



PINAL COUNTY

Innovative Workforce Solutions

Pinal County
Information Technology
Industry

2021 Asset Inventory

Information Technology

2021 Asset Inventory

Introduction and Technical Notes

This document inventories the workforce-related assets that support the Information Technology industry in Pinal County. It estimates both the incumbent workforce and the talent pipeline to provide perspective on the capacity of the region to an employer from this high-value sector.

Analysis of “Information Technology” as an industry carries inherent challenges because IT is more appropriately treated as a skills set than as either an industry or a family of occupations. Consider the number of businesses whose primary line of business is providing IT services. The number of people employed by those companies pales in comparison to the number of organizations who employ IT talent. For example, more workers who live in the district and report commuting for work are employed in Computer Occupations (SOC code 15-1200) by the Local Government than by IT firms. More than one of every ten are employed by manufacturers, and around 10% work for hospitals or educational entities. Employers from the Retail Trade, Manufacturing, Utilities, Food Services and many other sectors rely on workers with highly developed IT skills.

For these reasons, this report considers IT from two perspectives: occupations and skills. The first section will look at the twelve categories of occupations that make up the “Computer Occupations” family in public labor market systems:

- Computer Systems Analysts
- Information Security Analysts
- Computer & Information Research Scientists
- Computer Network Support Specialists
- Computer User Support Specialists
- Computer Network Architects
- Network and Computer Systems Administrators
- Database Administrators and Architects
- Computer Programmers
- Software Developers and Software Quality Assurance Analysts and Testers
- Web Developers & Digital Interface Designers
- Computer Occupations, All Other

The second perspective will be rooted in job postings data from Chmura Economics, a third-party provider of these data through its labor market analysis system JobsEQ. This system aggregates content from online job postings and parses the language in the postings to identify the skills, certifications and education levels most frequently requested by employers. A detailed query of this system was conducted on August 1, 2021.

Computer Occupations

The analysis of the incumbent workforce relies on public labor market data, specifically the United States Bureau of Labor Statistics' *Occupational Employment Statistics* series. According to these data, more than 500 people are employed in Computer Occupations in Pinal County, and 96,700 are employed in the larger Maricopa/Pinal/Pima corridor.

The Employers

Fifty-one Pinal County establishments are engaged primarily in computer-related business, including 23 who provide custom programming services and 16 who provide computer systems design. Together, these organizations employ 231 people in Pinal County

The Emerging Workforce

The education and workforce development systems are key to the success of the regional economy, and their ability to produce a sufficient supply of highly skilled IT talent is crucial to the success of organizations in almost every facet of the local economy.

This document seeks to quantify the levels of talent emerging from relevant postsecondary programs of study, as well as other non-college training and development programs and targeted efforts of the business community that are contributing to the supply of highly skilled IT talent in Pinal County.

It is hoped that this report will provide clear and practical perspective on the resources, partners and infrastructure that could support a regional employer who relies heavily on IT talent.

The Employers

More than 80 people are employed at 40 computer-related businesses in Pinal County.

