Operations & Maintenance

The Operations & Maintenance modules handle the Facilities department's main functions. It includes the following Modules & their functions:

Building Operations Management with FM Works

> Work Order System on Internet and Handheld devices

Preventative Maintenance

> Scheduled work for Equipment, Locations, and Vehicles

Warranty Management

> Tracking warranties for equipment and vehicles. This helps expedites the process of getting repairs taken care of, and keeps the County from paying for something that should have been covered under warranty.

Confined Space / Lockout Tagout Procedures

> Employees save time by having this information available on their work requests.

Housekeeping Management

> This module tracks cleanable fixtures and can approximate time and staffing necessary to clean buildings, based on established standards and levels of cleanliness.

Building Operations Module

What is the Building Operations Module

County Facilities staff has the ability to effectively manage work orders across all County facilities. Using web enabled screens and work queues, the work order management system can track on demand problems, schedule preventive maintenance tasks, document labor and parts, and perform historical reporting to measure trends and workloads. This system is also used by the Sheriff's maintenance staff to manage their work tasks at the Justice Center and Queensgate. Also Cincinnati Museum Center (CMC) is using our work order system to manage their work tasks.

How does the County use it

Our implementation strategy has help organizations, such as CMC, quickly implement a work order system with no internal software or hardware requirements thru coordination with their internal IT departments. We provide training classes and training documentation which targets each type of system user, including managers, trade and maintenance supervisors, and staff. Our CAFM partner has provided data conversion services which ensured that past work order history from a legacy system was properly carried over for reference and reporting purposes.

Our work order system allows us to have the ability to manage several thousand work requests per week across an unlimited number of locations. With the ability to collect requests from individuals outside the County Facilities Department, our web enabled work order system has drastically improved communication with the buildings' tenants and Building Managers.

Benefits and Features of the ARCHIBUS Building Operations Module

Facilities Work Order system features are:

- Online submittal of work requests by approved users

- Ability to approve, assign, issue, and complete work requests online

- Pre-filtered work queues to view work assignments

- Standardization of preventive maintenance tasks through common instructions

- Web enabled aging, cost summary, and workload reports

- Flexible reports to see active and historical work by location, trade, or individual craftsperson

- Management of work history on equipment and facility assets

Benefits to for our Building Managers:

- Schedules maintenance tasks through the entire lifecycle of an asset (equipment, fleet, or property)

- Helps balance future PM work against on demand requests and project demands

- Provides audit trail of work performed on assets for reporting and issue research

- Automatically generates work orders that can be assigned to maintenance staff

Activities of the Building Operations Module

Activities for Building Operations:

- Preventative Maintenance

- Confined Space / Lockout Tagout Procedures

- Warranty Management (see Asset Mgmt for more details)

- FM Works - PDA Extension

Building Operations Add-On Activities
Building Operations - Preventative Maintenance

County Facilities has implemented a preventive maintenance program and work order system that places equal importance on defining an efficient plan to operate the facility. Our structured preventive maintenance (PM) system ensures that a facility's structure and assets are maintained at recommended intervals to control long term operating costs.

Our staff has provided solutions to effectively structure and schedule preventive maintenance tasks. This is done thru direct integration with our work order system which ensures that preventive maintenance tasks are generated on a timely basis and that work is documented for historical reporting. Using web enabled screens and work queues, the system can track PM work orders, document labor and parts, perform historical reporting to measure trends and workloads, and forecast labor requirements for future PM demands.

Benefits of Preventative Maintenance:

- Schedules maintenance tasks through the entire lifecycle of an asset

- Defines standard PM procedures for all maintenance staff to follow

- Helps balance future PM work against on demand requests and project demands

- Automatically generates work orders that can be assigned to maintenance staff

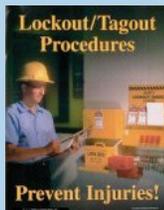### Building Operations - Confined Space / Lockout Tagout Procedures

This Activity was developed by our ARCHIBUS Business Partner to manage the procedures written for Confined Spaces and Lockout Tagout Conditions. A Safety Consultant provides the County with written procedures that each employee should follow when working in certain areas or on certain pieces of equipment. These procedures are now available on the website. When a Work Request is created for a piece of equipment or a space with an associated procedure, there is a link in the edit screen, report preview screen and on the shop print-out screen to open each related procedure. Additionally, pertinent information about types and quantity of locks and tools necessary to perform the work are located on the shop print-out and general report so that our staff are aware of the conditions and needs prior to reporting to the location of work, and without having to open the actual procedure.

