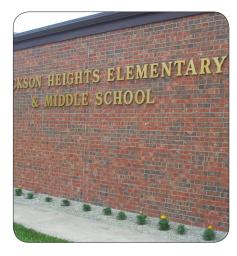


# **Case Study**

# North Jackson Unified School District 335

Holton, KS



# **PROJECT HIGHLIGHTS**

#### **Environmental Benefits**

391 tons of harmful greenhouse gas emissions reduced annually

#### Equivalent to:

- Preserving 2.5 acres of forest from deforestation\* or
- Conserving 286 barrels of oil\*

# **Capital Costs**

# \$2,365,908

#### **Annual Savings**

Energy:	\$43,440
Non-Energy:	\$14,268
Utility Cost Reduction:	28%

- \* Sources:
- Leonardo Academy's Cleaner & Greener<sup>SM</sup> Emissions Reduction Calculator http://www.cleanerandgreener.org/resources/ emission\_reductions.htm
- U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator http://www.epa.gov/cleanenergy/energy-resources/ calculator.html

# **PROJECT DESCRIPTION** Energy Savings Performance Contract

Challenges: North Jackson Unified School District faced new construction needs as well as failing existing infrastructure with limited funding resources. A failing mechanical system at the high school gave ConEdison Solutions, through its subsidiary, Custom Energy Services, a unique opportunity to look at an entirely different system to meet heating and cooling needs. The roof at the elementary school had been leaking and causing problems. The district was able to pass a bond issue but it was unable to fund all of their needs. By combining this funding with an energy savings performance contract (ESPC), available dollars went further and provided greater value to their students, staff and community.

# **PROJECT SCOPE**

**Solutions:** Working closely with the architect installing an addition on the high schools, ConEdison *Solutions*, evaluated multiple types of heating and cooling systems. Our analysis resulted in the implementation of a ground-source heat pump system. The well-field was sized to handle the additional load of the new addition and we coordinated electrical needs closely with the architect. Through this program, the district was able to save energy and better utilize taxpayer dollars to create a more comfortable and better functioning learning environment.

# Contact:

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### **Construction Start Date:**

March 2008

### **Construction End Date:**

August 2008

#### ENERGY CONSERVATION MEASURES

# **Lighting and Controls**

- High efficiency lighting
- LED exit signs
- Occupancy sensors

#### **Building Controls**

#### Energy management system

# **Heating and Cooling**

- Installed a boiler
- Installed a chiller

#### Water Conservation

 Installed low-flow water fixtures