

# Musco Shines Light on a Landmark



When the east span of the Bay Bridge opened on September 3rd, the lighting system got high marks. It met the challenges for building a new landmark and providing an efficient, high value corridor for the Bay area.

The Musco Team was brought in three years ago to help solve the lighting challenges. LED light sources provided the team a new tool for creating this novel lighting solution. Its high energy efficiency and controllability provide smooth lighting of the road deck and an energy efficient opportunity to highlight the unique architectural features of cables and tower.

Musco's LED lighting system solution, with unique photometric controls, improved the roadway lighting energy efficiency by 46% and additionally added greater quality and safety features.



**Open to traffic:** Lt. Governor Gavin Newsom commemorated the opening of the new East Span by reenacting the chain cutting that marked the 1936 dedication of the original Bay Bridge.



**Smooth transition:** The inaugural procession of vehicles crosses the new East Span (left), which was built alongside the original span after it was damaged by an earthquake. Rerouting motor traffic to the new span required a shut-down of only five days. Demolition of the old span will take approximately three years.

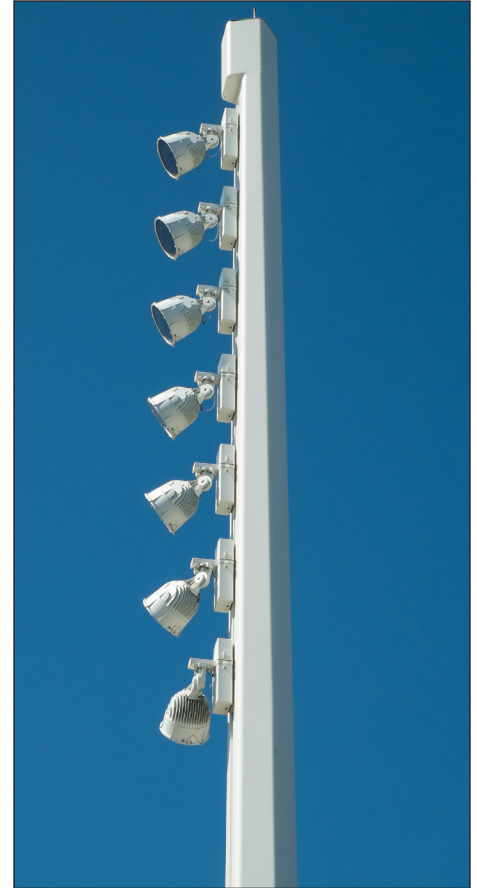




**Understanding the requirements:** Musco's R&D team created a scaled 40-foot section of the cabling system, built a life-size 80-ft by 180-ft section of the roadway, and did multiple on site demonstrations and tests to explore and simulate the lighting design.



**Fine tuning the lighting solution:** Musco on-site project managers helped coordinate installation within the complex bridge construction process and ensured the system was fine-tuned and achieved all criteria for the project.



**Designed for aesthetics and performance:** Custom fixtures were designed to fit the unique appearance of the bridge architecture and provide the quality and quantity of light needed for the roadway.

The system uses over 1500 fixtures, with more than 48,000 individually aimed LEDs.



**Enhanced drivability and safety:** Aiming the lights from behind the drivers provides a smooth wash of light on the road and protects motorists from glare.

273 light poles ascend from 23 to 65 feet.

## East Span facts:

- 2.2 miles long
- 525-foot tall tower
- Signature element is the world's longest self-anchored suspension bridge: 2,047 feet long
- Traveled by approximately 280,000 cars per day

**For more information visit:**

[baybridgeinfo.org](http://baybridgeinfo.org)



By Alexander Karnstedt (Alexrk) [CC-BY-SA-3.0 (<http://creativecommons.org/licenses/by-sa/3.0/>)], via Wikimedia Commons