



SHOWCASE PROJECT: CHANNEL SQUARE APARTMENTS

SOLUTION OVERVIEW

Channel Square Apartments is a 223 unit apartment community located in Southwest Washington, D.C.—just 4 blocks from public transportation and the Waterfront Metro Station and half of a mile from the U.S. Capitol. Channel Square Apartments was originally constructed in 1968. In 2013 the property was acquired by the National Housing Trust/Enterprise Preservation Corporation, in partnership with Somerset Development Company and the Jonathan Rose Companies. Moderate rehabilitation has been performed over the last 4 decades, but significant repairs are now needed to modernize the buildings. Through the Channel Renovation Project, NHT/Enterprise's goal is to maximize the affordability of its apartments for the long-term, while maintaining the highest standard of living for residents.

The organization worked with the tenant association to impose an affordability covenant on the property. The covenant states that two-thirds of the apartments must remain income restricted to low-income households, including Section 8 voucher holders and residents with annual incomes below 80% of area median income. The remaining one-third of the apartments are allowed to be market rate, but will continue to operate under D.C. rent control regulations.

NHT/Enterprise is proceeding with the Channel Renovation Project in two phases:

1. Phase I upgrades are focused on system improvements to maximize energy and water savings.
2. Phase II incorporates comprehensive building system modernization with some cosmetic upgrades and deep energy and water retrofits, including the addition of a solar system.

SECTOR TYPE

Multifamily

LOCATION

Washington DC, District Of Columbia

PROJECT SIZE

260,000 square feet

FINANCIAL OVERVIEW

Project Cost \$750,000

SOLUTIONS

NHT/Enterprise recognized the value of partnering with District of Columbia Sustainable Energy Utility (DCSEU) to help offset some of the initial upgrade costs. DCSEU committed nearly \$95,000 in rebates for items contained in the Phase I Upgrade Scope. The water and energy focused scope includes upgrading the boilers, installing low-flow showerheads and aerators, and upgrading lighting. It is expected that these initial upgrades will result in a 20% reduction in utilities costs, or approximately \$108,500 annually.

Phase I Upgrades

- Low-flow showerheads
- Low-flow aerators in faucets
- Central plant boiler and hotwater heater upgrade
- Variable frequency drives (VFD's) and controls
- Exterior lighting upgrades
- Securing 100% Wind Power for all electricity used by the building

Phase II Upgrades

- Window and sliding door replace
- Low flow toilets
- Solar hot water and photovoltaic systems
- Convector unit replacement
- Add economizer to rooftop air handler
- Replace dampers
- Insulate exterior walls and ceilings
- Air sealing measures

OTHER BENEFITS

Annual Energy Use

(Source EUI)

Baseline(2014)

139.3 kBtu/sq.ft.

Actual(2017)

89.2 kBtu/sq.ft.

Energy Savings

36%

Annual Energy Cost

Baseline(2014)

\$317,000

Actual(2017)

\$231,000

Cost Savings

\$86,000



Channel Square Apartments exterior



Channel Square Apartments rooftop solar