

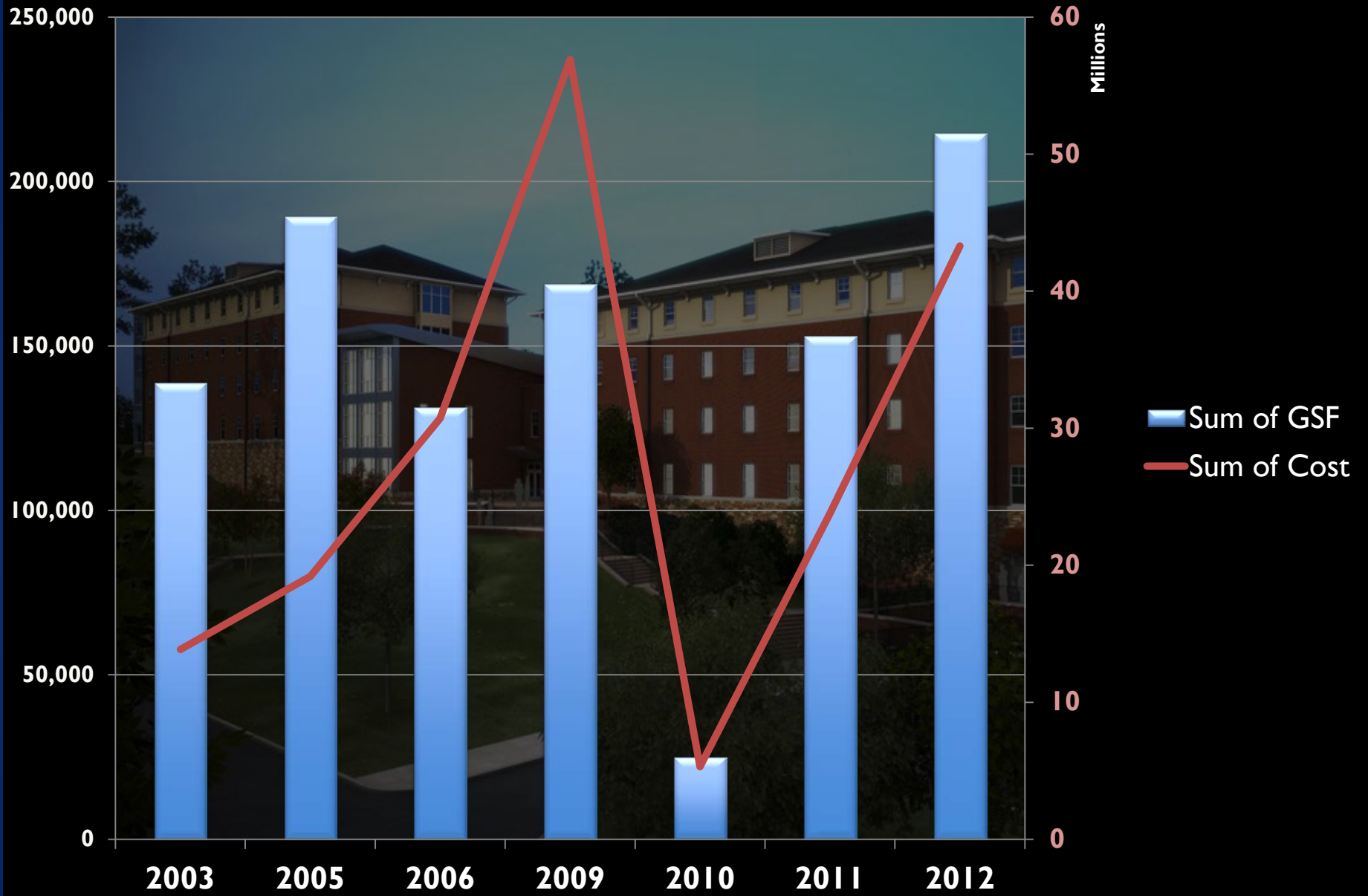
# Operations and Maintenance in Public-Private Ventures

