

## Missouri Conquers the Space Challenge

### Executive Summary

With the spirit of innovation and collaboration, the Office of Administration conquered the challenge of managing space for Missouri State Government. Faced with overseeing approximately 30 million square feet of owned and leased properties, Missouri's Office of Administration Director of Facilities Management, Design and Construction (OA/FMDC), David Mosby, led the initiative to engage the use of technology to both manage those assets and identify opportunities for improvement.

Beginning in March 2005, the Space Management, Real Property and Lease, and Building Operations software applications were implemented with the help of St. Louis-based ARCHIBUS Business Partner Arcturis, Inc. This use of technology to capture and organize data associated with the vast amount of space to manage provided Missouri with the ability, for the first time, to create a space allocation standard, monitor the efficient use of real estate, identify opportunities for space consolidation, and capture important attributes of both leased and owned properties.

With the ability to capture space information, maintenance and energy consumption electronically, great savings have occurred in the budget and billing processes. No longer is it necessary for Missouri to upfront the space costs with General Revenue funds. Efficiencies of both time and money have been realized in the auditing and payment processes of the state's utility bills. GIS capabilities are currently in the works becoming the backbone that ties into a portal, links with Google Maps, and integrates with the state's centralized IT systems to support a number of other initiatives.

More savings and efficiencies are expected from the roll-out throughout the state of the ARCHIBUS Building Operations application. Soon to be implemented, work order management will take on a 21<sup>st</sup> Century feel as maintenance supervisors receive their work orders over wireless BlackBerry devices and close them out on touch screen monitors in their maintenance shops. Now underway is the largest integration project of its kind, creating 24/7 real-time connectivity to multiple legacy control systems, power generation assets, power distribution systems, metering, chiller and steam plants. Integration of each facility began in December 2006 and will be complete by October 31, 2007.

Benefits realized since the implementation of the initial ARCHIBUS system in March 2005 are:

\$6.5 million is no longer needed from Missouri's General Revenue fund each year to provide for upfront space costs until reimbursement funds are collected.

\$3 million in cost savings due to using the system to identify opportunities for space consolidation, resulting in the cancellation of approximately 50 leases and representing a reduction of 220,000 square feet.

\$8.4 million returned to the State of Missouri from the sale of two St. Louis office buildings no longer needed due to the system's identification of excess space.

Reduction of utility bill paper handling and the ability to capture and audit energy consumption data from a 20 minute input and review of a utility bill to a five minute electronic review.

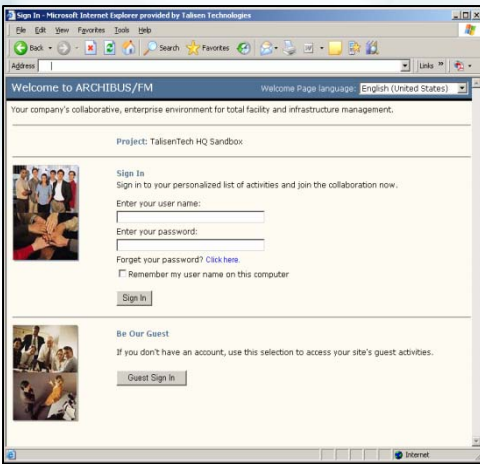
Elimination of one space management architect position and the opportunity to free up existing staff for other duties due to increased efficiency obtained from using the ARCHIBUS system.

## Missouri NASCIO Awards Submission

### Category: Data, Information and Knowledge Management

#### The Challenge

With the spirit of innovation and collaboration, the Office of Administration conquered the challenge of managing space for Missouri State Government. Faced with overseeing approximately 30 million square feet of owned and leased properties, Missouri's Office of Administration Director of Facilities Management, Design and Construction (OA/FMDC), David Mosby, led the initiative to engage the use of technology to both manage those assets and identify opportunities for improvement.



Due to such a vast amount of square feet to manage, it was necessary to look to technology as the delivery mechanism to know what Missouri has, where it is located, monitor utility costs, maintenance expenses, and funding associated with the real estate. After a review of potential vendor offerings, David Mosby was convinced that only the ARCHIBUS software could deliver the breadth and depth of functionality that was needed to modernize the facilities management software portfolio for the country's 17<sup>th</sup> largest state. As a result, it has saved millions of dollars annually in reduced real estate and other costs.

