

Department: Pima County Joint Technical Education District (JTED)
Revised Date: January 5, 2015

Future Pima County Bond Election Proposed Project

Project Name: Southern Arizona Industrial Technology Centers

Location: Tucson/Sahuarita, Arizona

Project Goal: Establish regional, state of the art Industrial Technology Centers that meet the needs of Pima County's population by providing Career and Technical Education (JTED) courses to over 13,000 students, who are enrolled in more than 25 programs at 35 high schools and nine central campus locations. Additionally, the centers will co-locate Pima Community College educational services and One-Stop workforce services to provide general job seeker and employer services to all individuals and companies as well as small business development assistance in the form of workshops, seminars, one-on-one counseling and mentoring.

Scope: The anticipated need for the Industrial Technology Training Centers is approximately 80,000 square feet of classroom and laboratory space. Space needs include classroom and academic meeting spaces for instructional and course work as well offices for faculty, workforce and support staff. An industrial shop and outdoor equipment operating space will provide a hands-on environment and 'real-world' application for students and workforce training. Additional large resource areas with shared and networking conferencing space, wired divisible classroom space, and offices will provide basic job seeker and employer services to all individuals and companies as well as on-site workshops and seminars on business related topics and business counseling.

Project Description: The Industrial Technology Centers will be regional one-stop center for education, workforce development and small business assistance in Pima County. The centers will integrate industry partners, programs and access to academic institutions, workforce development, business counseling and training. Additionally each center will serve as a central campus for the Joint Technical Education District (JTED). One center will be located roughly in the Sahuarita/Green Valley area to serve the nearly 7000 high school students from Southern Tucson to Nogales. An additional site located in partnership with University of Arizona Bridges and would serve nearly 10,000 students that attend high school within less than a 10 mile radius. The estimated enrollment of high school students at each site is approximately 700.

At the center high school students will learn specific skills necessary to secure a job as well earn dual Pima Community College or University of Arizona credit in select programs. Furthermore the center will work with business and industry to ensure that all students have the opportunity to move to careers and college.

Participating high school students will learn about the wide variety of careers available in mining and industrial technology including heavy equipment, welding, electrical power transmission, diesel mechanic and fixed plant maintenance. The mining technologies coursework will emphasize the basics of heavy equipment operations for the mining industry, of which students will learn through course work simulations as well as hands-on 'real-word' equipment. Specific applications of mining rigging and mine safety will also be taught. The Industrial Technology Centers will provide students with the opportunity to earn a national certification that can be used to gain entry into apprenticeship programs at various

mine/construction operations and ancillary businesses throughout Southern Arizona and further supporting job growth in Pima County.

The Industrial Technology Centers will utilize strategic partnerships with Pima County's Workforce Investment Board to assist people and support employers as well as the Small Business Development network to provide high impact, quality services and training to help business owners and further strengthen the local economy.

The innovative aspect of this program is the colocation of the continuing educational services for students and workforce development services for companies. Pima Community College will partner in the centers to deliver post-secondary as well as incumbent worker training. This partnership will create clear pathways for students from high school into the workforce. Additionally, programs will be available through Pima to offer training and certification to adults throughout the region. This partnership will maximize resources through sharing of space, equipment and personnel. The ongoing maintenance and operations costs of the facility will be shared with Pima Community College. Revenue generated from partners who lease space for small business development will also be utilized to maintain and operate the facility.

In addition to the regional centers, another goal of this initiative is to further define the industrial technologies pathways and increase opportunities for students at high schools throughout the county. A common foundation curriculum that can be implemented at virtually any high school is being piloted at Walden Grove and Sahuarita High Schools. This foundational curriculum aligns with the advanced pathways. This provides the opportunity for Pima County to develop a regional approach to meeting the demands of the future skilled workforce.

Regional Benefits: Construction and mining continue to offer long-term, well-paying jobs which are being added at an impressive rate. According to the Bureau of Labor Statistics and reported by the 2011 American Resources Review between June 2010 and 2011 metals mining jobs grew 3.9 percent and in jobs support activities by 19.2 percent nationally. Based on U.S. Energy Information Administration (EIA) projections, the U.S. mining industry is expected to grow to over at least the next ten years, adding 11,000-13,000 per year. EIA projects that the industry will also need 78,000 replacement workers due to retirement, bringing the total of 128,000 new positions by 2019.

Mining serves a critical part of the workforce in the region, but it is not the only employer of people with these skills. The commercial construction industry has as seen a significant amount of growth following the "Great Recession." Coupled with the fact that the average age of a construction worker is nearly 55, the opportunities for skilled professionals in fields such as industrial electrician, welding, equipment operation and even construction management are steadily growing. These are highly skilled and well-paying jobs. ONET (Occupational Information Network) through the Department of Labor indicates the median salary for a welder in Arizona is nearly \$40,000 per year and the same is true for an electrician. Diesel mechanics and machinery mechanics can earn as much as \$46,800 as the median salary. Moreover, ONET reports these job categories will see 20%-30% growth in new jobs between 2010 and 2020.

For 2012 the impact of mining to Pima County's economy was estimated to be 14,230 jobs and over \$1.3 billion in total income. The average the labor income of mining company employees is \$99,500 per worker with average labor income across all employment directly and indirectly supported by the mining industry at \$63,500. Pima County accounts for 27 percent of all mining related jobs in Arizona and claims a large share of the jobs supported by the spending of mining-related general tax revenue.

The Industrial Technology Centers will develop clear pathway from high school to postsecondary to the workforce and on to additional training by utilizing strategic partnerships to maximize resources and develop skills necessary to secure a job in mining and industrial technology careers. The centers will also integrate workforce development, business counseling and training in support of individuals who are transitioning and pursuing a second career as an entrepreneur and business start-up.

Costs: *Estimated cost of \$16,000,000*

Revised Bond Funding: \$6,000,000 (original request was \$12,000,000)

Other Funding: Other funding will come in the form of donated equipment from partnering businesses. Ongoing operational budget capacity will be available through enrollment in the Pima County Joint Technical Education programs as well as tuition from the Pima College Programs.

Fiscal Year Project Start and Finish Date: Start 2016. Projected Completion: 2018

Project Management Jurisdiction: Pima County Joint Technical Education District

Future Operating and Maintenance Costs: \$2 million dollars/year for the Pima County JTED portion of the operations. PCC will provide maintenance and operations budget capacity for the adult education portions of the operation. Cost will be shared for equipment whenever possible. Additional funds from revenue generated from leased space for business development and other support services will be utilized to operate and maintain the facility.

Supervisor District of Project Location: District 2 – Ramon Valadez