



Yearout Mechanical helps Albuquerque food bank save energy and “go green”



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When their local food bank wanted to “go green,” SMACNA contractor Yearout Mechanical Inc. of Albuquerque, N.M., provided the nonprofit organization with an energy analysis and upgrade that enabled them not only to save energy and money, but to channel more funds to where they were needed—feeding New Mexico’s hungry.

Yearout’s Sustainable Solutions Department (YSS) staff worked with the Roadrunner Food Bank of Albuquerque to analyze their energy consumption, recommend energy conservation measures, and implement sustainable energy solutions. Yearout donated their services to the food bank. The result: the food bank was able to streamline their energy needs and reduce their operational costs by about \$20,000 a year—a savings amounting to 100,000 meals annually for the hungry.

In the company’s first energy upgrade project, Yearout completed three major upgrades to the 150,000-sq.-ft. building, which consists of a warehouse and an office. The upgrades covered the warehouse lighting, warehouse insulation, and office air conditioning.



The warehouse had large, inefficient metal halide lights.

During the summer months, the warehouse, which is used for food storage would lose about \$250,000 worth of food because of temperature extremes. Yearout added insulation and fans to the ceiling to maintain a more constant temperature to ensure the food would be preserved. The warehouse also had large, inefficient metal halide lights, which Yearout upgraded to more efficient T-5 lights. Additionally, since during much of the day a large part of the warehouse was unoccupied, the company added occupancy sensors.

The office space had used inefficient equipment to condition the space. Yearout replaced the air conditioning units and improved thermostat control of the zones. The rooftop units were replaced with more efficient equipment.

In preparing their energy assessment, Yearout’s energy efficiency experts collected the food bank’s previous utility bills to establish a baseline for energy usage. Then they completed an assessment of the building’s construction, lighting, and energy-using equipment and produced an energy model for the building.

Yearout completed a calibrated energy model, which matched the food bank’s overall energy usage, and identified and modeled energy conservation measures (ECM) to determine the potential savings from the suggested energy conservation measures. Yearout estimated the overall cost of each measure and calculated a possible rate of return. Then a report with the modeling and financial analysis was presented to the food bank management.

After reviewing the full energy audit, the food bank decided to replace eight of their HVAC units, which,

at 20 years old, were near the end of their lifespan. The organization estimated that a new HVAC system would give a return on investment in three years. The food bank reduced the energy use in their existing lighting system by replacing warehouse lights with high efficiency lights and installing motion sensors.



Yearout upgraded the lighting to brighter, more efficient T-5 lights.

Roadrunner Food Bank included Yearout's analysis and assessment data in grant applications for funding to help implement the energy conservation measures. They received a primary grant from the Walmart Foundation.

Yearout's YSS staff helped the food bank through the bid and construction management process to implement the improvements to the building envelope, lighting, and ventilation. With the improvements now complete, the company is building inexpensive air-flow stations and setting up data loggers to record performance. Using this data, Yearout's staff is performing further analysis of the energy model by comparing actual results with modeled outputs.

Founded in 1980, the Roadrunner Food Bank feeds nearly 40,000 hungry people a week. The largest food bank in the state of New Mexico, it distributes more than 22 million pounds of food annually to hundreds of partner agencies and five regional food banks.

[Yearout Mechanical Inc.](#) specializes in the installation of mechanical and process systems for the commercial, government, manufacturing, and industrial communities in New Mexico. A complete mechanical contractor, from utilities and plumbing to wet and dry HVAC and sheet metal fabrication, the company is dedicated to helping clients find sustainable energy solutions and reduce energy consumption.