



# WEST VALLEY PIPELINE REPORT

YEAR THREE: 2021 UPDATE

# OUR STORY

## of West Valley Pipeline

WEST VALLEY PIPELINE — is a Regional Workforce Development Implementation Strategy to serve as the guiding document for the West Valley of Metro Phoenix in building the talent pipeline to move this region forward in a competitive fashion, attract new businesses and create employment opportunities for residents. Maricopa County is the fourth largest county in the nation. Over the next 25 years, 49.5 percent of the growth in Maricopa County will occur in the West Valley, further validating the importance of this visionary study for the success of this area.

The West Valley Pipeline, with the leadership of WESTMARC, a West Valley regional hub representing 15 communities and 1.6 million residents, is designed to:

- Align resources to enhance workforce and education infrastructure for current and future occupations.
- Guide a diverse workforce to choose career pathways relevant to target industries.
- Provide employer access to responsive customized training, employee recruitment and business resources.

Implementing the West Valley Pipeline is a team effort. Its success depends on the continued participation of government, economic development, employers, workforce, education and training partners. A lead organization for each strategy will be identified. WESTMARC is prepared to support and coordinate the efforts of these West Valley Workforce Development Teams, and Industry Employer Collaboratives.

In 2016, WESTMARC and regional partners, Maricopa

Association of Governments and Arizona State University, conducted a series of workforce surveys and industry SWOT analyses among key stakeholders in order to get a 360° assessment of the West Valley, including:

## WHY

1. Increase high wage employment in the West Valley.
2. Support current and future industry workforce needs.
3. Promote West Valley's skilled, educated workforce.
4. Improve quality of life for West Valley residents.
5. Reduce resident commute times for employment.

- Industry
- Education and Workforce Development
- Local government
- Local Economic Development teams
- Commercial Real Estate
- Young Talent/Youth Leadership

WESTMARC and West Valley partners identified six industry sectors. These industries show potential to quickly develop industry-preferred talent pipeline channels.

- Advanced Business Services
- Advanced Manufacturing
- Aerospace and Aviation
- Health Services
- Information Technology
- Transportation and Logistics/Supply Chain Management

In 2017, with the assistance of business consulting firm Chabin Concepts, partnering with Applied Economics and FJMcLaughlin and Associates, WESTMARC compiled the data in partnership with Maricopa Association of Governments, Arizona State University and EMSI, which show the existing talent pool. To attract the high wage jobs in high intellectual capital industries, the West Valley Pipeline was created. The plan was finalized and adopted by the WESTMARC Board of Directors in 2018, with nine key strategies to implement over a five year period spanning 2018 – 2022.

The nine key strategies will aid West Valley Economic Development teams in attracting businesses who have quality jobs that West Valley residents seek, ideally to allow more West Valley residents to live/work/play in their communities of choice.

# WEST VALLEY STRATEGIES AND GOALS

## PILLAR 1

### INDUSTRY & EDUCATION PARTNERSHIPS

- Address skills gap through partnerships
- Create career pathways for in-demand occupations
- Integrate soft skills in K-12
- Support STEM education
  - Re-brand vocational education and Career & Technical Education (CTE)

## PILLAR 2

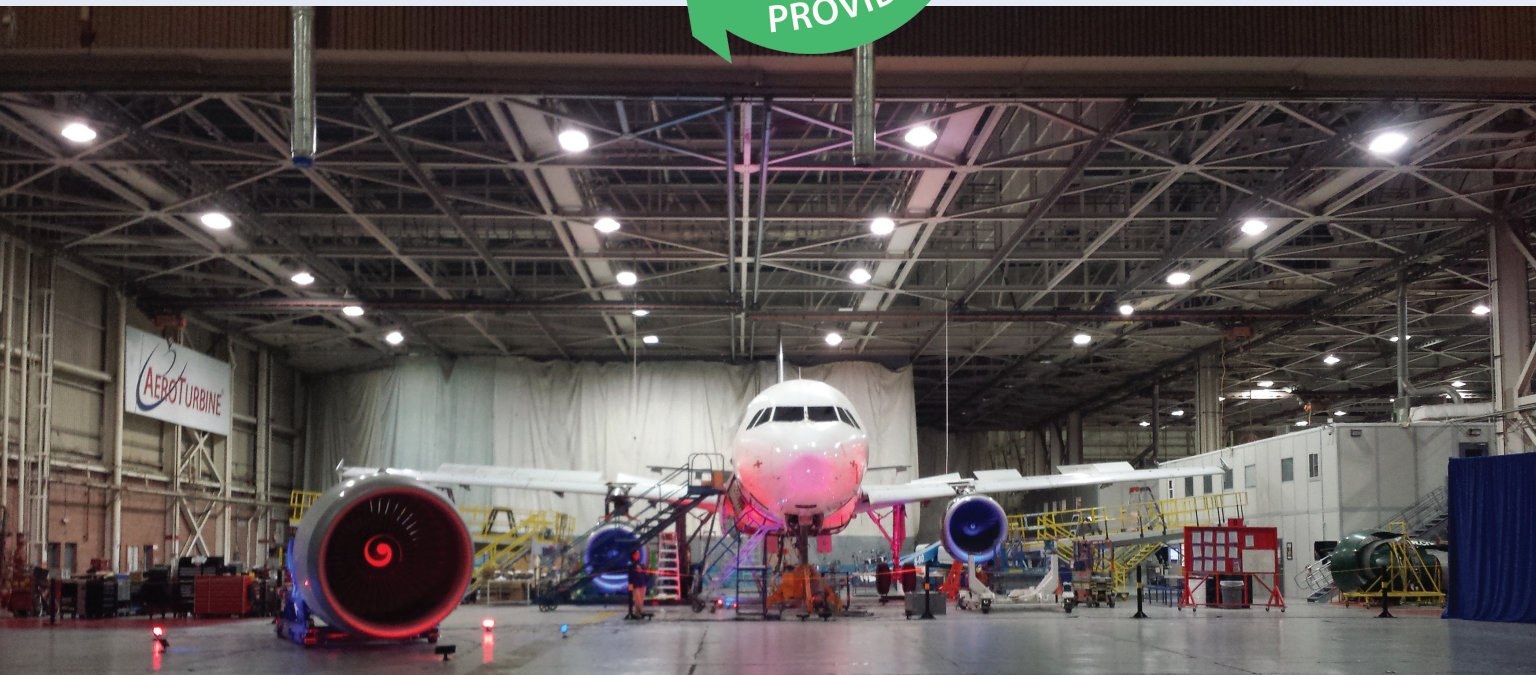
### COMMUNICATION STRATEGIES

- Convey consistent message to employers
- Build key message platform
- Re-brand vocational education and Career & Technical Education (CTE)

## PILLAR 3

### COMMUNITY OUTREACH

- Operate regional collaborative business outreach program
- Conduct resident and commuter survey



# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY A: Address Skills Gaps through Industry, Education, and Workforce Partnerships

### Purpose:

Create collaborative industry sector partnerships for all target industry sectors.

### Sample of Year 3 Accomplishments:

#### Arizona State University West Campus:

##### **ASU leads effort to upskill, reskill workforce through \$8M grant, AZNext**

- The U.S. Department of Labor awarded Arizona State University an \$8 million grant to lead an innovative workforce development partnership to help train workers for high-paying, high-demand jobs in advanced manufacturing, cybersecurity and information technology (IT).
- AZNext uses a combination of multidisciplinary and industry-relevant training, with multiple insertion points for degree-seeking or nondegree-seeking learners.
- ASU leverages programming from multiple colleges and enterprise units, while industry employers leverage paid internships, train-to-hire programs, boot camps and simulated work experiences.
- AZNext also builds on another grant-funded program through ASU's business school: Digital Workforce Apprenticeship Partnership, which was established through ASU's first department of labor grant to help close the skills gap in America's workforce.
- On ASU's West campus in Glendale, programs from the New College of Interdisciplinary Arts and Sciences help educate and train AZNext participants in the fields of biological data science and cybersecurity.
- The West campus effort is led by Karan Watanabe, an associate professor in the School of Mathematical and Natural Sciences who has been nurturing science, technology, engineering and mathematics workforce development initiatives for many years.

##### **Trilogy/2U: Public private partnership provides workforce accelerator certificate programs in technology areas.**

- Arizona State University has partnered with Trilogy/2U since May 2020 to educate a diverse body of adult learners for the best jobs in Arizona. Through this partnership, learners have access to a wide range of disciplines, including Cybersecurity and FinTech through the New College of Interdisciplinary Arts and Sciences on ASU's West campus.
- These Bootcamps provide a high-quality education that gives learners the advanced technological and career-readiness skills they need to be competitive in the local job market.
- ASU's bootcamp programs have built pipelines to local employers like Blue Cross Blue Shield of Arizona, Mesa Public Schools, Nikola Motor Company, and more. Nationally, over 50 of the Fortune 100 have hired bootcamp graduates, including Amazon, Bank of America, and Microsoft.
- ASU's Bootcamp platform combines a market-driven curriculum, robust career services, and a multinational community of universities, instructors, and employers to prepare adult learners for careers in the digital economy.

