

Wamego Unified School District 320

The Opportunity

Wamego is a growing community located in the Flint Hills of Kansas. The Wamego School District has kept up with rising student populations by passing bond issues to build new facilities.

However, those bond monies were not sufficient to address all of the facility needs and aging HVAC systems.

The school board identified over \$5 million of deferred maintenance needs in their buildings, and were faced with how to prioritize and pay for these improvements.

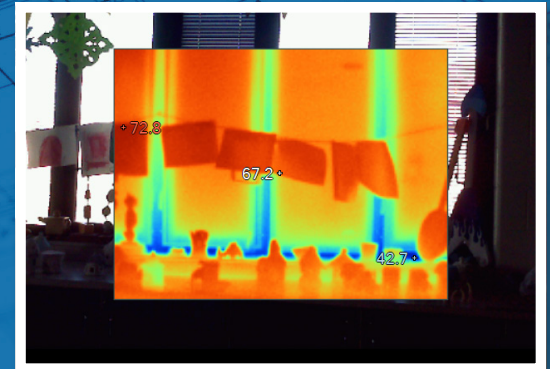
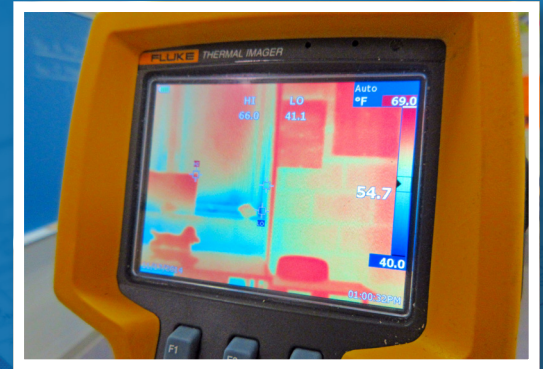


5 Buildings; 397,867 sq.ft.
Contract Amount: \$2,008,058



The Technical Solution

Navitas started with the school board's deferred maintenance list to help prioritize all existing building needs. We evaluated the energy savings and cost of each item on the list to determine what was feasible with the challenging financial situation Kansas schools face. Additionally, we evaluated several heating and cooling systems to determine the system with the best life-cycle cost. Ultimately, a plan was developed and implemented that addressed pressing HVAC needs, building envelope issues, and energy savings measures.



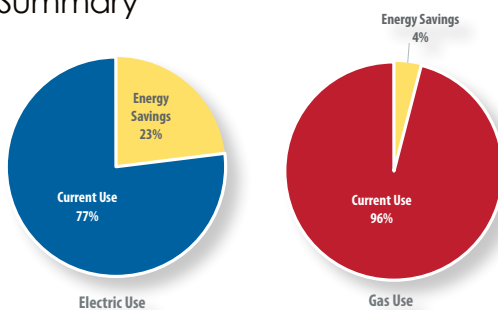
The Financial Solution

Navitas quantified the savings that could be achieved by implementing pressing building needs, and together with the district found additional energy savings measures to help address over \$2 million in facility needs. This allowed the district to keep valuable financial reserves to continue to meet growth demands. The district engaged with local banks to provide financing for the project.

Improvement measures implemented:

- LED Lighting Retrofit
- Thermostat Upgrade
- DDC Control Installation
- Occupancy Based Outside Air Control
- Rooftop Unit Replacement
- 4-Pipe Unit Ventilator Installation
- Windows Replacement
- Electrical Wiring Upgrade
- Engine Block Heater Controls

Savings Summary



Total Savings Over 15 years = \$1,913,856

Environmental Impact:

1,143,866 lbs. of harmful CO2 greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 3.9 acres of forest from deforestation
- Conserving 58,629 gallons of gasoline