

University of South Carolina: From Manual Processes to a Connected Facilities Operation

The University of South Carolina (USC) is one of the South's leading public research universities. With more than 12.5 million square feet of facilities spread across a dense, downtown campus, USC's Facilities Management team operates in a complex, high-demand environment. The team manages the needs of over 40,000 students, thousands of employees, and a campus portfolio that spans two centuries of architecture. Modernizing its technology infrastructure wasn't just a priority for the team – it was long overdue.

About the Campus

-  **Square footage:** 12.5M square feet
-  **Acreage:** ~400 acres
-  **Students:** ~40,000
-  **Employees:** ~6,000
-  **Buildings:** 155

Operations at Glance

-  **Rooms in AiM:** 50,000+
-  **Work orders per year:** 40,000
-  **Technicians on Mobile:** 120
-  **Implementation time:** ~2 Years

The above data is accurate as of the time of publication, August 2026.

In 2023, USC partnered with AssetWorks Facilities (GoAssetWorks) to implement a comprehensive, fully integrated Integrated Workplace Management System (IWMS). In approximately two years, the university transitioned from a decades-old legacy platform and a web of manual workarounds to a centralized, data-driven operation built on AssetWorks' AiM, ReADY Request, and Go solutions.



ReADY

A user-friendly and integrated work order request solution designed with campus community engagement in mind.



AiM

An enterprise-class Integrated Workplace Management System (IWMS) covering Operations and Maintenance, Capital Planning and Project Management, Space Management, Real Estate and Property Management, and Energy Management.



Go

Persona and function-based mobile apps designed to empower personnel in the field.

The Story of The University of South Carolina

Founded in 1801, the University of South Carolina is one of the oldest public universities in the United States and serves as the hub of a statewide system spanning eight campuses and twenty locations across South Carolina, from the Lowcountry to the Upstate. The Columbia flagship campus sits in the heart of the state capital, competing for space, talent, and resources alongside government agencies, state headquarters, and the full activity of a capital city.



USC's Facilities Management department is responsible for maintaining a campus portfolio that includes everything from historic buildings dating to the 1800s to modern research facilities exceeding 250,000 square feet. Demonstrating operational stewardship to university leadership, and securing recurring deferred maintenance funding, are central to the department's mission.



When Daniel Rabon joined USC as Director of Facilities Business Intelligence (Informatics) in 2021, he arrived with a mandate: implement a modern IWMS that could serve the full breadth of the facilities operation for the next 20-plus years, one and done.

The Challenge: Outgrowing a Legacy System

A System Implemented in 1993

USC's facilities team was running on a work order system that had been in place since the early 1990s. By the time Rabon arrived, the platform had accumulated decades of workarounds that made basic operational visibility nearly impossible.

The gaps were hard to ignore. Work requests came in by phone or an online form, and a call center employee would manually transcribe each one into the legacy system before printing and distributing paperwork orders to technicians in the field. When those technicians needed to log their time, they'd often return at the end of the day to fill out paperwork from memory, leading to missed details, delayed information, and incomplete records.

Data That Couldn't Be Trusted

The problems ran deeper than the work order process alone. Standing work orders masked the true volume and cost of maintenance activity, leaving leadership with no reliable way to see what was really happening across the operation. Space data lived in spreadsheets that were outdated the moment they were shared. Energy data had to be manually entered into the system every single month, and multiple shops operated without any shared view of operations, capital projects, or reporting. The data existed; it just couldn't be trusted or acted on.



“

There's a lot of things in the system that just had limitations on it. So there's a lot of workarounds to where now with AssetWorks, we don't have to do those workarounds.”

Daniel Rabon, Director of Facilities Business Intelligence (Informatics) at **University of South Carolina**.

