

EECBG Case Study #1

Small Municipal Retrofits



southeast michigan regional
energy office



Building Retrofit

Municipality:	City of Yale, MI
Population:	1,966
Governance:	City Manager
Grant Allocation:	\$50,000

Lessons Learned

- Partner, Contract with other organizations
- Energy Audits Provide a Roadmap

The Takeaway

Partnering with other organizations, both non-profit and for-profit, can pay huge dividends for smaller municipalities, who often lack the necessary resources to do analysis and grant writing on their own, but can benefit financially from doing the work.

A comprehensive energy audit can provide a road map for prioritizing what work needs to be done, as well as can provide a plan for seeking future funding, should that need arise. The City of Yale turned the information from the audit into a successful application for EECBG dollars.

Scope of Work

The City of Yale is retrofitting their City Hall and Police Building. Acting on an energy audit provided by U.S. Energy Engineers, the City of Yale will implement the following energy conservation measures:

- New windows to address air infiltration issues
- Roof/Attic insulation addition
- Insulation on Hot Water Heater and pipes
- Installation of Programmable Thermostats
- Installation of Zoning Controls on HVAC
- Lighting Retrofit
- Installation of Occupancy Sensors for Lighting Controls

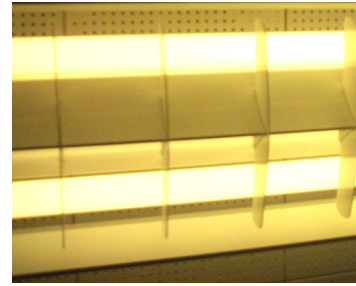


Installed foam insulation (existing) on the windows to prevent excessive air leakage and loss of heat.

Project Results

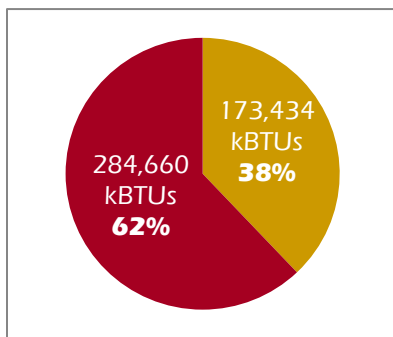
The City of Yale worked with WARM Training Center (their technical assistance provider) to create the necessary RFP's required to bid out the work. Project results are:

- Electrical Energy Savings
- Gas Savings
- Lower Building Maintenance Expenditure
- Higher Quality Lighting
- Greater Occupant Comfort



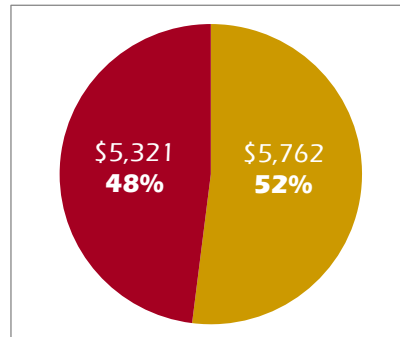
Outdated T12 Fluorescent Technology at Yale's Municipal Building

Potential Annual Energy Savings



- Savings from ECMs
- Continued Energy Use

Potential Annual Cost Savings



- Savings from ECMs
- Continued Energy Cost

Challenges Overcome

- Lack of capacity to apply for grants and to do grant paperwork
- Lack of knowledge on the measures to be pursued to get the most value.
- No in-house ability to assess energy needs
- Lack of capacity to produce RFP's that contain all the necessary components to do this work.

Further Resources

WARM Training Center
<http://www.warmtraining.org/>
Southeast Michigan Regional Energy Office
<http://www.regionalenergyoffice.org/>
Mi Source Foundation
<http://www.misource.org/>

Clean Energy Coalition
<http://www.cec-mi.org/>
Michigan Energy Options
<http://www.michiganenergyoptions.org/>
Michigan Municipal League
<http://www.mml.org/home.html>