#### WESTMARC

WESTMARC, in partnership with Pipeline AZ, and ARIZONA@WORK-Maricopa County launched the West Valley Industry Spotlight and job matching series. The webinar series brought together industry, education and workforce development subject matter experts to highlight the 6 target industry sector's key occupations, education pathways and emerging opportunities. West Valley employers and job seekers were able to connect, via the Pipeline AZ platform's job matching.

- The series was sponsored by the ASU West Campus:
- ASU College of Health Solutions,

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY A: Address Skills Gaps through Industry, Education, and Workforce Partnerships

- ASU Edson College of Nursing and Health Innovation,
- ASU New College of Interdisciplinary Arts and Sciences, and the
- ASU Office of Government and Community Engagement

### Northern Arizona University:

- Northern Arizona University and Discover Financial implemented a partnership in fall 2021 for NAU to deliver its Bachelor's in Strategic Leadership degree on-site at the Discover Financial Campus. Twenty Discover employees will complete their bachelor's degree in Summer 2022.
- Northern Arizona University and Dignity Health Global Education formed a partnership to create an online MBA with a Healthcare concentration. It will begin in Spring 2022, and serve employees of all healthcare organizations, and those seeking to get into the healthcare field.
- Northern Arizona University created short certificate programs for high school teachers. These certificate programs help high school teachers earn a credential to teach dual enrollment courses, giving students high school and college credit, and streamlining the process to complete their bachelor's degree.

### ARIZONA@WORK Maricopa County:

- Participated/presented at all WV Industry Spotlights Events
- Will hold in-person Career Fairs for multiple employers at the Glendale Career Center (10/21 and 11/18)
- Attended Maryvale Project meetings
- Attended WEST-MEC Pharmacy and Dental Council meetings
- Attended WESTMARC Education & Workforce Committee meetings
- Attended WESTMARC West Valley Quality of Life Committee meetings



*“What I learned in this class is beyond anything I knew I was capable of doing. It's opened my eyes to many possibilities and opportunities and given me a chance to pursue a career in the field I always dreamt of. I'm glad to have taken this course and met all of my classmates as well as the teachers. They went above and beyond to make sure we understood the subject matter and we're able to execute it.”*

Fernando P.  
ASU

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY A: Address Skills Gaps through Industry, Education, and Workforce Partnerships

### University of Phoenix

- Goodwill of Central and Northern Arizona and University of Phoenix to provide higher education cost savings to organization's employees and clients
- University of Phoenix community college pathway offers students an affordable pathway to degree completion: Joliet Junior College, College of Western Idaho, College of Southern Nevada, Bergen Community College, El Camino College
- University of Phoenix earns recognition for Online Education Leadership for Hallmarks of Excellence set by UPCEA
- University of Phoenix announces New Career Services for Life™ Commitment, aimed at helping students and alumni from enrollment to retirement
- University of Phoenix and EMSI are collaborating to map skills taught in the classroom to skills desired by today's workplace, per labor market analysis, helping students to become more career-ready
- University of Phoenix launched Phoebe™, an AI-Enabled, virtual assistant designed to support students with 24/7 service
- September: UOPX announces 3+1 transfer pathway program
- University of Phoenix offers new professional development courses designed for busy adults to gain in-demand skills for jobs in growing fields
- University of Phoenix collaborates with CareerStep to create integrated learning pathways in healthcare



# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY A: Address Skills Gaps through Industry, Education, and Workforce Partnerships

### Center for the future of AZ:

- CFA's RetailWorks AZ supports the important role the retail sector plays in Arizona's economy and in the lives of many Arizonans, whose first job experience and skills are often acquired in retail and help develop professional skills that are applicable to other sectors. Through this initiative, CFA brings education and employee development together in support of front-line, entry level retail workers to make it easier and faster for retail workers to move up the career ladder within retail across Arizona and build a pipeline of skilled talent for adjacent sectors such as hospitality, healthcare, and business services.
- 20+ retailers across Maricopa County, most with stores in the West Valley and some have headquarters in the West Valley (Fry's, PetSmart) engaged in a Retail Employers Network to catalyze changes in upskilling and progressive talent management practices at retailers including: Fry's, PetSmart, Kohl's, Best Buy, Gap brands, Los Altos Ranch Markets, Lowe's, ACE Hardware, Safeway/Albertson's, Walmart, TJX Companies, Goodwill, CVS, U-Haul, WinCo and Walgreens. The Retail Employer Network members employ approximately 75,000 retail workers or 32% of the retail workforce in Maricopa County.
- 15+ different workforce development partners collaborating to promote retail careers and transferable skills to other sectors, and provide training and development for job seekers and incumbent workers. Workforce Development partners include Arizona@Work City of Phoenix and Maricopa, Chicanos Por La Causa, Goodwill, Arizona Office of Economic Opportunity, Dress for Success, Boys & Girls Club, Maricopa County Community Colleges and others.
- Continued supporting the National Retail Federation RISE-Up training programs through 23 workforce development organizations.
- Continued supporting the National Retail Federation RISE-Up curriculum and credentials for Career & Technical Education programs across Arizona High Schools. Launched a quarterly Learning Circle webinar for sharing of best practices across school districts and adult education programs.
- National Retail Federation RISE-Up credentials approved for Prior Learning (PLA) credit at Rio Salado College for one course (Marketing) that can be used toward an Associate degree.
- Continued championing the AZRetailCareers.com website ([www.azretailcareers.com](http://www.azretailcareers.com)) to close knowledge gap about retail careers for job seekers, incumbent workers and workforce development partners and support the many displaced retail and hospitality workers during COVID-19.
- Partnered with Pipeline AZ to build out retail career information and making it easier to find information on retail careers.

## STRATEGY A: Address Skills Gaps through Industry, Education, and Workforce Partnerships

68% Completion



# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY B: Create Career Pathways for In-Demand Occupations

### Purpose:

To establish an education and workforce network with clearly defined and industry-informed career pathways.

### Sample of Year 3 Accomplishments:

#### Arizona State University West Campus:

- **ASU West campus' Knight-Swift Logistics Lab provides a platform for students' learning and real-world simulation to fortify supply chains**
- **Biological Data Science Entrepreneurship and Innovation Training (BDS-EIT) program**
- Prepares participants for industry sponsored internships, entry-level careers, and provide a foundation in entrepreneurship to stimulate economic development in the Greater Phoenix Metro Area.
- Course content from materials in existing ASU programs including **Biological Data Science, Information Systems, Entrepreneurship and Innovation**, and new training modules developed to meet the specific needs of our economic development region and employer partners.
- **HEALab (Health Entrepreneurship Accelerator Lab)**
- Provides an array of resources for innovators interested in bringing their health-related business concepts to market
- Monthly Speaker Series (LIVE @ HEAL) with guest Innovators and entrepreneurs
- Weekly networking and Idea-generation meetings for students
- Co-working / shared workspace
- Pitch competitions
- Mentoring meeting space and office hours with expert faculty
- Proposal prep assistance for funding and mentoring opportunities

#### West-MEC


- Listened to the needs of industry, providing training for in-demand jobs for high school students and adults.
- Refined career and postsecondary pathways and CTE offerings based on ongoing input from business and industry.
- Parsed through student data to measure performance, identify areas of growth and celebrated success. Overall, there is a positive trend among CTE students enrolled in West-MEC programs despite COVID-19 challenges. Successes include:
  - 2,066 students enrolled in central CTE programs
  - 99.8% student pass rate
  - 92% student retention rate
  - 4,179 earned industry credentials or certifications

*"It takes true dedication for regional planning of any kind. We are fortunate to have over 19 contributors who not only dedicated financial resources to this important initiative, but also gave their time and organizational talent to ensure success. A special thank you to the West Valley Pipeline stakeholders.."*













Sintra Hoffman President & CEO,  
WESTMARC




# BUCKEYE UNION HIGH SCHOOL DISTRICT


















## Estrella Foothills CTE Programs by Career Cluster

Agriculture, Food & Natural Resources	Architecture & Construction	Arts, A/V Technology & Communications	Business Management & Administration
Culinary Arts	Engineering Technical Theatre Carpentry	Graphic/Web Design Technical Theatre	Graphic/Web Design Social Media Business Technical Theatre
			
Education & Training	Finance	Health Science	Hospitality & Tourism
Education Professions	Social Media Business	Medical Assisting Sports Medicine	Culinary Arts Social Media Business
			
Information Technology	Manufacturing	Marketing, Sales & Service	STEM
Computer Science Social Media Business Technical Theatre Engineering	Engineering Technical Theatre	Culinary Arts Graphic/Web Design Social Media Business	Engineering Computer Science
			







