



Project Overview

The original lighting in the east side of the West Alabama Food Bank was obsolete fluorescent, much of which had failed. The food bank was able to improve lighting quality significantly through replacement of this inefficient lighting with high-performance LED. Warehouse, salvage, packing, and agency shopping lighting fixtures include integral motion-sensing controls to reduce lighting energy in unoccupied areas. The office area also uses local motion control. Outdoor lighting fixtures are bi-level, increasing lighting output when sensing motion.

The facility's thermostats were upgraded to web-based thermostats to allow for scheduling and temperature control of HVAC systems via the Internet or smart phone.

Other improvements include door closers and vinyl curtains for infiltration control, a new ENERGY STAR copier, and seasonal shutdown of supplemental refrigeration.



Working together to save energy, water and money. Building on its passion for nonprofits, Southface has partnered with organizations like Feeding America & Boys & Girls Clubs of America to develop an energy and water efficiency program for the national nonprofit community. Funded by The JPB Foundation, the ultimate goal of the Nonprofit Energy & Water Efficiency (NEWE) Initiative will strengthen nonprofit organizations by providing a path to reduce annual utilities cost and improve conditions in existing facilities so that those dollars may be redirected to their mission. For more information, see newinitiative.southface.org

Site Details

- 3.7 million lbs. per year annual food distribution (2016)
- 49,000 square feet
- Constructed in 1968; occupied by food bank in 2010

Baseline Utilities Benchmarks

- \$30,648 in baseline utilities cost
- \$8.38 utilities cost per 1,000 lbs. food distributed

Improvements & Results

- Total investment of \$50,000, or \$1.02 per sq. ft.
- Actual ROI to date of 21% with \$25,000 in grant funds
- Actual annual cost savings to date of \$5,345 will support at least 32,000 meals per year for persons in need
- Actual annual savings to date: 22% energy savings (site) and 22% avoided GHG emissions

Project Contacts

- Jean Rykaczewski, Executive Director; Greg Parker, Associate Director – West Alabama Food Bank
- Premier Service Company & Mayer Electric Supply: LED lighting & lighting controls
- Anne Bronson, Managing Director of Member Grants – Feeding America
- Jean Pullen, PE; Chandra Farley, Program Manager – Southface Energy Institute

Project Highlights



Figure 1: Web-Based Thermostats

New web-based thermostats allow for monitoring and control of HVAC system temperature setpoints and schedules online or via smart phone.

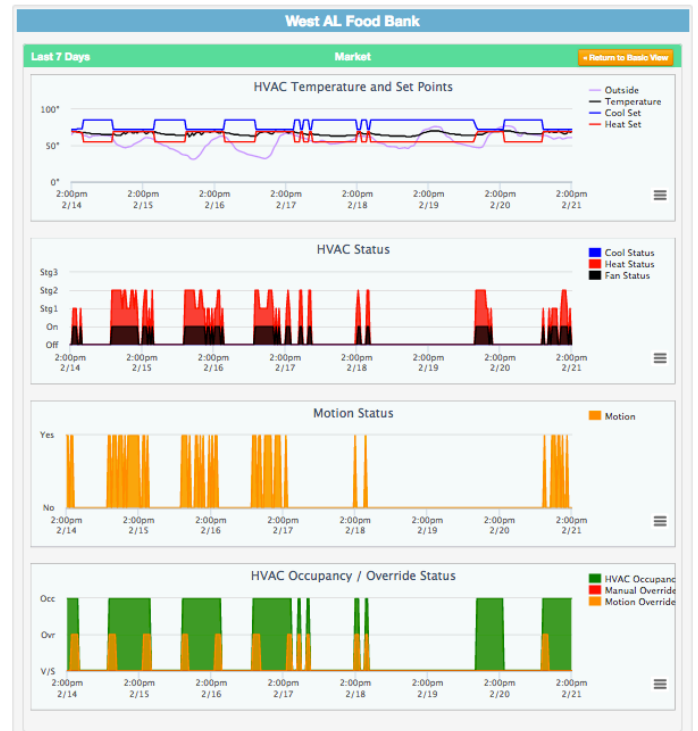


Figure 2: Web-Based Thermostats Online Trends Available

The web-based thermostats offer excellent online trending capabilities that allow for system optimization for efficiency and comfort.

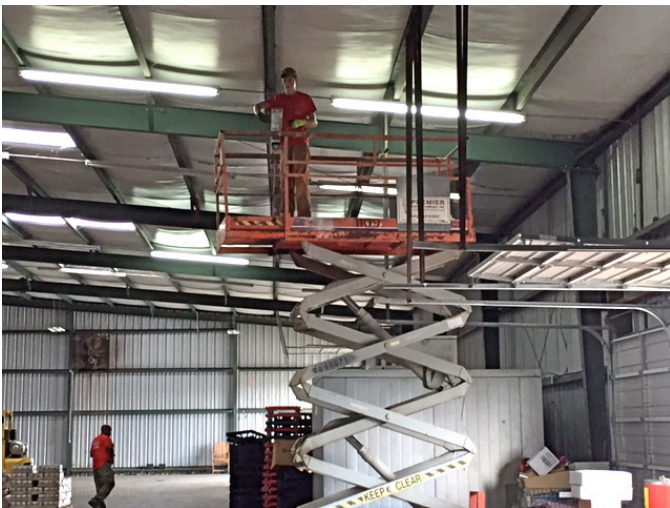


Figure 3: LED Lighting & Controls

New LED fixtures in the warehouse, packing, and agency shopping areas are equipped with integral motion sensors that turn fixtures off individually in unoccupied spaces.



Figure 4: Warehouse Daylighting

Prior to participating in the NEWE Initiative, the food bank reroofed the west side of their facility and installed skylights that provide enough daylighting to meet their needs in this section of the facility.