# STATEMENT OF THE

# AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM TO THE U.S. HOUSE OF REPRESENTATIVES - COMMITTEE ON APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

March 31, 2014

This statement focuses on the National Science Foundation (NSF) and National Aeronautics and Space Administration (NASA).

On behalf of this nation's 37 Tribal Colleges and Universities (TCUs), which compose the American Indian Higher Education Consortium (AIHEC), thank you for the opportunity to express our views and recommendations regarding the National Science Foundation's and the National Aeronautics and Space Administration's Tribal Colleges and Universities Programs (NSF-TCUP) and (NASA-TCUP) respectively, for Fiscal Year 2015 (FY 2015).

# **SUMMARY OF REQUESTS**

National Science Foundation (NSF) - Education and Human Resources Directorate (EHR): Since Fiscal Year 2001, a TCU initiative has been funded and administered under the NSF-EHR. This competitive grants program enables TCUs to enhance the quality of their science, technology, engineering, and mathematics (STEM) instructional, research, and outreach programs. TCUs that have been awarded an NSF-TCUP grant have completed comprehensive institutional needs analysis and developed a plan for how to address both their institutional and NSF goals, with a primary institutional goal being significant and sustainable expansion and improvements to STEM programs. Through NSF-TCUP, tribal colleges have been able to establish and maintain programs that represent a key component of the pipeline for the American Indian STEM workforce. We urge the Subcommittee to fund competitively awarded NSF-TCUP grants at \$15,000,000.

National Aeronautics and Space Administration (NASA) – NASA Headquarters, Office of Education - Minority University Research an Education Programs (MUREP): In 2014, the NASA-MUREP program initiated two competitive grant programs to enhance the range of education and research opportunities in STEM at the 34 eligible TCUs: the NASA Innovations in Climate Education and the Tribal College and University Experiential Learning Opportunity programs. Activities funded under this program help to address critical science education and research needs of TCUs, are helping to build the Native (and national) STEM workforce, and enhance the economic development of the communities they serve. We strongly urge the Subcommittee to continue to fund NASA-TCUP at the FY 2014 level, or higher.

# TCU SHOESTRING BUDGETS: "DOING SO MUCH WITH SO LITTLE"

Tribal Colleges and Universities (TCUs) are an essential component of American Indian/Alaska Native (Al/AN) education. The 37 TCUs operate more than 75 campuses and sites in 15 states, within whose geographic boundaries 80 percent of American Indian reservations and federal Indian trust land lie. They serve students from well over 250 federally recognized tribes, 80 percent of whom are eligible to receive federal financial aid. In total, the TCUs annually serve about 88,000 Als/ANs through a wide variety of academic and community-based programs. TCUs are accredited by independent, regional accrediting agencies and like all U.S. institutions of higher education must undergo stringent performance reviews on a periodic basis to retain their accreditation status. TCUs fulfill additional roles within their respective

reservation communities functioning as community centers, libraries, tribal archives, career and business centers, economic development centers, public meeting places, and child and elder care centers. Each TCU is committed to improving the lives of its students through higher education and to moving American Indians toward self-sufficiency.

TCUs have advanced AI/AN higher education significantly, since they first began four decades ago, but many challenges remain. Tribal Colleges and Universities are perennially underfunded. In fact, TCUs are among the most poorly funded institutions of higher education in the country.

The tribal governments that have chartered TCUs are not among the handful of wealthy gaming tribes located near major urban areas and often featured in the mass media. Rather, they are some of the poorest governments in the nation. Some of the poorest counties in America are home to Tribal Colleges and Universities.

The federal government, despite its direct trust responsibility and treaty obligations, has never fully funded the primary institutional operating budgets of the TCUs, authorized under the Tribally Controlled Colleges and Universities Assistance Act of 1978. Currently, the Administration requests and Congress appropriates over \$200 million annually towards the institutional operations of Howard University (exclusive of its medical school), the only other MSI that receives operating funds from the federal government. Howard University's current federal operating support exceeds \$22,000/student. In contrast, most TCUs are receiving \$5,850 per Indian Student (ISC) under the Tribal College Act, about 73 percent of the authorized level. TCUs have proven that they need and deserve an investment equal to -- at the very least -- the congressionally authorized level of \$8,000/ Indian student, which is only 36 percent of the federal share now appropriated for operating Howard University. Please understand that we are by no means suggesting that Howard University does not need or deserve the funding it receives, only that the TCUs also need and deserve adequate institutional operations funding; however, despite the federal responsibility, their basic institutional operations remain grossly underfunded.

While TCUs do seek funding from their respective state legislatures for the non-Indian state-resident students (sometimes referred to as "non-beneficiary" students) that account for 20 percent of their enrollments, successes have been at best inconsistent. TCUs are accredited by the same regional agencies that accredit mainstream institutions, yet they have to continually advocate for basic operating support for their non-Indian state students within their respective state legislatures. If these non-beneficiary students attended any other public institution in the state, the state would provide that institution with ongoing funding toward its operations.

