

#### **ENERGY EFFICIENCY CASE STUDY**

# Oakdale Park CRC: Fourth Time is a Charm

### About Oakdale Park CRC

For Oakdale Park Christian Reformed Church, serving the community and God's people have always been centric to their mission. A piece of all that they do is creation care, a committee which was founded about 1.5 - 2 years ago. One of the many ways they choose to steward the earth is through responsible building management and reduction of their carbon footprint.



### THE AUDIT

The Grand Rapids 2030 District's Assistance Program sponsored an ASHRAE level "1.5" energy audit performed by Catalyst Partners. The audit discovered a retrofit package which could net save Oakdale Park 11% on energy costs and net savings of \$2314 a year, including the additional AC load. The Oakdale Park CRC facility had a site energy use intensity (EUI) of 42.2 kBtu/sf/yr, when the national average 30.2 kBTU/sf/year. Catalyst Partner's proposal would reduce the buildings EUI to 37.1 kBtu/sf/yr and save more then 26 tons of CO2 per year. This included lighting, air flow, HVAC duct work, pipe insulation and sizing an additional AC load.







### **BEFORE**

Oakdale Park CRC is 129 years old, though their buildings never seemed to last with them. Their first building was destroyed by a fire, the second by a tornado, and in 2002 the sanctuary roof collapsed due to the snow load. The congregation faced a cross roads: to rebuild or move. They remained dedicated to serving their neighborhood and rebuilt – for the 4th time. Oakdale Park is not new to the importance of facilities management. They take a proactive role in building operations. In addition to the 225 attendees at Sunday worship, the building is open around the week for 125 youth, AA, fellowship, 70x7 and CJC for returning citizens, and other ministries to serve the community. Taking a practical approach to occupant comfort and creation care, Oakdale Park was interested in exploring how they can reduce their carbon footprint, add AC for the sweltering days, and explore their renewable energy options.

Energy Conservation Measures (ECMs) earmarked for year 1 and 2			
ECMs	Cost Savings (\$/year)	Rebates Available	Payback (years)
Block Air Flow	\$131	NA	NA
Sanctuary Lights	\$1,489	\$2,691	2.3
Sanctuary Fans	\$581	\$206	10.7
Sanctuary Cooling	-\$1,810	NA	NA

## To Put This into Perspective

When it comes down to it, facilities management and creation care is all about the congregation's "commitment to continue to be a ministry in this community." Making the building comfortable and inviting on a sustainability-minded budget, will enable Oakdale Park to further uphold this mission. A lower energy load supports their community and mitigates harmful impacts to the planet.

#### **AFTER**

"There were some no brainers," a staff member comments, as he looks up to the sanctuary ceiling. The committee is collaborating with another CRC church to share experiences in lighting upgrades. A master electrician can install fans while upgrading the light fixtures: two birds in one stone. Oakdale CRC is taking advantage of their new EnergyStar Portfolio Manager account. Through generating trends, graphs, and comparisons, they can witness the energy reductions as the ECMs are accomplished.