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In 2003, Whitefish Bay School District made a commitment to monitor and reduce its energy consumption. Through Board Policy, and a partnership with Cenergistic, Inc. (formerly Energy Education, Inc.) we developed a baseline of energy usage for each of our schools, began to make changes and track the impact.

At the time, some thought that with the high occupancy and usage of our school buildings, there would be little opportunity to reduce our energy consumption and still be able to operate in a manner that was safe and comfortable for students, staff, and visitors. However, using a behavior based approach, we discovered many opportunities existed that would have little or no negative impact, and didn't cost anything to implement. When we began to utilize opportunities for energy savings, such as reducing lighting when school wasn't in session or turning off equipment when not in use, we began to see the savings.

In the second year of the energy conservation program we saw the gap grow between the amount of energy projected for use and our actual usage. Our annual savings over what we would have spent grew from under \$100,000 per year to more than \$200,000 per year.

In 2007, we partnered with the ENERGY STAR program and joined the ENERGY STAR Challenge in an effort to expand our conservation program. We achieved national recognition from the Environmental Protection Agency, with each school earning the ENERGY STAR label in 2007, recognition as an ENERGY STAR Leader and Top Performer in 2008, and Whitefish Bay School District was named ENERGY STAR Partner of the Year in 2009.

In 2022, energy use and cost continues to be monitored and reduced where possible. While energy costs have continued going up, we've been able to maintain relative stability year-to-year in the portion of the school district budget allocated to utilities and other energy related costs.

Our people based conservation measures have evolved into an approach that looks not only at behavior and operations, but considerations for improved equipment, such as lighting and HVAC, and how these improvements impact energy use and cost.

Thanks to the forward thinking of the Whitefish Bay School Board and the ongoing commitment of our district employees, we have achieved some remarkable results. Recently having passed the 19th anniversary of our energy program, the attached report shows our school district's cumulative cost savings and greenhouse gas reduction.

#### **Executive Summary (KBtu)**

#### **Cumulative Cost Savings** Billing Period between Aug 2003 and Jul 2022 **Expected Cost** \$18,274,782 **Actual Cost** \$13,302,475 **Actual Energy Cost** \$4,972,307 **Program Savings Percent Savings** 27.2% **Program Savings** Other Savings \$0 **Total Savings** \$4,972,307

# **Expected Energy Cost**

Anticipated expense without energy management.

Base year usage after adjustments for such variables as changes in weather, equipment, schedules, occupancy and prices.

# **Actual Energy Cost**

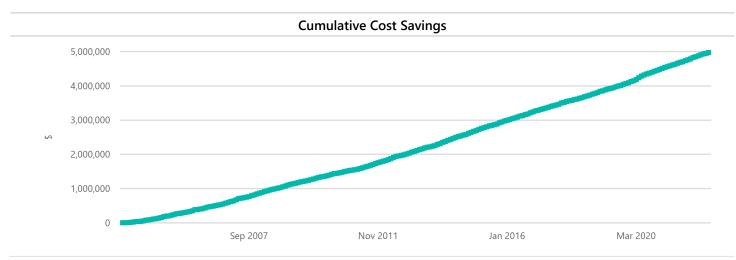
Actual utility costs for electricity, gas, water, sewer, etc. obtained directly from bills.

#### Other Savings

Additional documented savings attributable to Program activities but not the direct result of usage reductions, such as rebates, refunds, tariff changes, etc.

### **Program Savings**

The difference between Expected and Actual Cost, calculated in accordance with the International Performance Measurement & Verification Protocol and ISO 50015. Does not include savings attributable to reduced equipment maintenance and replacement costs and other collateral benefits. These savings can increase the program savings up to 20%.



#### **Cumulative Greehouse Gas Reduction**

**Energy Reduction Impact:** 252,027,583 KBtu 26,090 equiv. metric tons of CO2

This is equivalent to the following:

Passenger cars not driven for one year: 5,435

Tree seedlings grown for 10 years: 668,971





# **Energy Conservation Program Results** Report-23

Thursday, November 10, 2022 2:03 PM (Eastern Standard Time)

Pie and line charts for Cost Avoidance summarizes the effectiveness of your Energy Conservation Program.

### **Filters Used**

- Chart Values equals Cumulative Cost
- Value Displayed equals Cost
- Account is Active equals True
- Billing Period between 200308 and 202207