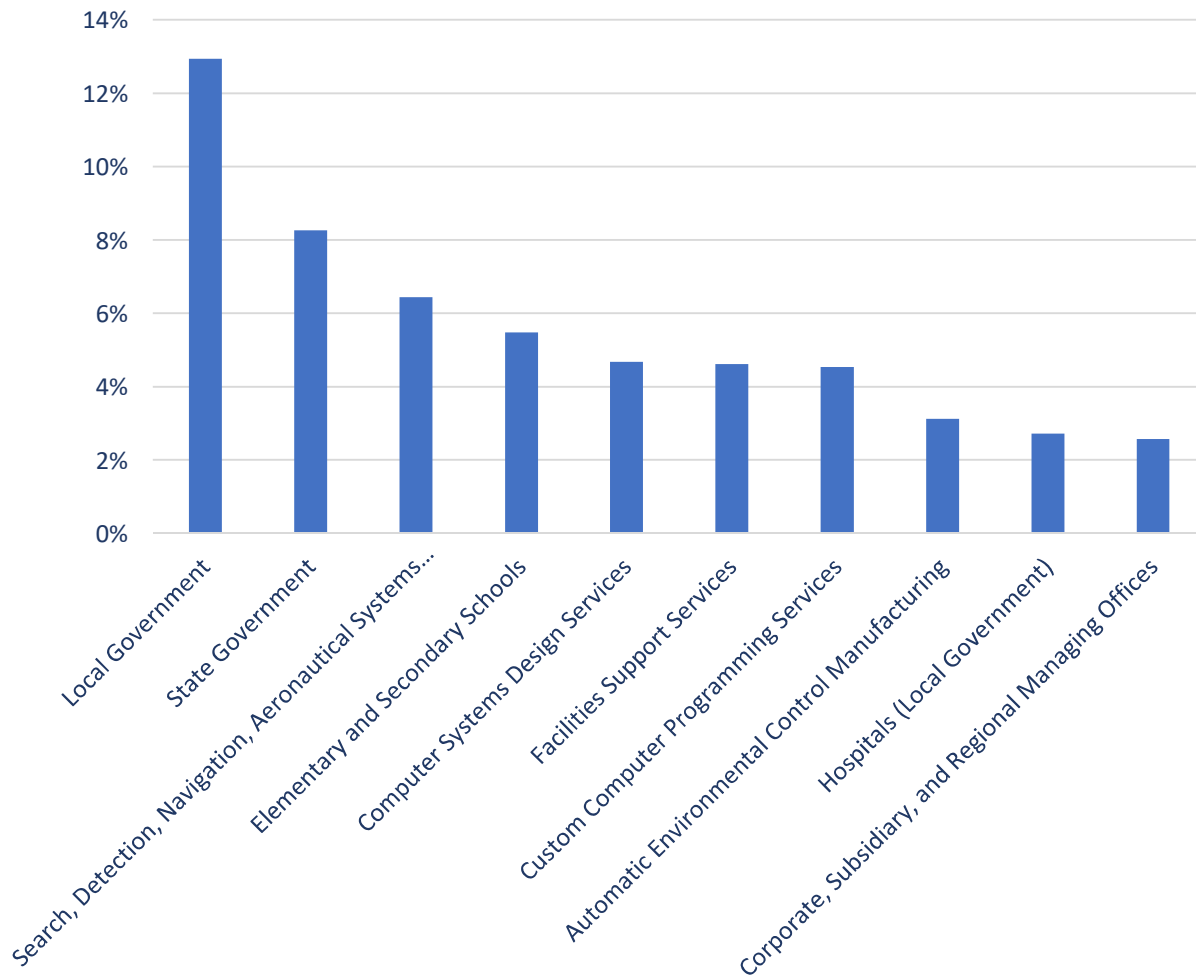
Table 1: Computer-Related Industries, Pinal County

Industries	2020 Establishments	2020 Jobs	Average Wages
Computer Systems Design Services	15	39	\$76,665
Custom Computer Programming Services	25	38	\$94,939
Other Computer Related Services	8	10	\$80,187

Arizona Office of Economic Opportunity

A number of industries that do not have computer-related services as their primary lines of business employ large numbers of workers in Computer Occupations.

Computer Occupations, Employment by Industry, Pinal County



Employers who have posted large numbers of openings for these jobs in recent years include:

- Wells Fargo
- Jobot
- Central Arizona College
- Lucid Motors
- IQVIA
- Boeing
- Army National Guard
- HCL Technologies
- Change Healthcare
- Indisght Enterprises

The Workers

More than 500 people are employed in Computer Occupations in Pinal County with a median salary of \$65,374.

Table 2: Computer Occupations, Pinal County

Occupation	Median Wages	Jobs
Computer and Mathematical Occupations	\$65,374	560
Computer Systems Analysts	\$67,808	50
Computer User Support Specialists	\$52,166	180
Network and Computer Systems Administrators	\$69,867	90
Software Developers and Software Quality Assurance Analysts & Testers	\$93,891	N/A
Computer Occupations, All Other	\$79,789	N/A

The Talent Pipeline

Overview

The talent development ecosystem in Pinal County provides a steady pipeline of trained workers for the Computer Occupations that support so much of the regional economy. A number of community colleges contribute to the region's talent pipeline with programs ranging from Logistics, Materials and Supply Chain management to Commercial Vehicle Operators. ARIZONA@WORK Pinal County provides career services and training programs to eligible jobseekers via training partners in the community.

Postsecondary Education

Thirteen institutions of higher learning are in the proximity of Pinal County, and two of them offer Transportation and Logistics Programs.

