



CONNECTED BUILDINGS

How Limbach transformed building performance using Facilio's connected buildings solution

As a premier service provider, Limbach leverages its HVAC, electrical, plumbing, and mechanical systems expertise to achieve cost reduction and sustainability goals for clients across diverse sectors, including healthcare, manufacturing, culture, higher education, and life sciences.





360-degree O&M insights



Implemented FDD with 300+ rules



Improved comfort levels and visitor experience

Challenges:

- The absence of a single pane of glass view resulted in limited access to historical data and performance insights.
- The lack of remote monitoring led to inconsistent monitoring of energy, natural gas, and water usage.
- Process inefficiencies due to heavy reliance on manual processes such as data management in Excel sheets.

Location:

US

Industry:

Service Provider

Project:

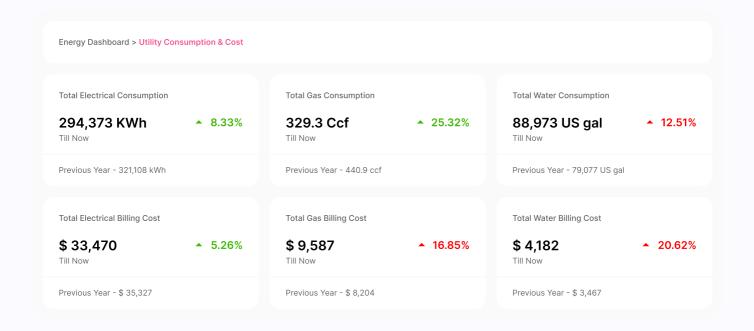
Connected Buildings platform to manage portfolio energy consumption, monitor building energy performance, enhance occupant comfort, and improve operations

The Solution:

Facilio's connected buildings platform was deployed across 4 sites spread over an expansive 1.3 million sq. ft of space and 813 assets, resulting in portfolio-wide visibility, optimized technician scheduling, and eventually bringing about a significant reduction in costs.

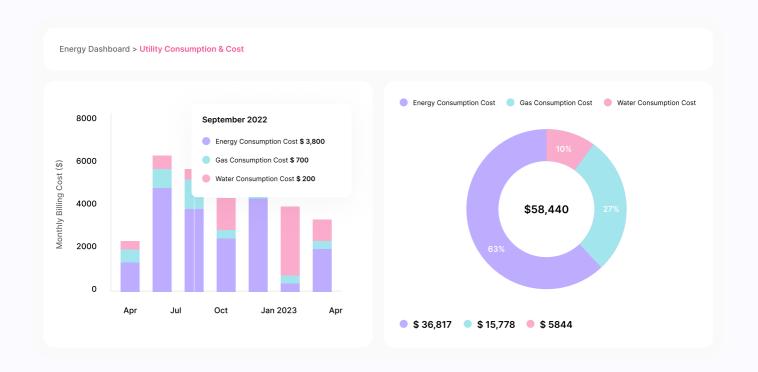
360-degree O&M Insights: Facilio's platform was pivotal in empowering Limbach to gain a comprehensive view of their sites across diverse sectors. By seamlessly integrating the different equipment sensors and consolidating all the insights in a single interface, Limbach gained easy access to crucial data, enabling them to provide new client services.

For example, Spaces, Floors, Buildings, etc., were created on the platform by mapping the associated HVAC equipment and sensors, providing Limbach with a granular view of the operations, thus helping them achieve peak building performance across its client's portfolio



Energy usage optimization: Facilio's utility tracking module streamlined the management of energy, gas, and water usage by uploading historical bills and providing insights on consumption trends, irregularities, and cost analysis, enabling Limbach to make strategic and informed decisions.

For Example, Limbach was able to identify that the AHUs were heating and cooling at the same time and hence rectified the issue to reduce the energy consumption



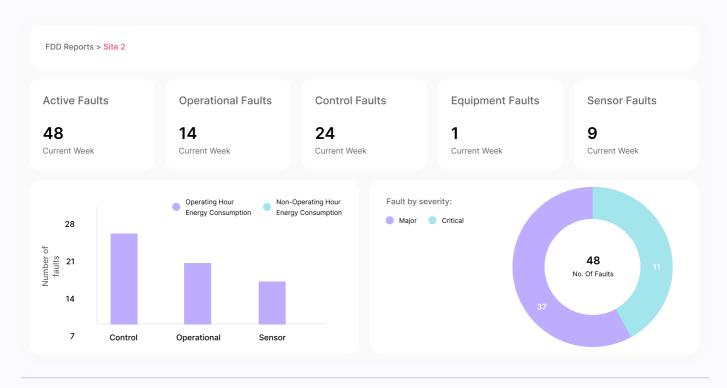
Real-time analysis to boost building performance: Facilio's energy analytics empowered Limbach to optimize building performance, identify energy-saving opportunities, and reduce operational costs even during non-operational hours by providing real-time trend analysis, weather-based comparisons and valuable insights on energy consumption

For example, BAS schedules were compared to real-time readings and modified to optimize system operations

Real-time analysis to boost building performance:



Proactive Maintenance: Facilio implemented FDD with 300+ rules and 4317 FDD alarms for real-time building performance monitoring, enabling timely alerts and customized reports for proactive maintenance at individual sites, optimizing operational efficiency. In addition to this, Facilio's FDD module also implemented RCA and impact analysis to help pinpoint actual fault conditions and derive fault impact with respect to energy wastage and energy cost.



Impact:



Gained end-to-end visibility of operations



Improved asset maintenance via remote monitoring



Identified recurring problems and helped prioritize Capital Planning initiatives



First reports within just 45 days of project kickoff



Optimized technician scheduling for efficient maintenance and minimizing downtime

