

EDA – American Rescue Plan Act - Build Back Better

Component Narrative – STEALTH Project

1. Program Description and Scope of Work

a. Executive Summary

Building a resilient and inclusive economy requires competency-based education and training that equips students with the technical and 21st Century skills needed for success in the workplace while addressing prevalent shifts in climate that will impact our ecosystem. In an era of rapid technological advancement and climate change, Project STEALTH (Sustainable Transportation, Equipment, Agriculture, and Logistics Training Hub) is a collaborative project of Arizona Western College (lead), Pima Community College, University of Arizona, and the Southern Arizona Coalition focused on the Economic Development Administration's (EDA) investment priorities for equity, workforce development, and environmentally sustainable development. Specifically, Project STEALTH will pioneer the creation of skills-based training programs needed to address climate change while addressing the skills gap of the jobs of today and the future in the sustainability sector.

Project STEALTH has an overarching Equity framework that is reflected through strategic workforce development efforts. The employer-driven offerings will be designed to address the skills gap while creating upward social mobility for Southern Arizona's underserved and marginalized communities, including Indigenous, Latinx and Black communities, rural communities, women, and those in vulnerable industries. Outreach and engagement with underserved communities will include community-based organizations, Tribal Nations, government and community supports such as SNAP, ARIZONA@WORK WIOA, and unemployment. There will be an alignment in the Certificate programs proposed with the needs of Southern Arizona to solve the key challenges of climate change, employer needs, and closing the skills gap. Through an employer-driven approach and Equity framework, we will uplift marginalized communities through skills-based training in high-growth/high-skill jobs.

b. Scope of Work

Addressing climate change will take an integrative and solution-focused approach within our ecosystem through an Equity framework. By leveraging Industry 4.0 (i.e., automation, artificial intelligence, cloud computing, mobile technology), Project STEALTH will lead workforce resilience innovation by undertaking a strategic course to align workforce training to high-growth jobs with a family-sustaining wage within the sustainability sector. Under Project STEALTH, there will be the design, development, and implementation of skills-based Certificates that have an intentional focus on addressing climate adaptation. The Certificate programs proposed are: *1) Electric Vehicle (EV) Charging Station Technician 2) EV Technician 3) Freight Management 4) Precision Agriculture 5) Heavy Equipment Service Technician 6) Circular Economy Environmental and Protection Technician 7) Electro-mechanical and Mechatronics Technician, and 8) Resilient Water, Wastewater, and Energy Systems.*

The outcomes will position Southern Arizona to be a national leader in solving these challenges as a living-lab for climate adaptation and resilience while improving the quality of life for our region’s most vulnerable populations, especially underserved communities and women.

Industry 4.0 is shifting the nature of agricultural, energy, water, and automotive jobs from low-tech/low-skill labor to human-robot interactions. Innovations, such as modern vertical farming, autonomous freight transportation, and the increase in electric vehicles from combustion vehicles will add further disruption. Rural communities will require workforce development to reskill and upskill existing labor pools and build a diversified highly skilled workforce. With direct input from existing employers and regional partners, programs will support adaptive industry with an emphasis on building new career pathways for future workers, especially from rural and underserved populations. Southern Arizona will become a national epicenter of climate adaptability by merging currently under-coordinated industries and organizations into an impactful, diverse Coalition addressing a growth cluster critical to our arid region – sustainable agriculture, water resources, and clean energy through an Equity framework.

2. Regional Industry Assets and Needs

a. Regional Description

Project STEALTH, led by Arizona Western College, serves the Southern Arizona Counties of Cochise, Pima, Santa Cruz, and Yuma. The region is facing a climate change induced threat, with 90% of our state experiencing “exceptional drought” during the last two decades. This arid region of Arizona will face a 20% reduction in Colorado River water by 2022, impacting our agricultural industry first, as they account for nearly 70% of all water usage in Arizona. This cluster supports 408,622 jobs and adds \$50 billion dollars to our State with far reaching industrial impacts in mining, construction, manufacturing, retail, aerospace, waste management, transportation, and tourism.