Beginning in March 2005, the Space Management, Real Property and Lease, and Building Operations software applications were implemented with the help of St. Louis-based ARCHIBUS Business Partner Arcturus, Inc. Once these applications were installed, no time was wasted in finally getting the dimensions of the state's properties understood. All state office buildings were polylined and the information centralized in ARCHIBUS. The task had been performed by one staff architect, whose sole job was to track who had how much space and assign a rental value to it. Once buildings were polylined, Missouri's FMDC were able to measure and assign space allocations against a standard that was finally developed. Missouri has never been able to do that before. As a result of the new system, OA/FMDC was able to eliminate the space management architect position. It was the first of a series of significant changes to the complex challenge of space management.

#### Using Technology to Restore \$6.5 Million to General Revenue

Potentially every Missouri State Government agency can have one funding source up to 40 or 50 sources that may include federal funds, fees, and other fund sources against which space expenses are applied. To make tracking expenses and related funding even more challenging, Missouri had used a blended rate system of space costing. All state-owned buildings had one rental rate that didn't reflect what might be higher constant expenses for some types of buildings. Lab space in the Department of Agriculture, for example, might have high HVAC and other utility costs of \$6 or \$7 a square foot that would ultimately be subsidized by comparable rents charged to less energy-intensive offices. As a result, a true cost for accounting purposes wasn't available to auditors.

To make this blended rate system work, the state had to set aside \$6.5 million from general revenues to cover upfront space costs until billing was sorted out and federal and other reimbursement funds were collected. Determining what part of the expense to

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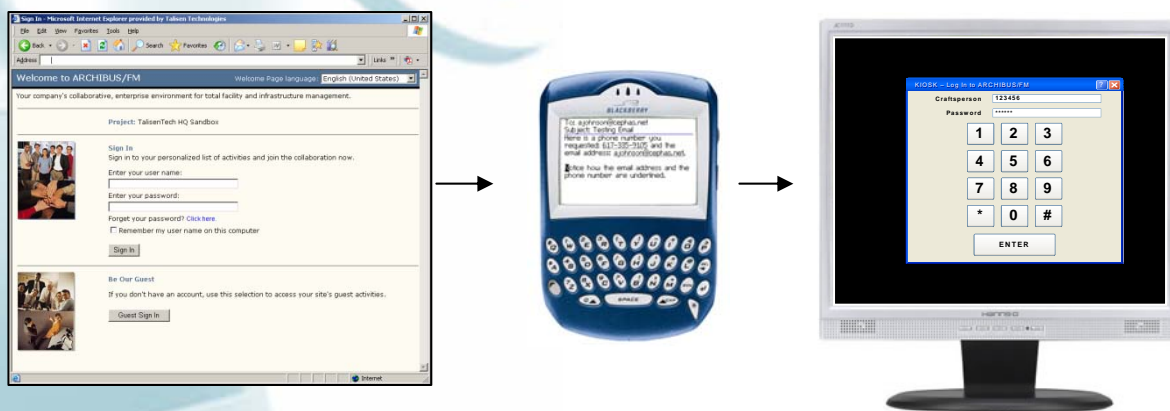
assign to which funding source was a nightmare for the budget people. The new Real Property and Lease Management system gave FMDC a near-real time capability to keep track of expenses and related funding sources on a monthly basis. Now it is no longer necessary to take the \$6.5 million out of the state's general revenue funds, allowing the funds to be allocated to something else.

### Identifying Space Consolidation Opportunities

With Missouri State Government facilities evenly split between leased and owned properties, reducing the amount of leased space was an imperative, a task made easier by ARCHIBUS real-time capabilities in updating and accessing space allocation and occupancy information. With near up-to-the-minute views of these statistics, ARCHIBUS enabled the consolidation of space during the system's first budget cycle. That allowed Missouri to cancel approximately 50 leases representing a reduction of 220,000 square feet and resulted in savings of approximately \$3 million.

