**Wayne State University - Facilities Planning and Management**

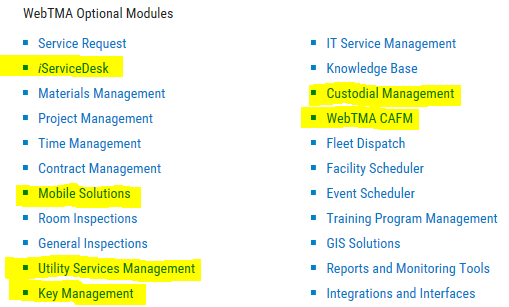
**Information Technology (IT) Infrastructure**

**Executive Overview**

The FP&M IT infrastructure consists of numerous applications, servers, network devices and communication systems hosted on a variety of computing platforms with a large number of physical and virtual servers. An example of this is the **Building Automation System (BAS)** which is one of the more critical enterprise application/system environments within the University. It consists of a vast array of embedded devices, servers and various other network hardware, primarily in support of the Heating, Ventilating, and Air Conditioning (HVAC) infrastructure located throughout the various campus locations. This system is very resource intensive and supported by multiple departments and vendors.

Another resource intensive application utilized by FP&M is the **Facilities Management System (TMA).** This software package functions as the University’s “Computerized Maintenance Management System” (CMMS) that’s used to track work-orders and associated data. Other critical features of the system include inventory management, project management, asset/equipment management and functions as a preventive maintenance system. The system is also used for numerous other purposes and is routinely enhanced with additional features that serve to benefit and communicate with users throughout the University. It integrates with the University’s Enterprise Resource Management system (Banner) to facilitate monthly billing to internal customers.





(Highlighted modules are currently being utilized)

Another important application is the **Key Management System** (KMS) which manages and tracks key/core devices and assignments. It assists with key control and physical security management.

The **Space Management System (Archibus)** is used by many units to track and report on space allocation throughout the University. It assists with space efficiency and helps compute occupancy costs, assists with space chargebacks as well as cost recovery and billing/reporting requirements. This system helps ensure that space planning information is accurate and defensible by linking (CAD) drawings with facilities and infrastructure data. It also provides space allocation analysis, including occupancy reports and assists with current and future space needs.

Modules available:

Strategic Financial Analysis

Advanced Portfolio Forecasting

Portfolio Management

Lease Administration

Cost Administration

Cost Chargeback & Invoicing

Capital Budgeting

Project Management

Condition Assessment

Commissioning

Strategic Space Planning

**\*Space Inventory & Performance (currently being utilized)**

Personnel & Occupancy

**\*Space Chargeback (currently being utilized)**

Strategic Master Planning

Enterprise Move Management

Enterprise Asset Management

Asset Management

Asset Portal

Furniture & Equipment Management

Telecommunications & Cable Management

Environmental Sustainability Assessment

Energy Management

Green Building

Waste Management

Emergency Preparedness

Compliance Management

Clean Building

Environmental Health & Safety

Hazardous Materials

On Demand Work

Preventive Maintenance

Condition Assessment

Call Center Wizard

Reservations

Service Desk

Hoteling

Fleet Management

The **Workforce Time and Attendance System** is used to track time, manage attendance and schedules. It integrates with the University Enterprise Resource System (Banner). It uses the HR and payroll modules to assist with scheduling, collecting labor information, and processing payroll while improving data accuracy.

Modules available:

**\*Time & Attendance: Captures detailed labor data and automates pay rules (currently being utilized)**

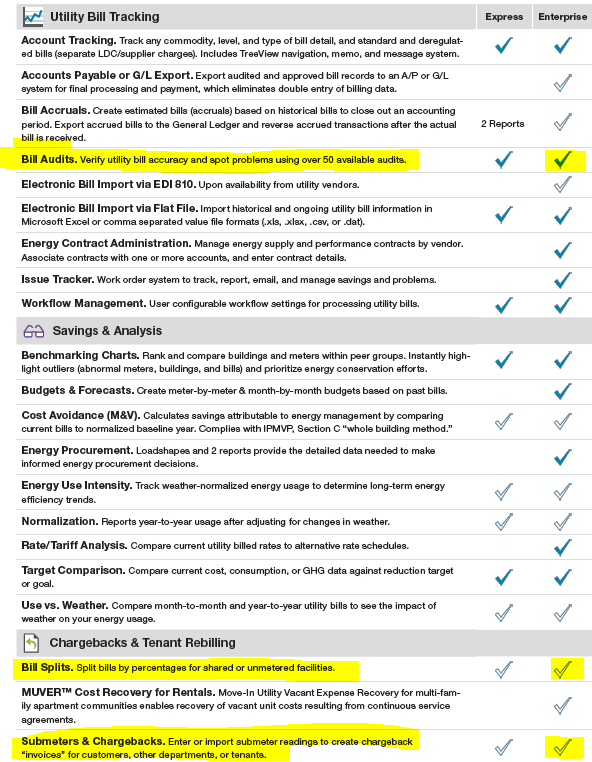
Absence & Leave Management: Manage employee leaves.

