

ARCHIBUS Success Story



Denver Public Schools: Enhancing Data Collection, Decision Support, with ARCHIBUS

Over a decade ago, Colorado's Denver Public Schools (DPS) began its effort to centralize and automate space management. Since then, the school district has moved all of its space data from more than 140 sites – comprising 13.5 million square feet of facilities and over 1,880 acres of land – into its ARCHIBUS Space Management application.

Today, the district can quickly provide planners, contractors, and government agencies with space usage data such as room size, room type, room use, and other details that are also supported by the ability to retrieve AutoCAD floor plans using the ARCHIBUS Overlay with Design Management for AutoCAD and Revit application.

Over the years, though, DPS has been enhancing its management practices thanks to the Facility Management Department's mission to develop, maintain, and extend the knowledge and power of ARCHIBUS to the rest of the district. The result, says the Department's Geographic Systems Analyst Robin Myers, is more insightful decision-making that is benefiting all of DPS' stakeholders.

Smarter Financial Management Decision Support

"The ARCHIBUS implementation, separately and in combination with other systems, is allowing the Denver schools to collect and analyze even more detailed data that lets the district improve its decision support, refine capacity and enrollment calculations, and provide more accurate data for bond initiative decisions," Myers points out.

The ARCHIBUS-enhanced information system is, for example, now providing data needed for such vital financial and management challenges as analyzing the impact of low or high enrollment vs. capacity, age of building vs. cost of maintenance, and closure or consolidation of buildings to benefit both the educational and financial needs of the district.

School closings, major remodeling in older buildings, reconfiguring of grade levels such as grades K-8 and grades 6-12 schools, as well as whether to construct new buildings for Denver's growing population, are all decisions made easier and with greater confidence through the detailed reporting ARCHIBUS delivers.

Fostering Community, Conserving Water... and Wages

The versatility of ARCHIBUS Space Management means that it performs



Vital Statistics

Organization:

Denver Public Schools
Denver, Colorado

Facilities Facts:

144 sites with 269 buildings comprising 13.5 million square feet on 1,880 acres of land

ARCHIBUS Applications:

Space Management, Overlay with Design Management for AutoCAD® and Revit, Furniture & Equipment

3rd Party Applications:

Autodesk AutoCAD, ESRI ArcMap

Reason for Implementation:

Improved space usage data collection, more detailed analysis and better allocation of space

Benefits Gained:

More efficient use of space for reconfiguring existing schools for changing grade level mix, more insightful decision support for future construction needs; lowered water bills; better labor cost management; blending of facilities and GIS data for enhanced visualization of properties

Future Plans:

Populate and operationalize the Furniture & Equipment application; implement ARCHIBUS Web Central throughout the district; add Building Operations Management; Condition Assessment; and Geospatial Extensions for ESRI

Business Partner:

Autodesk AutoCAD, ESRI ArcMap

Web Site:

www.dpsk12.org

many functions, both community- and conservation-oriented, that are helping Denver's public school system operate in the best interests of all the constituents it serves.

The school system's Community Use Department, for example, accesses ARCHIBUS space data to schedule facilities for use by community groups. This service helps build good will that fosters a sense of community with surrounding neighborhood groups and other organizations and makes maximum use of existing facilities.

The district also uses ARCHIBUS to track its outdoor resources and surfaces, which has helped conserve water at DPS, located in the semi-arid High Plains region of the United States. This tracking includes surface type, surface area, and asset type that are entered into site detail tables. Different surfaces, such as landscape and cement, are color coded in the system. By maintaining this information in ARCHIBUS, DPS can keep track of how long new surfaces last and calculate the area of replacement when they wear out.

DPS can also easily calculate the amount of irrigated turf by highlighting the area in question on a table. Being able to calculate and document permeable areas such as athletic fields has resulted in lower water bills for Denver Public Schools. Denver's Wastewater Management Division charges DPS based on water consumption per square foot, but water used for irrigation goes back into underground aquifers, not down sanitary sewers, and is therefore not subject to this charge.

Space information for buildings' internal and external areas takes on even greater importance in controlling custodial costs. Because custodial staffing is based on building floor area, ARCHIBUS is used to calculate actual floor space minus "open-air" space. The ability to generate accurate area measurements allows the district to better align staffing levels and labor costs with the space that actually has to be maintained.

GIS, Intranet Solutions, Aid Visualization and Data Collection

One of the newest ways DPS has been extracting maximum value from its space data is by combining that information with its ArcMap GIS application from geospatial information systems industry leader ESRI, Inc.

"Being able to take facilities data and convert it to a map showing geographic placements and calculations has been extremely useful for our departments, our school board and our committees," Myers reports.

"Currently, we are still using the Windows-based application but our plans for the future are to move to Web Central and this should make facilities management and GIS data synergy and access possibilities even more remarkable."



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—Robin Myers
Geographic Systems Analyst
Denver Public Schools

