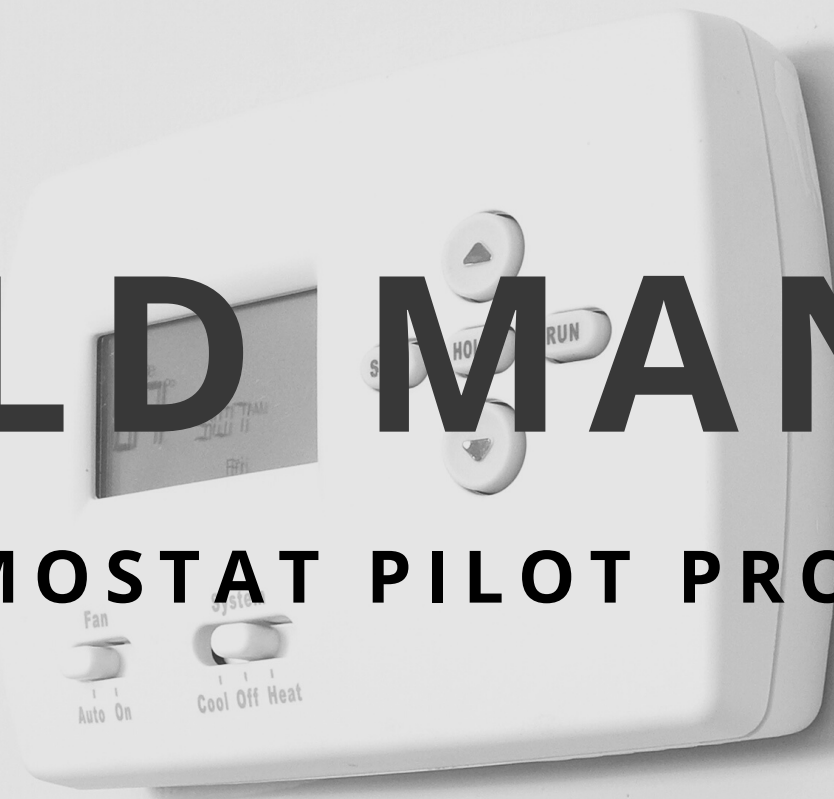


# GREENFIELD MANOR

## PROGRAMMABLE THERMOSTAT PILOT PROGRAM



## INTRODUCTION

Greenfield Manor in Little Chute, WI is a locally owned and operated senior retirement living center with approximately thirty tenants residing at the facility. In 2017, Kaukauna Utilities approached Greenfield Manor and discussed the possibility of upgrading their non programmable (number dial) electric heat line voltage thermostats as a pilot program study. The study would help determine if programmable thermostats used for their electric heat could save energy and provide a payback of less than two years compared to their current thermostats that had no capabilities of programming the heat cycle.

## PILOT PROGRAM

Programming the thermostat allows the user to setback or dial the heat down during the times that the tenants are away or when asleep. Over two years of energy data was compiled, including one year of data before the programmable thermostat installation and one year after installation of the programmable thermostats.

## SAVINGS

Kaukauna Utilities anticipated, and confirmed, electrical energy savings in the first year of **over 15,000 kilowatt hours**, with annual results likely to mirror the savings displayed in the first year. Estimated yearly heating kWh pre install = 104,924 and yearly heating kWh post install = 89,879. Energy costs added up to approximately **\$1,500** in savings per year!



**KWH  
SAVINGS**

**15,045 kWh/year**



**DOLLAR  
SAVINGS**

**\$1,500/year**

## RESULTS & DISCUSSION

So, what made this pilot program a success?

One reason was the ability to program the thermostat to lower temperatures when the space was unoccupied. This allowed for greater energy savings. An accurate digital temperature readout also provided savings. The digital readout ensured the user an accurate room temp compared to the previous thermostat that relied on a "dial a number" setting.

A less than two year simple payback, energy savings, and a lower utility bill deem **programmable line voltage thermostats** a solution for those who look to reduce their heating energy use and utility bills.

Looking for more information on programmable thermostats, or interested in saving energy in your facility, call our Energy Services Rep, Steve Engelos, at **920.462.0251**.