

## SHOWCASE PROJECT: ROCKFORD HOUSING AUTHORITY: PARK TERRACE APARTMENTS

### SOLUTION OVERVIEW

Park Terrace is a Public Housing Development owned and managed by Rockford Housing Authority and is home to 183 elderly and/or disabled families. In addition to the residential units, the entire first floor is common area space which includes a community room, tenant computer lab, resident services and management offices as well as a maintenance shop. RHA has leveraged their assets and capital funds in order to make the improvements that are both aesthetically pleasing and energy efficient.

### SECTOR TYPE

Multifamily

### LOCATION

Rockford, Illinois

### PROJECT SIZE

279,000 square feet

### FINANCIAL OVERVIEW

Project Cost \$1,033,000

### SOLUTIONS

The energy upgrades will include building system upgrades, and the installation of a high efficiency condensing boiler. This new boiler will serve the building heating loop during heating season and operate as a domestic hot water heating loop during the summer. An HRV will be installed to help with moisture control and ventilation. As a whole, these upgrades are expected to produce a 21.36% savings in electric usage and a 34.39% savings in gas, resulting in a \$39,539 annual reduction in overall cost in utilities.

Upgrades will include:

- Common area lighting and tenant lighting will provide benefits in reduced electrical consumption which correlates to dollar savings. In addition it will provide improved quality of lighting, improved light levels and improved aesthetics bringing a feeling of comfort for

residents and visitors alike.

- Tenant unit air sealing include all areas of penetration; from bath fans, to electrical and plumbing penetrations, to doors. Benefits of unit sealing is reduced electrical consumption, improved comfort, and draft reduction.
- Tenant unit weatherization will provide comfort to the tenants and reduce heat loss and drafts in the apartments.
- Installation of Energy Star Appliances will help reduce electrical consumption which in turn will lower the tenant's electric bills.
- Water conservation upgrades will offer significant savings. The initial energy audit revealed old fixtures that were less efficient than energy code minimum standards. A high efficiency bathroom sink faucet flowing at 1.0 gpm reduces the flow by 55% over the traditional faucet with a maximum flow rate of 2.2 gpm.

## **OTHER BENEFITS**

Rockford Housing Authority has committed to provide a healthier living environment and better indoor air quality for the residents of Park Terrace Apartments. Improved efficiencies and new building systems, along with a smoking ban in all buildings, reinforce the fact that RHA is committed to the health and wellbeing of all residents. RHA believes that changing the environment by offering energy efficient systems, upgraded and improved tenant units and community space will be the beginning of a culture change in public housing.

## Annual Energy Use

(Source EUI)

Baseline(2012)  
388,710 kwh

Expected(2014)  
305,690 kwh

Actual()  
Coming soon

## Energy Savings

21%

## Annual Energy Cost

Baseline(2012)  
\$38,690

Expected(2014)  
\$31,800

Actual()  
Coming soon

## Cost Savings

\$6,880



Park Terrace Apartments



Park Terrace community room kitchen



Park Terrace community room