



Southwestern Indian Polytechnic Institute

Priorities for the 118th Congress

(February 2023)

Tribal Colleges and Universities (TCUs) provide rigorous postsecondary education and research opportunities for American Indians and Alaska Natives (AIANs) and other rural community residents. TCUs offer higher education that is uniquely Tribal, founded on Native languages, culture and philosophy with strong student support systems and community engagement. Unfortunately, federal education completion metrics fail to consider the unique nature of TCUs and our students. Federal completion rates focus on first-time, full-time students. But success at TCUs is defined holistically and most students attend part-time or are transfer students. Our shared vision: Strong Sovereign Nations Through Excellence in TRIBAL Higher Education.

Southwestern Indian Polytechnic Institute

Enrollment Trends (Spring 2020/Fall 2022):

Spring 2020 (428) to Fall 2022 (366) percentage drop of 15%

Affordable Tuition:

Full Time cost per Trimester is \$590.00 * to support students this has been waived under HERRF funds at this time.

Student to Faculty Ratio: 19 to 1

Part-time/Full-time: Enrollment total 269

Part time :90/ Full Time: 96/ Commuter:83

Graduation Rate: 16%

Persistence rate (Fall to Fall): 49%

Retention Rate (i.e. Course completion rate for college level courses): 89%

Highest level of degree/program available:

AA/AS

Significant facts about SIPI

- Certified Optometry program – with 99% job placement
- 100% Native American Students
- 100% Federally Operated
- SIPI Board of Regents is Tribally appointed.
- SIPI Year Round under the Trimester system



Narrative: SIPI has partnered with Youth Development Inc., to provide an onsite lab school for Early childhood students as well as early childhood programming for students and staff of SIPI. In addition SIPI offers an Associate of Arts in early childhood Education and Liberal Arts. Also offered is an Associate of applied sciences in: accounting, business administration, culinary arts, environmental science, geospatial information technology, natural resources management, network management and vision care technology. SIPI offers also an Associate of Science degree in business administration and pre-engineering. Certificate programs can also be obtained in accounting, business administration, computer aided drafting and design, culinary arts, geospatial information technology, and optical laboratory technology. SIPI provides a year around pantry, along with a technology grant to all incoming new students. Monthly food and clothing drives are also conducted to support children and students of SIPI.

EXPECT SUCCESS!

Southwestern Indian Polytechnic Institute

1994 Land-Grant Programs

1994 Land-grant Institutions: The Equity in Educational Land-Grant Status Act created the “1994 Land-grants” more than 25 years ago. Since then, funding for the 1994 Land-grant programs and resources have remained inadequate to address the growing agricultural needs and opportunities in Indian Country.

SIPI has proactively expanded its NIFA-sponsored Extension and Research activities in the past 4 years to achieve great relevance and beneficial impacts for SIPI students and Tribal communities. This is being achieved through a national leadership role among TCUs in STEM education and research, and by developing meaningful partnerships with AIHEC and other TCUs.

1994 Extension Program:

The NIFA 1994 Extension program has funded several ongoing activities involving advanced technologies for Precision Agriculture, Natural Resources Management, and Environmental Science. Significant accomplishments include substantial progress toward 1) implementation of an automated, robotic gardening system, or “FarmBot” (Figures 1 and 2) installation of a professional, scientific-quality weather station for environmental monitoring and climate studies (Figures 3 and 4). These activities benefit SIPI’s Extension and Academic programs by providing quality resources for agriculture-related experiential learning and applications by SIPI students and Tribal community members.

1994 Research Program:

The NIFA 1994 Research program funds an ongoing project to develop and test remote sensing methods for mapping and monitoring of semiarid grasslands in the Southwest. Significant accomplishments include progress in developing a prototype, field-portable multispectral imaging system for vegetation analysis (Figures 2 and 4). SIPI students benefit from this project through direct engagement in research, development and applications of geospatial information technology for studies of vegetation-climate relations and natural resource management.



Figure 1. Students and faculty of the Advanced Technical Education (ATE) Department installing the new SIPI FarmBot system near the Science and Technology Building



Figure 2. New weather station for environmental monitoring and analysis located adjacent to the SIPI agricultural



Figure 3. SIPI students developing a software control system for the new multispectral imaging system.



Figure 4. Field-portable multispectral imaging system in development with support from the NIFA 1994 Research Program



EXPECT SUCCESS!

REQUEST: \$40 million TCU IT Service Fund

USDA – Rural Utility Service

The ongoing pandemic has exacerbated the digital divide and underscored the lack of broadband access across Indian Country. To address these deficiencies that could leave Indian Country – and AIAN students – behind the rest of the U.S. for generations, Congress must act to establish a *permanent TCU IT Service Fund within the USDA-Rural Utilities Service Program*. An annual \$40 million set-aside for TCUs, which are 1994 land-grant institutions served by USDA, would help cover rapidly increasing network, connectivity, and equipment costs, maintenance, infrastructure expansion, and IT staffing.

