Towards A Total Cost of Ownership

Community Colleges: Beyond Design and Construction
Towards A Total Cost of Ownership

Community Colleges: Beyond Design and Construction
ICCCFO | April 10, 2015

Agenda
- Introductions
- STV Overview
- Asset Management
- Planning Efficiencies
- Space Utilization
- Discussion
Established 1912
100% Employee Owned
40 North American Offices
1,800 Personnel

Market Sector Diversity
- Public and Private Academic and Healthcare Providers
- Transportation & Infrastructure
- Federal, State and Local Agencies
- Commercial and Residential
- Master Planning / Programming
- Design & Engineering
- Asset Management
- Program and Project Management
- Construction Management
- Project Controls
Facilities & Asset Management

Impetus: Facilities Planning

- Collection of Documentation
- Assessments
- Programmatic Review
- Space Utilization/Space Needs
- Facilities Recommendations
- New/Replacement Systems
- Infrastructure Improvements

Ventura County Community College 2015
Laney Community College 2013
Marin Community College 2013
Solano Community College 2014
The Result... Facilitating OBJECTIVE Decisions

Community College Facilities/Asset Management

DATA
Connecting To Data; For Desired Outcomes

DECISION
Reporting & analyses; Decisions & Action Plans

MONEY
Smart Spending; Achieve College Goals

Connecting data and organizing it in easy to understand formats, communicating facility and operational requirements
Facilities Management - Basic Data
## Space Inventory

**Campus, Building, Room | Program, Room Use | Square Footage**

### Building Profile

<table>
<thead>
<tr>
<th>Building No.</th>
<th>Name</th>
<th>Location Code</th>
<th>Plan Type</th>
<th>Ownership Code</th>
<th>Condition Code</th>
<th>Performance Code</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>900 COLLEGE CENTER</td>
<td>College/Campus</td>
<td>Permanent</td>
<td>Owned in fee simple</td>
<td>2 - Remodeling - A</td>
<td>Ordinary Masonry</td>
<td>70.40%</td>
</tr>
</tbody>
</table>

### Rooms

<table>
<thead>
<tr>
<th>Prfx.</th>
<th>Rm No.</th>
<th>Sufx.</th>
<th>Use#</th>
<th>Room Use</th>
<th>Top/CSS #</th>
<th>Top/CSS Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>901</td>
<td>630</td>
<td></td>
<td>630</td>
<td>Food Facilities</td>
<td>6940</td>
<td>Food Services</td>
</tr>
<tr>
<td>902</td>
<td>A</td>
<td>680</td>
<td>680</td>
<td>Meeting Room</td>
<td>6730</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>902</td>
<td>A</td>
<td>310</td>
<td>310</td>
<td>Office</td>
<td>6730</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>902</td>
<td>B</td>
<td>310</td>
<td>310</td>
<td>Office</td>
<td>6730</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>902</td>
<td>C</td>
<td>310</td>
<td>310</td>
<td>Office</td>
<td>6730</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>905</td>
<td>310</td>
<td></td>
<td>310</td>
<td>Office Service</td>
<td>6730</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>906</td>
<td>A</td>
<td>630</td>
<td>630</td>
<td>Food Facilities</td>
<td>6940</td>
<td>Food Services</td>
</tr>
<tr>
<td>907</td>
<td>A</td>
<td>310</td>
<td>310</td>
<td>Office</td>
<td>6430</td>
<td>Extended Opportunity Programs and Services (EOPS)</td>
</tr>
<tr>
<td>907</td>
<td>B</td>
<td>310</td>
<td>310</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Room</th>
<th>Station</th>
<th>Sq. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>308</td>
<td>3,079</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>359</td>
</tr>
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<td></td>
<td>93</td>
<td>939</td>
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</tr>
<tr>
<td></td>
<td>81</td>
<td>81</td>
</tr>
</tbody>
</table>
Facilities Management - Basic Data

- **Space Inventory**
  - Campus Building, Room, Programs, Room Use, Space Footage

- **Alignment with State**
  - Assess Data and Information Across Databases

- **Programmatic Uses**
  - Graphic Indication of Program Type

- **Condition Index**
  - Facility Condition, Cost of Renovation, Cost of New Construction

