

NSF Tribal Colleges and Universities Program (TCUP) Cyberinfrastructure Strategic Planning Grant Template

Project Summary

Overview:

[Tribal Colleges or University] intends to engage the campus community in a Cyberinfrastructure (CI) strategic planning process to develop a comprehensive strategic plan for the institution's information technology systems and resources. *List at least three reasons that the TCU wishes to develop or revise the current CI strategic plan.*

Intellectual Merit:

A CI strategic plan will provide *[TCU]* with the framework and specific policy, staffing, and technology improvements necessary to align the college's information technology resources with the overall program and support services functions. A key focus of the strategic plan will be to implement campus technology necessary to support and develop the academic and research capacity of the institution. The project will advance the understanding of current information technology resources, their role in supporting the essential functions of the institution, and provide a roadmap for acquiring, operating, and maintaining the CI resources needed to achieve the vision, mission, and goals of the institution.

Broader Impacts:

In the TCU community, high-quality STEM research and education programs are responsive to the local STEM workforce, education, and research needs, they take advantage of new and emerging technologies and methods in data science, and they facilitate collaborations among the TCUs and among the national research community. A fully-implemented campus CI strategic plan will optimize *[TCU]*'s capacity to develop and offer this type of high-quality STEM research and education programs. *List the current NSF awards and STEM programs at the college that will be impacted by developing a strategic plan for the institution's IT resources.*

Goals and Objectives

Project Goals:

- 1) Engage the entire *[TCU]* campus community in developing a CI strategic plan with technical assistance from expert consultants.
- 2) Develop a CI strategic plan for increasing the capacity of *[TCU]* campus IT resources to advance the academic and research missions of the institution and improve the quality of STEM programs.

Specific Objectives:

- 1) Assemble a team with representation from key academic and support services departments to participate in the planning process;
- 2) Recruit strategic planning expert consultants to work with the CI planning team as needed;

- 3) Collect information from each department about current and anticipated IT services requirements through a combination of facilitated discussions and review of existing documents, reports, and other informational resources;
- 4) Compile information collected through Objective 3 into a draft CI strategic plan
- 5) Disseminate draft CI plan to entire campus community and solicit input

Planning Process Description/Plan of Work

Cyberinfrastructure Strategic Plan Preparation

[TCU] CI Planning Team

A comprehensive cyberinfrastructure strategic plan requires input and recommendations from stakeholders across the college campus. The staff who have been asked to participate in the planning process include the *[insert selected planning team members such as Chief Academic Officer, key academic faculty, Chief Financial Officer, IT director, or other administrators or staff]*. These individuals will assure that the college's CI planning team has the required broad representation.

AIHEC Consultant Orientation Meeting

The planning process will begin with a remote orientation meeting of the college's CI planning team and AIHEC planning support staff. This meeting will:

- provide the planning team an opportunity to discuss the campus CI strategic planning goals and the expected outcomes for an IT strategic plan;
- Provide AIHEC consultants an understanding of *[TCU]* planning support needs;
- Establish an approximate timeline for the IT stakeholders to participate in the planning through to completion.

The *[TCU]*'s CI planning team will work with AIHEC support staff to identify trusted expert consultants with expertise appropriate for campus CI strategic planning goals. A second remote orientation meeting will be scheduled between the college's CI planning team and the AIHEC-vetted consultants to:

- Discuss the CI planning goals;
- Identify and confirm commitments of consultants to support the CI planning process;
- Draft a plan of work itemizing specific process and timeline for completion of the CI strategic plan.

AIHEC Consultant Planning Meeting

AIHEC consultants will be asked to:

- Review the materials gathered provided by the campus planning team, including any existing campus strategic plans and an updated Cyberinfrastructure Study Site Visit Report, provided by the AIHEC CI team within the last three years through a previous NSF grant.
- Participate in virtual planning sessions to continue to refine the scope of work and work plan outlined in the previous meetings. These planning sessions will include assistance in developing

a campus survey outlined below, the IT Plan template for each TCU, and other materials or documents as needed to aid the **IT stakeholders committee** in their work developing the cyberinfrastructure strategic plan.

