

**Owner**

Liberty Science Center

Contract Type

Lighting Retrofit

Contract Amount

\$354,000

General Contractor

Public Service Electric and Gas

Electrical Contractor

Facility Solutions Group

Engineering Firm

Facility Solutions Group

Energy Savings

\$118,825.00/yr

Number of Fixtures Replaced

2,861

Annual kWh Reduction

624,409

LIBERTY SCIENCE CENTER

Jersey City, New Jersey

Liberty Science Center Upgrades Exhibit and Back Of House Lighting

CHALLENGE

Liberty Science Center is an interactive science museum and learning center located in Liberty State Park in Jersey City, Hudson County, New Jersey. The center, which first opened in 1993 as New Jersey's first major state science museum, has science exhibits, and the largest and most technologically advanced planetarium in the Western Hemisphere. The lighting at the center had not been updated for many years, and management was looking to save energy, reduce maintenance costs and improve the lighting quality on exhibits.

SOLUTION

FSG provided a detailed audit of the existing lighting system and designed a cost-effective retrofit solution that met Liberty Science Centers' stated goals. The lighting audit covered both back of the house and exhibit areas. Different lamp color options as well as different beam spreads were tested to ensure that lighting on exhibits met the expectations of all involved. New LED lamps not only provided superior illumination on exhibits, providing higher color rendering and more controlled beam spreads, they also run cooler, last longer, and provide energy savings of up to 75%.

RESULT

Over 2,861 fixtures were retrofit or replaced, providing annual savings of over \$118,000. The project qualified for the PSEG Direct Install Program, which paid for 80% of the installed project costs. The remaining 20% was billed at 0% interest on the Liberty Science monthly electric bill.

