

# Brave Questions Create Major Results for Hospital

### **Building the Future**

The journey towards better building performance can start with a dose of courage and asking a fundamental question: "Where and how can we improve?" That's what a midwestern children's hospital staff started asking in 2020. Management believed opportunities for improvement existed and reached out to BuildingLogiX to begin the journey by determining whether there were operational improvements to be made and, if so, what their impact would be on the hospital. Their courage in asking these questions was rewarded.

### **Motivation for Improvements**

This premier pediatric hospital employs more than 2,400 people, including 400 physicians who treat 300,000 children annually. The hospital had recently completed a significant expansion, and its facilities staff had been maintaining patient comfort and humidity requirements during and after the construction. Despite no major operational issues being recorded, the hospital's leadership believed better building performance was possible. This was an important position because it challenged the status quo and opened the door of possibility. BuildingLogiX validated and reinforced the hospital's belief and provided examples where optimizing existing HVAC systems creates more efficient and effective building performance and with reduced operating costs. Identified more than **\$160,000** of Annual Utility Savings Opportunities

Improved Operational Efficiency via **13 Energy Conservation Measures** 

All Operational Improvements with **No capital project spending requirements** 

1.7 Million kWH Saved Annually

6.5 Million kBTU Saved Annually



## **BuildingLogiX's Contribution**

The hospital's team made the right decision and engaged BuildingLogiX to perform a full retro-commissioning study on their facility. We deployed our Connected Building Services (CBS) analytics & fault detection platform to collect data on their entire HVAC system, which included more than 715,000 square feet of:

Inpatient facilities
Outpatient facilities
Operating rooms



Emergency rooms

Medical offices

The BuildingLogiX team reviewed operational data, system performance, and utility consumption and discovered 13 energy conservation measures that would save the hospital more than \$160,000 per year in utility costs. What surprised the hospital staff wasn't that improvement opportunities existed but that all of these improvements were operational, and none required capital budget dollars. All operational improvements were paid for with a fraction of 1st year's annual savings. The Energy Conservation Measures included items such as:

- Optimized Chiller Rotation to bring on the proper machine at the right time
- Tighten Air Handling Unit Sequence of Operations
- Leverage Off-Hour Operations
- Peak Period Adjustments

#### **Positive Results**

0 BuildingLogiX Focus on **Operational Improvements Optimize Operations** of Existing Equipment & Infrastructure No Capital Equipment or Expense Easy and Low-Cost Transition to Continue CBS Analytics and Fault Detection to Protect Gains and Make Incremental Improvements.

A project that began with the hospital's leadership asking brave questions ended with valuable knowledge gained and documented about their system's operations and straightforward improvements. The client was pleased to learn that their facilities were operating at an above-average efficiency in many areas even before the BuildingLogiX project. They were thrilled to learn that operational adjustments can create major additional savings.

In the six months following our analysis, the client implemented changes to produce an additional \$100,000 in annual utility savings. Our team estimates that our solutions will deliver more than 1,700,000 kWh in annual electricity savings and more than 6,500,000 in kBTU savings. The hospital has implemented the Connected Building Services full-time to make incremental operational improvements and sustain the benefits gained.

#### Ready to ask the important questions?

Contact BuildingLogiX and see how our solutions create healthier, higher performing buildings.



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