Facilities Officers Conference  
October 24-26, 2012  
Savannah, GA

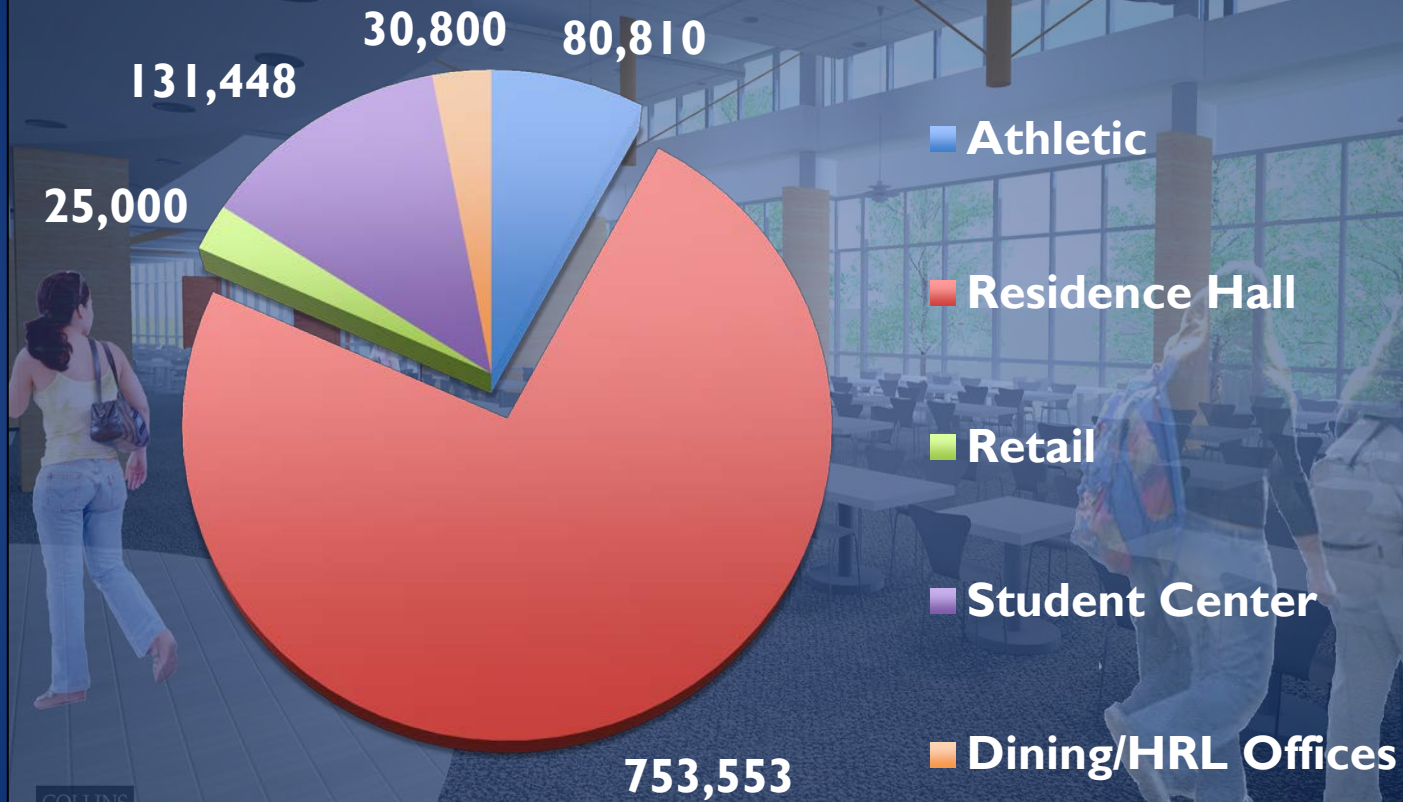


# PPV's at UWG

Year	Project	Facility Use	Units	Cost	Accum. \$	GSF
2003	University Suites	Residence Hall	607	\$13,860,000	\$13,860,000	138,950
2005	Arbor View Apartments	Residence Hall	600	\$19,175,000	\$33,035,000	189,505
2006	Campus Center	Student Center		\$30,720,000	\$63,755,000	131,448
2009	Athletic Complex	Athletic		\$30,450,000	\$94,205,000	80,810
2009	Greek Village	Residence Hall	264	\$26,440,000	\$120,645,000	88,098
2010	UWG Bookstore	Retail		\$5,300,000	\$125,945,000	25,000
2011	Student Housing Ph 1	Residence Hall	602	\$23,800,000	\$149,745,000	153,000
2012	Student Housing and Dining Ph 2	Residence Hall	760	\$28,500,000	\$178,245,000	184,000
2012	Student Housing and Dining Ph 2	Dining/HRL Offices		\$11,300,000	\$189,545,000	30,800
2012	Athletic Operations Center Buildout	Athletic		\$3,500,000	\$193,045,000	N/A
<b>Total</b>			<b>2,833</b>	<b>\$193,045,000</b>		<b>1,021,611</b>



