

Cushman & Wakefield/Polaris Parkway

CASE STUDY



Challenge

While consistently focused on tenant retention, Cushman & Wakefield® juggled construction, growth, and improvements at the Polaris Parkway property, seeking to reduce energy and operational costs, as well as enhance tenant comfort. Lacking a controls system to assist in efforts to achieve their objectives, facility managers were forced to rely on the timeconsuming task of managing building systems manually.

Solution

Based on Trane's reputation and previous equipment supplier relationship, Cushman & Wakefield met with the company to discuss their cost reduction and building control needs. Trane proposed a technologically focused, data driven, cutting edge solution that aligned with the building manager's progressive values. The solution included the implementation of a Trane® Tracer® SC building automation system, complemented with Trane Intelligent Services Building Performance to help manage energy consumption and improve operations.

Improving efficiency, enhancing comfort

A Tracer SC building automation system was installed in the two buildings to optimize daily operations and maximize energy efficiency. The simple-to-navigate system enables building operators to establish scheduling, make set point changes, troubleshoot issues, manage alarms, and engage optimization tools. State-of-the-art graphics and dashboards make it easy to monitor and manage systems, determine the status of equipment and spaces, and take appropriate action to respond quickly to hot/cold calls.

"The building automation system is flexible and easy to access from any computer," said Crock. "Our techs use it to do their daily due diligence, adjust temperatures, and revise the operating schedule if there is a holiday closing, or one of our tenants changes their work hours."

"Our tenants look for a certain cost per square foot. The complex's electricity costs were too high, and we needed better control of temperature in order to reduce hot/cold complaints."

- Benjamin Crock, Property Manager,
Cushman & Wakefield

Cushman & Wakefield/ Polaris Parkway Westerville, Ohio

PROJECT HIGHLIGHTS

Building automation and energy management solutions help reduce annual energy usage by more than 225,500 kWh, greenhouse gas emissions by 10 percent, and comfort complaints by 30 percent. Upgrades result in \$20,000 annual energy savings and service cost avoidance of \$35,000.

Managed by Cushman & Wakefield, a leading global real estate firm, Polaris Parkway is a 139,500 sq ft two-building Class A office complex serving a variety of corporate tenants.

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Assessing energy use, tracking impacts

Using advanced Energy Assessment tools to visualize and measure the building's energy profile, Trane identified how the building was using energy, established a baseline of performance, and offered actionable insights. Providing ongoing support and expertise, Trane also uses the tools to focus on KPIs (Key Performance Indicators) to validate and track the impact of any actions taken, allowing building managers to turn attention to other areas of their expertise.

Identifying opportunities, executing improvements

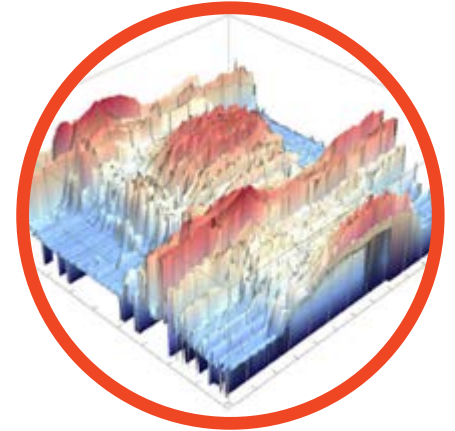
With Building Performance, Trane analyzes data to uncover hidden information and opportunities for improvement to optimize equipment runtime, reduce operational costs and promote sustainable efforts. Cushman & Wakefield and Trane building professionals participate in quarterly review meetings to enable discussion regarding issues, trends, data-driven insights, energy usage, and action items.

Equipment upgrades have included enhancements to mechanical systems, and replacement of humidity sensors and compressors. Service opportunities implemented include asset planning to determine whether to replace or refresh existing HVAC equipment, supply air temperature control, duct static pressure optimization, supply air temperature reset strategies, and variable air volume set point evaluation. Occupied mode scheduling was also reviewed to reduce operating loads and run times, especially on equipment running 24/7 unnecessarily.

Results

A controls system upgrade with a Trane® Tracer® SC building automation system and the addition of Trane Intelligent Services has helped Cushman & Wakefield® reduce energy consumption and comfort complaints at its Polaris Parkway property. Electricity usage has been reduced by 225,500 kWh annually, saving more than \$20,000 a year, and greenhouse gas emissions have been reduced by nearly 10 percent. In addition, hot/cold complaints have decreased 32 percent, allowing the facility to save nearly \$35,000 as a result of avoided on-site service calls.

"We are pleased with the reduction in energy use and comfort calls," said Crock. "New buildings are always being built and we need to stay competitive. Using Intelligent Services is helping us do that."



About Cushman & Wakefield/Polaris Parkway

Daily 24-hour load profiles are used to analyze building energy use and peak demand to determine the impact of completed improvements and potential high-efficiency system modifications.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.

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