

ELS CASE STUDY

MARSHALL MEDICAL CENTER

QUICK FACTS

- **Project Name:** Marshall Medical Center LED Retrofit
- **Location:** North Ellington Pkwy, Lewisburg, TN
- **Gross Square Footage:** ~60,000



PROJECT DESCRIPTION

Marshall Medical Center is a 25-bed critical access medical facility in southern Middle Tennessee. They are part of the Maury Regional Health system.

In 2012, the Marshall Medical Center contracted with Energy Lighting Services to retrofit all of the lighting (interior and exterior) to LEDs. The faculty and patients were very pleased with the transformation from an aesthetics perspective. Their campus is safer, brighter, and fresher looking. The administration and board were thrilled with the financial benefits.

Energy Lighting Services secured \$80,994 in incentive money for the project. The project had a 46% return on investment (ROI). Retrofitting to LEDs cut their energy consumption by 47% on their lighting system. The cut was so dramatic that the local energy utility provider replaced the meter on the facility because they thought it was malfunctioning. In reality, the savings were legitimate and impressive.

Special Note: This hospital was the first hospital in the state of Tennessee to complete an LED retrofit.

ENVIRONMENTAL IMPACT

This energy efficiency project created a very favorable environmental impact. Not only did they save \$1,780 per year, they reduced their carbon footprint as well. The comparable metrics are as follows:



156 acres of trees saved annually



34.7 fewer cars driven for 1 year



181 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
\$132,118	\$80,994	\$51,124	\$25,177	24 months	49%
Annual Energy Use			Annual Energy Reduction		
Before Project: 491,585 kWh After Project: 257,829 kWh			47%		