Siloed Data and Manual Labor

The challenges extended well beyond the work order process. Staff were manually keying utility usage data into the system every month across more than 250 electricity accounts, not counting water. Inventory management was centralized, meaning technicians in downtown Columbia had to endure long waits at busy railroad crossings and navigate heavy traffic to reach the central warehouse for supplies. As the central warehouse was relocated further from the main campus, the problem compounded. For a campus spread across a capital city, that "windshield time" was quietly consuming thousands of hours of labor each year.

Leadership had grown accustomed to operating without real-time visibility into work volumes, technician assignments, asset conditions, or space utilization. Decision-making at every level was hampered by data that was outdated the moment it was shared, a reality the team knew all too well. **"This is as accurate as I can give you," the space manager would say, "but as soon as I hit send, it's old."**



Complexity That Demanded a Single Source of Truth

As USC began its formal market research, a process accelerated in part by COVID-19, Rabon convened a cross-functional team including staff from the call center, trade shops, capital projects, and accounting. Their collective feedback shaped a solicitation document that was deliberately comprehensive. The goal was not to acquire four or five separate point solutions competing within facilities, but to find a single platform where every department could work, access shared data, and see the same picture.

The requirements spanned work order management, capital projects, lease administration, space management, and energy, all with the granular chargeback functionality USC's budget model required. Leadership was clear: this needed to be a system built to last.

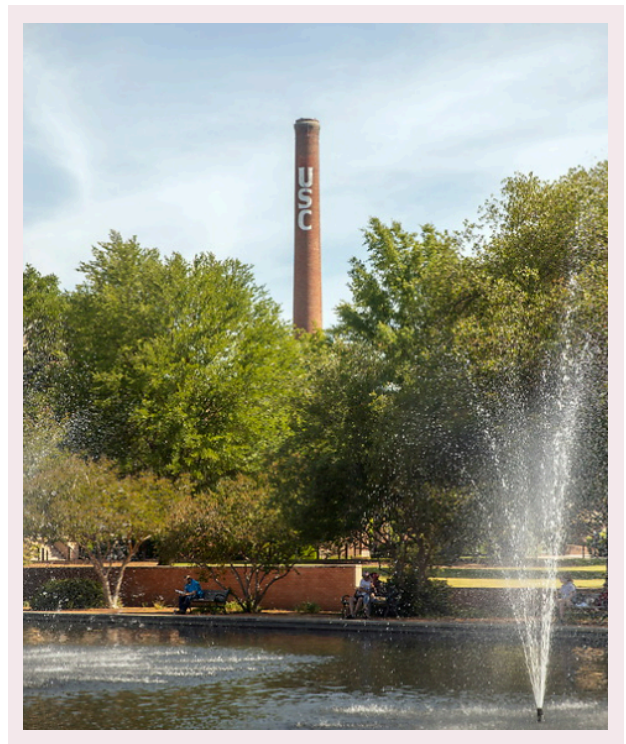
Solution: A Phased, Full-Platform Implementation

Choosing AssetWorks Facilities (GoAssetWorks)

AssetWorks' reputation with peer institutions, including fellow SEC schools, was a meaningful factor in the selection process, but what distinguished AssetWorks in USC's evaluation was the depth and flexibility of its integration capabilities. The ability to connect AiM with enterprise systems like PeopleSoft, push live space data to the registrar's office, and automate data flows that had previously required manual effort was a differentiator USC's team couldn't overlook.

USC also valued the ability to extend the platform's benefits to its seven branch campuses, institutions that might not be able to afford an IWMS independently, but could benefit from USC's implementation. That scalability was core to the vision from day one.

As Rabon recalled: **'Luckily our administration said, I don't want to do this in seven or ten years. I want this to be one and done.'**



A Deliberate, Module-by-Module Rollout — Built for Adoption, Not Just Activation

Rather than attempting to go live with everything at once, the USC team made a deliberate choice: start where the pain was most visible and build from there.

