ARCHIBUS(r) Supports Core Research Activities at University of Medicine & Dentistry of New Jersey

Mission of UMDNJ

The University of Medicine and Dentistry of New Jersey (UMDNJ) is the state's university of the health sciences, with programs at five main academic health center campuses in Newark, Piscataway, New Brunswick, Stratford, and Camden, and at educational and health care institutions in communities throughout the state.

The University's mission is to advance the health sciences and prepare future health professionals for leadership roles; to respond to academic, health personnel, and service delivery needs, while recognizing the diversity of its constituencies.

UMDNJ offers a broad spectrum of health education programs. With more than 4,000 students enrolled in programs in medicine, dentistry, the biomedical sciences, and other health professions, the University owns and operates 59 buildings, with more than 6 million square feet of space. UMDNJ was founded as the College of Medicine and Dentistry of New Jersey in 1970 and granted University status in 1981.

Developing a CAD/CAFM Database

In 1994, the University evaluated the top three Computer Aided Facilities Management software products and chose ARCHIBUS for its overall functionality and AutoCAD(r) integration. The University had already established AutoCAD as its CAD software standard, and ARCHIBUS proved to be the most effective product for its needs. UMDNJ's main goals were to standardize drawing media, and establish site and building standards, organizational standards, and space usage standards.

Prior to the CAD/CAFM database development effort, a space management database was used in dBase format, providing information primarily for reporting research space allocations to state and federal agencies, including the Commission of Higher Education, the National Institutes of Health, and the Federal Government.

The standardization of the space usage codes and descriptions was developed based on the standards established by the Commission of Higher Education. The HEGIS (Higher Education General Information Survey) coding system was integrated into the ARCHIBUS database, providing coding and category for classroom, research, administrative and residential space assignments. Tracking space usage and tagging it with the appropriate code in ARCHIBUS streamlines complex reporting requirements, enabling the University to efficiently track and report on more than 6 million square feet of space by business unit, department, space category and type.

The integration of AutoCAD with ARCHIBUS has allowed the University to ensure that building space allocation is maintained on a room-to-room basis for 59 facilities across the State of New Jersey.

Regulatory Agency Reporting

ARCHIBUS implementation has significantly improved the accuracy of data for reports required by various regulatory agencies. UMDNJ's use of ARCHIBUS assists in the preparation of reports to the Commission of Higher Education, Research agencies, and the Indirect Cost Recovery Proposal to the Federal Government. ARCHIBUS has simplified the process in preparing the Indirect Cost Recovery. This proposal determines the percentage of reimbursement from the Federal Government for grant-funded research and has resulted in millions of dollars for the University over a period of five years. ARCHIBUS was personalized by the local ARCHIBUS Business Partner, Robotech CAD Solutions, Inc., to accommodate the Cost Recovery requirements. This functionality includes integrating room usage survey data into the ARCHIBUS database, calculating room usage percentages and areas, summarizing areas in the department and floor levels, and exporting them to a financial system for further calculations and audit. The set of scripts and reports provides an easy menu-driven operation to process the survey data quickly and consistently.

UMDNJ Space Management

The UMDNJ ARCHIBUS system has also improved the availability of reports to various Business Units. Provisions of Facilities Background data, Departmental Allocation, and Space Usage data are now readily available. The integrated tables and primary fields produce accurate data which is no longer subject to human input error. Since the square foot calculations are generated from the AutoCAD drawings, human interpretation is no longer a factor.

Over time, the use of ARCHIBUS has proven to be a tremendous resource of information for all UMDNJ business units across the state. In 2003, UMDNJ Department of Facilities Planning and Construction initiated the implementation of ARCHIBUS Web Central in order to provide and share the ARCHIBUS resources with other School/Units. A Facilities Web Portal provides access to reports, drawings in DWF format and graphic stacks diagrams to analyze space allocation and building occupancy. School/Unit administrators can now review the data on a regular basis and provide updates as needed. The management of this data on a School/Unit basis will further enhance its accuracy and improve any federal reimbursement and grant funding for the University.

ARCHIBUS System Expansion

UMDNJ is planning to increase the utilization of ARCHIBUS across additional groups-schools and units, and implement additional functionality such as Emergency Preparedness and Building Operations Management. UMDNJ relies on its ARCHIBUS Business Partner to provide the technical services and support needed to maintain and expand the CAFM system. Robotech's role has grown in recent years from providing as-needed technical services and support to providing on-site, day-to-day CAFM services; project management, CAFM portal development, and drawing/database maintenance.

Vital Statistics

Organization:
University of Medicine and Dentistry of New Jersey

Location:
Newark, NJ

Facilities Facts:
Eight schools located on five main campuses, totaling over 6 million square feet

ARCHIBUS Applications:
Space Management, Overlay for AutoCAD with Design Management, Strategic Master Planning, Real Property & Lease Management, Furniture & Equipment Management, Work Wizard, FM Web Central

3rd Party Applications:
ArchiSTACK (an intranet application for Building Stacking charts by Robotech CAD Solutions, Inc.) and Autodesk Architectural Desktop
Impetus for Implementing:
Needed clearer understanding of space allocation, classification, and categorization

Benefits Gained:
Increased Federal Indirect Cost Recovery dollars by streamlined reporting for state and federal grants

Future Plans:
Implementing ARCHIBUS Emergency Preparedness, Building Operations Management, Telecommunication & Cable Management, and Room Reservations; encouraging self-service options with FM Web Central

Business Partner:
Robotech CAD Solutions, Inc., Hoboken, NJ

Web Site:
www.umdnj.edu