

SAN MATEO COUNTY
COMMUNITY COLLEGE DISTRICT

CCC/IOU Partnership

Freeing up Dollars for the Classroom

Green California Schools Summit
September 28, 2012
Pasadena, CA

San Mateo County Community College District

- Three Campuses (1.4M GSF / 346 Acres)
 - Cañada College – Redwood City - 1968
 - Skyline College – San Bruno - 1969
 - College of San Mateo – San Mateo – 1963
 - District Office, San Mateo - 1978
- 25,000 Students / 1,000 Staff / Adjuncts
- \$900M Capital Improvement Program
 - Multiple Funding Sources
 - Multiple Delivery Methods

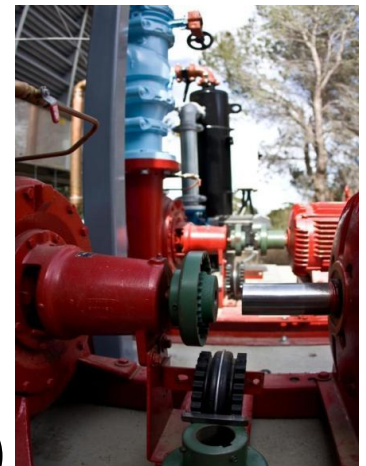
District Energy/Sustainability Goals

- Reduce Operating Costs through Renewable and Energy Efficiency Capital Projects
- All new projects LEED Silver Certified
- All Modernization Projects designed to LEED Standards
- Every new project to achieve 15% better than Title 24 requirements
- Mandatory PG&E Energy Efficiency/Savings by Design Application
- Mandatory Life Cycle Cost Analysis on Major Equipment



Sustainability Planning

- Design Standards
 - Mandatory Goals
 - PG&E Energy Efficiency/Savings by Design
- Project Review (Different Goals)
 - College Leadership
 - Maintenance & Operations Staff
 - Designers
 - Constituents (Faculty/Staff/Students)
- Design/Construction (Constant Vigilance)
 - Programming
 - Schematic Design (SD)
 - Design Drawings (DD)
 - Construction (RFI/Submittal Review)
 - Commissioning (Programming through Occupancy)



New Facilities



Skyline College Building 4 Multi-Cultural/Cosmetology (21.3%)



College of San Mateo Building 5 Health & Wellness (36%)



College of San Mateo Building 10 College Center (21.5%)



Cañada College Facilities Maintenance Center (FMC) (16%)

New Facilities



Cañada College Building 9 Library/Learning Resource Center (30%)



Skyline College Building 6 Student & Community Center (28%)



Skyline College Facilities Maintenance Center (FMC) (18.2%)

Total Cost of Ownership

(An Additional ~ 441,537 gsf)

- Existing Facilities (as of 2000) 1,171,823 gsf

- New CIP Facilities
 - Cañada Bldg. 7 FMC ~ 17,292 gsf
 - Cañada Bldg. 9 Library/LRC ~ 75,917 gsf
 - Cañada Bldg. 22 ~ 11,870 gsf
 - CSM Bldg. 5 Health & Wellness ~ 89,086 gsf
 - CSM Bldg. 10 College Center Bldg. 10 ~ 142,901 gsf
 - CSM Bldg. 35 RPSC ~ 9,244 gsf
 - CSM Bldg. 36 Science Building & Planetarium ~ 60,904 gsf
 - Skyline Bldg. 4 Multicultural/Cosmetology/Admin Center ~ 72,810 gsf
 - Skyline Bldg. 6/7 Student Union/Science & Allied Health ~ 106,816 gsf
 - Skyline Bldg. 11N Transmission Facility ~ 6,746 gsf
 - Skyline Bldg. 21-24 FMC ~ 17,618 gsf
 - Loma Chica ~ 11,000 gsf (CDC Modernization)
 - DW Athletic Facilities (Restrooms / Press Boxes) ~ 10,508 gsf

- CIP Demolished Facilities
 - CSM 5/6 ~ 73,588 gsf
 - CSM 10, 11 & 13 ~ 42,603 gsf
 - CSM Bldg. 20 & Greenhouse ~ 13,126 gsf
 - CSM Bldgs. 21 – 29 ~ 58,958 gsf
 - Skyline Bldg. 4 ~ 2,900 gsf

Ongoing Challenges

- Complexities of New Systems
 - Maintenance & Service Agreements
- Staffing & Technology
 - Old vs. New
 - Wrench vs. Computers
 - Old Timers vs. Younger Generation
- Diminished M&O Budget
 - General Fund Reductions



Freeing up Dollars for the Classroom: The Process

- Utility Savings Analysis
 - Estimated Savings due to Energy Efficiency & Sustainability Projects (kWh, Therms, CCF, etc.)
- Space Analysis – Buildings and Grounds
 - Increased Square Footage
 - Labor (APPA Levels)
 - Materials and Supplies
- Facilities Budget Analysis & Request Process
 - Road Show: Information is Key

The Argument: Funding

- **Operational (On-going)**
 - Energy & Sustainability Savings - \$1,712,553
 - Therms: \$146,960
 - KWH: \$802,593
 - Cogen: \$500,00
 - O&M: \$28,000
 - Athletic Field Conversion: \$235,000
- **Capital (One-time)** (as of September 2012)
 - PG&E Energy Efficiency: \$1,024,778
 - Savings by Design: \$494,147
 - CCC/IOU Partnership
 - Received \$426,732
 - Pending \$55,847



