CASE STUDY
Energy
Solutions

Lewisville Independent School District



LOCATION | Lewisville, TX

ENROLLMENT | 5

53,000

SCHOOLS

41 elementary schools 15 middle schools 10 high schools 11 additional campuses 127 square miles

9.7 million SF

PARTNER SINCE

2008

SERVICES

Utility Management Dining

Results

- 22% Actual Energy Reduction
- \$19 Million in savings through September 2018
- 62 Energy Star Certified Schools

A SUCCESSFUL PARTNERSHIP THAT EXCEEDED STATEWIDE ENERGY MANDATES

Facing Statewide Energy Mandates, Lewisville Independent School District (LISD) Selected Aramark to Deliver a Utility Management Program to Reduce Their Second Highest Operating Expense – Utility Costs

Located north of Dallas, LISD is one of the largest school districts in the region with 53,000 students enrolled in 77 campuses.

SERVICES PROVIDED BY ARAMARK

- Optimize heating and cooling operations
- Triage heating and cooling work orders
- · Implement lighting energy savings program with custodial staff
- Program 1500+ after-hours heating and cooling schedules per month
- Review utility bills for accuracy and excessive consumption
- Develop and implement high-return energy efficiency measures
- Perform night-time energy conservation building surveys
- Develop and maintain the LISD Energy Management Policies and Standards
- Secure utility rebates and enroll in incentive programs
- Provide engineering expertise for HVAC and building automation system controls selections.
- Prepare annual utility budget

"Utility costs make up one of the largest annual expenses at any school district. The Aramark utility management team of on-site engineers and certified energy managers has brought a level of professionalism and expertise to LISD that has helped us create an energy program that we are very proud of."

Jason Hughes, LISD Executive Director of Facility Services



Lewisville Independent School District



BEFORE: LED Westside Aquatic Center Project

AFTER: LED Westside Aquatic Center Project

KEY PROJECTS

- Delivered turnkey LED lighting project for the Westside Aquatic Center, resulting in a reduction in the pool lighting usage by 80%.
- Implemented multiple power quality projects throughout the district, eliminating expensive utility penalties.

REBATES AND INCENTIVES

- Over \$100,000 in cash refunds and credits (generated from utility bill auditing).
- Over \$130,000 in utility company incentives and rebates.

ACCOMPLISHMENTS

- Developed the energy management policies and standards for the Facility Services' Business Operating Plan.
- Represented Facility Services during commissioning of 500,000 square feet of new facilities.
- Collaborated with campus staff to identify the most energy efficient areas to use for after-hours events, resulting in \$72,000 annual savings.
- Upgraded energy management software to control exterior lighting, resulting in \$65,000 annual savings.
- Re-commissioned a middle school's building automation system (BAS), reducing the energy consumption by 46%.
- Corrected programming errors throughout LISD that caused multiple pieces of equipment to operate unnecessarily.
- Established standards for saving water in kitchens and nurses offices.
- Created lighting solutions and obtained energy rebate funds to replace 1,300+ metal halide gymnasium lighting at 47 campuses with a payback of less than 3 years.
- Contributed to selecting a centralized irrigation system which provides enhanced controls resulting in more efficient operation of irrigation systems for the 77 campuses.
- Initiated and managed a wireless thermostat project in an elementary school, resulting in 33% energy reduction.
- Implemented wireless thermostat project to control heating and cooling in over 160 portable classrooms with a 7 month payback.
- Developed and executed a computer based monitoring system for kitchen freezer and cooler temperatures.

"LISD believes in being good stewards of public funds and Aramark's utility management program has been a tremendous success at helping LISD find huge savings in utilities. The Aramark team was also instrumental in helping LISD achieve an Energy Star Achievement score of 92 which places us in the top 8% of school districts for energy conservation."

Jason Hughes, LISD Executive Director of Facility Services



Lewisville Independent School District



Energy Star Certification - Stewart's Creek Elementary School

THIRD PARTY RECOGNITION VALIDATES PROGRAM RESULTS



Energy Star Certification Lamar Middle School

To earn ENERGY STAR Certification, the U.S. EPA's recognition of superior energy efficiency, buildings must perform in the top 25 percentile of similar buildings nationwide. At LISD we have certified 62 of 64 eligible schools resulting in a 98% certification rate. LISD's overall Energy Star rating of 92 puts the districts in the top 8% of all districts nationwide. ENERGY STAR Certification provides third-party validation of energy efficiency improvements and helps build school pride. LISD's partnerships with Aramark Engineering and Asset Solutions (EAS), has helped direct more money into the classroom while reducing environmental impacts.



THE PARTNERSHIP



Energy Star Certification The Colony High School

Aramark's degreed engineers are embedded alongside LISD Facility Services personnel. Via the BAS, we review over 2,500 mechanical service calls a year and screen them for compliance with energy policy. Valid complaints are sent to the Maintenance Department for resolution with identification of possible faults based upon the BAS review. Our goal is to assist LISD in sending the correct technician, to the correct mechanical room, and to the correct piece of equipment to serve the customer and add value while we save energy.

BEST AND PRUDENT USE OF ENERGY

Aramark's engineers also perform 19,000 scheduling actions annually to operate equipment in support of after-hours, before hours, and weekend events. We achieve significant savings by this micro-scheduling approach. If LISD does not need an area, that area is set to unoccupied mode. The successful implementation of these best practices has been a team effort supported by the staff at all of the campuses.