# PPV Distribution by Use (GSF)



COLLINS  
COOPER  
CARUSI  
Architects

By 2013

35%

of UWG's Gross Square Footage  
Will be PPV Space

# PPV O&M Risk Factors

- Front Cost vs. Life Cycle Cost
- Impact of design decisions on operating costs
- Inflation “double-bind” (debt service and operating costs)
- Renewal and Replacement Reserves
- Potential for premature depletion of maintenance reserves
- Silo effect





The business-like nature of PPV projects – based on rigid pro formas and subject to performance metrics – raises the bar for the Facilities Officer, and requires diligence in managing the facility maintenance and renewal cycles.

# Elements of a PPV O&M Program

1. Ensure that university building and quality standards are met during design and construction;
2. Careful attention to MEP system design, energy modeling, and project commissioning to control long-term energy costs;
3. Reliance on Facility Condition Assessments to benchmark current condition and predict future maintenance costs;
4. Implementation of an effective preventive maintenance (PM) program to ensure operational performance metrics are achieved.
5. Careful budgeting during proforma development to ensure that O&M funding and R&R reserves are adequate.





# I. Meeting Building Standards and Quality Objectives

- Involvement of SME's (Subject Matter Experts) from across campus in the design process
- Development of a Building Standards Document to establish quality standards for the design team
- Active participation in design and frequent review of contract documents throughout the schematic, design development, GMP, and CD phases
- During construction: constant presence on site by program manager, resident inspectors, maintenance staff, and special inspectors
- Submittal review program
- Warranty Management Program



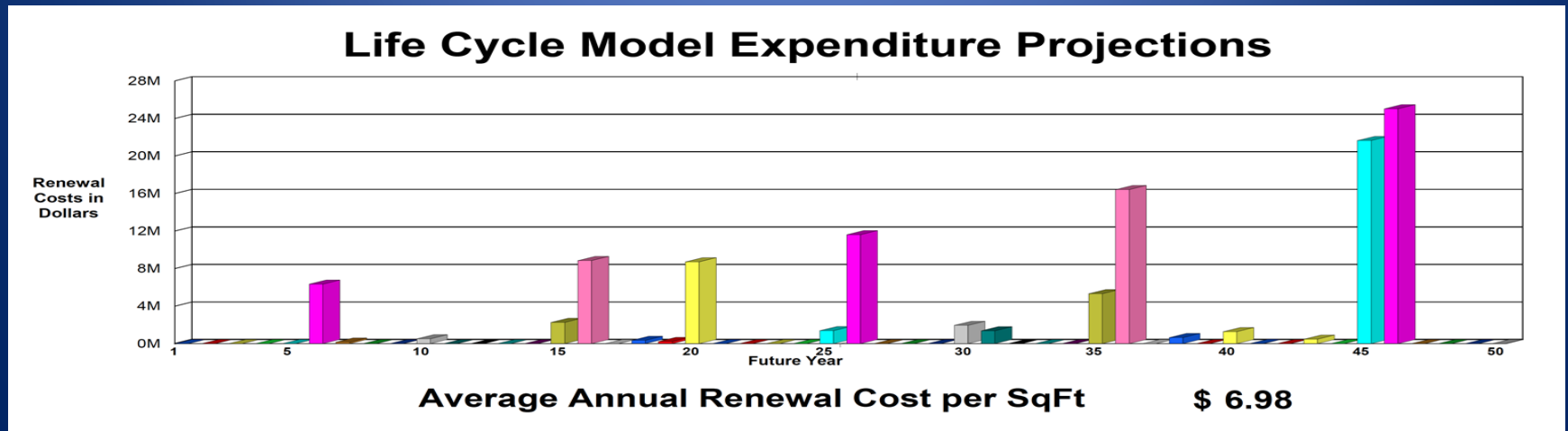
## 2. MEP Systems Design and Commissioning

- Balancing front-end cost and operational costs.
- Energy modeling for HVAC and lighting systems
- Case Study: Center Pointe Suites
  - VRV HVAC systems: Pilot program and decision-making during early design
  - Verve lighting controls: ROI study
- Commissioning: Lessons learned from Phase I

