

NSF Engine (Type-II)

Solicitation: [NSF Engines \(Type-II\)](#). A major federal solicitation under the CHIPS and Science Act, spearheaded by the new TIP Directorate at NSF. This is a flagship federal R&D effort aimed at stimulating new innovation ecosystems around the country.

Topic: Regional innovation engine around a technologically consequential topic of national importance. CSUB will serve as lead applicant and fiscal agent for the NSF Engine Type 2, Taft will serve as partner. Topic will be: Emerging Desert Technology. Previously proposed by the Mojave Spaceport Coalition in the seed version of this award, with very high reviews. Now we have a chance to propose it for the full award, addressing all feedback collected.

Uniquely, the CSUB Engine will form part of the **Western Spaceport Coalition** -- which currently includes at least one other NSF Type-II Engine proposal, to be primed by AI company Infyrno in Salt Lake City, envisioned to be around the construction of the Utah Spaceport. A third Engine proposal is likely to become available in Arizona, at the Yuma Spaceport. As a partner with CSUB, Taft College has an opportunity to become an important, long-term element of a high technology, multi-state regional innovation ecosystem centered on spaceports.

Topic area of the Engine: Emerging Desert Technology. To develop the technologies uniquely suited for harsh desert conditions such as high temperature swings, unpredictable flooding, extremely high temperatures. For deep technological reasons, desert technology will spearhead the new wave of technological innovations for a world tilting closer towards desert conditions than ever before -- because much of the required R&D cycles will already be 'baked in'. Specifically, the CSUB Engine will focus on: energy, water, and aerospace innovations.

Overall budget: The prime (CSUB) would receive \$160M over 10 years, deployed across an entire regional coalition of partners, including Taft College. Central to an Engine is the intention to stimulate the influx of additional capital and investments for regional innovation efforts, from corporations, federal government, and other sources.

Full FOA Announcement: Expected late Spring 2024