TCUs effectively blend traditional teachings with conventional postsecondary curricula. They have developed innovative ways to address the needs of tribal populations and are overcoming long-standing barriers to success in higher education for American Indians. Since the first TCU was established on the Navajo Nation in 1968, these vital institutions have come to represent the most significant development in the history of Tribal higher education, providing access to, and promoting achievement among, students who might otherwise never have known postsecondary education success.

# **JUSTIFICATIONS:**

 National Science Foundation/Tribal Colleges and Universities Program (NSF-TCUP) in the Education and Human Resources Directorate: American Indian students have the highest high school drop-out rates in the country. Those who do pursue postsecondary education offer require developmental classes before beginning in earnest. Placement tests administered at TCUs to first-time entering students indicate that 74 percent required remedial math. Of these students, our data indicate that many do not successfully complete the course in one year. Without question, a large proportion of the TCUs' already limited resources is dedicated to addressing the continual failings of K-12 education systems.

To help rectify this, TCUs have developed strong partnerships with their K-12 feeder schools and are actively working, in large part through support from NSF-TCUP grants, to engage young students in community and culturally relevant science and math education and outreach programs. These efforts include weekend academies and summer STEM camps that reinforce and supplement the instructional programs area K-12s are able to provide.

Beginning in Fiscal Year 2001, NSF-TCUP has provided essential capacity building assistance and resources to TCUs. In the years since the program began, NSF-TCUP has become the primary federal program for building STEM capacity at the TCUs. NSF-TCUP has served as a catalyst for capacity building and positive change at TCUs and the program can be credited with many success stories. Today, American Indians and Alaska Natives are more aware of the importance of STEM to their long-term survival, particularly in areas such as renewable energy and technology-driven economic development.

The NSF-TCUP, administered by the Education and Human Resources Directorate, is a competitive grants program that enables TCUs to develop and expand critically needed science and math education and research programs relevant to their respective communities. Through this program, TCUs that have been awarded an NSF-TCUP grant have been able to enhance their STEM instructional offerings, workforce development, research, and outreach programs.

For example, Northwest Indian College (NWIC) in Bellingham, Washington is building a strong STEM pipeline for American Indian students through support from the NSF-TCUP. Strengthening the STEM pipeline includes monthly academy and summer STEM camp programs for high school students that provide a variety of opportunities to learn and apply scientific concepts through community-based projects such as riparian-zone restoration, involving activities such as re-vegetation, water quality monitoring, and stream bank stabilization. Through these experiences, young people are becoming advocates within their communities for sustainable management of their water, land, and wildlife resources. Students can further channel their interest in ecological research and management through bachelor and associate of arts and sciences degree programs in Native environmental science that were developed to help meet the critical need for American Indian environmental scientists rooted in traditional culture. NSF-TCUP funds have allowed NWIC to cultivate a comprehensive science education program that, beginning at the high school level, are providing a range of mentoring, peer tutoring, research, service learning, and academic enrichment opportunities that are helping to grow the next generation of American Indian scientists, science teachers, and leaders.

Unfortunately, not all of the TCUs have had an opportunity to benefit from this program; yet, funding for this vital program has been static, and the percentage of proposals funded has declined each year beginning in 2004. We urge the Subcommittee to fund competitively awarded NSF-TCUP grants at \$15,000,000.

 National Aeronautics and Space Administration (NASA) –in the NASA Headquarters, Office of Education - Minority University Research an Education Programs: NASA Innovations in Climate Education and the Tribal College and University Experiential Learning Opportunity programs.

Fond du Lac Tribal and Community College in Cloquet, MN is launching an exciting new project as a member of the first cohort of institutions funded under the NASA Innovations in Climate Education program. The project is employing a multigenerational model to engage students from sixth grade through graduate school in exploring solutions to address local and regional climate change issues, while learning and applying basic science concepts through application of the scientific method. Through a monthly weekend science camp, students, elementary and high school teachers, as well as undergraduates work with scientists from NASA (and other local and national partners) to identify threats and implement adaptive responses to the St. Louis watershed ecosystem. This project engages students throughout the educational pipeline in important, locally relevant scientific investigation that is helping to address real environmental issues while inspiring students to pursue a career path in science. The NASA Innovations in Climate Education is an important new program that is supporting the development of important models for student engagement that leverage major national science resources that will have an important impact on American Indian STEM education at all educational levels, and may well help to increase American Indians in STEM-based careers. We strongly urge the Subcommittee to continue to fund NASA-TCUP at or above the FY 2014 level.

# **CONCLUSION**

Tribal Colleges and Universities provide access to quality higher education opportunities, including STEM focused programs, for thousands of American Indians. The modest federal investment that has been made in TCUs has paid great dividends in terms of employment, education, and economic development. Continuation of this investment represents one of the most cost-effective strategies for enabling Tribal (and national) STEM-based economic development.

We greatly appreciate your past and continued support of the nation's Tribal Colleges and Universities and your serious consideration of our FY 2015 appropriation request.