## Youngker CTE Programs by Career Cluster

Agriculture, Food & Natural Resources	Architecture & Construction	Arts, A/V Technology & Communications	Business Management & Administration
Culinary Arts	Carpentry	Graphic/Web Design Film & TV	Graphic/Web Design Social Media Business Film & TV
			
Education & Training	Finance	Government & Public Administration	Health Science
Early Childhood	Social Media Business	Law & Public Safety	Medical Assisting Sports Medicine
			
Hospitality & Tourism	Human Services	Information Technology	Law, Public Safety, Corrections & Security
Culinary Arts Social Media Business	Early Childhood	Computer Science Social Media Business Film & TV	Law & Public Safety
			
Manufacturing	Marketing, Sales & Service	STEM	
Carpentry	Culinary Arts Graphic/Web Design Social Media Business Film & TV	Computer Science	
			



## Buckeye Union CTE Programs by Career Cluster

Agriculture, Food & Natural Resources	Architecture & Construction	Arts, A/V Technology & Communications	Business Management & Administration
Agrisience Automotive Technology Culinary Arts	Agrisience Airforce JROTC Technical Theatre Welding	Aerospace/JROTC Graphic/Web Design Technical Theatre	Agrisience Aerospace/JROTC Graphic/Web Design Social Media Business Technical Theatre
			
Education & Training	Finance	Government & Public Administration	Health Science
Agrisience Aerospace/JROTC	Agrisience Aerospace/JROTC Social Media Business	Aerospace/JROTC Law & Public Safety	Agrisience Medical Assisting Sports Medicine
			
Hospitality & Tourism	Human Services	Information Technology	Law, Public Safety, Corrections & Security
Culinary Arts Social Media Business	Aerospace/JROTC	Aerospace/JROTC Computer Science Social Media Business Technical Theatre	Law & Public Safety
			
Manufacturing	Marketing, Sales & Service	STEM	Transportation, Distribution & Logistics
Agrisience Automotive Technology Aerospace/JROTC Technical Theatre Welding	Agrisience Aerospace/JROTC Culinary Arts Graphic/Web Design Social Media Business	Agrisience Aerospace/JROTC Computer Science	Automotive Technology Aerospace/JROTC
			

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY B: Create Career Pathways for In-Demand Occupations

### Grand Canyon University

#### **GenCyber NSF Grant**

- Summer Camp to equip K12 Teachers to build the future Cybersecurity pipeline. GCU helps teachers boot up their cybersecurity skills - GCU Today

#### **Charles Schwab Foundation Finance Center**

- Sponsored by Charles Schwab Foundation, a dedicated space for finance classrooms, guest speakers, and Finance/Economics club, financial literacy
- Bloomberg Terminals; Wall Street Journal
- Creating new CFP degree program, BS in Finance with emphasis in Financial Planning
- Continued support of SIE Exam (Securities Investment Essentials Exam) FINRA sponsored industry exam for undergraduate students
- GCU, Schwab invest in students with finance center - GCU Today

#### **Canyon L.E.A.P (Local Education Agency Pathway) to Teach program**

- Cohort alternative teacher certification pathway
- First cohort makes L.E.A.P. to teacher certification - GCU Today

#### **Concurrent Enrollment Program with Maricopa Community Colleges:**

- GCU partners with Maricopa Community Colleges to offer their enrolled AAS Nursing students an option to enroll in GCU's RN-BSN concurrently, or an option for their AAS nursing students who have a prior bachelor's degree in another field the option to obtain an RN-MSN degree.

#### **Transition To Practice (TTP) Clinical Placements**

- Senior Nursing students apply to healthcare organizations seeking a 1:1 residency clinical experience with a preceptor employed by the healthcare organization. TTP experiences are provided with the intent that it leads to employment upon graduation and successful completion of the national NCLEX exam.
- WORKFORCE TALENT: <https://gcuworks.com/> GCU's students and graduates make up the next generation of global workforce. To date, Canyon Venture companies have hired over 100 students.
- ECONOMIC DEVELOPMENT: GCU's Center for Economic Development @ Canyon Ventures was established in May of 2021 to assist in locating and landing new companies to the state of Arizona and especially West Phoenix. GCU's 100,000+ students offer a highly qualified and willing talent pool of prospective employees.

#### **Counseling Industry and Education Partnerships:**

- Prepare students to become licensed counselors and certified school counselors to meet the increased demand for mental health services in the community and schools.
- Offer certificate programs in behavioral health and counseling to prepare and sharpen skills of mental health professionals.
- Provide free professional development and continuing education opportunities to counselors and other mental health professionals in agencies and schools.
- Counseling Industry Advisory board

#### **Social Work Industry and Education Partnerships:**

- Social Work Advisory Board creates a synergy between education and industry professionals to support trends and needed skills developed by students prior to graduation and supports efforts to connect students to employment within those partnership organizations.
- Prepare students to become licensed social workers to meet the increased demand for social service needs in

*“The West Valley is a growing community, and the world’s interconnectedness makes it increasingly important to align strategic priorities between education, business, and industry to support the growth. We need to continue to leverage our resources to develop the current and future workforce needs. EMCC and GCC are well-positioned to provide the education and training necessary for our West Valley business partners, and we look forward to continued opportunities for partnership.”*

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY B: Create Career Pathways for In-Demand Occupations

the community, state, and nation through internships, special events, and collaborative research with partnering organizations.

- Develop certificate programs in specialized areas of social work practice to prepare and sharpen skills of social work professionals and support professional growth.
- Provide free professional development and continuing education opportunities to social work professionals.

### Northern Arizona University

- Northern Arizona University and Glendale Community College partnered to offer a Bachelor of Science in Health Sciences-Fitness and Wellness degree on the campus of GCC.
- Northern Arizona University's Bachelor of Science in Health Sciences – Fitness and Wellness degree program is a pathway to the NAU Master in Athletic Training and Doctor of Physical Therapy. These programs serve West Valley students at the Phoenix Biomedical Center.
- Northern Arizona University continues to partner with Estrella Mountain and Glendale Community College to provide the RN to BSN Concurrent Enrollment pathway. Students complete their associate's and bachelor's degree in the same semester. This partnership streamlines the process to provide bachelor's prepared nurses for the healthcare field.
- Northern Arizona University developed an online MS in Cybersecurity program.

### University of Phoenix

- University of Phoenix earns recognition for Online Education Leadership for Hallmarks of Excellence set by UPCEA
- University of Phoenix Launches Two New Cybersecurity Certificate Programs to Speed Job Opportunity in the Growing IT Field

### Center for the Future of Arizona

**Arizona Pathways to Prosperity** creates seamless educational, training, and credentialing opportunities for students that are aligned with industry needs in high-demand, high-growth industry sectors, leading to increased educational attainment and a strong talent pipeline for employers. CFA works with 40+ K-12 and postsecondary education partners and 60+ industry and community partners across Maricopa, Pima, Pinal, and Yuma counties. The college and career pathways target Arizona growth sectors including IT & cybersecurity, advanced manufacturing, healthcare, and energy.

### Expansion of Statewide Platform for Middle Grades Career Literacy

- CFA secured a partnership with the Partnership for Economic Innovation (PEI) to enhance the digital career exploration platform built by PipelineAZ to meet the needs of middle school students in completing Education Career Action Plans (ECAP). This expands the project between PEI and the Arizona Department of Education to build the My Future AZ platform within PipelineAZ for high school student ECAPs. With CFA's contribution, My Future AZ includes a middle school dashboard for students to create an ECAP that will follow them to high school. My Future AZ responds to a pressing need to provide a resource for students, families, and educators that promotes high-demand STEM pathways and empowers individuals to reimagine their occupational identity. This partnership to expand My Future AZ will impact thousands of middle-grade students statewide by providing quality career literacy information and guidance through a dynamic online platform.
- The platform will enhance the implementation of the Possible Futures middle grades career exploration curriculum. Students will have access to Pipeline AZ and My Future AZ to inform how skills built through coursework support their educational and career pathways. Serving as the replacement for the Arizona Career Information System funded through ADE, the platform is projected to be used in nearly 900 high schools and

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY B: Create Career Pathways for In-Demand Occupations

middle schools across the state. The platform functions are being developed and released in a phased approach, beginning with registrations and exploration capabilities starting August 31st, 2021. In the first phase, all Arizona middle and high school students can set up accounts, take an interest assessment, favorite careers and industries, access resources, and explore education and career opportunities.

- CFA has provided critical input and feedback on the middle grades platform design, based on learnings from our middle grades school partners as to the unique needs of middle school students. While other CFA Pathways funding was used for this project, the work meets the goals and objectives of AZ GEAR UP and partner schools provided critical feedback for the system design. My Future AZ will allow middle grades students across the state the ability to begin the ECAP activities and make informed decisions as they transition to high school.