Campus Survey

Following the preparation activities outlined above, the [TCU] point of contact will work the IT Director, or another appropriate TCU staff member, to update the previously submitted AIHEC CI Study Site Visit Report with technology upgrades, modifications, and IT-related challenges that the college has since the report was received, including responses to the COVID-19 pandemic and access to CARES Act funding. In addition to updating the [TCU] CI Study Site Visit Report, the point of contact will provide the AIHEC consultants and the AIHEC CI Team has access to other relevant documents. The AIHEC CI Team will create MS Team workspace for the IT Stakeholders Committee, the AIHEC CI Team, and the AIHEC consultants to submit, review, and edit working documents. These documents will provide essential information regarding the current state of the campus cyberinfrastructure and anticipated changes in academic and support services programs to be included in the campus CI strategic plan.

Consultant IT Plan Template and Recommendations

The AIHEC consultants will develop a set of recommendations for a draft IT plan based on submitted documents and the updated CI Study Site Visit Report for the IT Stakeholder Committee and campus leadership to review. The draft cyberinfrastructure strategic plan will attempt to integrate campus cyberinfrastructure development plans with the direction of the institution's academic, research, business, and public service programs and services as described in submitted documents and indicated in meetings with campus personnel. The AIHEC consultants will also provide any resources or documents in the TEAMS folder that would assist [TCU] as the IT Stakeholders Committee considers the recommendations and continues to develop the details of their institution's cyberinfrastructure strategic plan.

IT Stakeholder Committee Revisions

The AIHEC consultants will meet remotely with the [TCU] IT Stakeholders Committee to present their suggested IT plan format and their recommendations. The committee will discuss and consider the recommendations from the AIHEC consultants and then revise the draft IT Plan provided by AIHEC consultants as needed. The AIHEC consultants will review the revised draft plan and provide additional recommendations. The draft cyberinfrastructure strategic plan may undergo multiple iterations of the activities described above until the IT Stakeholder Committee and campus leadership are satisfied with the resulting plan.

Management Plan

The [TCU] IT Stakeholders Committee will be composed of *[insert names and titles of the individuals at the campus who will partake in the committee to develop a cyberinfrastructure strategic plan]*. The IT Stakeholders Committee will be responsible for meeting on a regular basis to develop the campus CI strategic plan. Regular meetings of the stakeholders will draw out the current concern areas of the IT resources at the campus and the future direction and capacity that the stakeholders identify as

priorities to be addressed in the plan. Since every department at the campus is impacted by the campus cyberinfrastructure, the committee will have broad representation. Members of the committee will meet regularly with the AIHEC cyberinfrastructure planning consultants to share the results of their internal discussions and drafted documents for the consultants' expert analysis, feedback, and recommendations.

The AIHEC CI team will be expected provide the AIHEC consultants, coordinate meetings between the IT Stakeholders Committee and AIHEC consultants, and provide a virtual space for planning documents to be shared among the various teams.

Timeline

[Tribal College or University provides a detailed breakdown of their anticipated timeline to convene their IT Stakeholders Committee, conduct their internal survey and meetings, provide and draft the necessary documents and outlines for the AIHEC consultants, and meet regularly with one another and the AIHEC consultants to discuss the various parts of the draft campus cyberinfrastructure strategic plan through to completion]

Budget Justification

A majority of the budget (\$30,000) is dedicated to staff salaries to offset the time they will dedicate to their membership in the IT Stakeholders Committee.

- \$X,XXX for *[Name and Title of Member]*
- \$X,XXX for *[Name and Title of Member]*
- \$X,XXX for *[Name and Title of Member]*
- \$X,XXX for *[Name and Title of Member]*
- \$X,XXX for *[Name and Title of Member]*

The remaining amount of the budget (\$20,000) is provided as a subaward to the American Indian Higher Education Consortium for overall planning coordination and support, including the use of expert consultants in planning discussions and document development.