

Enlightening Care for Rochester Hospital

- Major overhaul of lighting systems
- Estimated annual energy savings of \$22,249
- Projected to save an estimated 275,000 kWh and over 115 tons of CO₂, annually



Highland Hospital

The aptly named Highland Hospital has overlooked Rochester, New York's Highland Park since 1889, when it opened its doors as one of the first homeopathic hospitals in the United States. Today, the Hospital is well known for its comprehensive orthopedics services, women's services, nationally ranked geriatrics program, and regional leading gastric bypass surgery center, as well as much more.

A History of Being First

When Dr. John Williams, chief of medicine at Highland for 30 years, gave the first insulin injection to the son of the chief legal counsel at Kodak, Highland became the first hospital in the United States to use insulin to treat diabetes. Highland is home to many other firsts, including the first U.S. hospital to establish a clinical chemical laboratory, the first in New York State to ban cigarette vending machines, and the first in Rochester to allow fathers to be present in the delivery room.

Continuing this tradition of leading the way, the Hospital will be among the first in New York to use American Recovery and Reinvestment Act funding to undertake a major parking garage lighting system upgrade. The Hospital was granted \$71,989 by the New York State Energy Research and Development Authority to complete the project, which was an award that propelled the Hospital to act. "The process of selecting a vendor, the vendor doing the work, and turning the project around has been a good one," says Michael Zanghi, Director of Facilities at the Hospital. "We've had good support from everyone involved."

Seeing the Light

Upgrades to the currently installed lighting system include changing high pressure sodium and metal halide fixtures to T8 and T5 fluorescents, which provide marked energy savings. "The most direct impact of this project is the quality of the lighting," says Mr. Zanghi. "The garage seems brighter, even though the number of lumens is the same."

"The effect of the project on the community is a visible one. The new lights will impact both our staff and patients."

Mr. Matt James, Chief Operating Officer of Alliance Energy Solutions, the firm contracted to complete the project, concurs. “This project has improved the Hospital’s light levels – the community will have a much better experience visiting the facility.”

Beyond saving on energy costs, the new fixtures offer significant savings in time and inventory. As the more efficient lamps will need to be replaced less often, the facilities department can devote its time to more productive projects. “Retrofitting the lamps has reset the clock on our maintenance program for the garage,” Mr. Zanghi notes.

Together, the measures are expected to save the Hospital \$22,249, annually. The project will pay for itself in less than four years.

Local Jobs

“Projects like this have helped us to retain employees,” says Mr. James. He points to the installation work completed by a subcontractor as a further opportunity for local companies to maintain employment. “The ARRA funds granted by NYSERDA have helped to get projects out on the street, and we’ve been able to keep our sales staff and project managers engaged.”

“The grant absolutely allowed the Hospital to move forward with the project. The way that NYSERDA has administered the grant process has been great. We’d like for there to be more opportunities like this.”

Reduced Carbon Footprint

“Most organizations have sustainability as one of their core values,” notes Mr. James.

With an eye toward energy and environmental impact, the Hospital staff continually looks for ways to reduce its carbon footprint. “While there are many fixed energy needs in a hospital, we try to meet each in the most efficient way possible,” says Mr. Zanghi.

An estimated 4 million kWh will be avoided over the fifteen year life of the measures. The environmental benefits of the project include avoiding almost 3.5 million pounds of carbon dioxide emissions, avoiding 12,151 pounds of nitrogen oxides, and avoiding 25,030 pounds of sulfur dioxide. This reduction in greenhouse gas emissions will reduce air pollution and is the equivalent to avoiding burning over 3 million pounds of coal.

American Recovery and Reinvestment Act – State Energy Program

The Highland Hospital received this award from the [U.S. Department of Energy’s State Energy Program](#). The State Energy Program provides grants to states and directs funding to State Energy Offices from technology programs in DOE’s Office of Energy Efficiency and Renewable Energy. States use grants to address their energy priorities and to adopt emerging renewable energy and energy efficiency technologies. SEP is distributing \$3.1 billion of funding to the states and U.S. territories under the [2009 Recovery Act](#).