

## **SHOWCASE PROJECT: BALTIMORE HOUSING: CHERRY HILL HOMES**

### **SOLUTION OVERVIEW**

Cherry Hill was originally built in 1945 by the Housing Authority of Baltimore City (HABC) and the United States War Housing Administration for African American War Workers. It was later converted to affordable housing. It is the largest public housing development in Baltimore, MD and consists of 1,394 units configured as townhouses and garden apartments. Priority was placed on Cherry Hill because of the number of units, combined with the benefit of installing quick payback measures and the opportunity to address some chronic, long standing heating issues in parts of the campus.

### **SECTOR TYPE**

Multifamily

### **LOCATION**

Baltimore, Maryland

### **PROJECT SIZE**

895,000 Square Feet

### **SOLUTIONS**

HABC focused on capitalizing on previous retrofit work and systems efficiency. A portion of the heating system at Cherry Hill was replaced in 2008, which allowed a targeted approach to heating efficiency in the most recent work. At the building level, most of the equipment was housed in spaces that were difficult to access, monitor, and repair. This project supplied outbuildings with clear access to equipment, controls, and an enhanced building management system. The project fixed the capital intensive maintenance and Building Management Systems issues and provided residents with efficient and reliable heat.

Previously at Cherry Hill, maintenance personnel and crews were not able to remotely control equipment to meet the required conditions. Often there were no indications of a problem or an alarm until a resident lodged a complaint. The new system allows for greater control to adapt to situations as needed and avoid residents using stoves, electric heaters, and other means to supplement heat. Additionally, new convectors with temperature limiting controls were installed in all individual residential units. Additional work at Cherry Hill included:

- Replacement of the entire heating system, including new piping and registers
- New lighting
- Low-flow aerators
- Weatherization measures
- Insulation
- Heating controls
- Electrical meters
- Energy management system

## **OTHER BENEFITS**

HABC installed smart meters and is utilizing EnergyCAP, an energy management software, to provide detailed energy statistics on a per unit basis. Together, these two tools provide residents real-time energy use information to compare against their actual utility allowance. HABC has begun to use these tools in combination with an aggressive education campaign, “Eye on Energy,” to address the behavioral aspects of energy efficiency, which is generally considered a major barrier to cutting energy waste.

## Annual Energy Use

Baseline(2009)



**Energy Savings**

**35%**

## Annual Energy Cost

Baseline(2009)



**Cost Savings**

**\$1,160,000**