### 2020-2022 Goals:

- Map job families within each industry sector by leveraging information from industry leaders, education and workforce development partners, and other stakeholders.
- Map the possible career progression connections within and across job families.
- Develop a graphic or map showing the pathways for the top occupations in each industry sector.
- Publish the pathways or maps on the WESTMARC talent development website page.
- Promote the pathways to:
  - Education and training providers to recruit students into the pipeline
  - Students and parents to help make career and education decisions
  - Industry to recruit graduates for open positions or internships
  - Economic development professionals to recruit targeted industries

## STRATEGY B: Create Career Pathways for In-Demand Occupations

48% Completion

# Industry Statistics

### ADVANCED BUSINESS SERVICES



32% of Advanced Business Workers in Maricopa County, live in the West Valley

### MANUFACTURING



34% of Manufacturing workers in Maricopa County, live in the West Valley

### HEALTHCARE



36% of Healthcare workers in Maricopa County, live in the West Valley

### TRANSPORTATION & LOGISTICS



45% of the Transportation & Logistics workers in Maricopa County, live in the West Valley

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY C: Integrate Soft Skills in K-12 Curriculum

### Purpose:

Promote a ready-for-work population that is sought-after by employers.

### Sample of Year 3 Accomplishments:

#### Arizona State University West Campus:

- CommlabASU: provides communication and public speaking instruction in K-12 classrooms

#### Buckeye Union High School District

- The Arizona Professional Skills are taught as an integral part of all CTE programs. They are recognized by business and industry leaders as being the most critical knowledge and skills necessary to obtain the job, be successful in the job, and advance in any career pathway. They are the result of 11 focus groups conducted around the state by the Arizona Department of Education, Career and Technical Skills Department, working in cooperation with the Arizona CTE Quality Commission, advocates for accountability and excellence in Career and Technical Education. All our teachers are teaching these in various ways. Either through bell work, through their CTSO events, or through project-based learning. This is an integral part of our CTE program development.

Complex Communication	Collaboration	Thinking & Innovating	Professionalism
Initiative & Self-Direction	Intergenerational & Cross-Cultural Competence	Organizational Culture	Legal & Ethical Practices
Financial Practices			

#### West-MEC

Soft skill training is embedded in student and adult CTE programs to ensure completers are equipped with those skills desirable to business and industry. Soft skill training includes, but are not limited to:

- Critical thinking
- Leadership
- Problem solving
- Professional writing
- Public speaking

#### Grand Canyon University

##### Soft Skills Updates to College of Education Course Curriculum

- Virtues and character embedded in educational administration and education leadership master's programs, funded by a grant from the Kern Family Foundation
- Free character education conference slated for Monday, December 13, 2021 in the GCU Arena, funded by the Kern Family Foundation
- Registration link: <https://events.gcu.edu/event/college-education-character-education-conference/>
- As a response to COVID-19 pandemic, curriculum through College of Education programs were updated to include social-emotional learning experiences.

##### Engaging Ed Tech Tools Used by College of Education

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY C: Integrate Soft Skills in K-12 Curriculum

- College of Education faculty created personalized videos to connect with learners through 'Takeover Thursdays' format on social media.
- <https://news.gcu.edu/2021/09/education-facultys-videos-are-a-hit-with-students/>
- FlipGrid tech tool videos created by College of Education students to diminish virtual learning gap
- <https://news.gcu.edu/2019/06/gcu-associate-professor-chosen-for-flipgrid-board/>
- Almost 19,000 COE student videos
- Almost 500,000 video views
- COE students broke the FlipGrid engagement meter
- Microsoft now has to create a new meter

### **Multicultural Library and Model Classroom**

- This successful conference was a collaboration between the Faculty Advisory Board, Faculty Training & Development, and Online Full-Time Faculty. Workshops and materials offered during this conference are an excellent resource for all course modalities. The 2021 Spring into Summer conference theme, **Engaging-Empathizing-Educating**, highlights three important aspects of teaching.
- The workshops, 1) Pivoting Pedagogy, 2) Application, Advocacy, and Activism, 3) Purposeful Presence, and 4) Tell us a Story provide great tips on how to be present, flexible, and engaging according to students' needs in an ever-changing classroom environment.
- <https://news.gcu.edu/2021/08/new-library-classroom-set-to-create-teacher-leaders/>
- <https://cirt.gcu.edu/frc/facultyacademy/odw/sis2021>

### **Social-Emotional Learning strategies to support classroom instruction**

- COE faculty and staff continue to address Social-Emotional Learning strategies through blogs, professional development, and curriculum.
- <https://www.gcu.edu/blog/teaching-school-administration/teaching-tuesday-3-strategies-support-social-emotional-learning>

## 2020-2022 Goals:

- Promote a ready-for-work population that is sought-after by employers.
- Become familiar with the Arizona Office of Economic Opportunity's Arizona Career Readiness Credential (ACRC), the Arizona Department of Education Professional Skills, the National Employability Skills Framework and certification through ACT Work Keys, and other existing "soft-skill" resources.
- Convene K-12 educators and administrators to adopt the philosophy and determine the approach to integrating soft skills into every part of students' school career.
- Sign Memorandums of Understanding or adopt protocols among educators, schools, and school districts that outline approaches, expectations, resources, and other expectations of participation.
- Prioritize the schools or districts that will implement the model.
- Adapt curriculum with integrated practices and expectations.
- Conduct a funding campaign for corporate sponsorships and community investment to support acquisition of programs, course materials, professional training, and other resources.
- Set target date for implementing and reviewing results.
- Through business outreach visits and different messaging platforms, ensure employers are aware of and contribute to the efforts to improve the West Valley's workforce soft skills.

## STRATEGY C: Integrate Soft Skills in K-12 Curriculum

35% Completion

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY D: Support STEM Education

### Purpose:

To prepare students for today's and tomorrow's jobs through fully-funded science, technology, engineering, and math (STEM) educational programs.

### Sample of Year 3 Accomplishments:

#### ASU West Campus

##### **DEF CON's Capture the Flag (CTF) cybersecurity competition**

- An example of ASU's mission of creating social impact and helping learners build the knowledge and skills needed to thrive in today's workforce into practice.
- As the United States continues to see threats to the nation's security and infrastructure, ASU professors have found that this competition brings to light just how much impact education and research can provide.
- Through the CTF event, ASU has helped thousands of people develop an adversarial mindset — an understanding of how an adversary thinks, what information is valuable to them and what sort of tactics they may deploy. This knowledge is crucial in today's world where cybersecurity professionals need to identify vulnerabilities before bad actors do.

##### **SummerUP: grades 6 – 12 summer camps on West campus**

- SummerUP 2021, hybrid sessions in-person and virtually online
- Sessions included:
  - High School Coding Camp
  - All About Energy
  - Forensic Science
  - Cyber Camp
  - How Animals Work
  - Hands-on Science
  - Math World: Big Data
  - Plant Science
  - STEAM Academy
  - Veterinary Science Exploration
  - Why Math Matters
  - Women in Science

##### **New College Undergraduate Inquiry and Research Experiences**

- Undergraduate research is integral to the student-centered, interdisciplinary education that New College faculty provide to their students. Benefits provided to students, faculty, and campuses are manifold and well-documented.
- The New College Undergraduate Inquiry & Research Experiences (NCUIRE, pronounced "Inquire") Program engages New College undergraduates in meaningful research partnerships with faculty and other undergraduate scholars.
- Provides paid and/or course credit hands-on research experience for undergraduate students

##### **TRAIN-STEM Scholarships**

- o \$5 million National Science Foundation grant provides \$5,000 per semester scholarships to STEM transfer students from targeted Maricopa Community Colleges:

##### **Glendale Community College, Phoenix College, and South Mountain Community College**

- Program participation helps participants be more competitive for outside internships, provides more in-depth training in their STEM field of interest, and increases their laboratory or numerical modeling research skills.

##### **The New College Environmental Health Science Scholars (NCEHSS) program**

- Paid Undergraduate Training in Environmental Health Sciences

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY D: Support STEM Education

- Faculty in the School of Mathematical and Natural Sciences, New College of Interdisciplinary Arts and Sciences mentored students in summer 2021
- The program seeks to eliminate cultural, economic, and logistic barriers faced by underrepresented minority (URM) students seeking a summer research experience.
- Students are recruited from the Maricopa County region in Arizona, the nation’s fastest growing county where the population is 30% Hispanic and 3% Native American.
- Students are matched with a faculty mentor for a 9-week summer research experience in ASU’s School of Mathematical and Natural Sciences on ASU’s West Campus in Glendale, AZ.
- Sponsored by the National Institute of Environmental Health Sciences (NIEHS) grant.