Work management and ReADY Request came first, addressing the most immediate gap: a manual, time-consuming work order intake process that wasn't scaling with the demands of a campus this size. Implementation was timed intentionally to coincide with the slower summer months, giving the team room to equip 120 technicians with tablets and train them on the Go mobile application before the pressure of fall semester arrived.

That breathing room didn't happen by accident. USC had invested in a dedicated training team, a structural decision that paid dividends throughout the entire rollout. Rather than dropping a new system on staff and hoping it sticks, they built the capacity to bring people along properly. The result was a team that was ready, not just launched.

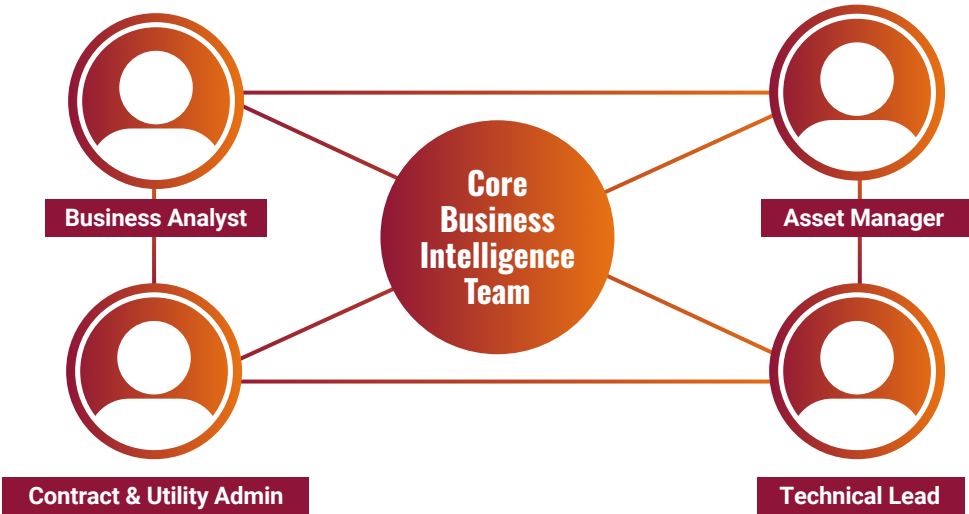
Capital projects and energy management followed, with two modules running concurrently where capacity allowed. Lease administration and space management came next, with the relevant department leads at the table for each go-live, ensuring the people closest to the work had a voice in how it was implemented. Each phase fed the next, building institutional familiarity with the platform while expanding its footprint across the operation.

That expansion didn't stop at the Columbia campus. AiM is now being rolled out to USC's seven branch campuses, extending the system's reach across the full eight-campus statewide network and bringing the same operational visibility to institutions that had never had access to it before.

The momentum that built through each phase never dissipated; if anything, it accelerated. **"July 1st we turned on the system and we haven't slowed down. We've been growing ever since."**

Building the Right Team

Rabon credits a core business intelligence team of four for making the implementation possible: a technical lead capable of writing SQL and building automated processes in-house, a business analyst focused on technician training and dashboard development, a dedicated asset manager with a background in maintenance and data skills, and a contract and utility administrator. A finance partner embedded in the broader administration team served as the "gut check" to ensure all data flows correctly through to the general ledger.



Rabon also organized an advisory committee that included voices from across the operation: call center supervisors, maintenance managers, space administrators, lease teams, and utility plant staff. Each module go-live included the relevant stakeholders, ensuring that real-world operational knowledge shaped configuration decisions, not just technical assumptions.

