



# Southwestern Indian Polytechnic Institute

## Priorities for the 118<sup>th</sup> Congress

(February 2024)

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 (Fall 2022 to Fall 2023):

Fall 2022 (266), Fall 2023 (249). Percentage drop of 7%

#### Affordable fees:

Full-time residential cost per trimester is \$590.

Full-time commuter cost per trimester is \$365.

Part-time commuter cost per trimester is \$290.

**Student to faculty ratio:** 7 to 1

#### Part-time/full-time:

Enrollment total 249. Part-time 60. Full-time 189.

**Graduation Rate:** 12%

**Persistence rate (fall-to-fall):** 34%

#### Highest level of degree/program available:

Associate of Arts, Associate of Science, Associate of Applied Science

#### Graduate Outcomes:

100% find jobs or transfer out within a year of graduation.

53% go directly into the workforce

56% transfer on to other colleges

63% find work directly related to their degree or certificate

37% find work in service to the Native American community

Average salary in the first landing job out of SIPI is \$37,391



SIPI offers the following degree and certificate programs:

- **Associate of Arts** in Early Childhood Education and Liberal Arts
- **Associate of Applied Sciences** in Accounting, Business Administration, Culinary Arts, Environmental Science, Geospatial Information Technology, Natural Resources Management, Network Management and Vision Care Technology
- **Associate of Science** in Business Administration and Pre-engineering.
- **Certificates** in Accounting, Business Administration, Computer Aided Drafting and Design, Culinary Arts, Early Childhood Education, Geospatial Information Technology, and Optical Laboratory technology.

In addition, SIPI offers a High-School Equivalency Program which provides non-high school graduates with courses that prepare them to pass the national HiSet examination. SIPI also partners with Youth Development Inc., to provide an onsite lab school for Early Childhood students as well as early childhood education for the children of SIPI students and staff. SIPI's year-round pantry provides food and other necessity supplies to SIPI students.

**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 is engaged in a diverse array of Extension and Research activities that enhance the educational experience of SIPI students and support needs of Tribal communities. These activities involve meaningful partnerships with AIHEC, Tribal and federal agencies, and other organizations, and reflect SIPI’s leadership role among TCUs in STEM education, research, and extension.

#### 1994 Extension Program:

The USDA-NIFA 1994 Extension grant program supports several ongoing activities involving advanced technologies for precision agriculture, natural and cultural resources management, and environmental science. Significant, recent accomplishments include:

- establishment of an environmental monitoring station for (Fig. A),
- installation of a FarmBot, an automated, robotic gardening system for student and community education (Fig. B),
- enhancement of the SIPI Culinary Program through acquisition of a BBQ trailer and smoker (Fig. C), and
- acquisition of a ground-penetrating radar system for advanced training in environmental remote sensing (Fig. D).

These activities and resources benefit SIPI students and Tribal communities by enhancing experiential learning opportunities through the academic and extension programs.

#### Sponsored Research:

SIPI is leading a path finding project to develop and demonstrate a digital network system that facilitates indigenous data sovereignty and data governance for environmental monitoring on tribal lands (Fig. E). This National Science Foundation-sponsored project is providing education and training on innovative technology to SIPI students, TCUs and native nations throughout the country.



**Figure C.** A new BBQ and smoker trailer enhances the academic and community education and training activities offered by the SIPI Culinary Program.



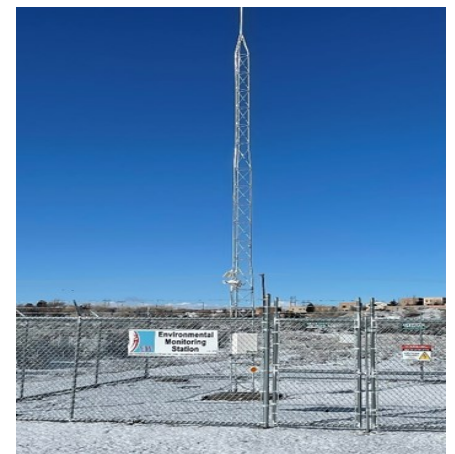
**Figure D.** SIPI is developing training opportunities for students and tribal communities on applications of ground-penetrating radar for detection and mapping of below-ground infrastructure and unmarked gravesites.



**Figure E.** Computer server installation for the SIPI Sovereign Data Network project. The project supports TCUs and tribal nations in realizing effective data sovereignty and governance.



**Figure B.** SIPI students and faculty collaborate on a FarmBot installation for automated gardening. The system enhances interdisciplinary, ex-periential education in STEM, agriculture and culinary fields.



**Figure A.** The new SIPI Environmental Monitoring Station supports education, research and training in sensor technology.



# 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:

To fully equip our students to meet the needs of the Information Technology evolution and progress, SIPI students deserve to learn with state-of-the-art technologically advanced classrooms and equipment. We desire our students to be competitive in the 21<sup>st</sup> Century. Today's Native student will witness the advancement of Artificial Intelligence, Global Technological advancements, and Economic Market expansions. Our Tribal Nations and communities will benefit from their children returning home from a quality IT program and well-equipped school.

As we enter into a quarter of the 21<sup>st</sup> Century, SIPI's cyber infrastructure is in urgent need of upgrades and modifications to meet the ever increasing academic online programs and access student online support services. Improvements of the legacy broadband infrastructure and computer technology must be addressed to ensure the ability to support quick online real-time learning access with personal laptops, tablets and other smart devices that are now commonplace in higher education facilities. Major needs and concerns include:

- The existing broadband and bandwidth is in need of upgrading. Recent assessments have called for the development of a separate parallel academic network while also increasing bandwidth to gigabit speeds.
- There is a great need for real-time quick access of web cloud based support applications for all areas of the campus.
- In-building campus-wide copper and fiber legacy cabling is inadequate and inferior to peer facilities and post-secondary best practices.
- WiFi reception is currently spotty with poor signal coverage. The current vendor industry support requires continuous upgrades every 3 years.
- SIPI is in need of adequate funding to ensure permanent IT support services throughout campus. Currently there are only two IT staff permanently funded and two temporary grant funded IT staff supporting the entire campus.
- There is no dedicated funding for equipment life cycle maintenance. There is an increase in dependence on hardware and software 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)

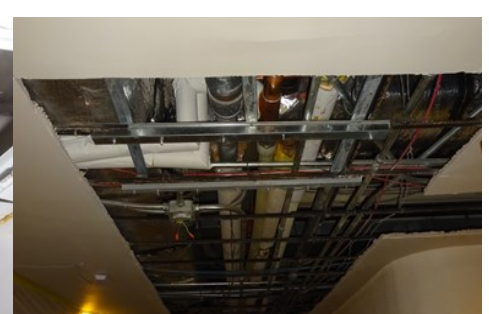
TCU operation and maintenance: \$20 million (annual, recurring need)

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

**Southwestern Indian Polytechnic Institute: Construction, Maintenance, Rehabilitation**

SIPI has seen a decrease in student interest since the deterioration of critical infrastructure and facilities. In the late 80's and early 90's the SIPI campus was a popular and thriving campus, but in recent years multiple challenges surfaced due to the age of our facility which was opened in 1971. 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 (e.g., construction administration personnel whom are onsite for project construction), 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 affected 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.



**EXPECT SUCCESS!**