### Buckeye Union Highschool District

#### COMPUTER SCIENCE/FBLA

- Help you understand how computing and technology influence world around you
- Develop digital projects, such as videos and mobile apps, and websites to address real world issues
- Learn the fundamentals of object-oriented programming in Java
- Opportunity to enhance employability and earn college credit through AP program
- Experience leadership opportunities and competition through FBLA Media

#### Career Focus

- Prepared for immediate employment and further education in the Computer Science industry
- Industry Certification - Microsoft Technology Associate or Programmer Level 1 – Java Basics

#### Computer Science Discoveries

F, So	1 Semester	1	Y
-------	------------	---	---

Computer Science Discoveries is an introductory computer science course for 9th - 10th grade students. Mapped to CTSA standards, the course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user centered design, and data, while inspiring students as they build their own websites, apps, animations, games, and physical computing systems.

#### AP Computer Science Principles

So, J, Sr	1 semester	1	Y
-----------	------------	---	---

This is an introductory Advanced Placement (AP®) course designed to broaden participation in computer science. The Course has been reviewed by the College Board and is pre-approved to pass the audit. This intermediate level course introduces students to the foundations of modern computing. Topics covered include programming, algorithms, the internet, big data, digital privacy and security and the social impacts of computing. Students will apply these topics by creating computer programs and applications. Students may earn college credit through the AP assessments (Multiple choice test and Create Task (computer program))

#### AP Computer Science A

So, J, Sr	1 semester	1	N
-----------	------------	---	---

*“The strength of our West Valley community is built on the collaborative efforts of industry, municipalities, and education. A core component for institutions of higher education is to help prepare and train the workforce for expanding labor market needs. Developing and building strong industry partnerships helps to ensure a relevant curriculum while also providing internship opportunities for students as future leaders in our community.”*

Teresa Leyba Ruiz,  
President, Glendale  
Community College



# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY D: Support STEM Education

This upper level course dives deeper into fundamental topics in computer science. Successful students will be able to: design, implement and analyze solutions to problems, use and implement commonly used algorithms, use standard data structures, develop and select appropriate algorithms and data structures to solve new problems, write solutions fluently in an object-oriented environment, and write, run, and debug solutions in the Java programming language. Students may earn college credit the AP assessment in May. Additionally, the course may also serve as a Math credit beyond Algebra 2.

### Computer Science Practicum

J, Sr	1 semester	1	N
-------	------------	---	---

This is a capstone program for all CTE students who completed a CTE program. Students will be working mainly on their work-based learning projects, along with many hands-on real-world relevant projects. Dual enrollment may be offered to allow the student to get college credit through Maricopa Community colleges. This course may be repeated for credit with instructor permission.

J, Sr	1 semester	1	N
-------	------------	---	---

### ENGINEERING/SKILLS USA

- Exposes students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation
- Operate the same state-of-the-art computer-aided 3D solid modeling design software utilized by professionals in industry today
- Hands on challenges, projects and competitions with VEX Robotics Systems
- Experience leadership opportunities and competition through SkillsUSA

### Career Focus

- Prepared for immediate employment and further education in the Engineering field
- Industry Certification – Solid Works

### ENGINEERING I

F, So, J	1 semester	1	Y
----------	------------	---	---

- The level I class provides students with a basic overview of the engineering field through application of the engineering design process. Students will experience structural and mechanical process with an introduction into VEX Robotics.

### ENGINEERING II

So, J, Sr	1 semester	1	Y
-----------	------------	---	---

This class is designed to further advance students' knowledge and application of the engineering process with advancement into electronics and mechanical coding. Students will continue working with VEX Robotics with a new set of parts and electronics system. Dual enrollment may be offered to allow the student to get college credit through Maricopa Community colleges

### ENGINEERING III

So, J, Sr	1 semester	1	Y
-----------	------------	---	---

This class is designed to have the students learn how to handle real world problems and challenges. Students will compete in REV Robotics Competitions with other High Schools in Arizona. Students will become completers in the program by passing the state technical assessment and will receive a certificate from Arizona Department of Education. Dual enrollment may be offered to allow the student to get college credit through Maricopa Community colleges

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY D: Support STEM Education

### West-MEC

As the West Valley's public CTE district, West-MEC is one of 13 districts in AZ. Collectively, the 14 districts are known as "AZCTED." West-MEC took a leadership role in garnering State legislative support for an aggressive agenda advancing career and technical education in the West Valley and the State. Lobbying efforts resulted in all items on the AZCTED agenda receiving broad legislative support and approval. Items included the approval/passage of:

- CTEDs; averaged daily membership (sponsored by Republican Representative Udall – East Valley) allows for greater flexibility in the CTE school calendar, allowing for course offerings "anytime and anywhere."
- CTED 4th Year Funding (sponsored by Republican Senator Mesnard) restores CTE funding for 9th graders and for students in the year after graduation.
- CTEDs; internship funding (sponsored by Republican Representative Udall)
- Career; technical education; projects (sponsored by Republican Representative Kaiser) allow greater flexibility in how funds generated by CTE programs may be used.
- CTEDs letter grade exclusion (sponsored by Republic Representative Blackman - Snowflake) recognizes the unique nature of CTE districts in relation to public school districts.

### Northern Arizona University

Northern Arizona University developed an online Master's in Engineering in Civil Engineering for civil engineers seeking additional professional development.

### Center for the Future of Arizona

Through generous support from Arizona GEAR UP, CFA worked with partners to digitize the successful Possible Futures career exploration curriculum. The result of this project is an innovative, high-quality, relevant, and robust suite of career literacy curriculum that is now available to students across the state. Possible Futures materials include 72 total lessons - 12 digitized lessons in each of 6 modules: Skills for Success, Lenses on the Future, Cybersecurity, Healthcare, Information Technology, and Engineering and Design. Each lesson has a corresponding Facilitator Guide to support teachers when delivering the curriculum. The lessons are designed to be compatible with virtual, hybrid, and in-person learning. Each Facilitator Guide includes details on how to accommodate the lessons depending on the context.

Each lesson concludes with a section titled "Thinking About My Future" that guides students to reflect on their learning as it pertains to their individual career pathways. This section also contains a link to corresponding industry pages on Pipeline AZ that connects students with current Labor Market Information.

CFA looks forward to working with partners to expand the use of the curriculum during the 2021-22 school year, providing critical implementation support to ensure a successful experience for students and for teachers.

### Virtual Work-based Learning Experiences for Teachers and Students

CFA, in partnership with ABEC, ElevateEDAZ, and the Pima County Superintendent's office, delivered multiple externship experiences during this reporting period. Educators from Yuma, Tucson, Santa Cruz County, Nogales, and Greater Phoenix attended, including several middle school, high school and community college instructors in the West Valley.

### Virtual Educator Externship FY21 Summary

158 Educators participated in five rounds of virtual externships. Typically, an externship is done in-person; however, responding to COVID-19, ElevateEdAZ, Arizona Business and Education Coalition (ABEC), and CFA developed a version that could be delivered entirely virtual. This model maximizes connections between industry and educators while providing both parties the opportunity to customize industry-specific solutions that improve student outcomes and meet workforce needs. Over 40 industry partners provided 63 unique employer-led sessions. The sessions

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY D: Support STEM Education

focused on high-wage jobs in their industry, behavioral interviewing, and critical skills gaps in the workforce. The 158 educators could impact as many as 21,500 students during the school year. Educators from seventh grade through community college participated. To make the program more accessible to educators, CFA and ABEC provided a \$500 stipend to participating educators. The goal of creating these externships is to support the expansion of “work-based learning” and build a framework for virtual externships that can be replicated in other regions across the state. Through the implementation of virtual externship experiences, Arizona schools and educators will stay better connected with industry professionals. Industry representatives from Google, The Hartford, CommonSpirit Health, Mayo Clinic, Dircks Moving and Logistics, Benjamin Franklin Plumbing, SRP, Pulte Homes, Bechtel, Alliance of Arizona Nonprofits, DP Electric, Zovio, APS, Charles Schwab, 1st Bank Yuma, Banner, Carlisle Companies, Pilkington Construction, and the University of Arizona-Yuma participated.

### **Virtual Student Externship FY21 Summary:**

#### **Rising 9th Graders Experience**

Fifty-one rising 9th grade students from across the state participated in an innovative virtual internship and received a \$250 stipend. Students participated in six employer sessions and a post-secondary education panel. Students also completed daily activities to inspire and inform their own career identity and a vision for their future. Student feedback was extremely positive, and lessons learned will be applied to future sessions.

**Participant #1 feedback-** “I am proud of working with my classmates and getting to know them. I am also proud of coming out of this high school career connect with more knowledge or insight on what jobs or companies look for in an employee, and this makes me more confident in applying to jobs”

**Participant #2 feedback-** “The most valuable thing I learned was the different types of careers, and on the personal level it helped me be less shy and decide what kind of career I want to pursue”.

