1. Summary of Accomplishments

The project to re-surface and enhance the Berkeley Municipal Fishing Pier had to be curtailed in 2015 because of structural problems on the Pier itself that were found at the end of the design phase. As a result, only the design phase was completed. This design work will still be used in the future larger project to re-build the pier.

In the late Spring of 2015, the final design for the Berkeley Pier Accessibility Project was completed. Before the project was advertised for construction bids, the City undertook its annual preparation for the July 4th fireworks display at the Berkeley Pier. During preparations, an independent structural evaluation found that the concrete layer on the underside of the concrete decking surface of the Pier had spalled off significantly, exposing the structural rebar. A significant portion of the rebar has rusted and snapped, leaving the concrete decking surface with no strength to support the weight of the concrete. On July 22, 2015, the City of Berkeley closed the Pier to the public indefinitely until a repair can be developed and funded.

The cost to repair the pier could be several million dollars, and it may take several years for the City to assemble funds for the repair. As a result, the City requested that the remaining funds in the Fishing Pier Accessibility Surface Project grant ($214,630 remaining) be re-programmed to the South Cove Parking Lot Renovation Project, which had been a finalist for the Cosco Busan Grant Program, but was not awarded funding. On December 3, 2015, the City was informed that the request to re-program the funds to the parking lot project was approved by the grants selection committee.

2. Project Activities & Outcomes

Activities

The final design for the Berkeley Pier Accessibility Project was completed by the designer in the late Spring of 2015. After the project design was completed in the late Spring of 2015, the implementation of the Berkeley Municipal Fishing Pier Accessibility Surface Project needed to be curtailed due to the closure of the Berkeley Pier.
Benefits
The need to improve the badly spalled and uneven concrete surfacing at the Berkeley Pier would have greatly improved the visitor experience to a wide range of users, including the disabled, the elderly, low-income fisherman, and other recreational users from throughout the entire region, totaling over 100,000 person visits per year.

After the project design was completed in the late Spring of 2015, the implementation of the Berkeley Municipal Fishing Pier Accessibility Surface Project needed to be curtailed due to the closure of the Berkeley Pier on July 22, 2015.

3. The Future
The next phase of this effort will be to perform a structural analysis of the Berkeley Pier using City funds, and to develop a range of concepts and costs for a possible repair of the existing structure. Any future repair will incorporate the design that was produced by this grant, e.g., ADA accessible fishing stations and ADA accessible surfacing.

4. Lessons Learned
When the City identified the problems of an uneven and spalled concrete surface at the Berkeley Pier, the proposed solution to grind and re-grout the uneven concrete joints was seen as an effective method to greatly improve accessibility of the pier to the public. Then, in 2015, the structural engineering assessment of the pier found that the concrete decking throughout the length of the pier had lost all of its structural support due to failed rebar, and could not even sustain its own weight. After further analysis, the structural engineering firm indicated that the uneven surface of the concrete decking was a possible indication that the structural rebar in the concrete decking had failed.

5. Project Documents
Project-related images are included below.
Image 1: Wide angle view of the Berkeley Municipal Fishing Pier on a sunny day in 2012, facing west towards the Golden Gate Bridge, prior to the current closure. (Photo Credit: Ken Jones)
Image 2: Newspaper article in the San Francisco Examiner in 1973, extolling the virtues of free fishing and recreation at the Berkeley Pier, after a major pier renovation. (Photo Credit: Margot Patterson Doss)
Image 3: Newspaper article in the Oakland Tribute, with several photos, describing the recreational virtues of free fishing and walking at the Berkeley Pier, 1976. (Photo Credit: Andy Morgenssen)
Image 4: Young Anglers Tournament Flyer, June 23, 2012 at the Berkeley Pier, sponsored by the CA Department of Fish and Game (DFG), and the United Pier and Shore Anglers of California (UPSAC). The derby is open to the public. (Photo Credit: Ken Jones)
Image 5: The Pier is extremely popular for the public on any given sunny day, throughout the year. Based on several sources, the Pier receives over 100,000 visits per year. Note the uneven surface joints every fifteen feet. (Photo Credit: Ken Jones)
Image 6: A group photo of the youth competitors at the annual Fishing Derby at the Berkeley Pier in 2011. (Photo Credit: Ken Jones)
Image 7: At the Kids Fishing Derby in 2014, grandma shows the next generation how to cast off the Berkeley Fishing Pier. Note the tall height of the railing. Lowered rails would create easier fishing access for persons with disabilities. (Photo Credit: Ken Jones)
Image 8: At the Kids Fishing Derby in 2014, two boys learn casting and how to enjoy the great views and fresh air while waiting for those nibbles. (Photo Credit: Ken Jones)
Image 8: At the Kids Fishing Derby in 2014, two young girls each earn first prize for their respective age groups! (Photo Credit: Ken Jones)
Image 10: At the Kids Fishing Derby in 2012, a six year old shows off his catch of a brown rockfish. (Photo Credit: Ken Jones)
Image 11: At the Kids Fishing Derby of 2013, a young boy and his father are having a great time on the Pier. (Photo Credit: Ken Jones)
Image 9: At the Kids Fishing Derby of 2011, a thirteen year old boy shows off his prize winning black and yellow rockfish catch. (Photo Credit: Ken Jones)
Image 10: At the Kids Fishing Derby of 2012, a six year old boy wins a first place certificate! (Photo Credit: Ken Jones)
Image 11: After the closure of the Pier on July 22, 2015, the Pier is fenced off and closed to the public. In 2016, the City is conducting a structural study of the Pier for repair options. (Photo Credit: Roger Miller)
Image 12: A close up photo of the Pier Closure sign for the public, mounted on the chain link fence at the entrance to the Pier. (Photo Credit: Roger Miller)
Image 13: The City is sponsoring a “What’s your Berkeley Pier Story?” contest to collect stories and photos about the ninety year old Pier from the general public. The City continues to receive phone calls every single day asking when the Pier can be re-opened. (Photo Credit: Roger Miller)
Image 14: On the underside of the concrete deck surface of the Pier, the bottom layer of concrete has spalled off, exposing the structural rebar, which has snapped and failed for the most part, throughout the entire length of the 3,000 foot Pier. On the upper right, see the partially remaining layer of concrete that was applied to the underside in 1984, to prolong the life of the structural rebar. (Photo Credit: Roger Miller)
Image 15: A detailed photo of the rusted and snapped structural rebar on the underside of the concrete deck surface of the Pier. An independent structural engineering evaluation found that most of the structural rebar has snapped, leaving the Pier with zero strength to hold up the concrete deck surface, which required the City to close the Pier to public access. (Photo Credit: Roger Miller)
Image 16: The first page of the Berkeley Pier project design drawings by RHAA. The final plan for the renovation of the first 700 feet of the surface of the pier for improved ADA accessibility, plus 10 ADA accessible fishing stations. (Credit: RHAA Design)