



## Historic Bridge Foundation Facebook Archives

### Focus Bridges: Harahan Bridge

**November 2016**

In October 2016, Memphis Tennessee became home to one of the most impressive examples of adaptive reuse of a historic bridge in the country, when it completed conversion of a long-abandoned highway deck on the historic Harahan Bridge into a new pedestrian walkway.

The location of this adaptive reuse is unique and has an interesting history as well. Crossing the Mississippi River between Memphis and the state of Arkansas are two historic railroad truss bridges of cantilever design. Sitting directly beside each other, these two bridges are immediately north of a third parallel cantilever truss bridge carrying highway traffic. Together these three bridges show a unique evolution of bridge design. The oldest bridge is the Frisco Bridge, designed by one of the most important 19th century bridge engineers, George S. Morison. This bridge was completed in 1892 and was noted for its size and design. In 1916, a second railroad bridge called the Harahan Bridge was completed immediately to the north. Designed by one of the most important 20th century bridge engineers, Ralph Modjeski, this bridge creates a unique opportunity to compare masterpiece works by two famous bridge engineers. It is also of interest to note that when the Frisco Bridge was built, Modjeski was in the earlier years of his career and was in fact working for Morison on the Frisco Bridge as an assistant engineer.

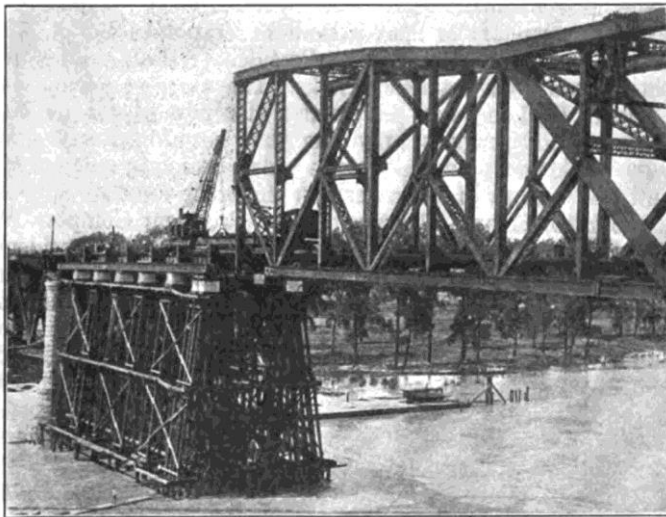
The Harahan Bridge had an additional notable feature in that decks cantilevered out from the truss lines accommodated vehicular traffic in addition to the railroad tracks in between the truss lines. In 1949, immediately south of the Frisco Bridge, a new highway bridge was completed, making the vehicular decks of the Harahan Bridge obsolete, which were then abandoned.

After sitting abandoned for many years, a special public/private partnership made possible the unique project to convert the northern vehicular deck of the Harahan Bridge into a pedestrian walkway. The walkway is known at the Big River Crossing and the official website is at <http://www.bigrivercrossing.com/>

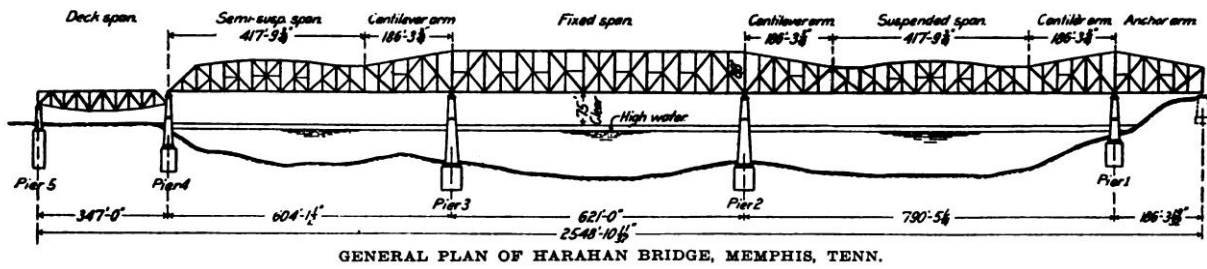
Several challenges existed with this project. The simple fact that the bridge is nearly a mile long made for a costly project. The other major challenge is that the Harahan Bridge remains a very active, busy

