Honeywell

Arrigoni Bridge Overview
For
City of Middletown and Portland

February 10, 2011
- History
- Lighting of the Bridge
- Potential Funding sources
- Next Steps

75th Anniversary
The Arrigoni Bridge, carrying Route 66 and Route 17 across the Connecticut River, connects Middletown and Portland.

Construction started in 1936, and continued nearly 24 hours a day until the Arrigoni Bridge opened to traffic on August 6, 1938. The day it opened, the bridge was the longest of any kind in New England.

The Bridge cost $3.5M to build.

The Bridge is Length: 3,428 feet (0.65 mile), with two 660-foot arches.

The Bridge was named after State Sen. Charles J. Arrigoni, of Durham.
Lighting of the Bridge

- Lighting Scenario 's
  - Necklace Lighting
  - Interior Structure Lighting
  - Solar & Battery
Lighting of the Bridge

- Necklace Lighting
  - 84 LED Sparkle Accent Lights
  - 24 Watts each
  - New 9.7 Watt Options Available
  - Safe 12 Volts
  - Computer Color Controlled - RGB

- Approximate Lighting Cost to install $1,800,475
- Annual Lighting Energy Cost $954
- Useful life of new technology 75,000 hrs – 17yr
Lighting of the Bridge

- Interior Structure
  - 28 LED Flood Lights
  - 36 Watts each
  - Safe 24 Volts
  - Exterior Structure Silhouetted

- Approximate Lighting Cost to install $993,175
- Annual Lighting Energy Cost $477
- Useful life of new technology 75,000 hrs – 17yr
Solar Battery System & Recommended Solution

- 20.25 kW PV Array – With 3 to 6 Day Battery Capacity
- Optimized to be used with LED Fixture – No Rectifiers

Approximate Lighting Cost to install $1,058,650

Annual Lighting Energy Cost $0.00 (A Total Savings $1,430)

Useful life of new technology 25+ years

Enhancement to Further Upgrade the Yellow HPS Deck Lighting to White LED to Match the Color Quality Esthetic of the Accents
Potential Funding Sources

- Potential Funding sources
  - $400,000 Federal Grant
  - Northeast Utilities energy efficiency grant
  - CT Clean Energy fund
  - Other?
Next Steps

- Choose a solution
- Develop final costing
- Establish timeline for implementation
- State approvals?
- Finalize funding sources
- Begin installation
Questions?