Developing remote and affordable strategies for construction, that offer construction training for locals.

Tolani Lake is a remote community located within the Navajo Nation. The community is part of the Bennet Freeze area, where land disputes halted home construction since 1966, and residents suffer some of the worst living conditions in the nation. Tolani Lake’s challenge is cost-effective and expedient housing solutions and construction skills training.

Co-Design Methodology

The co-design methodology developed at the University of California was employed by the students. It was a method of bringing together the community, along with a multidisciplinary team of engineers, architects and environmental specialists to address the disconnect between the creation of sustainable technological innovations and the needs of end users.

Solving for Complexity

The aim of the interdisciplinary applied coursework at ASU is to allow student to work through competing issues related to tribal housing including economic, social, cultural, regulatory, environmental, legal and technical considerations.

Infrastructure impacting Kinship Systems

Infrastructure is one of the biggest challenges to planned developments in tribal communities (Arviso 2018). The expense of installation drives concentrated development, with an unfortunate recurring consequence: dissolving traditional support kinship systems as families are relocated to new developments.