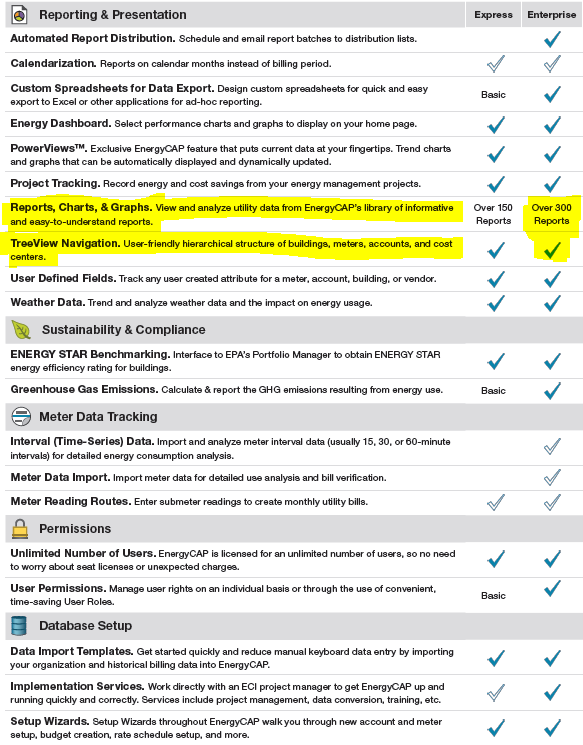
Forecasting & Scheduling: Optimizes workforce scheduling.

Analytics & Reporting: Provide business analysis and workforce planning

Fatigue Management: Automates various facets of fatigue risk mitigation by enforcing employee work-hour limits and aligning them with fitness for duty best practices

The **Utilities Tracking System (EnergyCAP)** is the enterprise software application used for tracking, managing, processing, reporting and analyzing utility bills and energy usage information. It records monthly utility bills; assists with audits and spot billing as well as indicates metering and consumption problems; it prepares a variety of management and analysis reports; and helps to ensure overall organizational energy efficiency. One of the primary purposes of this system is to provide accurate and timely energy information, which is critical to energy management, utility bill processing, energy procurement and utilities accounting, budgeting and reporting.

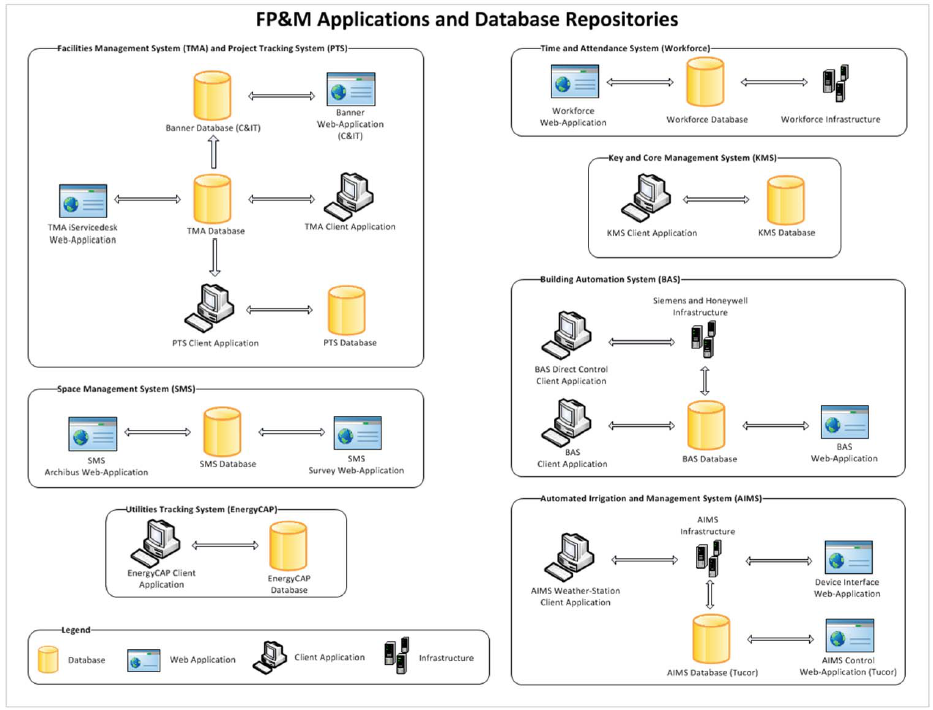




(Highlighted modules are currently being utilized)

The **Automated Irrigation Management System** is a network of computer software, hardware and irrigation infrastructure that enables the monitoring and operation of irrigation systems. An important feature of the system is that it enables administration of the environment from a central interface. It’s capable of monitoring and automatically adapting system operation and irrigation run-times in response to conditions in the system and surrounding area (weather change, pipe breaks, etc…) as well as take into account parameters defined by the operator.

The **Project Tracking System (PTS)** is *custom* application used for tracking and organizing project related data, primarily University Plant Fund Account (PFA) projects. Over the years, the system has evolved to include additional capabilities and features through extensive revisions, such as the Invoice Tracking and Shift Notes modules. Work has commenced on migrating the system to an online “Business Intelligence” web-application.



To summarize, FP&M is constantly integrating and implementing new applications, systems, services and technologies that benefit the department and University community. Projects currently in progress are the implementation of the Facilities Management System (TMA) Custodial module (manages custodial staff, work-flow processes and cleaning supplies, while capturing costs by utilizing ISSA 447 Cleaning Times and APPA's Custodial Staffing Guidelines) as well as the mobile work-order management system for technicians in the field. These are just a few examples of the technology projects that will enhance the effectiveness and efficiency of the service’s the department provides to the entire University.