- **Building Status**
  - Online, Offline, Construction

- **Room Use**
  - Lecture, Lab, Office, Library, And More
Facilities Management - Connecting Data
Management - Connecting Data

Schedule Connection
Web-based / Digital link to the Room/Classroom Schedule

[Image of a campus building floor plan with scheduling information]
Facilities Management - Connecting Data

- Interior Finishes
- Systems Management
- Energy Management
- Systems Locations
- Systems Data
- Space and FF&E Data
Systems Management
One Source for Access To BMS and EMS Interface

Systems Data
Systems Locations

Facilities Condition | Cost of Renovation over Cost of New Construction
Space and FF&E Data

Lecture | Lab | Office | Library | And More
Facilities Management - Connecting Data

- Interior Finishes
  - Floors, Ceiling, Walls, Base

- Systems Management
  - One-Square for Areas, D&B/RE, and Data Integration

- Energy Management
  - Overview of Data Sources in One-Square with Dashboards and Data Interpretation

- Systems Locations
  - Facility Condition, Cap of Reneau, 45th Ave, NWE Concourse

- Systems Data
  - Online, Offline, Georeferenced

- Space and FF&E Data
  - Interior Office, Living, Close-out
Knowing our clients well, we saw additional need...

• And, hence... STV+
  • Collection of Documentation
  • Programmatic Review
  • Space Utilization/Space Needs
  • Custodial Planning
  • Preventative Maintenance
STV+ | Community College Features

Dashboard Access

QR & Bar Code Scanning
In-field access to Equipment and Systems Data
Document and File Library

- Secure Interface
- Campus and building structure
- Access to known projects: related files and data
- E-mail access to building files
- Ability to e-mail link to desired categories; Category level allows ability to send link to individual files
Custodial Planning and Tasking

- Utilizes Industry data to acknowledge standard custodial tasks by building and room type
  - APPA Data
  - Tool to Set Expectations
- Ability to customize standard data to apply to college preferences
STV+ | Community College Features

Custodial Planning and Tasking

- Structure
  - Campus
  - Building
  - Room
- Building selection
- Room selection
  - Custodian assigned
  - APPA Level
  - Routine and project tasks defined
  - Assumed minutes/day
  - Ability to customize
STV+ | Community College Features

**Space Utilization**

- Structure
  - Campus
  - Building
- Room
- Building selection
- Room selection
  - Square footage
  - Room finishes
  - APPA level
  - Routine and project tasks defined
  - Assumed minutes/day
  - Ability to customize

Search for equitable space
Infrastructure Asset Management

- **Network:** Storm Drainage
- **ID:** SD-PIPE#20
- **Material:** RCP
- **Size:** 21" (21"
- **Datum:** 5-1 (9/3/1968)
- **Invert Up:** 35.6
- **Invert Down:** 35
- **Length:** 118 (Calc.)
- **Flow Direction:** E
- **Slope:** 0.005 (Calc.)
- **Date Constructed:** 07/1969
- **Source Document:** 1969 As Built Utility Plan
- **Status:** Verified

*Copyright: CSW/Sliper-Stroeh Engineering*
Lessons Learned

Community College Asset Management

REAL NEED
• Connection of Various Data Sources Facilitating Greater Outcomes
  • Facilities Team
  • Maintenance & Operations
  • Educational Planners
  • Schedulers
  • State Agencies

• High Desire for Accessing this Data / Capability
  • Immediate Add-Value; Efficiency and Effectiveness
Lessons Learned

Community College Asset Management

IMPLEMENTATION

• Improving Quality of Data Important - Time & $$$ Investment
  • "Bad data in, Bad data out"
• Developing Database, Connecting Resources - Time Investment
• Buy-in at Highest Levels of Leadership is Essential
Lessons Learned

Community College Asset Management

**VALUE**

- Implement Highest Value Tools First - Scalable
- Connecting Traditionally Silo-ed Teams/Resources - Priceless
- Immediate Access to Information, Data, Tools - Priceless
- Ability to Communicate and Facilitate Objective Decisions - Priceless
Towards A Total Cost of Ownership

Community Colleges: Beyond Design and Construction