

ELS CASE STUDY

COLUMBIA ACADEMY

QUICK FACTS

- **Project Name:** Columbia Academy LED Retrofit
- **Location:** West 7th Street, Columbia, Tennessee
- **Number of Buildings:** 10



PROJECT DESCRIPTION

Columbia Academy covers 67 beautiful acres in the heart of Columbia, Tennessee, a community located approximately 45 minutes south of Nashville. The campus was built in 1890 as the Columbia Arsenal. In 1905, it became the Columbia Military Academy, a prestigious school that attracted students from across the country and around the world. In the fall of 1979, the school became Columbia Academy.

In 2014, the school contracted with Energy Lighting Services to retrofit all of the lighting on campus (interior and exterior) to LEDs. The faculty and students were very pleased with the transformation from an aesthetics perspective. The administration and board were thrilled with the financial benefits.

Energy Lighting Services.

ENVIRONMENTAL IMPACT

This energy efficiency project created a very favorable environmental impact. Not only did they save \$75,102 per year, they reduced their carbon footprint as well. The comparable metrics are as follows:



47,892 trees saved grown annually



158 fewer cars driven for 1 year



639 tons of carbon dioxide gas

KEY PROJECT RESULTS					
Total Cost w/o Incentives	Financial Incentives	Net Cost of Project	Projected Annual Savings	Simple Payback Period	Return on Investment
\$236,720	\$0	\$236,720	\$75,102	37 months	34%
Annual Energy Use			Annual Energy Reduction		
Before Project: 782,784 kWh After Project: 185,688 kWh			76%		