



Owner: **The Community Builders** | Location: **Schenectady, NY** | Completion Date: **Ongoing**

The Parkside View project consists of 20 duplexes for a total of 40 units in Schenectady, NY undergoing moderate rehabilitation for HFA.

The audit process for Parkside view involved completing an ASHRAE level 2 audit, which includes assessing the condition of the existing mechanical systems, evaluating the building envelope and inspecting the water and electrical appliances throughout the apartments. Buildings generally had low efficiency, atmospheric venting heating equipment, and the overall building envelopes were not well insulated or air sealed. While some lighting and appliances were in above-average condition, most were aged and in need of replacement.

The energy and water scope of work was developed directly from our observations of the existing conditions. A sample of apartments were audited in order to give an accurate representation of the various building types and sizes.

In order to generate cost estimates and our savings report, a historical utility bill analysis was performed based off tenant billing data. Using TREAT Multifamily, the collected audit data, billing data and weather data for this location were all compiled to build an energy model and develop a scope of work. The unique models for the buildings in this project were grouped based on their size and age similarities.

Across the 20 buildings in Parkside View's portfolio, the projected annual utility savings for electricity and natural gas is \$12,500. Additionally, an energy savings level of 1,593 mmBtus or 35.3% was achieved using this scope of work. This savings level was achieved with a combination of mechanical equipment upgrades, insulation improvements and appliance replacements. The implementation of closed combustion furnaces and DHW systems alongside increased envelope tightness and insulation greatly improved energy savings across all properties.

Developing a relationship with the maintenance staff is key to ensuring the smooth operation of any improved mechanical systems and appliances. During the audit, we started a conversation with the maintenance staff about the items we were inspecting, and how best to remedy or improve upon them.

The process for verification of installed energy measures involves diligent documentation of progress at multiple points throughout construction. The DRAFTs that were filled out during the audit phase will also aid in monitoring utility usage in the years following the energy improvements. Air sealing measures and exterior wall inspections are completed before the apartment walls are sealed, so as to minimize any disturbances to a finished apartment. Final inspections will be completed once the various appliances and HVAC equipment are nearing completion.