The Argument: Change in GSF

SMCCCD Facilities Square Footage Increase				
	2000 GSF	2012 GSF	Change	% Change
Cañada College	246,431	352,215	105,784	43%
CSM/District Office	592,230	727,039	134,809	23%
Skyline College	333,162	541,325	208,163	62%
Total	1,171,823	1,620,579	448,756	15%

The Argument: Association of Higher Education Facilities Officers (APPA) Guidelines

- Custodial – If cleaning activities are accomplished with decreasing frequency, appearance will suffer
 - Level 1: Orderly Spotlessness
 - Level 2: Ordinary Tidiness
 - Level 3: Casual Inattention
 - Level 4: Moderate Dinginess
 - Level 5: Unkempt Neglect
 - APPA Recommends Level 2 as the reasonable standard
- Standard Spaces – Not all spaces are created equal. Different space types require different cleaning approaches and effort
- All data presented in Cleanable Square Feet – an industry standard of measure

The Argument:

Association of Higher Education Facilities Officers (APPA) Guidelines

- Engineering – If maintenance activities are accomplished with decreasing frequency, breakdowns will increase and service will suffer
 - Level 1: Showpiece Facility
 - Level 2: Comprehensive Stewardship
 - Level 3: Managed Care
 - Level 4: Reactive Management
 - Level 5: Crisis Response
 - APPA Recommends Level 2 as the reasonable standard
- Grounds – If grounds maintenance activities are accomplished with decreasing frequency, appearance will suffer
 - Level 1: State of the Art
 - Level 2: High Level
 - Level 3: Moderate Level
 - Level 4: Moderately Low-Level
 - Level 5: Minimum Level
 - APPA recommends Level 2 as the reasonable standard

The Argument: Staffing Needs

	FY10-11 Current Staffing				FY10-11 Proposed Staffing Needs			
	CAN	CSM	SKY	Total	CAN	CSM	SKY	Total
Custodial	8	17	13	38	1	3	3	7
Engineering	4	7	6	17	0	1	0	1
Grounds	3	6	3	12	0	2	2	4
Total				67				12

The Argument: Staffing Needs

Additional Annual Budget Needs					
	\$ per FTE	Cañada College	College of San Mateo	Skyline College	Total
Custodial	\$ 43,445	\$ 43,445	\$ 130,335	\$ 130,335	\$ 304,115
Engineering	\$ 59,712	\$ -	\$ 131,712	\$ 61,000	\$ 192,712
Grounds	\$ 44,076	\$ -	\$ 88,152	\$ 88,152	\$ 176,304
Total		\$ 43,445	\$ 350,199	\$ 279,487	\$ 673,131
Total Needs (w/ benefits @ 35%)		\$ 58,651	\$ 472,769	\$ 377,307	\$ 908,727

The Argument: Operational Needs

- GENERAL OPERATIONAL NEEDS (\$480,000)
 - Fuel expense increases for vehicles and fuel-powered equipment
 - Certification of backflow prevention devices
 - Hazardous Waste Generator Fee
 - Custodial supplies increases
 - "new" Computerized Maintenance Management System
 - FUSION
 - Chiller/Cooling Tower maintenance
 - Chiller/Hot water loop water treatment
 - Boiler maintenance
 - Elevator Inspection and Permit Fees
 - Annual Fire Pump testing and overhaul
 - Annual Fire Extinguisher inspections
 - Air filters and V-belts for air handling unit
 - Batteries for fire life safety devices and ACAMS
 - Exterior/Interior Lighting replacements
 - Replacement parts/services for BMS, Data RM AC, Sewage Pumps, VFDs, irrigation, to name a few
 - Lawn chemicals
- BUILDING SYSTEMS MAINTENANCE NEEDS
 - Access Controls and Monitoring (ACAMs) (\$250,000)
 - Upkeep of equipment (cameras, servers)
 - Repair and replace parts (nodes, input/output, readers)
 - Fire and Life Safety Systems Maintenance (\$170,000)
 - Building Management Systems Maintenance (\$115,000)



The Argument: Summary

Additional Annual Budget Needs for Facilities				
Needs	Cañada College	College of San Mateo	Skyline College	Total
Staffing	\$58,651	\$472,769	\$377,307	\$908,727
General Operational Needs	\$120,000	\$240,000	\$120,000	\$480,000
Building Systems Maintenance Needs	\$126,046	\$160,821	\$248,133	\$535,000
Total	\$304,697	\$873,590	\$745,440	\$1,923,727

The Argument: Buy-In Road Show

Information is Key

- One-on-One
 - CBO
 - CFO
 - Chancellor
 - College Presidents
- Chancellor's Cabinet
 - Chancellors, Presidents, Executive Staff
- Constituents – Road Show
 - SMCCCD Financial Officers
 - College Cabinet
 - President, VPs, CBO, Marketing
 - College Counsel (Shared Governance)
 - Admin, Faculty, Staff, Students



Best Practices – Facilities Commitment

- 12 Month Systems Review
 - M&O Staff
 - A&Es
 - Retro-Commissioning
- Indoor Environmental Quality
- Regular Follow-up
 - End User
 - Facilities Staff
 - Commissioning Agent
 - CCC/IOU Partnership Staff



Question & Answer

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