Benefits of Confined Space / Lockout Tagout Procedures:
- Updated Procedures are available on the website

- Pertinent information about necessary tools, locks, and equipment are available prior to employees arriving at a work site

- Procedures available on the website for printing - so employees can have their own copy for equipment they are specifically responsible for

What is the Warranty Management Activity

Warranty Management Activity (Asset Management)

As part of the Management of our Facilities and assets, the County Facilities Department has the need to manage warranties as they are associated with the equipment and vehicles we own. This information not only needs to be managed, but it needs to be available in the ARCHIBUS system for easy reference when there is an issue that requires maintenance or repair of a warranty item.

The Facilities department has modified the existing Warranties table within ARCHIBUS to handle warranties for equipment and vehicles, and made the necessary changes to accommodate the likelihood of there being multiple warranties per item. The warranties are associated with a vehicle or piece of equipment, and the type of warranty is identified, as well as the date it expires, who the warranty is with, and a PDF of the warranty can be uploaded to the database/website for review online.

When accessing the summary report for a given piece of equipment or a vehicle, there is now a section available to display all associated warranties. There is also a link next to each warranty for the loaded PDF files, that will open the file in a separate browser window.

Benefits of The Warranty Management Activity

Benefits of the Warranty Activity:
- Ability to catalog various warranties for equipment and vehicles
- Easy reporting of warranties by date, show what warranties are still active
- Ability to see associated warranties in vehicle and equipment summary reports
- Ability to upload PDF versions of the actual warranty for online viewing - making the information easily available to all employees

Building Operations/Furniture & Equipment Add-On Activity
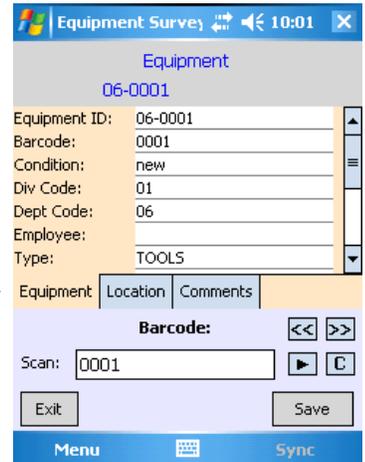**Building Operations/Furniture & Equipment - FM Works Mobile - PDA Extension**

What is FM Works Mobile

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 hand-held device via the FM Works Server application. Once the database is synchronized, the hand-held 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

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)

Hamilton County Facilities Department
Available Support Services - IWMS
(Integrated Workplace Management System)

Housekeeping Management

The Housekeeping Module in ARCHIBUS takes cleaning a few steps beyond what the Building Operations Module can provide. The module allows organizations to track individual fixtures that will be cleaned, such as, toilets, urinals, sinks, water fountains, etc. These are items that are not typically found in an Inventory system like the ARCHIBUS Furniture & Equipment Module, since they are part of the building. The module also allows for the tracking and calculation of your room surfaces for cleaning, wall area for painting, flooring types (carpet, tile, etc.), allows you to track individual cleaning tasks and calculates cleaning time based on the industry standards, and can create detailed work cleaning schedules.

The module was originally developed in a MS Access database that was connected to the ARCHIBUS Space Management Module. The Access database would pull in the room information and Square Footage for calculation cleaning times. Cleaning Staff would be established in Access and schedules created for export to a PDA.

At Hamilton County, the module is built in the ARCHIBUS database, so that information does not need to be shared with an outside system anymore. We have found the information to be invaluable to our daily operations, especially since we are working with a lot of outsourced cleaning personnel.

Benefits

Benefits
- Counts of cleanable fixtures per building, for bidding on cleaning services
- Clearly defined steps and procedures for cleaning, which allows various outside vendors to operate exactly the same
- Calculates the number of full-time employees necessary to clean each facility
- Generates a random listing of rooms to spot check, to assure that no one person is being checked on more than others
- Well defined tasks that generate based on cleaning schedules set, similar to PM Schedules