Table 3: Awards, Transportation and Logistics, by Institution, 2019

Institution	All Programs		Computer Sciences Programs	
	Certificates Below a Bachelor's Degree	Associate's Degree	Certificates Below a Bachelor's Degree	Associate's Degree
Central Arizona College	834	600	2	1
Chandler-Gilbert Community College	1,573	1,386	32	5
Mesa Community College	2,224	2,209	61	30
Pima Community College	3,005	2,257	115	112
South Mountain Community College	467	530	20	6

*National Center for Education Statistics
Integrated Postsecondary Educational Data System*

Table 4: Computer Sciences Awards, Mesa Community College

Program	Certificates Below a Bachelor's Degree	Associate's Degree
Computer Systems Networking and Telecommunications	42	26
Computer Systems Analysis/Analyst	8	4
Computer Support Specialist	11	0

*National Center for Education Statistics
Integrated Postsecondary Education Data System*

Table 5: Computer Sciences Awards, Central Arizona College

Program	Certificates Below a Bachelor's Degree	Associate's Degree
Computer Systems Networking and Telecommunications	2	1

*National Center for Education Statistics
Integrated Postsecondary Education Data System*

Table 6: Computer Sciences Awards, Chandler-Gilbert Community College

Program	Certificates Below a Bachelor's Degree	Associate's Degree
Computer Systems Networking and Telecommunications	22	2
Computer Installation and Repair Technology/Technician	6	0
Computer Systems Analysis/Analyst	4	0
Computer Science	0	3

*National Center for Education Statistics
Integrated Postsecondary Education Data System*

Table 7: Computer Sciences Awards, Pima Community College

Program	Certificates Below a Bachelor's Degree	Associate's Degree
Computer Systems Networking and Telecommunications	2	56
Computer Systems Analysis/Analyst	0	14

*National Center for Education Statistics
Integrated Postsecondary Education Data System*

Table 8: Computer Sciences Awards, South Mountain Community College

Program	Certificates Below a Bachelor's Degree	Associate's Degree
Computer Systems Networking and Telecommunications	18	4
Computer and Information Systems Security/Information Assurance	2	2

*National Center for Education Statistics
Integrated Postsecondary Education Data System*

ARIZONA@WORK

Arizona's Eligible Training Provider List identifies five providers who offer programs related to the Transportation and Logistics Sector and who are approved for funding under the Workforce Innovation and Opportunity Act:

- Central Arizona College-Network Systems Administration Certificate
- Central Arizona College-Networking Technologies AAS
- Software Programming Certificate
- Computer Business Applications Specialist Certificate
- Computer Business Applications Specialist AAS

Appendix One: Job Postings

Table A1: Job Postings, Computer Occupations, Pinal County, July 2020-June 2021

Employer	Unique Postings	Employer, continued	Unique Postings
Wells Fargo & Company	254	4-Power Bikes	6
Jobot	85	Sun Life Family Health Center, Inc.	6
Central Arizona College	47	Price Industries, Inc.	6
Lucid Motors	42	Patriotic Hearts Inc	6
IQVIA	30	Dell Inc.	6
Boeing	30	Revature	5
Army National Guard	27	Maricopa Unified School District	5
HCL Technologies Limited	26	Abbott Laboratories	5
Change Healthcare, Inc.	24	Horizon Health and Wellness, Inc	5
Insight Enterprises, Inc.	19	Kpmg LLP	5
Pdma Corporation	17	Motion Recruitment Partners Inc.	5
City of Maricopa	16	Vings Technologies Limited	5
Raytheon Technologies	14	Pricewaterhousecoopers LLP	5
Amazon.com, Inc.	13	Aerotek, Inc.	5
Dish Network L.L.C.	10	Recruiting.com Inc	4
General Motors Company	10	The Adecco Group	4
Computer Measurement Group Inc	8	The Judge Group Inc	4
Cynet Systems Inc.	8	LFC Consulting Inc	4
Freelancer Technology Pty Limited	7	United States Department of the Navy	4
Mitsubishi UFJ Financial Group	7	Rio Tinto	4
National Security Agency	7	Pioneer Services	4
Gila River Indian Community	7	Mediacom Communications Corporation	3
General Dynamics Corporation	7	Data Doctors Franchise Systems, Inc.	3
City of Mesa	7	Jacobs Engineering Group Inc.	3
Vmware, Inc.	6		