# THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
The Outer Bridge Crossing

## FSG Designs And Provides New LED Lighting For Outer Bridge

**Owner**
The Port Authority of NY and NJ

**Contract Type**
LED Lighting Upgrade

**Contract Amount**
$387,825

**General Contractor**
Constellation Energy

**Electrical Contractor**
Port Authority Electrical

**Energy Savings**
$66,172 a year

**Number of Fixtures Replaced**
628

**Annual kWh Reduction**
413,652 kWh a year

## CHALLENGE

One of the "firsts" in the Port Authority legacy, the Outerbridge Crossing was built as part of an overall project to accommodate greatly increased interstate automobile traffic following World War I. The Outerbridge Crossing and the Goethals Bridge, which are similar in design, were the first facilities constructed by the Port Authority. The 143-foot channel clearance of the Outerbridge Crossing permits passage of deep-sea vessels through the Arthur Kill. As part of a contract to update lighting on several PANYNJ locations, FSG designed an LED lighting retrofit that included both cobra head and high mast roadway lighting, building mounted wall pack and floodlights, and interior fixtures in the administration building.

## SOLUTION

Installation on this project was performed by Port Authority electrical personnel. FSG designed lighting solutions supervised mock-up installations and took pre and post light readings to validate results. Existing 1000 Watt HPS high mast fixtures were upgraded to new 550 Watt LED fixtures, while 250W HPS roadway fixtures were upgraded to 83W LED roadway fixtures. Other outdoor fixtures included wall packs, flood lights, bollards and canopy fixtures. All were converted from HID to LED. Interior recessed fixtures were upgraded to new LED fixtures, and screw in lamps were converted to LED.

## RESULT

The new lighting system greatly improved appearance, with CRI improving from 22CRI to 80CRI. Lamp life for the roadway increased from 24,000 hours to 100,000 hours, greatly reducing maintenance costs in the future

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