#### **High School Experience**

One-hundred and seventeen rising 11th and 12th grade students from A60 schools across the state participated in an innovative virtual internship and received a \$250 stipend. Students participated in employer sessions aligned to their career interests in one of three areas: healthcare, information technology, or advanced manufacturing. Twelve employers participated in the session (4 in each sector) and students also learned about post-secondary pathways from community college partners. Students completed daily activities meant to inspire and inform their own career identity and a vision for their future. Student feedback was extremely positive, and lessons learned will be applied to future sessions.

**Participant #1 feedback-** “I enjoyed learning more about cyber security. I have never seriously considered doing cyber security, so it was nice to understand it more.”

**Participant #2 feedback-** “My favorite part of today’s session would be hearing from representatives of Dignity Health since it really broadened my knowledge of the different work environments.”

# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

## STRATEGY D: Support STEM Education

### University of Phoenix

University of Phoenix Launches Two New Cybersecurity Certificate Programs to Speed Job Opportunity in the Growing IT Field

#### 2020-2022 Goals:

- Establish a STEM Coalition to advocate for current and expanding STEM education opportunities and teacher training.
- Support bond measures, grant applications, and other funding resources by helping to create factual rationale for the need for STEM and CTE.
- Document and promote to students, parents, employers, and prospective employers STEM programs in the West Valley region.

## STRATEGY D: Support STEM Education

72% Completion



# PILLAR II: COMMUNICATION STRATEGIES

## STRATEGY E: Convey Consistent, Regular, and Valued Messages to Employers

### Purpose:

To effectively convey the West Valley message of unparalleled customized training and employee recruitment, screening, assessment, placement and incentives to existing and prospective businesses.

### West-MEC

West-MEC continues to advance its mission to prepare students today for tomorrow's careers with consistent messaging to employers and related activities. Year 3 activities include:

- \$10 M to satellite high schools based on student enrollment
- \$2.5 M to support industry aligned equipment
- \$400K to support industry credentials
- \$450K to support innovation in CTE
- \$72K to support small districts
- \$300K to support 8th grade STEM education
- CSF Dollars - Perkins & State CTE monies
- CTSO Membership
- CTSO Travel
- CTSO Registration
- CTSO Officer Trainings
- Host Regional CTSO Competitions
- School grants to grow CTE programs
- Counselor grants to promote Central Programs
- State CTE Curriculum Consortium Membership
- Economic Modeling System for Employment Projection Services
- OSHA Training, 10 & 30 Certification
- Snap-On Training Certifications
- Program of Study/Dual Enrollment
- Career Services for Students
- Externships for Teachers and Students
- Facility Usage of West-MEC Facilities by Member Districts
- Facility Safety Evaluation of Member District CTE Facilities
- START Center Services
- Certification Services for Teachers to renew their Teaching Certifications
- Certification Classes for Teacher to earn their Teaching Certifications
- A-F School Label Reports
- Coordination of ADE A-F Certification Applications

### Northern Arizona University

Northern Arizona University established a 10% tuition discount partnership program for organizations to support their employees with degree completion. Currently 11 organizations operating in the West Valley participate.

## PILLAR II: COMMUNICATION STRATEGIES

### STRATEGY E: Convey Consistent, Regular, and Valued Messages to Employers

#### Sample of Year 3 Accomplishments:

- Coordinating messaging with the Greater Phoenix Economic Council (GPEC), Arizona Commerce Authority (ACA) & West Valley economic development & communications professionals.

#### 2020-2022 Goals:

- Update the West Valley Workforce brochure as an employer resource booklet that is distributed by economic and workforce development representatives calling on existing and prospective businesses.
- Enhance the WESTMARC website by adding an “employer talent development” page for customized workforce training and related services.
- Enhance target employer messaging by key workforce development resource providers (websites, social media, print)
- Work with the Industry-Education-Workforce Partnerships to create ready-to-go workforce development programs to address new business attraction or expansion initiatives.



### STRATEGY E: Convey Consistent, Regular, and Valued Messages to Employers

45% Completion

# PILLAR II: COMMUNICATION STRATEGIES

## STRATEGY F: Build a Key Message Platform

### Purpose:

To create and maintain a focused communications program for West Valley economic and workforce development professionals using a key message platform that is supported with factual proof points, images, and testimonials.

### Sample of Year 3 Accomplishments:

- Convened Marketing Subcommittee composed of West Valley city Public Information Officers and other stakeholder's communications staff.
- Developed monthly calendar of key messages derived from West Valley Pipeline data findings.
- Hired a writer to compose monthly articles around key messages/data derived from the West Valley Pipeline and coordinated with the monthly calendar messaging.
- Created videos to share on social media outlets to accompany the monthly articles.
- Met with media partners to share information, articles and West Valley interests/goals/successes.

### WESTMARC

Created a 2021 Marketing Strategy calendar that highlighted key messages related to education, infrastructure & workforce throughout the year. Working alongside community and city leaders in marketing, communications and economic development to create key messages and to send out to their respected communities. Messages were seen through our digital assets including email marketing, social media platforms and website.

### ARIZONA@WORK-Maricopa County

Our Job Blasts are sent twice a week to Job Seekers and Career Advisors. They contain extensive information including updated Job Leads and Community Resource

### 2020-2022 Goals:

- On-going collaboration and messaging.
- Collect the marketing messages being used by economic and workforce development professionals.
- Compose new or modify existing messages deemed necessary to speak to each of the targeted audiences.
- Determine the data that will support each message.
- Collect appropriate photos, graphics, testimonials to support key messages and proof points for printed and electronic materials.
- Share messages with economic and workforce development partners; encourage them to use.
- Conduct a full review annually to update messages and proof points as necessary, as well as contact information, emails, phone numbers, sources, and hyperlinks.
- Create videos to share on social media outlets to accompany the monthly articles.
- Meet with media partners to share information, articles and West Valley interests/goals/successes

## STRATEGY F: Build a Key Message Platform

65% Completion

# PILLAR I & II: COMMUNICATION STRATEGIES

## STRATEGY G: Re-brand Vocational / Career and Technical Education (CTE)

### Purpose:

To shift the public perception of CTE training, jobs, wages and career advancement opportunities.

### Sample of Year 3 Accomplishments:

#### Arizona State University West Campus:

**Partnering with West-MEC and Maricopa Community Colleges, creating pathways to associates degrees and bachelor degrees from popular CTE programs including:**

- Veterinary Sciences
- Automotive Technology
- Emergency Medical Technician
- Energy & Industrial Technology
- IT Security
- Law, Public Safety and Security
- Physical Therapy
- Precision Machining
- Welding
- Culinary Principles
- Fire Science
- Coding

#### Northern Arizona University:

- Northern Arizona University, the Maricopa Community Colleges, and West-MEC continued our tri-level partnership to provide bachelor degree completion pathways for all Career and Technical Education programs offered to high school students. This year we have taken it a step further to include our CTE Teacher certification program and mapped a pathway through Master's degree completion.

#### West-MEC

- West-MEC seeks to advance its brand, thereby helping to rebrand CTE in meaningful and creative ways. For West-MEC's communication update visit: [Communications Update 10.1.21\[88366\].pdf](#)

### 2020-2022 Goals:

- Build on the partnership between WESTMARC member organizations, West-MEC member school districts, West-MEC and Maricopa Community College District leadership to constantly and consistently convey and prove the fact that CTE is a proven pathway to a well-paying career of a student's choosing and is a proven and effective pathway to post-secondary education.
- Actively promote and educate the value of career and technical education (CTE) via multiple media outlets.
- Encourage and work with school districts within West-MEC's district boundaries to make a sincere and ongoing effort to promote the value of career and technical education.

## STRATEGY G: Re-brand Vocational / Career and Technical Education (CTE)

75% Completion



# PILLAR I: INDUSTRY AND EDUCATION PARTNERSHIPS

February 2021

## CTE in Arizona



The Arizona economy is experiencing a skills gap...

**51** of jobs in Arizona require skills training—  
more education than high school but less than a four-year degree.

**46** of Arizona workers are trained at this level.



Career and technical education (CTE) programs can fill these gaps, particularly in Arizona's key industries, like:

- aerospace and defense
- manufacturing
- bioscience and health care
- film and digital media

88% of Arizona postsecondary CTE concentrators met performance goals for technical skills in 2018.

Many students are already enrolled in CTE in Arizona, developing technical, academic and employability skills and engaging in work-based experiences with industry partners. During the 2018-19 school year, Arizona had:

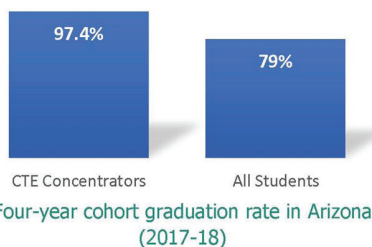
**125,857**

secondary CTE participants

**104,682**

postsecondary CTE participants

These youth and adult learners in CTE programs are more engaged, graduate high school at higher rates, earn industry-recognized credentials, and have rewarding and family-sustaining careers.



