Physical Asset Tracking

The Physical Asset Tracking modules handle the Facilities department’s main assets. It includes the following Modules & their functions:

Real Estate Information System
- Maintains current property information, for properties owned by the Board of County Commissioners.
- These Properties can be linked to Buildings, and can also have Leases associated with them. The Building Operations modules was modified to also track Property Work Requests for maintenance.

Space/Roof Management
- Maintains current space and roof data. This includes SQ FT, types of space, departmental occupancy, and tracks materials and maintenance for roofs.

Record Drawings
- Tracks all Record and As-Built drawings that belong to the Facilities department. This information can be searched against, and the drawings are filed and barcoded in accordance with this information.

Furniture & Equipment W/FM Works
- Tracking all assets that belong to the County, from furniture to building equipment, this module tracks location, users, warranties, and has reporting for the 5 year plan and year end asset lists submitted to the BOCC and Auditor. Standard forms are also available.

Software Management Activity
- Tracks all software that belongs to the department, and how it is being used. This also has a function for uploading document, tracking costs, and for forecasting future costs to upgrade.

Fleet Management
- This module track vehicles in the same capacity as equipment, and tracks mileage, fuel, and maintenance associated with each vehicle. Then you can calculate cost and usage analysis reports.

Key Control with Door & Lock Inventories
- Locks and Doors are tied to the actual CAD drawings, and then to specific key cuts. The keys can then be distributed to a specific list of people. Reports are available to report what keys a specific person has, and then the details of what doors those keys open.
Real Estate Information System

The Real Estate Information System is a modified version of the ARCHIBUS ‘Real Property and Lease’ module. This module was designed to track real property, parcels, and leases as they relate to those properties. In Hamilton County we have made changes to track additional details about the property such as who is responsible to maintain it, ability to upload lease documents, integration with the Building Operations module, and additional web reporting capabilities.

As a government organization, it is important that we are able to track and maintain all properties owned by the County (Board of County Commissioners). This module allows the Facilities department to maintain information about all properties owned by the County, location, size, type of property, responsible Agency for maintaining the property with contact information, easements, deed restrictions, tenants (if available), etc. Parcels related to each property are also listed, but information is not maintained on each individual parcel unless otherwise necessary. In addition to the properties, we can also use this module to track Leases, for property or space within a building, in which we are the landlord or the tenant. Lease documents can be uploaded, as well as geographic maps of the location.

This information is then tied back to the Space Management module (buildings located on the property) and the Building Operations module (tracking requests as work requests and tracking that the work was completed).

Some of the Benefits include:
- Ability to find all owned property and values in one place
- Ability to evaluate opportunities to sell unnecessary properties
- Ability to review cost of maintaining properties and annual payments
- Ability to quickly respond to Citizen requests for cleaning or maintaining a property by easily looking up who is responsible for that property and knowing how to contact that Agency

Some of the Standard Reports available:
- Properties with Listed parcels, buildings, and photos
- Cost Analysis by Property Type
Space Management Module

Although most large organizations have space management programs in place, they are consistently challenged to keep the data current and accessible to management for timely decision making. For many organizations, the information resides in AutoCAD or static spreadsheets, making ad hoc reporting a challenge. For others, excessive time is often spent auditing space information on an annual basis, rather than focusing on the upkeep and validity of the data throughout the year. The result can be a lack of confidence in the space inventory numbers, leading to non-enforced space standards, inefficient use of space, and the inability to respond to management reporting needs. For the facilities managed by County Facilities we have addressed this issue.

Our Space Management module of our CAFM system allows us to document facility portfolios and report on facility space utilization. This used for benchmarking to BOMA reports of similar type facilities. Using AutoCAD drawings and relational databases, the Facilities staff and CAFM Partner has built a comprehensive inventory of facility information, including sites, buildings, floors, and rooms. Our intuitive website provides our staff and Design Partners with access to view drawings, generate space utilization reports, and update space data.

Our system has provided:
- Clear visualization and documentation of space ownership
- Ability to do benchmarking and to establish standards as necessary for County facilities
- Accurate space usage reports to avoid external or interdepartmental billing disputes
- Automates space chargebacks to departments, if needed
- Easy to access drawings for use in project planning and estimating
- Easy to update database once drawings changes have occurred
- Facilitates the identification of space inefficiencies and enforcement of room standards
- Captures facility information such as work order detail, assets, and infrastructure
- Online access to facility plans, which can include structural, mechanical, electric, telecommunication and plumbing detail
- Additional Life Safety Information can be accessed online as it relates to projects and general employees and their work conditions

Activities for Space Management:
- Overlay for AutoCAD
- Roof Management
Space Management Add-On Activities
Space Management - Roof Management Module

Although most large organizations have space management programs in place, many systems lack the ability to track roof space as a separate type of asset, integral to the building, and tracking square footage that is separate from the overall building square footage. This space can also have equipment located on it, Work Orders and Projects associated with it, and the Building level reporting includes information about it. Proper maintenance and knowledge of the roof surfaces is just as important to the Building Manager as any other part of the building’s infrastructure.

