

This Immense Steel Reuse Program Creatively Bridges California's Past With Its Future

Editor

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The eastern span of the San Francisco-Oakland Bay Bridge in California, USA, was badly damaged in an earthquake and eventually had to be demolished and rebuilt, but the local community was keen for its iconic steel structure to find a new purpose, resulting in an imaginative steel reuse program.

The San Francisco-Oakland Bay Bridge, connecting San Francisco to Oakland, has been a Californian landmark since 1936, so when an earthquake damaged its eastern span in 1989, leading to its eventual replacement, the local community was keen to see its immense steel infrastructure creatively reused. This resulted in the ambitious Bay Bridge Steel Program.

Following the demolition of the historic east span, the Toll Bridge Program Oversight Committee gave the Oakland Museum of California the task of distributing the salvaged steel for the Bay Bridge Steel Program. The museum was

charged with making the steel from the bridge available for repurposing and reuse, while preserving and celebrating its historic legacy. The museum gave away 450 metric tons of steel to artists, architects and creative communities across the state who demonstrated that they would preserve the legacy of this landmark through creative transformation.

Even Tiny Pieces of the Bridge Found a New Life

After an extensive consultation period, in the spring of 2017, steel from the demolished part of the Bay Bridge was distributed to projects designed to be used and enjoyed

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ASSOCIATION

The World Steel Association (worldsteel), headquartered in Brussels, Belgium, is one of the largest industry associations in the world, with members in every major steel-producing country. Its members represent around 85% of global steel production.

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by people across California. Each of these schemes celebrates the bridge, its history or its importance as an iconic structure. Some projects have seen vast sections of the bridge being reused in dramatic public sculptures and street furniture, but the smallest art project involved just one rivet that fits into the palm of a hand.

This rivet is being used by the Elsewhere Philatelic Society in interactive performances that tie the history of the bridge to the society's stories and vice versa. During public displays of The Rivet, audience members receive a fanciful description of the original 1936 East Span of the Bay Bridge and specially chosen historical moments from the bridge's history.

At the other end of the scale, San Francisco-based landscape architectural practice Surfacedesign Inc. was the largest recipient of the salvaged steel. This was used in its Bayfront Park development, a new 5.5-acre park along the easternmost edge of San Francisco's Mission Bay. These steel elements are incorporated throughout the park as functional sculptural features. Vertical steel elements animate the 16th Street Plaza and act as supports for a pair of shade structures, while repurposed beams are used as informal seating elements along the waterfront and in the plaza and as part of the observation deck.

Another recipient of the salvaged steel was sculptor Sean Paul Lorentz, who has used the steel to create large-scale eye-catching sculptures, which can be found across California. Where once the steel was used to physically connect two areas of California, Lorentz is now using the steel to connect people through art.

Building New Connections With Steel

The San Francisco-Oakland Bay Bridge steel reuse program demonstrates the diverse ways that steel can be given a new lease on life. "Steel is fundamental to a circular economy, one in which products or their parts can be reused, remanufactured or recycled," explains Åsa Ekdahl, director, Communications and Climate Advocacy at the World Steel Association. "The San Francisco-Oakland Bay Bridge steel program is a splendid example of how steel's inherent properties made it the perfect choice for reuse." With more importance now being given to reusing construction materials, expect to see more imaginative steel reuse programs taking off across the world. ♦