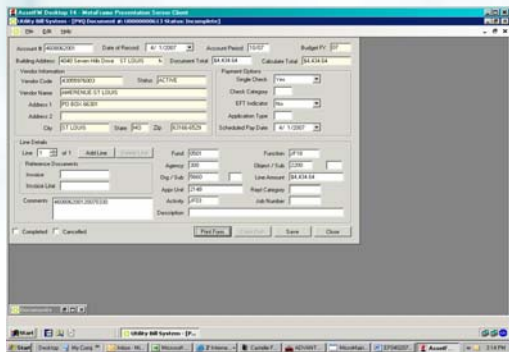
An additional benefit of using the system to identify best-use opportunities of existing real estate resulted in the sale of two St. Louis buildings, Midtown State Office Building and 505 Washington. Recognized through ARCHIBUS as having excess space capacity not being utilized, the sale of these two buildings resulted in returning \$8.4 million back to the State of Missouri.

Still more savings and efficiencies are expected from the roll-out throughout the state of the ARCHIBUS Building Operations application. Soon to be implemented, work order management will take on a 21<sup>st</sup> Century feel as maintenance supervisors receive their work orders over wireless BlackBerry devices and close them out on touch screen monitors in their maintenance shops. The reduction in paper that has to be processed, and the expected improvements in maintenance regimens, will streamline the entire process and make preventive maintenance and other cost-reduction activities easier and more effective. Supply vendors will also be integrated into the process to streamline the ordering process.



### Managing Space with GIS

A facilities management GIS system is currently underway using ARCHIBUS as a backbone that ties into a portal, links with Google Maps, and integrates with the state's centralized IT systems to support a number of other initiatives. One goal is to be able to access comprehensive information on a building using ARCHIBUS linked with corresponding photos generated in Google Maps. With one click of an aerial view of a state building, information such as occupancy statistics, the status of work orders, facility condition data, and energy consumption and utility bills will be available for review.

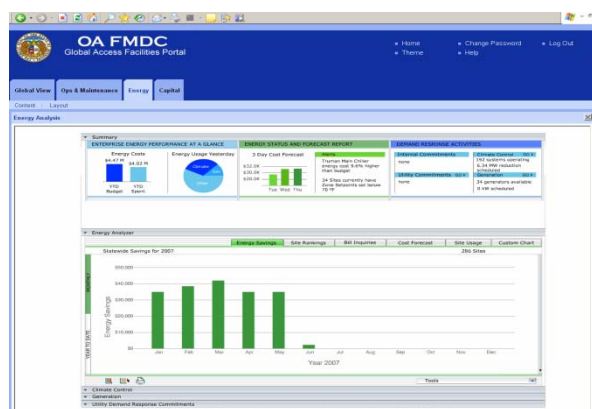


Also tied in to the state accounting system is the start of an electronic bill delivery initiative for the state's utility providers. Approximately 1/3 of the state's 3000 utility bills are currently coming in electronically from one utility vendor. Those bills go into ARCHIBUS and the state accounting system, thus reducing paper handling and more easily capturing and auditing consumption data to achieve energy consumption goals while freeing workers for more important tasks. In the past it took an accountant 20 minutes to input and review a utility bill. With the electronic bill delivery, it takes only 5 minutes for the accountant to do the review.

### Conquering the Next Space Frontier

The next bold initiative launched by OA/FMDC is the statewide integration project of Missouri's current 28 million square feet of real estate. As the largest integration project of its kind, it involves creating 24/7 real-time connectivity to multiple legacy control systems, power generation assets, power distribution systems, metering, chiller and steam plants, all of which keep 1,000 facilities safe, productive and comfortable for the citizens and employees of Missouri.

The statewide integration project was awarded to a group of companies that created a co-op entity to bid and deliver on the state contract. The co-op is comprised of GridLogix (a company focusing on total device integration for the extended enterprise), Johnson Controls (a global market leader in facility management and controls), and Talisen (a company that provides IT and business process management solutions). Integration of each facility began in December 2006 and will be complete by October 31, 2007.



**Benefits Realized**

Conquering the space challenge has become a reality in Missouri through the use of technology provided via the ARCHIBUS Space Management, Real Property and Lease Management, and Building Operations Management systems. Missouri now has an integrated, real-time, web-based system for tracking and optimizing extensive space inventory usage and billing, work order management, and energy efficiency initiatives.

Tax dollars have been saved that were previously being thrown away on expensive leases while state-owned space went underutilized. Utility costs are now monitored at the enterprise level allowing for energy saving opportunities. The integration of electronic utility vendor billing saves both the State and the utility in time and money. Work orders will soon be delivered via the BlackBerry and closed out on touch screen monitors that will log and account for maintenance time and materials.

Benefits realized since the implementation of its initial system in March 2005 are:

