



# Gilbane Intelligent Building Technologies

## New Construction and Existing Buildings

Throughout every building's lifecycle, whether existing or new, it continuously generates enormous amounts of valuable data that usually goes unnoticed. Comprehensive building data, albeit massive, scattered, and complex, is the golden thread that links all lifecycle phases together. The data provides an accurate representation of a physical asset's performance at any point in time from commissioning to demolition. Unfortunately, most owners and operators lack the resources and tools to harvest and harness all building data...*until now.*

Intelligent Building Technologies (IBT) represents the details of smart buildings. An intelligent building contains legacy HVAC controls and combines them with modern Internet of Things (IoT) devices to deliver unprecedented monitoring and alert capability. IBT delivers not just a smart building, but a truly *intelligent* building, born with the ability to sense, diagnose and treat operational performance issues in real-time. IBT solutions can be custom designed to address the specific need from asset management to risk management. All the information to successfully manage your building is right there at your fingertips.



*An intelligent building contains all the legacy HVAC controls that have evolved little over the last few decades and combines them with modern IoT devices to provide unprecedented monitoring and alert capability.*

### Owner-driven Solutions Grounded in Risk Mitigation and ESG Goals

IBT aims to empower project stakeholders to make informed decisions related to risk management, safety, and operational efficiency. Our IBT deployments are specifically designed based on your needs and the specific risk exposure of your project. For example, a client's operations would be severely compromised in the event of water intrusion. Our integrated solution can combine leak detectors, third-party shut-off valves, and the creation of a work order to dispatch a technician, all in an owner's existing Computerized Maintenance Management System (CMMS) platform.

Many owners focus on reducing electricity consumption, as well as tracking building performance as it relates to carbon footprint reduction. Energy benchmarking is as important as measurement and verification (M&V). Our solution not only allows our clients access to detailed information as to how their actions are affecting their ESG goals, but also starts tracking that data from building handover. This comprehensive data history combined with additional sensors or sub-meters will allow for better warranty tracking, performance forecasts, asset outlier identification, and M&V for ESG targets.

With real-time feedback and analysis of comprehensive IBT data, your building capital returns become more tightly aligned with financial and operational projections. You will understand the performance relationship of the building, its trends and will be well equipped to make informed decisions that increase the value of your portfolio asset.

## Cradle to Grave Building Operations and Performance

A successful IBT deployment begins at the construction phase. By providing material tracking, jobsite camera functions, daily RFID trade counts and environmental monitoring throughout construction, our system can enhance the visibility of the project to your key stakeholders. IBT provides value during the construction phase and delivers the communication hardware and infrastructure necessary for owners to utilize smart building technology post-construction.

By coordinating with our construction management teams, all the required hardware and cabling can easily be placed into the walls before drywall goes up at the most cost effective point in the schedule. Considering design teams give little thought to building intelligence infrastructure, it is often defined long after established occupancy. By deploying IBT solutions during construction we are in essence “plumbing” the building for future automation solutions. Our IBT platform allows you to take advantage of tomorrow’s IoT technologies without the costly expense of retrofit, while gaining building insights on day one.

## Optimized and Enhanced Transition to Operations

Operations and Maintenance (O&M) handover at the end of a project has long been a pain point for owners and project teams with neither side gaining significant value. IBT, when combined with Gilbane’s Enhanced Transition to Operations (eTOP) services, streamlines this tedious process, reducing the effort required by the project team while increasing the value of information we provide to support efficient operations post-construction. All sensor data points, Preventive Maintenance schedules, alarms, work orders, maintenance history, O&M documentation, and cost details are loaded into your CMMS. Unlike other platforms, requiring web links, SaaS accounts and passwords for each hardware solution deployed, IBT brings all building technology into a single agnostic interface.

### Benefits of Intelligent Building Technologies for Owners/Operators

- › Total Operational Costs Savings – up to 20%
- › Real-time Building Performance/Asset Monitoring
- › Proactive Maintenance Program
- › Reduced Headcount Requirements
- › InfoSec Compliant Network Communications
- › Decreased Risk Mitigation and Downtime
- › Reduced Property and Casualty Premiums
- › Enhanced Financial Reporting and Operational Forecasting
- › Warranty Tracking and Regulatory Compliance
- › Improved Tenant Engagement, Owner Satisfaction
- › Open Source and Hardware Agnostic

Gilbane’s Facilities Management Services (FMS) team is an industry leader in consulting services on CMMS selection, data loading, and implementation services. FMS and IBT combine these solutions in a single management tool wherein data relationships can provide enhanced operational visibility for the capital planning staff. This insight allows for better decision making related to maintenance staffing and cost forecasting plus it reduces the likelihood of unforeseen catastrophic failures.

For more information, please contact:



**Don Conover**

FMS Director

[Dconover@GilbaneCo.com](mailto:Dconover@GilbaneCo.com)

(908) 421-3259



**Eric Hall**

IBT Project Executive

[Ehall@GilbaneCo.com](mailto:Ehall@GilbaneCo.com)

(541) 214-4129



Facilities Management Services