

## SHOWCASE PROJECT: DANVILLE DEVELOPMENT: UNION GARDENS

### SOLUTION OVERVIEW

Union Gardens is a low-income residential center for seniors 62 and older managed by Danville Development. Built in 1982, the building needed upgrades to improve energy efficiency due to issues like inefficient incandescent lighting, heat loss, and poor insulating windows. These issues presented an opportunity to improve both the property's efficiency and the quality of life for residents.

### SECTOR TYPE

Multifamily

### LOCATION

Ogden, Utah

### PROJECT SIZE

39,375 Square Feet

### FINANCIAL OVERVIEW

Project Cost: \$217,280

### SOLUTIONS

Planning for the upgrades to Union Gardens started in 2013. After completing an inventory of the property, Danville identified needed improvements and moved forward with implementation. Target areas included upgrades to lighting, water fixtures, and attic insulation. All funds for these projects came from Danville's Reserve for Replacement account, a savings account monitored by HUD. These funds cannot be accessed without HUD's prior approval.

Key elements of the retrofit that reduced energy and water consumption included:

- LED lighting in common areas (including sensor switches in bathrooms), parking lots, and outdoor landscaping
- Emergency LED lighting
- High-efficiency elevator components
- Sensor switches in laundry and garbage chute areas
- 3 gas water heaters
- Attic insulation
- High-efficiency windows/sliding glass doors throughout building
- New energy-efficient washers/dryers

- LED lighting in apartment units
- Energy-efficient ceiling fans in unit living rooms
- 10-year smoke detectors in units

## **OTHER BENEFITS**

Beyond energy and water efficiency, measures taken have provided safety and comfort to residents. The LED emergency lighting and smoke detectors ensure that in case of an emergency, there is a reliable system in place to alert every resident and help facilitate proper safety procedures. The lighting throughout the building and exterior also enhance safety by reducing the risk of trips and falls due to poor visibility.

## Annual Energy Use

Baseline(2013)  
103 kBtu/sq. ft.

Actual(2018)  
79 kBtu/sq. ft.

**Energy Savings**  
**23%**

## Annual Energy Cost

Baseline(2013)  
\$54,430

Actual(2018)  
\$39,080

**Cost Savings**  
**\$15,350**



Front entrance of Union Gardens



Grounds of Union Gardens



Rear view of units at Union Gardens