railroad bridge. Typically railroad companies are, to put it mildly, hesitant to allow civilians anywhere near their trains, let alone share a bridge with them. However, the Big River Crossing includes a rather substantial fencing system that ensures that trains and people are kept away from each other on the bridge. Although this fencing system is high, the trusses of the bridge are even higher, which makes it possible for users of the walkway to still enjoy the impressive details of the trusses despite this barrier. Another challenge was to maintain the qualities of the bridge that have historical significance, while meeting project requirements as well. While modern railing/fencing was needed on the outer edge of the deck of the walkway, the original riveted lattice railing from the original construction of the vehicular deck was left in place behind the modern fencing. While some project stakeholders were initially opposed to retaining the original railing (perhaps thinking it would look cluttered), the completed product is very nicely composed from a visual standpoint. From a distance beside the bridge, a visitor continues to see the lattice railing design just as it has been seen since 1916. On the walkway itself, a visitor can easily see the details of the lattice railing (given that there is a gap between the original and new railings). At the same time, the lattice railing does not detract or obstruct the view of the Mississippi River from the walkway.

A visit to this bridge in November 2016, several weeks after the grand opening, revealed that the walkway is a very popular attraction with the walkway being extremely crowded with people! The Big River Crossing is an impressive preservation and adaptive reuse success story. It offers visitors a unique view of the Mississippi River, and also offers a closer look at a significant historic bridge that for decades was not open to public use.



Above: Harahan Bridge under construction.



A historical drawing showing the layout of the Harahan Bridge.



Historical photo showing the Harahan Bridge when the vehicular roadways were still in use.





The Harahan Bridge.



The Harahan Bridge's "Big River Crossing" crowded with people. Photo taken November 6, 2016.





The Harahan Bridge's "Big River Crossing" crowded with people. Photo taken November 6, 2016.



Details of the Harahan Bridge as seen from the Big River Crossing.





Details of the Harahan Bridge as seen from the Big River Crossing.

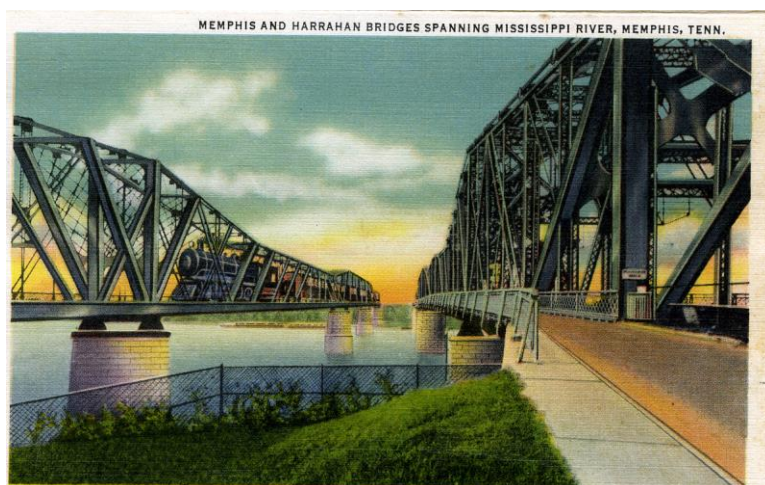


Sign for the Big River Crossing near the bridge.





Original plaques on the Harahan Bridge.



Historical postcard showing the Harahan Bridge when the vehicular roadways were still in use.





View of the Frisco Bridge. Harahan Bridge is visible behind the Frisco Bridge.



View of the Frisco Bridge. Harahan Bridge is visible behind the Frisco Bridge.





View of the Memphis and Arkansas Bridge.