**51,877**

postsecondary credentials earned by CTE students in Arizona (2016-17)



More investment is needed to scale CTE programs across Arizona to ensure that all learners, including historically underserved learners, have access to high-quality CTE programs in high-skill, high-wage and in-demand career fields.

***CTE: Good for Students, Good for Business, Good for Communities!***

**FY 20 Federal Perkins CTE Funding for Arizona**

**\$32,139,650**

For more information visit [www.acteonline.org](http://www.acteonline.org), [www.azed.gov/cte](http://www.azed.gov/cte) and [www.ACTEAZ.org](http://www.ACTEAZ.org).

Data sources are available from [publicpolicy@acteonline.org](mailto:publicpolicy@acteonline.org).

# PILLAR III: COMMUNITY OUTREACH

## STRATEGY H: Operate a Collaborative Business Outreach Program

### Purpose:

To create a plan for economic development, workforce development agencies and partners to jointly visit local businesses, and to communicate a coordinated message.

### West-MEC

- West-MEC's Department of Government & Business Partnerships continues its work with business and industry, state and local governments, Chambers of Commerce, and a wide variety of non-profit organizations to develop partnerships with West-MEC Central Campus programs. Partnerships include financial investments, membership on our many advisory committees, advocacy at the state and local level as well as providing job opportunities for our graduates.
- West-MEC established an Institutional Advisory Commission comprised of a collection of esteemed industry and community leaders knowledgeable of the workforce talent pipeline needs of the community. Through regularly scheduled and documented meetings, the Commission provides consultative assistance to district leaders to ensure West-MEC continually meets the career education needs of the West Valley. Visit: Institutional Advisory Commission | West-MEC
- Program Advisory Councils improve the quality of instruction in Career and Technical Education programs. Members are volunteers who share an expert knowledge in a career pathway, the job tasks and competency requirements for specific occupations.

### Grand Canyon University

#### Sports Business:

- Developed sports sales academy with support from professional sports teams to teach students the basics of sales in sport
- Curriculum developed and taught by Phoenix Rising/AZ Coyotes/AZ Diamondbacks/Surprise Stadium over a 5 week period
- Dedicated to support students who are interested in sales as a large percentage of entry level positions in the industry are sales/sales related

#### **Collaboration with Cactus League** for hiring pathways for students to support Spring Baseball season 2022

- 15 teams, 9 communities

#### **New Business Development Center –**

- Partnered with Chicanos Por La Causa with Spanish entrepreneurship training – working with 10 west valley small businesses
- Received over \$10k in grant money to support local small businesses negatively impacted by the pandemic
- 15 student ambassadors from across the university are assisting in entrepreneurship training and assistance for small business owners

#### **The Canyon Ventures center is home to thirty-five independent companies including:**

- NogginBoss: <https://nogginboss.com/> Co-Founded by Gabe Cooper, a GCU undergraduate and GCU MBA graduate. Noggin Boss is to be featured on the NBC's hit series Shark Tank this December 2021. The company secured funding from several Sharks to grow their promotional business.
- 40-Below-Joe; <https://40belowjoe.com/> Founded by Curt Jones, an engineer and the creator of Dippin' Dots. The company transforms coffee into a frozen treat.
- HomeKey Systems: <https://gethomekey.com/> HomeKey has reinvented the home experience for homeowners, builders, and the professionals they rely on. HomeKey is like CarFax but for your Home.
- Digitile: <https://digitile.io/> Digitile's Document Tag Management solution saves time and improves the way

# PILLAR III: COMMUNITY OUTREACH

## STRATEGY H: Operate a Collaborative Business Outreach Program

teams work.

- eHealth Nexus: <http://www.ehealthnexus.com/about-us.html> The company produces StayKlear, a unique sanitizer that contains G2 copper, a powerful disinfectant.
- Little Taller: <https://littletaller.com/> A website and application development agency comprised of experienced professionals serving companies local to enterprise.
- Impala Scrubs: <https://impalascrubs.com/> Great scrubs can support you in your routine and uplift your purpose. That's why we're rebuilding your daily essentials with care and determination.
- Candor: <https://candor.cloud/> A cloud-based provider of technology services.
- Neon: <https://neonscreens.com/> Transforms TV screens to create powerful customer experiences. Neon helps drive sales, boost revenue, and increase efficiency with simple signage solutions.
- Journeyage: <https://journeyage.com/> Online personalized training (LMS) designed to accelerate your company's growth.
- Canyon Analytics: <https://www.canyon-analytics.com/> Canyon Analytics provides business intelligence solutions by utilizing data science tools and expertise to solve problems and pursue growth opportunities.
- SignAll: <https://www.signall.us/> SignAll's breakthrough technology translates American Sign Language into English using any mobile phone. Due to the COVID-19 pandemic the company could not move its operations from Budapest Hungary to GCU, so it hires, manages, and pays their GCU student staff all via the internet.
- Zorrosign: <https://www.zorrosign.com/> When security is mission-critical, your business needs secure digital signatures, transactions, and documentation. Only one complete solution is secured via blockchain. Z-Sign, or don't sign! Originally from Dubai, UAE, Zorrosign searched the United States for its US Headquarters and landed at GCU's Canyon Ventures.
- Little Bird: <https://www.golittlebird.com/> Smart Technology, both hardware and software, for apartment residential communities.
- Lux Longboards: <https://www.luxlongboards.com/> World's best electric longboards
- ICT Tracker: <https://ict.tech/> Track in real-time your construction progress to drive greater profits. Digitize the manual process of tracking and reporting with real data.
- E6 Agency: <https://e6.agency/> The E6 Agency is a lean-operating, full-service creative agency in the heart of Phoenix, Arizona.
- Qwick: <https://www.qwick.com/> On-demand staffing as a service platform that connects service industry professionals with food and beverage shifts in real-time.
- Schola: <https://www.schola.com/> Schola's mission is to improve education outcomes by placing students in their ideal educational setting.
- Nova: <https://gonovaced.wixsite.com/website> Engineers ideas into reality. We design and build our customers ideas into prototypes ready for the manufacturing process, and eventually to mass production.
- Viva Brilhante: <https://www.vivabrilhante.com/> Custom bathing suits for all sizes.
- AlexMath: <https://www.alexmath.org/> Online math tutoring.
- ConfirmD: <https://www.confirmd.io/> Enables everyone to know, verify, and voluntarily share their health status including COVID-19 vaccinations.
- EARN Modern Talent: <https://www.earncares.com/> We take the uncertainty out of finding a new full-time nursing position
- Feniks: <https://shopfreshdrop.com/> Farmer's market delivered to your door.
- I-CalQ: <https://i-calq.com/> Smartphone medical laboratory.
- Persosa: <https://www.persosa.com/> Track and own your consumer data while delighting them with immersive, connected experiences across all of their brand interactions.

# PILLAR III: COMMUNITY OUTREACH

## STRATEGY H: Operate a Collaborative Business Outreach Program

- Rivia Health: <https://www.riviahealth.com/> The payment experience patients love. Increase your revenue, improve operational efficiency, and encourage patient loyalty.
- Santa Calls: <https://experiencebelief.com/> Santa to your home via video call!
- Silent Sector: <https://www.silentsector.com/> Silent Sector is a cybersecurity services firm of industry-leading experts bringing experience ranging from Fortune 500 companies to NASA and the U.S. Army Special Forces.
- TeqBall: <https://www.teqball.com/> Teqball is a sports innovation, the fastest growing sport in the world. The revolutionary multifunctional sports equipment, the Teq table offers a variety of ways of playing Teqsports.
- Branch49: <https://branch49.com/> A full-service revenue generation consulting firm.
- Taproot Interventions: <http://www.taprootinterventions.com> TapRoot's Ella is the First Personalized Care Management Platform for persons with cognitive loss.
- Washed Clothing: <http://www.washed-clothing.com> We are a Christian clothing company that for every shirt we sell, we in return provide a shirt to someone in need.
- Dasuni USA: <http://www.dasuni.us> Simplifying internet transactions.

### Behavioral Health Community Outreach

- Transport psychoeducational groups to the "Where Hope Lives" program at the Phoenix Dream Center, the "Hope" residential program serves sex traffic victims, and the Mariposa Program is a series of 8 workshops covering topics of beliefs, abuse, and life skills. Each group is led by Faculty with a clinical license, accompanied by the students who have developed the materials to deliver the objectives of the group.

### Social Work Community Outreach

- GCU City Serve needs assessment to identify behavioral health service needs within the surrounding GCU community.
- Alhambra Program addresses social and emotional support groups to be further expanded in other school districts.
- Andre' House supports resource and referral efforts of staff serving guests of Andre' House. Provide trainings to staff by GCU faculty in engaging with guests (Motivational Interviewing Skills, Addressing Addiction, Resource and Referral).

