The University of Texas at Arlington (UTA) is a vibrant and dynamic institution that has united the Dallas-Fort Worth metroplex for decades. The university’s location in the heart of the metroplex makes it easily accessible for students who commute daily from cities around the area. However, the North Bridge and South Bridge, which span over Cooper Street, the major Texas state road, currently divide the campus East and West.

The proposed design concept is inspired by the web-like structure of UTA’s partnerships worldwide. The tension cables of the bridge will be used to create a web that anchors to points around the bridge, pointing to the direction of where each partnership is located. For example, a university in Austria will be displayed on a stone with an interactive QR code that provides students with more information on that exchange program. These cables will wrap around the bridge, replacing the current metal mesh with randomized openings allowing beautiful lighting effects. The tension cables were chosen due to their lightweight properties, longevity, and low maintenance requirements.

The proposed redesign aims to create an immersive and interactive experience for students and visitors alike. This iconic representation of the university’s commitment to fostering international connections and opportunities will serve as a symbol of its dedication to being a global leader in knowledge and innovation. The bridge, often the first thing that locals see when passing by, will now showcase the university’s forward-thinking approach and its ongoing efforts to continuously improve and evolve.

The inclusion of a map displaying UTA’s connections around the world will instill a sense of pride and belonging in students, while also communicating to the broader community the university’s commitment to shaping the future.

The innovative use of drones and robots in the construction process improves efficiency and speed of assembly and enhances economic sustainability by reducing the need for manual labor. Additionally, by utilizing drones and suspended robots to assemble the cable web structure, disruptions on Cooper Street can be minimized.