

WCCCD, Michigan

Meeting Operational Goals Using SpatialFacilites

GIS & FMIS IMPLEMENTATION & SUPPORT SERVICES





SSA: Implementing A FMIS System In A Campus Environment

ayne County Community College District (WCCCD) is located in Detroit Michigan and the surrounding region. The college serves 32 communities and townships in Wayne County, Michigan, a region with nearly two million residents. WCCCD now operates five campuses (Downtown, Western, Downriver, Northwest, and Eastern), serving as many as 70,000 credit and non-credit students annually from 32 cities and townships in Wayne County and beyond. WCCCD's value statements include Supporting Excellence in Teaching and Learning; Honoring Diversity; Serving the Common Good; Being Accountable; and Operating with Integrity. WCCCD offers associate degree programs, certificate programs, and individual courses that prepare students for entry-level employment and career advancement. The associate degree courses and programs also transfer to baccalaureate-level colleges and universities.

THE CHALLENGE

Goal Number One of WCCCD's current strategic plan calls for Advancement of Operational Systems, including in-depth evaluations of critical operational areas, such as facility maintenance and budget development. Goal Number Two calls for Integration of Innovative Technological Resources, including implementation of an Infrastructure Enhancement Plan. Goal Number Three requires Development of Institutional Resources, including assurance of financial viability and sustainability and update of facility and site development initiatives.

THE SOLUTION

In 2014, WCCCD selected Spatial Systems Associates, Inc. (SSA) to implement its SpatialFacilities platform for the college in support of these strategic plan goals. SpatialFacilities is comprised of three independent, but associated Esri-based applications—SpatialPortfolio, SpatialOperations, and SpatialSecurity. The SpatialPortfolio product provides the opportunity to inventory all of WCCCD's real property assets to a level of detail that had not previously been available. SpatialPortfolio relies on Esri's GIS platform to store and display all of the data that is collected, including not only the building outlines and interior space definitions, but also the physical location of all infrastructure incorporated into the building and site, including building envelope components (walls, doors, windows, roof), HVAC infrastructure,

plumbing, lighting, fire protection, exterior campus assets (parking, sidewalks, utilities, storm water conveyance and management, perimeter security), etc.



For every component, SpatialFacilities can not only allow the asset to be mapped, but also to have the asset (feature) linked to available documentation (as-builts, cut sheets, operating manuals, etc.), work orders, spare parts, and preventative maintenance requirements. Further, the existing condition of every asset can be determined, the value can be established, and recommended remediation can be estimated and prioritized. While this level of detail can be maintained, the individual component



requirements can also be summarized at the building, campus, or university level.

Competing remediation requests can be summarized according to the year in which the requisite work is anticipated. When done for

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an entire building, campus, or institution, the necessary capital investment can be summarized and compared to available funds to determine whether projects need to be rescheduled or whether additional funds are required. The ability to demonstrate funding requirements in this way had never been available to WCCCD, and its implementation is allowing administrators to have honest and frank discussions about relative priorities for capital investment.

When completed, WCCCD will have a system to manage the entire inventory of campus maintenance, operations, and improved situational awareness for the public, students, and faculty.

Thus far, the system has been implemented for one building on one campus. SSA and WCCCD are currently implementing the system for the remaining buildings on the Northwest Campus, the largest of WCCCD's inventory. It is anticipated that Spatial-Portfolio will be implemented on all five campuses over the next several years, and that the Spatial Operations and Spatial Security applications will follow.

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please contact Spatial Systems Associates or visit our website—

