Faircreek Church Reduces Energy Costs, Eases HVAC Management, and Increases Comfort



"InThrMa EMS helps us free up time and money that we can invest back into ministry."

Aaron Deal, Faircreek Associate Pastor, Fairborn, Ohio



Problems

- ✓ Effectively regulating heating and cooling proved to be challenging
- ✓ Inconsistent and uncomfortable temperatures
- ✓ Staff and visitors made random thermostat changes
- ✓ Runaway utility costs

Solution

- ✓ InThrMa Energy Management Suite (EMS)
- ✓ Wi-Fi Thermostats & remote sensors
- Project cost reduced by generous Utility rebates

Benefits

- ✓ InThrMa EMS provides centralized management of thermostats
- ✓ InThrMa EMS links with Faircreek's ServiceU calendar to automatically program thermostats
- Prevents or limits thermostat changes
- ✓ 24x7 monitoring of HVAC system
- ✓ Energy costs estimated to be reduced by up to 25%

"InThrMa has made efficiently controlling our HVAC units both convenient and granular. InThrMa provides us with the data and tools to maximize our energy efficiency, and it automatically synchronizes our thermostats in real-time to our digital facility calendar."

Faircreek Church, home to over 1,000 regular attendees, provides three Sunday services, and hosts dozens of activities throughout the week. In order to better support community outreach projects and world-wide missions they are always looking for ways to reduce operational expenses of their two buildings (~36,000 square feet).

To help decrease their utility bills, Faircreek is mindful of energy efficiency and green practices. During energy audits they found that HVAC accounted for the lion's share of their annual energy use. Though their zoned HVAC system and 16 older thermostats provided some scheduling capabilities, it wasn't adequate for their growing needs. One of the audits showed that with better HVAC management, heating and cooling costs could be slashed by up to 25%.

Faircreek staff wasn't able to schedule the HVAC system for each activity due to the church's active and dynamic calendar, leading to uncomfortable temperatures and wasted resources. Staff and visitors would make random temperature changes, often forgetting to change the thermostats back after an activity. Rooms were being excessively heated or cooled while empty, which could last for days until the next activity.

Knowing that they weren't managing their heating and cooling as best as they could, Faircreek explored energy management solutions and after comparing solutions Faircreek chose InThrMa Energy Management Suite (EMS). For Faircreek, InThrMa EMS entailed an upgrade to Wi-Fi Thermostats, deployment of remote temperature sensors, integration with their church calendar, and tying it all together with InThrMa's easy to use web-based EMS.

Thanks to generous incentives from their local Utilities (DP&L and Vectren) as well as a regional energy efficiency program (DRG3), Faircreek qualified for rebates that covered around 75% of the project costs. All together, this was excellent investment in Faircreek's infrastructure and future.

Today, rooms are automatically heated and cooled exactly when needed via the InThrMa EMS, and this also enables Faircreek to set a more energy efficient base temperature for off-hours. Temperatures, scheduling, and a variety of other parameters are now easily accessed and modified via the web, smart phone or at the thermostat.

Faircreek imposes a limited temperature range at the thermostats, giving church members some control. By using a PIN #, administrative staff have full access over thermostat settings should the need arise. Additionally, they are now able to see HVAC data, graphs, stats, and insights via InThrMa EMS that they never had before. Very early on, InThrMa EMS identified a system that was running incorrectly and they were able to address the issue as well as keep a closer eye on it before a major issue arose.

These days Faircreek is averaging around 280 thermostat events per month, some starting as early as 6:30am and some ending as late as 11pm. That's a lot of HVAC events that were not well managed in the past. Church staff and visitors now enjoy a more comfortable environment, all without any extra effort and they know that they are saving energy and valuable Church resources in achieving this level of comfort.

Aaron Deal