



PHILIPS

Case Study

Big River Crossing

Mississippi River
Memphis, Tennessee/
West Memphis, Arkansas USA



Photo by Darius Kuzmickas

The Harahan Bridge and adjacent Big River Crossing boardwalk stretch across the Mississippi River, illuminating the night sky with a new dynamic LED lighting system from Philips Lighting.

The setting

The historic Harahan Bridge, completed in 1917, stretches approximately one mile across and 100+ feet over the Mississippi River next to an active rail line. Still active today, the bridge was and remains a symbol of advancement and connection.

Big River Crossing opened to the public on October 22nd, 2016. It is the longest public pedestrian bridge across the Mississippi River. Adjacent to the historic Harahan Bridge, it serves as the centerpiece of a \$43 million Main Street to Main Street Multi-Modal Connector project, a 10-mile project linking downtown Memphis, TN and downtown West Memphis, AR with walkable and bike-able streets, pathways, and trails.

A Turnkey Solution

As a leader in lighting bridges around the world, Philips Lighting installed dynamic LED lighting to highlight the Harahan Bridge in the skyline, helping revitalize the bridge and solidify it as a regional landmark.

The Philips Lighting team supported the lighting design and consulted and guided the system specifications and installation. As with many public/private partnerships, there were numerous stakeholders involved, and the team worked closely with all key players to ensure a smooth installation in order to meet the tight deadline.

Planners and designers selected Philips Color Kinetics ColorGraze MX4 Powercore luminaires for the massive project. The lights highlighted the architectural detail and natural patina of the bridge.

The Big River Crossing required 2,370 separate fixtures with over 100,000 individual light points, forming a total of 9,480 feet of lighting. The Philips Color Kinetics luminaires offered an expanded palette of more than 16 million colors, which form a variety of beam angles that showcase the depth and structure of the bridge. The bridge typically lights the skyline in an amber hue, but also has the ability to change colors for holidays and special occasions.

Because the bridge is constantly busy with watercraft and train traffic, it was vital that the lighting could be remotely adjusted with short notice. Planners installed a control system that allowed the lighting to automatically dim to a lower level in order to accommodate rail and maritime lighting requirements.

The installation also incorporates the cloud-based Philips ActiveSite connected lighting platform. ActiveSite allows for the remote management of the architectural LED lighting system, including diagnostics, reporting, data analytics, and control, with very little downtime.

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Revitalizing the bridge and adjoining Big River Crossing through dynamic lighting experiences will ensure its role as a source of great pride for our city and the region for the next hundred years and more.

Jim Strickland,
Mayor of Memphis, Tennessee



Philips Lighting solution overview

Philips Product

Philips Color Kinetics
ColorGraze MX4

Philips ActiveSite

Project Credits

Client: Downtown Memphis Commission

Electrical Contractor: Koontz Electric Company, Inc.

Electrical Engineer: Garver Engineering

Structural Engineer: HDR, Inc.

Architect: Modjeski & Masters

General Contractor: OCCI, Inc.

Technical Consultant: Allen & Hoshall

Technical Project Manager: All World Project Management

Landscape Architect: J. Ritchie Smith Assoc.

Acknowledgments: Union Pacific Railroad

United States Coast Guard

City of Memphis, TN

Crittenden County, AR

Big River Strategic Initiative

Using a single dashboard, authorized users can change scenes, effects, and light shows from a remote PC or tablet device. The platform also allows users to schedule shows ahead of time for special events, helping the city constantly refresh content for the bridge.

The pathway opened to great fanfare and the vast number of bicyclists, joggers, and explorers traversing the century-old structure and winding trails are a testament of the walkway's impact and popularity. In the first six weeks of the bridge's opening, nearly 65,000 people experienced and celebrated the Big River Crossing. Historian, Wayne Dowdy said, "The Harahan Bridge is an engineering marvel...it is a hundred years old now and it's still in place and can still be used. And the fact that the citizenry of this community believes enough in the Harahan Bridge – its heritage, its legacy, and also its future – says a lot about the creativity and ingenuity of this community."

The new lighting installation allows the region to showcase spectacular light shows and stunning dynamic effects, creating a center of activity for the local community and visitors while enhancing the vibrant waterfront and encouraging further development.

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Wayne Dowdy,
Historian



