

Innovation through Education and Illumination



Initial Savings
(First 15 months):
\$418,449

Total Savings
(15 years):
\$6,864,113

Project Implementations

- ▶ Interior and exterior LED lighting upgrades
- ▶ LED parking lot lighting upgrades
- ▶ Building control system improvements
- ▶ HVAC system replacements
- ▶ Chilled water system modifications

District Benefits

- ▶ Improved lighting and eliminated over-lighting
- ▶ Increased comfort level for students and faculty
- ▶ Reduced overall energy consumption
- ▶ Savings will pay for 100% of the project
- ▶ Energy conservation incentive
- ▶ Delivered positive cash flow

CHALLENGE

At Forney Independent School District, their slogan is “Inspiring Students Through Innovative Education.” So it was no surprise when they began looking for “innovative” ways to upgrade facilities, reduce their energy consumption and lower energy costs throughout the district. In order to align their schools with their forward thinking, they also required funding, which is always a challenge for school districts.

ANALYSIS

The Gexa Energy Solutions team evaluated a majority of Forney ISD’s facilities, which included 26 buildings. By performing a comprehensive assessment of the existing equipment, Gexa developed a scope of work for each facility. Some of the proposed implementations included retrofitting the existing lighting systems, as well as occupancy sensors, both designed to reduce energy consumption. Other implementations included a chilled water loop modification at the high school, which allows for isolation of certain portions of the school during unoccupied hours. Heating, ventilation and air conditioning (HVAC) equipment upgrades included replacing aged rooftop units (RTU) and direct expansion (DX) split systems with new high efficiency equipment. The District’s building automation system (BAS) was enhanced and expanded, allowing for improved monitoring and control of the air conditioned spaces, and geared toward energy efficiency.



RESULTS

By implementing these measures, the District has cleared the way to eliminating excessive maintenance, reducing their energy consumption and saving money year over year. Students and staff are now greeted with well lit, comfortably air conditioned classrooms and the administration now has the ability to monitor and manage their facilities with ease. Finally, with the savings more than paying for the investment, the District’s cash flow was improved. The ultimate result is an environment conducive to education, which is a testament to collaboration and innovative thinking.