



Photograph courtesy of Dave Einsel - HISD

HOUSTON INDEPENDENT SCHOOL DISTRICT

Hattie Mae White Educational Support Center HISD, Houston, TX

Texas' largest school district sought to cut A/C costs so it would have more money to invest in students and the classroom.

The opportunity

HISD looked for an energy-saver solution that would increase energy efficiency, improve indoor cooling, enhance humidity control, and save money in 38 of its schools.

Even when classes are out, school districts need to minimize the costs of keeping their buildings cool. The Houston Independent School District has 276 schools and more than 200,000 students, making it the largest district in Texas and seventh-largest in the United States. Students are encouraged to challenge themselves in rigorous academic courses designed to prepare them for college and meaningful careers. The number of HISD students earning college credit on Advanced Placement exams, posting top scores on the SAT college entrance exam, and graduating are at all-time highs. The district is constantly seeking solutions that allow it to invest more of its limited funds into the classroom rather than ancillary services such as electricity.



OPTIMIZE
\$0 cost A/C tune up



IMPROVE
Increase system capacity



EXTEND
Potentially lengthen equipment lifespan





The challenge

With so many campuses, HISD wanted a way to decrease their expenses and improve the cooling output and efficiency of their commercial conditioning – particularly during the summer months, when air conditioning units require special care to keep up with the demands of Texas' scorching heat.

To do this, HISD needed a low-cost solution that addressed its unique usage patterns and special demands and that would save it money upfront and in the long run.

The solution

The CoolSaverSM Program provided a FREE solution that showed a 15% average efficiency improvement across the 38 HISD schools.

CoolSaver, a CLEAResult program sponsored by CenterPoint Energy Houston Electric, sent out a program-qualified technician to test and inspect 1,012 units in the 38 schools. The technician performed 517 free A/C tune-ups which included cleaning condenser coils, evaporator coils and blowers, replacing and cleaning the A/C air filter, and measuring and adjusting airflow and refrigerant charges.

The technician also calculated system pre and post efficiency to ensure increased air efficiency so that HISD's units could take on the high summer demands. A full report was provided to HISD.

The CoolSaver tune-up post-test showed a 15% average efficiency improvement across the 38 schools – an estimated annual energy savings of nearly 324,000 kWh.



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38
HISD schools



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324,000 kWh
estimated annual
savings



227.6 kW
estimated demand
savings