

# CASE STUDY

## HISTORIC BUILDING IS MODERNIZED

AND REJUVENATED THROUGH GUARANTEED ENERGY SAVINGS PROGRAM

### VANDEBURGH COUNTY COURTHOUSE EVANSVILLE, INDIANA



**ENERGY AND  
OPERATIONAL  
SAVINGS OVER  
\$6.7 MILLION**

#### ABOUT ENERGY SYSTEMS GROUP

ESG is an award-winning energy services company that provides its customers with innovative energy efficiency, technology, and long-term financing solutions for modernization of their facilities and energy infrastructure.

#### PROJECT BACKGROUND

The leadership of Vanderburgh County wanted to reverse deterioration while improving the energy efficiency and functionality of this historic courthouse which was built in 1888 that serves as home for municipal and commercial operations without impacting existing budgets or increasing taxes on local citizens.

#### STRATEGIES & SOLUTIONS

After an extensive analysis of the energy consumption, facility infrastructure and occupant needs, Energy Systems Group (ESG) developed an award winning program and implementation plan for the \$5.7 million effort that benefits the county operation and citizens through:

- Financing Package Using Guaranteed Savings Installment Program
- Leveraged Energy & Operational Savings to Fund the Project
- Upgraded HVAC, Lighting, and Electrical Systems to Improve Building Life
- New Window Systems & Building Envelope Improvements Increasing Occupant Comfort

By leveraging the benefits of this plan, ESG was also able to provide added benefits to Vanderburgh County by:

- Installation of Voice, Data and Fire Alarm Systems to Provide the Most Current Technology and Safety for Occupants of This Historic Facility
- Awarded the 2004 John Biasini Environmental Excellence Award for Energy Efficiency from the Metropolitan Evansville Chamber of Commerce

#### Key Installed Technologies included at the Historic Vanderburgh County Courthouse:

##### Lighting Systems

- New lighting systems and retrofit upgrades
- Upgraded emergency lighting systems

##### HVAC System

- New central chilled water system and piping
- Retrofit boiler system to hot water system
- New digital control systems

##### Building Envelope and Interior

- Retrofit all exterior windows while maintaining historical integrity
- Refurbishment of interior flooring and ceilings
- New water conservation system throughout building
- New instantaneous hot water systems for lavatories

##### New Fire Alarm System

##### New Fiber Optic Voice and Data System

##### Electrical Systems

- New distribution system throughout building
- Enhanced electrical system design for increased safety



PRINTED ON RECYCLED PAPER

[www.energysystemsgroup.com](http://www.energysystemsgroup.com) A VECTREN Company

Building Performance with Energy