Southern Arizona agriculture is also nationally essential, providing 90% of winter leafy greens to all of North America. This sector is critically important to our tribal communities with almost 20,000 Indigenous farmers and ranchers in Arizona comprising about 57% of the agriculture operators. The future success of this cluster in Southern Arizona demands innovation at a historic pace; we must produce more with less while leaving a smaller environmental footprint. Agriculture, water, energy, and food production need improved data-driven systems, technological innovations, and a “reduce, reuse, recycle,” resource mindset to continue to produce sustainable enterprises, equating to enhanced infrastructure, innovations, and the upskilling and reskilling of the labor market specific to a new skills-based economy.

b. Industry, Employer, and CEDS alignment

Project STEALTH under the Southern Arizona Coalition has focused its COVID-19 recovery efforts on supporting entrepreneurship, small businesses, job recovery, and is pioneering efforts on climate adaptation. Yuma, Cochise, Pima, and Santa Cruz Counties have become strategic locations for prominent agribusiness and manufacturing operations, serving several Fortune 500 companies. Located near the U.S./Mexico border and four surrounding states, Southern Arizona

is a natural transportation and commerce hub with over 52 million consumers within a one-day truck haul east/west via Interstate 8 or north/south via US Highway 95. Our region boasts a seamless border region with international partners to the south in Mexico; the communities along the U.S./Mexico border share workforce and resources to make for strong agribusiness, industrial, and logistics sectors. Future Comprehensive Economic Development Strategy (CEDS) plans will result in long-term sustainable outcomes beyond Project STEALTH.

3. Proposed Solution

The proposed solution for Project STEALTH is centered on the design, implementation, and evaluation of eight skills-based Certificate programs to address climate change and catalyze economic growth through an Equity framework. The solution has five intentional and strategic efforts:

- 1) Strengthen the larger ecosystem of community colleges and university, business and industry, municipalities, and economic development organizations to collectively create and implement solutions to climate adaptation and workforce development.
- 2) Leverage business and industry partnerships to understand their needs.
- 3) Co-design Certificate programs that prepare students for high-growth/high-skill careers with family-sustaining wages in the sustainability sector.
- 4) Close the skills gap in Southern Arizona.
- 5) Uplift marginalized and vulnerable communities through high-quality skills training.

The eight skills-based training programs are detailed below:

1) *Electric Vehicle (EV) Charging Station Technician*: Acquire skills in renewable energy, specific vehicle power requirements, read electric industry diagrams, and electrical wiring through electrical conduit to install and service EV charging stations.

2) *EV Technician*: Diagnose and repair alternative energy engines, fuel systems, and computer systems. This specialty skill set will include advanced electrical systems diagnosis and repair, advanced engine diagnosis and repair, hybrid vehicle theory and operation, hybrid vehicle system servicing, advanced hybrid diagnosis and repair, and alternative fueled vehicle diagnosis and repair.

3) *Freight Management*: Acquire the skills to help businesses find efficiencies in freight expenses through fuel improvements, labor cost savings, safety measurements, leveraging technological advancements, and reductions in carbon emission.

4) *Precision Agriculture*: Acquire the skills to fly and drive drones to surveil, spray pesticides or fertilizers, and monitor crop growth conditions (e.g., disease, drought) with a high-level of accuracy to grow and preserve crops.

5) *Heavy Equipment Service Technician (HEST)*: Obtain the knowledge and skills required to transition to electric equipment, perform maintenance, minor repair work, and emergency response on heavy equipment. Additionally, students will learn to perform daily inspections; repair defects such as steering defects, drivetrain defects and tire wear; replace defective parts, rebuild major components such as transmissions and engines; and repair hydraulic systems such as steering, drive systems and attachments.

