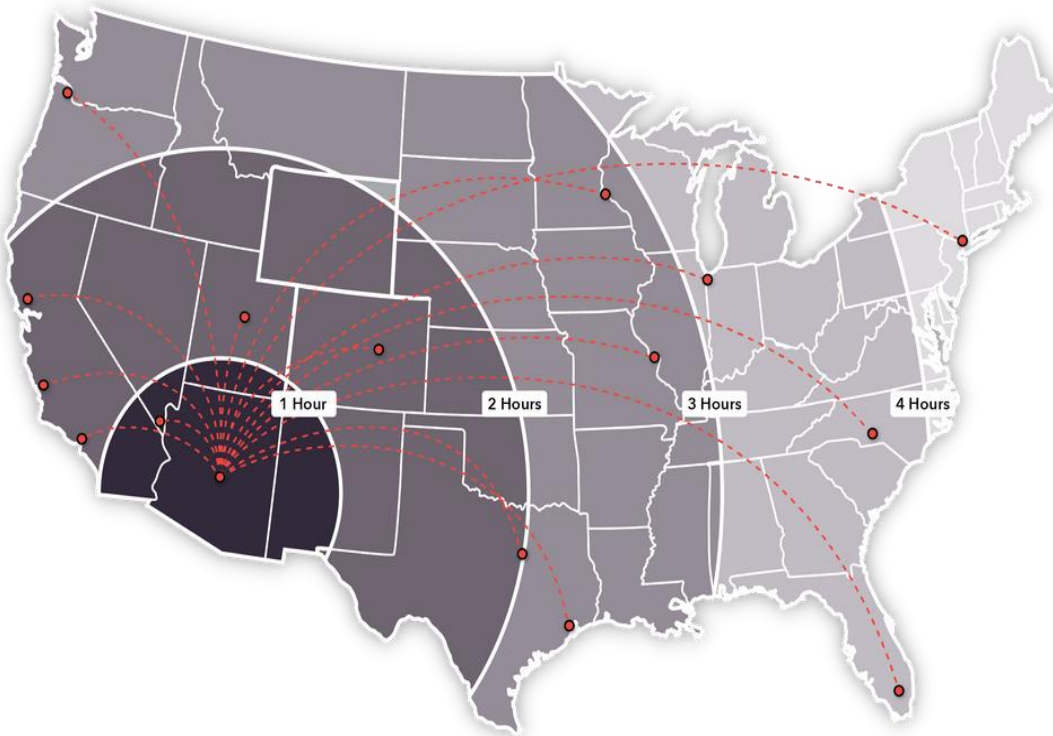
# Key Infrastructure

## Greater Phoenix Airport Connectivity

Greater Phoenix is home to two commercial airports, Sky Harbor International Airport and Mesa Gateway Airport. Sky Harbor, the larger of the two, is consistently rated among the best international airports in the United States.

### Major carriers from Sky Harbor include:

- Air Canada
- Air France
- Alaska Airlines
- American Airlines
- Boutique Air
- British Airways
- Condor Airlines
- Delta Airlines
- DHL (Freight)
- FedEx (Freight)
- Frontier Airlines
- Hawaiian Airlines
- JetBlue
- Southwest Airlines
- Spirit Airlines
- Sun Country Airlines
- United Airlines
- UPS (Freight)
- Volaris
- WestJet



### Phoenix Sky Harbor International Airport:

- 48.6 million passengers in 2023
- 454,665 landings and takeoffs in 2021
- Over 1,200 tons of cargo handled daily

### Sky Harbor offers nonstop flights to 25 international locations, including:

- Frankfurt
- London
- Mexico City
- Montreal
- Paris
- Toronto

# Rankings & Recognition

## #1

Phoenix was ranked #1 by population growth from 2010 to 2020 among all US cities

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## #1

Arizona State University named America's Most Innovative Schools nine years in a row by U.S. News & World Report

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## #2

Arizona is ranked #2 by U.S. News and World Report in power grid reliability

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## #3

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

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## #4

Arizona was ranked the No. 4 place to do business in 2022 by *Chief Executive*

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## #7

In 2023, Arizona was ranked as the seventh-best state to start a business by WalletHub

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## Top 20

In 2022, Scottsdale was listed in the top 20 happiest cities in the nation

## Top Tier

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

# Greater Phoenix Greater Together