Southwestern Indian Polytechnic Institute: Broadband and IT Progress & Challenges:

The College's telecommunications and computer technology is in need of upgrades and modifications to meet the ever increasing needs of the academic programs and student support services. Improvements for telecommunications and computer technology must be addressed to ensure the ability to support online learning as well as the greater use of laptops, tablets and other smart devices that are now commonplace in higher education facilities. Major needs and concerns include:

- Currently the existing bandwidth is in need of upgrading and recent assessments have called for the development of parallel academic network while also increasing bandwidth 5 to 10 times the current capacity.
- There is a great need for web based support applications for all areas of the campus.
- In-building cabling is inadequate and inferior to peer facilities and post-secondary best practices.
- WiFi reception is spotty and is in need of campus wide expansion and upgrades.
- SIPI is in need of permanent IT support staff. Currently there are only 2 IT staff to support the entire campus. Much of the IT staff are temporary employees tied to various grant funds. There must be adequate funding to ensure permanent IT support services throughout campus.
- There is no dedicated funding for equipment life cycle maintenance. We keep increasing our dependence on technology without adequately funding continued maintenance and upgrades.



EXPECT SUCCESS!

REQUEST: \$3.2 billion TCU Construction Fund

DOI – Bureau of Indian Education

A July 2021 AIHEC survey of TCUs revealed many chronic unmet facilities and infrastructure needs, including lack of student and faculty housing, inadequate classroom space, insufficient libraries, and outdated laboratories.

TCU deferred maintenance/rehabilitation: \$400 million (total)

TCU completion of master plans: \$2.7 billion (total)

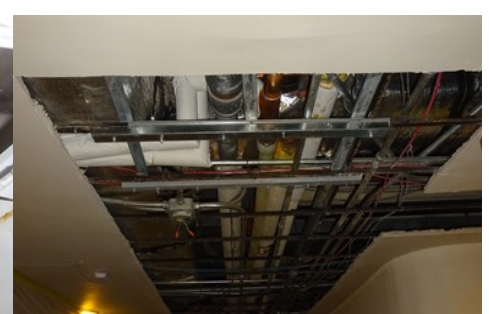
TCU operation and maintenance: \$20 million (annual, recurring need)

AIHEC strongly urges Congress to fund dedicated TCU facilities programs through DOI-BIE to modernize current facilities and build safer 21st century campuses.

Southwestern Indian Polytechnic Institute: Construction, Maintenance, Rehabilitation

The SIPI campus which encompasses twenty four buildings, has experienced multiple challenges due to the age of our facility which was opened in 1972. Ongoing issues and concerns include work efforts being placed on deferred maintenance list due to lack of funding allocations to complete total projects, lack of contracting personnel i.e. construction administration personnel whom are onsite for cradle to grave and the need to move facilities to forward funding in line with the rest of the campus funding. Additionally the campus is continuously dealing with our aging utility infrastructure and campus wide HVAC needs. These had been a prevalent issue pre-pandemic but has only been exacerbated by the pandemic and the ongoing needs for cleanliness, sanitation and filtration throughout our campus. Major facilities issues include:

- 50 year old galvanized water piping (HVAC heating and cooling water lines; hot and cold domestic water lines) have calcified and deteriorated in some areas to the point of minimal to no water flow. Hot water on demand and correct flow/pressure rate at each tributary are effected by the calcification constriction of the water pipes. Replacement of all galvanized waterlines throughout all campus buildings is needed.
- SIPI currently has a pre-pandemic conventional HVAC system design which share a common plenum return air space that cannot provide maximum filtration or coil sanitation to mitigate particulates from being spread to other areas of the building through the HVAC system. Current system configuration and operation will not be able to accept retrofitting to meet mitigation efforts without a complete removal, redesign and installation of HVAC systems that could be outfitted with higher filtration requirements and means for coil cleaning through UV lighting and isolation capability.
- SIPI residential halls built in 1968-1972 needs HVAC system for ventilation purposes due to COVID as well as electrical, sewage, and hot and cold water upgrades. Due to cost for repairs, it may be prudent to have new dorms built.
- SIPI gymnasium roof is in dire need of repair. It has numerous leaks during storms and wintery weather. The new gym floor has buckled due to the leaks. Recent foundation settling has also caused floor tile buckling in the Atrium and the need to close the gymnasium until an assessment can be completed.
- The aging sewer infrastructure has caused continuous problems with frequently occurring sewer backups.
- There is a need for additional contracting and construction administration personnel onsite for cradle to grave project oversight as well as a need of additional Facility Operations and Maintenance funding, and additional maintenance personnel.



EXPECT SUCCESS!