Our system has provided:
- Clear visualization and documentation of roof space
- Important information about the various roof surfaces for each building, such as the date last replaced, vendor, flashing, deck type, drainage, insulation, roof slope, vapor retarder, etc.
- Easy to access drawings for use in project planning and estimating
- Captures roof information such as work order detail, assets, and infrastructure
- Online access to roof plans and detailed reporting per surface

Space Management - Overlay for AutoCAD w/Design Management

The Overlay for AutoCAD allows for a direct connection between the AutoCAD drawing space data and the ARCHIBUS database. The AutoCAD Add-On that is provided allows for updating various pieces of information that is connected between the drawings and database, including but not limited to: room square footage, location of equipment, furniture and employees, hazardous material locations, asbestos and lead-based paint locations, and lock & door details. (More detail is available on the sheets for the associated modules)
Furniture & Equipment Module (Asset Management)

As a Government Organization with funding from various sources, we are responsible for tracking everything we purchase and dispose of. An annual inventory is submitted to the Board of County Commissioners and the County Auditor, and then the information is reconciled. We need to know who owns everything, who pays the bill when it comes, and who is responsible for keeping track of it.

The ARCHIBUS Furniture & Equipment module allows us to track our assets to the necessary level. We track all non-consumable items purchased over a certain dollar amount (varies by agency and funding source), tools, computers, and equipment related to the function of the buildings.

Additionally, we can track PM and On-Demand work that is performed on the equipment, track tools for tool control in secure work locations, Confined Space and Lockout Tagout Procedures for the equipment, sub-components, and we track the software associated with each computer in a sub table. The Warranties module is available to track multiple warranties per piece of equipment, as well.

Facilities Furniture & Equipment module features are:
- Online snapshot of the equipment including photo, location in building (floor plan), details of equipment, work history, and scheduled maintenance
- Ability to add and update equipment online
- Easy inventory tracking system that can be used by all County departments/agencies
- Tracking of warranties
- Track depreciation of assets
- Annual budget Forecasting - replacement plan

Benefits for the County:
- Annual inventory submittal process is more efficient - reports are printed for each location or person responsible, information is updated via the website, and pre-formatted reports are available for submission
- Ability to track maintenance of equipment and know when we are spending more on repairs that the actual value of the asset

Additional Asset Management Activities:
- Software Management
- Record Drawing Inventory
- Key Control with Door and Lock Management
- Warranty Management
Building Operations/Furniture & Equipment Add-On Activity

Building Operations/Furniture & Equipment - FM Works Mobile - PDA Extension

FM Works Mobile is a hand-held application that extends the power, innovation and productivity of the Building Operations and Furniture & Equipment modules to mobile PDA devices. Data from the ARCHIBUS system is synchronized to a local database installed to the handheld device via the FM Works Server application. Once the database is synchronized, the handheld is used “offline” to review, enter and update work. It provides the capability for the submission of work. It will run on PDAs with Windows Mobile 5.0 and 6.0. Data communication can be via hard-wired “cradle sync”, IEEE 802.11b/g wireless LAN and/or broadband (cellular) wireless WAN.

Mobile Work Express™ -- allows maintenance workers, using their own login ID, to access a focused screen that displays only their own work orders (and/or unassigned requests in their trade) and allows them to make updates with an easy-to-use interface. This powerful capability enables maintenance workers to access and update their work orders from their own handheld device anywhere the worker has wireless access to the intranet.

Equipment Survey™ -- enables you to download your equipment inventory to the handheld so it can be field verified, updated, etc. You can add new equipment, as it is discovered in the field. The Filtering tool enables equipment to be filtered, as it is scanned, and allows default data to be added for new equipment. The “Bean” Counting tool allows users to set the current date/time as “Date of Last Count”, when scanned, and/or predefine a location, and have assets update as they are scanned.

Benefits

- Designed for Ease-of-Use
- Quickly Update Equipment Location Details
- Quickly Audit Asset information
- Easily run reports showing what you did not find in your audit
- Easily update work requests with notes and labor hours
- Quickly add work requests, while out in the field
- Ability to look up details about equipment when performing Maintenance Service (finding the filter number, for example, without having to return to their desk)
**Software Management Activity (Asset Management)**

Management of purchased licenses and their documentation is very important to an organization, and the larger the organization, the more critical it is to know where you are using software.

The ARCHIBUS Software Management Activity allows us to track our purchased software, and upload documentation related to the purchase of the software, as well as, knowing where a subscription or access fee is due, when product support ends, etc.

Additionally, we can track what equipment the software is installed on. The information is secure, and usable for reporting purposes. Ever wonder if you have gone over on your licensing with recent purchases, or some old computers you brought out of storage and setup for an employee? This module can help you manage it. You can also track versions. As computers are upgraded to new versions of software, you can manage that in the system, so you can review the status of your upgrades.

