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## SPANNING THE AMERICAN WEST COAST

### Bootstrapping Opportunities for Design in an Engineering Led Context

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#### Abstract:

##### bootstrap

*verb*

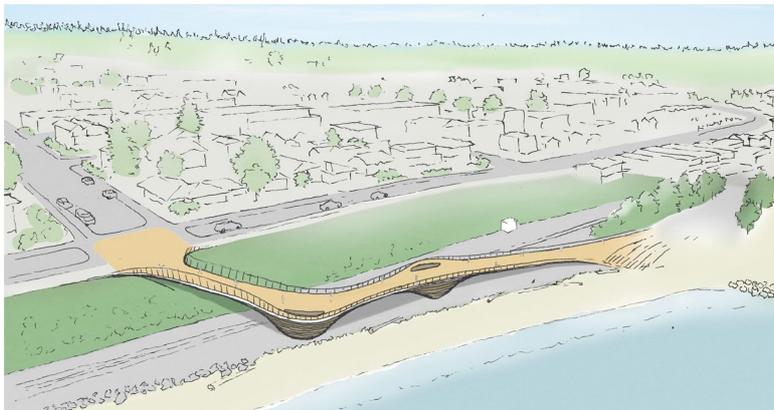
1. get (oneself or something) into or out of a situation using existing resources

North American bridge design is primarily lead by the steady and practical hand of the engineering community with the primary objectives of maximizing safety and efficiency. While these objectives should be the baseline of any project, they are sometimes set as the sole benchmarks for a successful bridge design within the North American context. When the end game is to simply meet the baseline of safety and efficiency, goals related to user experience and aesthetic impacts are often considered superfluous.

This paper showcases lessons learned from designing within this context. Stories from eight bridge designs showcase the ups and downs of bootstrapping higher design goals into footbridge projects in the Wild West. Each project offers unique conditions to explore opportunities and challenges for incorporating architectural expression and elevated user experience. Strategic engineering partnerships, community buy-in, and good storytelling are just a few of the strategies utilized to make the case for a higher standard of care.



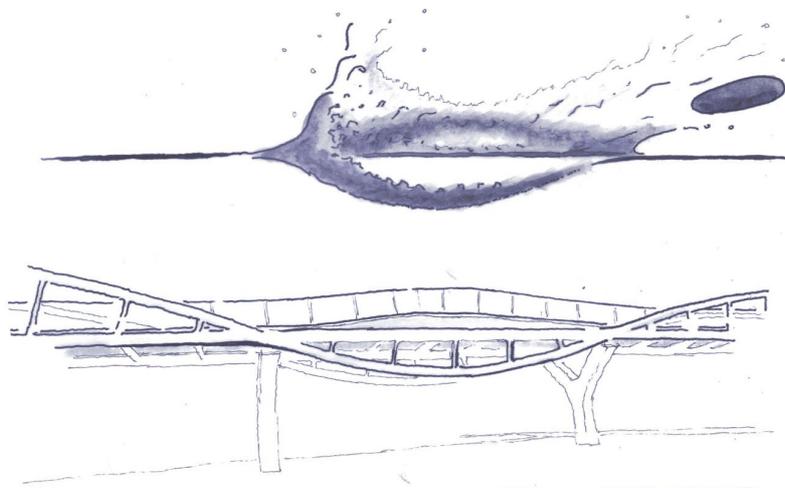
*Fig. 1. Image of Iron Horse Bridge connecting to rapid transit in the San Francisco Bay area, a collaboration with ARUP engineering.*



*Fig. 3. Concept image developed for the Edmonds Waterfront Connector on the Puget Sound in Edmonds, WA, USA*



*Fig. 3. Image of the Central Marin Ferry Connection bridge in the San Francisco Bay area.*



*Fig. 4. Concept image and rendering developed for Totem Lake Connector to tell the story of structure as art to the City of Totem Lake, WA, USA.*