6) *Circular Economy Environmental and Protection Technician*: Recognizing and distributing economic opportunities in a circular economy, developing and implementing services that generate value, and designing materials that sustain living systems.

7) *Electro-mechanical and Mechatronics Technician:* Acquire skills to design, develop, test, and manufacture electrical/electronic components or systems. This includes hydraulic, mechanical, and pneumatic systems through welding, piping, and electrical components.

8) *Resilient Water, Wastewater, and Energy Systems Training:* Acquire the skills to handle extreme climate events, prepare for outages in the electric system, discharge fewer chemicals into the environment, engage in managing water supply systems that include more reuse of wastewater following advanced water treatment technologies, monitoring for emerging contaminants, community engagement, broadscale hazard mitigation planning, electric grid enhancements, and environmental monitoring.

Project STEALTH proposes cutting-edge skills-based training programs that meet EDA’s investment priority of accelerating industry growth by creating virtuous cycles of innovation and entrepreneurship, increasing employment, and attracting private investment. The quality of education and economic growth are inextricably tied to attracting new businesses and industry, building a strong talent pipeline for local and regional employers, accelerating cutting-edge innovation, and job creation. Arizona is securing its economic prosperity and global competitive edge by attracting diverse advanced manufacturing businesses to the state. With its commitment to preparing learners for the jobs of today and tomorrow by creating a high-skilled workforce and expanding economic development. Pima Community College and Arizona Western College have been a driving force for the attraction of new businesses and economic growth at a statewide and regional level. The University of Arizona has also been a catalyst for growth of the modern agriculture industry and has been instrumental in strategically shaping the future of Arizona agriculture through innovative research and potential transformational changes to the region.

4. Partners and Program Outreach

a. Partnerships

The strong partnerships that the Southern Arizona Coalition and Project STEALTH have established and strengthened has affirmed our role as a catalyst for economic growth and innovation while addressing climate adaptation. Project STEALTH will leverage the partnerships with business and industry, municipalities, community-based organizations, chambers of commerce, and a wide-array of organizations in the community to establish an ecosystem of collective impact. The partnerships include but are not limited to the Tucson Metro Chamber of Commerce, ARIZONA@WORK WIOA system, Sun Corridor, Inc., Pascua Yaqui Tribe, Tucson Electric Power, TuSimple, City of Tucson, Association for Unscrewed Vehicle Systems International, Pima County Wastewater Reclamation, Yuma County, Pima County, and others as depicted through our robust letters of support. Please see detailed partnership overview below:

- Tucson Electric Power, Pima County Wastewater Reclamation, TuSimple, ADOT Equipment Services, and City of Tucson Water: co-design curriculum, establish employer-driven skills that include both technical and soft skills, identify industry needs, and showcase cutting-edge technology.
- Sun Corridor, Inc. (SCI) will be invaluable to the success of the program grant by working to attract new employers in Pima County to create new jobs, working with

existing employers to create new jobs, expanding employer partnerships, and expanding avenues for employer/PCC partnerships.

- The Tucson Metro Chamber of Commerce has established strong partnerships with employers and served as a convener of diverse employers in the Tucson Metro.
- ARIZONA@WORK: Lead the Workforce Investment Board, provide holistic wraparound services to help students overcome barriers that prevent them from pursuing high-quality education and training, and conduct intake & co-enroll eligible participants into the WIOA system.