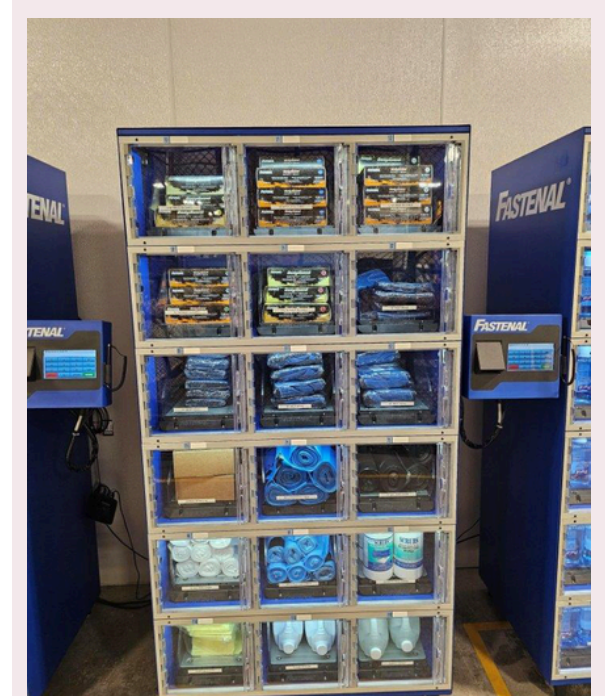
It's an approach that translates well beyond USC's campus. The tendency in large-scale technology implementations is to lean heavily on IT and leave operational staff at the margins. USC inverted that instinct, embedding the people who understood the work alongside the people who could build the systems to support it.

Transforming Inventory: A Decentralized, Point-of-Use Model

One of the most visible operational transformations at USC came through a partnership between AssetWorks and Fastenal, USC's state-contract MRO vendor. Rather than requiring technicians to travel to a central warehouse, crossing downtown Columbia's busy streets and train tracks, USC strategically placed Fastenal-managed vending machines at more than 65 locations across campus. The thinking was straightforward: if the work is spread across 400 acres, the supplies should be too.

What makes this model powerful is how tightly it's connected to AiM. A technician badges in at the machine, scans their active work order in the Go mobile app, and the parts are dispensed, automatically generating a counter release in AiM and capturing material cost at the work order level in real time. Without that integration, the vending machines would simply shift the inventory problem rather than solve it, creating a new layer of manual reconciliation. Instead, inventory levels are tracked continuously, with Fastenal managing restocking based on established minimums and maximums, and AiM holding the single source of truth for what was used, when, and where.

The program has also introduced PM kits: pre-assembled material packages matched to specific assets within AiM, so technicians arrive at a preventive maintenance task with everything they need, without spending time sourcing or ordering parts. Each zone's machine is stocked based on real purchasing history, reflecting the unique needs of buildings that span two centuries of construction.



One of 65+ vending machines across USC's campus

It's the kind of operational shift that's hard to fully appreciate until you see what it saved, in dollars, in hours, and in headcount that could finally be put to better use.



The Results

\$60K

Annual materials savings
via Fastenal partnership

~3 FTEs

saved in call center via
ReADY automation

2 FTEs

Reallocated from delivery
runs to floor care

250+

Utility accounts now
auto-fed monthly via AiM

Real-Time Data Replacing Manual Workarounds

The shift from manual processes to an integrated platform has fundamentally changed how Facilities Management operates. Work requests that once required a call center employee to transcribe a phone call and print a paper order now flow directly through ReADY Request, available around the clock, with active chart field string validation preventing billing errors downstream. The call center has been freed from transactional processing to focus on root cause problem solving.

The manual utility data entry process, which consumed staff time every month across more than 250 electricity accounts, has been replaced by automated file feeds from utility providers directly into AiM's energy module. That position has been redeployed to higher-value work within the department, now serving as a contract administrator supporting capital project managers and the expanding branch campus rollout.

“

I think ReADY alone probably saved us three FTEs by just not being as manual with it.”

Daniel Rabon, Director of Facilities Business Intelligence (Informatics) at **University of South Carolina**.

Operational Efficiency and Labor Reallocation

The decentralized inventory model has delivered measurable cost savings. By eliminating the centralized warehouse delivery model and deploying point-of-use vending machines, USC has reduced material costs by an estimated \$60,000 per year in true material savings alone, not accounting for the labor hours previously spent on deliveries or warehouse trips. Two full-time employees previously dedicated to deliveries have been reallocated to the floor care team, effectively expanding the custodial coverage area without adding headcount.