Facilities Software Management Activity features are:
- Detailed listing of software
- Ability to store key codes, license codes, etc.
- Ability to upload documentation (invoice, PO, Quote, EULA, etc.)
- Easy designation of relationship between software and computers installed on
- Budget forecasting for upgrading software, or paying annual fees
- Per software item, and key, reporting on what equipment the software is installed on
- Full reporting on your department’s available licenses

Benefits for the County:
- Ability to report on overages in licensing
- Ability to report on software costs and value of existing software
- Ability to track relevant documents
Record Drawing Inventory Activity (Asset Management)

The Record Drawing Inventory and Request activity was developed to address Ohio Senate Bill 184, in response to 9/11. Drawings are barcoded and cataloged into ARCHIBUS, from construction projects, and stored in a secure location. The database will allow you to search for certain types of drawings or drawings of work performed in certain locations, and then details are available for the drawings location (room number, drawer, and barcode ID).

Information being tracked for each drawing includes the following: Barcode Number, Building, Floor, Room, Drawer ID, Project Name, Sheet Name, Sheet Number, Drawing Date, Drawing Type (Architectural, Structural, etc.), Drawing Scope (Full or Partial Plan), Drawing Medium (Bond, Sepia, Mylar, etc.), Drawing Size, 3 fields for Partnering Firms, Available on Website, Security Level, and the location of the Electronic Files (if any were provided).

Requests can also be made through the system for drawings. These requests are sent to the appropriate employees for review and approval and then the request is passed on to the individual responsible for sending the drawings out for copies. Each drawing requested can be approved or declined, based on the security level provided and the requestor and purpose for the request.

Facilities Record Drawing Inventory activity Benefits:
- Controlled secure access to drawings
- System for easy lookup of drawings for projects
- Method for tracking changes in the building and confirming that all updates have been made to the master plan drawings maintained for ARCHIBUS
- System for others to request drawings for approval
- System for tracking who has made drawing requests and of which drawings they were given copies
Key Control with Door and Lock Management *(Asset Management)*

For years, County Facilities maintenance staff utilized a paper system to track key cuts and key ownership. The existing key database was limited in its abilities, and did not support flexible queries or easy reporting. Multiple instances of the database created further complications, as older data was not easily accessible for reporting purposes. The implementation of our CAFM system is a perfect opportunity to integrate the existing key data into the facility management process used by County Facilities.

County Facilities partnered with GBBN Architects, Inc. to implement a Key Control module for improved tracking and management of keys in various County Facilities. This supports the tracking of key instances, key cuts, and key standards, while utilizing the existing CAFM inventory of buildings and floors and building web-based screens to make the data accessible. Web screens in the iFM web application provide integration with the existing work order system in ARCHIBUS/FM to track keys associated with individual work requests.

In addition to the Key Control Module, we added an activity to tag doors on the master drawings in AutoCAD and tie that back to a record in the database that also relates to a table of locks. The keys, locks, and associated doors are all then integrated. This allows us to track which doors are able to be opened with each different key, or key cut, and who has been issued those keys. It also allows for better distribution of keys and knowledge of how to key a lock when new ones are installed.

Using reports in the Key Control module, users can view:

- Keys issued by individual and/or building
- Keys issued by key cut
- Hours and costs associated with key work requests
- Reports to see who holds the keys and what buildings the keys can access
- Reports showing which doors are accessible by key cut and/or individual
- Information is available on the master drawings, so when floor plans change, we know that new information may be required for doors, locks, and key cuts
- Easily accessible information for projects - Architects know that when they see a door tag on a drawing that they need to check with Facilities to determine what locks are necessary and how to have the locks keyed for access
Fleet Management Module (Asset Management)

This Module offers a solution to the critical need of safety and efficiency in operations for every organization that owns fleet - whether they consist of cars, trucks, ships, or planes. ARCHIBUS/FM helps track each vehicle, its usage, mileage, fuel consumption, maintenance schedules, and more. ARCHIBUS modules are all add-on products that can be used as a stand alone product or as an integrated product. The iFM and Web Central websites allow users to have a simple way to enter information, modify existing information, develop reports, and see an overview of the fleet which they maintain.

Hamilton County’s Fleet Module offers functionality to manage vehicles, fuel consumption, users, how the vehicle is being used, mileage, warranties, maintenance schedules, and on demand maintenance. Several standard reports are available through the websites, as well as the option to easily set up custom reports, via the Facilities department.

Some of the Benefits include:
- Boosts fleet availability through improved preventative maintenance
- Lowers operating costs by enabling implementation of a maintenance program
- Tracks all maintenance and vehicle use in one place making it clear when a vehicle is an issue
- Provides one place to store all vehicle information
- Provides the County garages with the information they need to better service other department/agency vehicles
- Allows users to reserve vehicles on their own - where departmental policies allow
- Provides easy access to warranty information for vehicles

ARCHIBUS also allows users to better control the cost and downtime of their fleet. The preventative maintenance feature allows users to follow the manufacturers maintenance schedule. This will keep the vehicles in better shape, they will likely last longer, and mechanics will be able to better predict their workload based on those schedules, additionally the number of pop-up requests will be reduced because the vehicles are being better maintained.

Some of the Standard Reports available:
- Vehicle Inventory
- Individual Vehicle Summary
- Mileage Per Employee
- Fuel Usage Report
- Scheduled Dispatch Orders
- Vehicle availability and scheduled vehicle reports