Under the Southern Arizona Coalition, Project STEALTH project includes aligned support of 11 Coalition members, 9 municipalities, tribal governments, 22 industry partners, and countless additional regional assets, all who will facilitate the implementation of the project. We have established strong partnerships through our leadership and commitment to the community and will leverage these partnerships to catalyze economic growth, attract new businesses, and close the skills gap. Our partners are well-positioned to deliver the proposed project and have already conclusively demonstrated their commitment through resources, time and talent toward building a strong and thriving community.

b. Program Outreach Strategy

Our program outreach strategy will be centered on three components: 1) Marketing and recruiting to underserved communities; 2) Leveraging partnerships; and 3) Evaluation against goals and metrics. Key partners who already have a strong history of successful collaboration with Project STEALTH project institutions will be instrumental in the implementation plans, which are based upon identified local needs. The Equity framework will serve as the foundation for program outreach with a focus on underserved and marginalized communities, including Indigenous, Latinx and Black communities, rural communities, women, and those in vulnerable industries. Outreach and engagement with underserved communities will include community-based organizations, Tribal Nations, government and community supports such as SNAP, WIOA, and unemployment. These strategic outreach activities will play a significant part in the facilitation and solution stages of development and implementation. Our unique value contribution is in our existing collection of assets.

c. Promoting Diversity, Equity, and Inclusion

The three coalition members under Project STEALTH (Arizona Western College, Pima Community College, and the University of Arizona) are Hispanic-Serving Institutions (HSIs), and bring a wealth of diversity, equity, and inclusion. We value and engage our diversity by ensuring that diverse groups share the benefits of the STEALTH project. More importantly, our value proposition of helping people get high-growth/high-tech jobs with family-sustaining wages is premised on equitable access and equitable outcomes for all races/ethnicities, socioeconomic status, and genders. All stages in the STEALTH project development will adhere to strict strategic efforts that promote equitable representation, adapted to underserved communities.

Coalition members have been nationally recognized for their focus on diversity, equity, and inclusion. Project STEALTH is unique in its influence on a groundswell of industry and academia and its focus on community-based solutions with the intentional inclusion of organizations that represent and work with our region's most vulnerable populations.

The evaluation of programs against the Southern Arizona Coalition Equity Plan assesses the ability to serve our entire community, create economic impact, and live up to the cluster goal of climate resiliency.

5. Measurable Goals and Impacts

The proposed STEALTH project has specific, measurable goals that will be achieved through implementation of the project. The goals and metrics set forth will demonstrate the impact of the project utilizing data and evidence-based outcomes. Metrics that will be tracked and reported on include: **Recruitment:** Recruit 1,132 students; **Enrollment:** Enroll 80% of students (or 905 students); **Earn a credential:** 75% (or 679 students) of those that enroll will earn a credential; **Job attainment:** Of the individuals who earn one or more credentials, 80% will obtain a job (or 543 students); **Average wages of entry-level job placements in careers with family-sustaining wages;** **Number of learners participating in program broken down by key demographics;** and **Number of learners who complete the program broken down by key demographics.** The STEALTH project will use data collected to measure the progress of the project and assess the impact of the project.

6. Sustainability Plan

Arizona Western College, Pima Community College and the University of Arizona are individually and collectively aligned to leverage our resources and expertise. The Southern Arizona Coalition has a strong partnership alliance that supports the BBB Regional Challenge to strategically channel existing momentum and the prospect of economic growth to Southern Arizona into a dynamic, equitable, and transformational cluster that catalyzes economic resilience and growth while equipping a workforce capable of meeting the challenges presented by a changing climate and the disruptions of this current Fourth Industrial Revolution. The Southern Arizona strategic plan for Workforce Development has prioritized the expansion of innovative solutions that will produce an industry-ready workforce with highly attractive skills and credentials that will attract significant support beyond EDA funding. The University of Arizona has developed a model of use-and user-inspired research that emphasizes technology de-risking over esoteric academic concerns and fosters an entrepreneurial mindset among its participants. The Arizona Western College has revitalized the region by recently (2021) acquiring a newly remodeled Manufacturing and Construction Trade Center that will train technicians to meet industry-driven workforce demands. Pima Community College has also upgraded their commitment to workforce development through the investment of new Centers of Excellence Center that provide high-touch/high-tech training and best-in-class learning for in-demand jobs. The strong alignment with partners and industry will increase our competitiveness and help ensure sustainability after EDA funding period ends.