On the maintenance side, PM kits tied to AiM asset records mean technicians no longer spend time ordering parts or tracking down supplies before a preventive maintenance task. Materials arrive ready for use, and all costs are captured automatically at the work order level.

Greater Visibility—Inside and Outside Facilities

Custom Power BI dashboards built on AiM data have replaced spreadsheets at every level of the organization, from shop supervisors tracking individual technician productivity to AVPs and VPs monitoring department-wide KPIs. Tailored dashboards for building managers and liaisons give academic colleges real-time visibility into work order volumes, response times, and facility status, reducing the perception gap between what facilities is doing and what campus partners see.

ReADY Request has also changed the culture of campus engagement. Previously, requesting maintenance required submitting a chart field string, a barrier that discouraged many users from putting in requests at all. USC removed that friction for standard mission work, making it easy for anyone on campus to submit a request and receive realtime status updates as their work order progresses. The uptick in submissions that followed wasn't a problem; it was the point.

"We want to know where the problems are. We have over 12 million square feet across campus — we can't lay eyes on all of it. So who's better to do that than our 40,000 students?" Engaging the campus community as an extension of the facilities operation has become one of the more unexpected dividends of the platform, yet one of the most valuable.

That visibility isn't just an internal operational win; it's also changing how the facilities team communicates its value to the broader campus. Work that once happened invisibly can now be surfaced and shared.

The goal, in Rabon's words, is to be more proactive: **"We want to show, 'Hey, we're taking care of this facility for you.' PMs are done on a night shift and the customer doesn't see us doing it. But we want to show that."**



Integration as a Strategic Differentiator

AiM is now the system of record for space at USC, feeding live data nightly to PeopleSoft, the registrar's office, and other enterprise systems. Capital project managers, who previously had to enter requisitions in both PeopleSoft and the legacy system separately, will soon complete that workflow in AiM alone, with a bi-directional integration dispatching POs and returning status updates automatically.

This was an integration that the project management team had sought for more than a decade, but could never achieve with the previous system. The ability to finally make it happen is a direct result of moving to a platform with the depth and openness to connect with the university's enterprise infrastructure. After years of trying, the conversation finally shifted from "we can't do this" to "when do we start."

The platform is also serving as a vehicle for USC's broader "One Carolina" technology strategy, connecting facilities data to campus law enforcement, student housing, academic scheduling, and GIS systems. Each connection makes the departments on either end of it more effective: less time reconciling data across systems, more time acting on it. As Daniel put it, **"All these main systems are trying to talk to each other, so it keeps all the processes rolling for everybody."**

For a team that spent years working around the limitations of its technology, getting to this point wasn't inevitable. It took the right platform, the right people, and a willingness to build toward something bigger than a single implementation. The most meaningful outcome isn't any single integration, but the confidence that when the next connection needs to be made, the infrastructure can support it.

Looking Forward

The University of South Carolina's Facilities Management team continues to build on the foundation they've established with AssetWorks, with their sights set firmly on what's next. Near-term priorities include automating remaining manual touchpoints, expanding GIS capabilities across campus, and exploring how AI can make facilities operations more proactive, from work order pattern analysis to predictive identification of recurring issues.

As USC expands to remaining branch campuses and deepens the connection between facilities data and enterprise systems, the groundwork they've built with AssetWorks positions them to keep expanding that strategy. Daniel adds, **"We can't say we don't have the technology for it anymore since we do have AssetWorks. Now it's making that light shine."**

Do you have a **complex facilities landscape** like USC?

AssetWorks gives you deep insight into your asset management data to justify funding and inform funding decisions. Contact us to speak with a member of our sales team if you would like to see similar results.

CONTACT US