### L.O.P.E.S. Academy - Operate a Collaborative Business Outreach Program

- Mission: To provide an inclusive, immersive Christian university experience for individuals with intellectual and developmental disabilities focused on finding personal purpose through academic, social and job skills development.
- Activities include:
  - Class twice per week
  - Workshops
  - Chapel
  - Guest Speakers
  - Campus activities
  - Internship
  - Assigned a Lopes Buddy (GCU Student)

# PILLAR III: COMMUNITY OUTREACH

## STRATEGY H: Operate a Collaborative Business Outreach Program

### Northern Arizona University

- In September 2021, Northern Arizona University hired a Business-to-Business Outreach Coordinator to engage organizations in the Valley.
- Northern Arizona University created a new Continuing Education department to serve working professionals with non-credit professional development courses, badging and micro credentials.

### 2020-2022 Goals:

- Publish a simple and concise West Valley Resource Directory that includes all local, regional, state and federal resources related to workforce development. Publish the directory on each partners' website or establish links.
- Evaluate EMSI Business Retention and Expansion data platform.

## STRATEGY H: Operate a Collaborative Business Outreach Program

35% Completion



# PILLAR III: COMMUNITY OUTREACH

## STRATEGY I: Conduct a Resident and Commuter Survey

### Purpose:

To validate the quantity and quality of the West Valley regional workforce with primary data. This strategy will be satisfied via the Maricopa Association of Governments (MAG) annual trip reduction survey process and findings.

### 2020-2022 Goals:

- Determine the survey questions.
- Select the survey tool.
- Conduct an early test of the survey to learn if there are any inconsistencies, unclear instructions, and how long it takes to complete.
- Make any necessary revisions.
- Promote the survey and its purpose.
- Periodically send reminders to email contact lists and through press releases.
- Compile and share results with key stakeholders, survey respondents, and the public.

## STRATEGY I: Conduct a Resident and Commuter Survey

100% Completion

## SUMMARY

Workforce is a key decision factor when companies determine their next site for business operations. West Valley leaders understand the importance of supporting implementation of West Valley Pipeline over a five-year period and beyond. West Valley Pipeline lays a solid the foundation and roadmap for developing and growing a high-quality workforce to serve targeted industries in this region. We know that continuing to attract leading companies will provide high-wage employment for West Valley residents and improve their quality of life by working close to home. Changing this employment paradigm will have a ripple effect on other aspects of a strong community. West Valley education is rich in opportunity with a growing and improved K-12 system, additional choices, and over 25 post-secondary education opportunities. But this plan is more than just growing numbers – it's making strategic connections between industry and education that will really move the needle. We look forward to your continued engagement as we move the West Valley forward together.

# APPENDIX

Appreciation is extended to the dozens of stakeholders who participated in the West Valley Workforce Development Plan. Their participation ensured that the project team was provided information and diverse opinions.

Special thanks to the WESTMARC Board of Directors, Committee Members, and staff for their leadership and hard work to ensure that this project was inclusive and thorough.

## EDUCATION / WORKFORCE DEVELOPMENT

Jeff Kulaga, Arizona State University  
Shiela Shedd, ASU Career Services  
Bobbi Magdaleno, Arizona State Univ  
Elaine Farinas, ARIZONA@WORK  
Angie Favela, ARIZONA@WORK  
Heath Anderson, ARIZONA@WORK  
Tina Wadham, ARIZONA@WORK  
Kevin Dumcum, ARIZONA@WORK  
Brianna Soto, Dysart High School  
Jada Thurston, Dysart High School  
Heidi Sanchez, Dysart High School  
Melanie Garcia, Dysart High School  
Paula Livingston, Estrella Mt.  
Community College  
Scott Schulz, Glendale Community  
College  
Fernando Camou, Glendale  
Community College  
Michelle Alcantar, Glendale  
Community College  
Troy Maskell, Goodwill of Central and  
Northern Arizona  
Zack Merhavy, Grand Canyon  
University  
Emily Ghena, Grand Canyon University  
Angela Bratt, Grand Canyon University  
Mike Mobley, Grand Canyon University  
Jacqueline Smith, Grand Canyon Uni-  
versity  
Roger Freeman, Littleton Elementary  
School District  
John Catapano, Maricopa Community  
Colleges District  
Dennis Paulson, Midwestern University  
Doug Small, Northern Arizona  
University

Susan Johnstad, Northern Arizona  
University  
Briana Keen, Northern Arizona  
University  
Maylee Acosta, Peoria Youth Advisory  
Board  
Cassidy K. Gatrost, Peoria Youth  
Advisory Board  
Peter DiFilippantonio, TruPath  
Justin Finnerty, University of Arizona  
Julie M. Trujillo, University of Arizona  
Barbara Snyder, University of Phoenix  
Katie Mehin, West-MEC  
Thomas Bogart, West-MEC  
Greg Donovan, West-MEC  
Jack Erb, West-MEC  
Stephen Weltsch, West-MEC  
Diane McCarthy, West-MEC  
Elyias Maldonado, West-MEC  
Cassidy Cosgrove, Willow Canyon  
High  
Edith Micu, Willow Canyon High

## GOVERNMENT AND EDO

Tyler Gentry, Arizona Commerce  
Authority  
Mayor Kenn Weise, City of Avondale  
Dan Davis, City of Avondale  
Cheryl Covert, City of Avondale  
David Roderique, City of Buckeye  
Mayor Jackie A. Meck, City of Buckeye  
Eric Orsborn, City of Buckeye  
Roger Klingler, City of Byckeye  
Tom Doyle, City of El Mirage  
Mayor Lana Mook, City of El Mirage  
James P. Shano, City of El Mirage  
Mayor Jerry P. Weirs, City of Glendale  
Kevin Phelps, City of Glendale  
Kristen Stephenson, City of Glendale  
Michelle Lawrie, City of Goodyear  
Mayor Georgia Lord, City of Goodyear  
Brian Dalke, City of Goodyear  
Mayor Cathy Carlat, City of Peoria  
Jeff Tyne, City of Peoria  
Scott Whyte, City of Peoria  
Kirsten Hall, City of Peoria  
George Colebrook, City of Peoria  
Tamara Shreeve, City of Peoria  
Mayor Greg Stanton, City of Phoenix  
Daniel Valenzuela, City of Phoenix

Michelle Pierson, City of Phoenix  
Lori Collins, City of Phoenix  
Mike Hoover, City of Surprise  
Mayor Sharon Wolcott, City of  
Surprise  
Bob Wingenroth, City of Surprise  
Suzanne Boyles, City of Surprise  
Mayor Everett Sickles, City of Wicken-  
burg  
Vince Lorefice, City of Wickenburg  
Aaron White, City of Wickenburg  
Brad Smidt, GPEC  
Katherine Pappas, GPEC  
Anubhav Bagley, MAG  
Jami Dennis, MAG  
Peter Burnett, MAG  
Amy St. Peter, MAG  
Tim Suann, Town of Gila Bend  
Michael Celaya, Town of Gila Bend  
Sintra Hoffman, WESTMARC  
Kimberly Jordan, WESTMARC

## BUSINESS AND INDUSTRY

Stan Holm, Abrazo West  
John Karolzak, AMR  
David Bentler, APS  
Malcom Green, AMP  
Douglas Hill, Aviage Systems  
John Cusic, Aviage Systems  
Courtney Ophaug, Banner Health  
Joe Cable, Bowman Consulting  
Amy Munson, Charles Schwab  
Karlie Andres, Discover  
Latasha Causey, USAA  
Candice Wiest, West Valley National  
Bank  
Les Meyers, White Tank Mountains  
Conservancy  
Karla Moran, SRP

## COMMERCIAL REAL ESTATE

Valentin Hernandez, CBRE  
Rusty Kennedy, CBRE  
Ted Liles, CRESA Real Estate  
Sheila Bale, Cushman & Wakefield  
Bill Honsaker, Jones Lang LaSalle  
Kurt Rosene, Novo Development  
Bill Cook, Plaza Companies  
Ron Ensley, The Opus Group

# FUNDING PARTNERS

Avondale

**GMFTZ**  
Greater Maricopa Foreign Trade Zone

  
AVIAGE SYSTEMS  
昂际航电

  
Glendale  
ARIZONA

  
City of  
EL MIRAGE  
Arizona



  
BUCKEYE, AZ

  
Town of  
GILA BEND  
JEWEL OF THE DESERT

  
SURPRISE  
ARIZONA

  
CITY OF  
Goodyear

  
THE CITY OF  
Litchfield Park



City of Phoenix

  
CITY OF  
TOLLESON  
ARIZONA

  
MARICOPA  
COMMUNITY COLLEGES

ARIZONA @WORK™  
MARICOPA COUNTY

  
Town of Wickenburg

 WESTMARC

  
PEORIA  
ARIZONA

 WESTMARC

*15 Communities... One Voice*

**Western Maricopa Coalition**

WESTMARC

6751 N. Sunset Blvd. Suite 210

Glendale, AZ 85305

Phone: 623-435-0431

[www.westmarc.org](http://www.westmarc.org)

Sponsored By: 