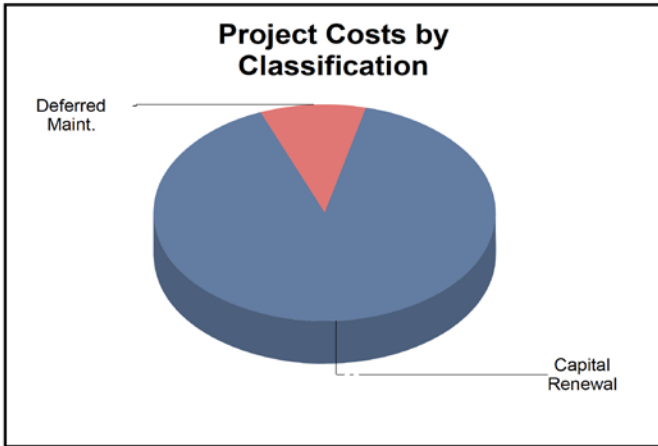


# 3. Facility Condition Assessments

- Required for most PPV's
- Engineering study to measure the life cycle performance of building systems and components.
- Identifies deferred maintenance, future modeled renewal and replacement costs, and viability of reserves.
- Provides a roadmap for effective life-cycle management of PPV facilities.



# EXECUTIVE SUMMARY - CAMPUS CENTER / HPE



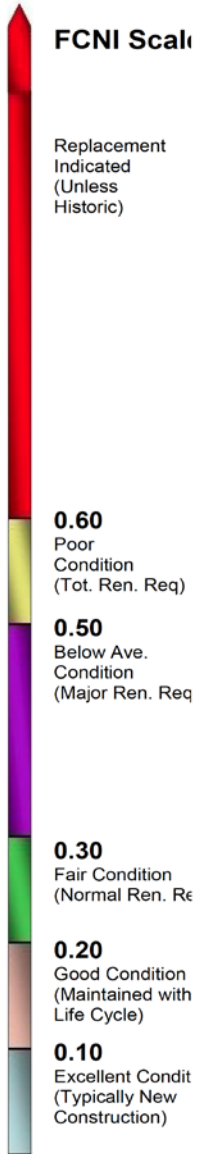
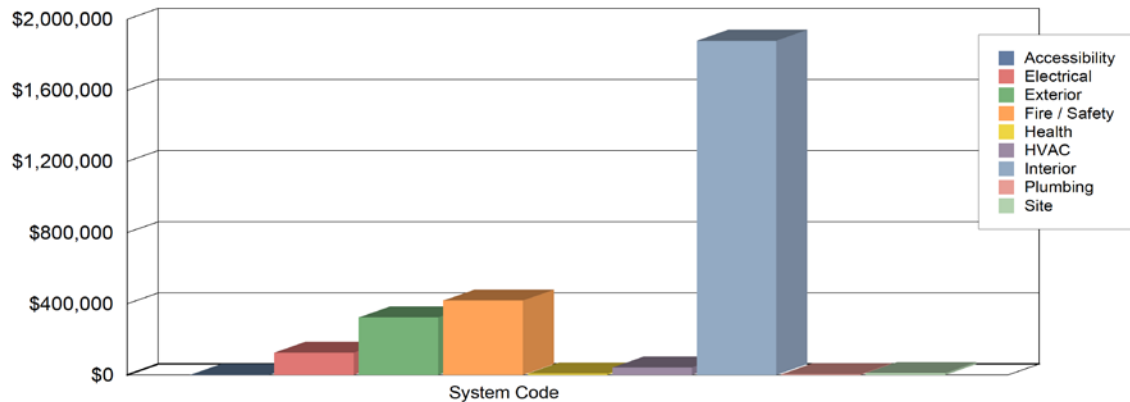
**Building Code:** 0049  
**Building Name:** CAMPUS CENTER / HPE  
**Year Built:** 1965  
**Building Use:** Multi-Purpose  
**Square Feet:** 131,448

## Project Costs by Priority

Priority 1:	\$0
Priority 2:	\$14,410
Priority 3:	\$1,456,400
Priority 4:	\$1,340,202
Priority 5:	\$0
<b>Total Project Costs:</b>	<b>\$2,811,012</b>
<b>Current Replacement Value:</b>	<b>\$46,539,403</b>

**Facility Condition Needs Index (FCNI): 0.06**  
 (Project Costs / Replacement Cost)

## Project Costs by System Code



# 4. PM Program and Performance Metrics

- Preserve overall value and condition of facility from initial acceptance through termination of lease/transfer of asset to BOR
- Perform planned maintenance at recommended intervals to extend lifecycle of building systems and components.
- PM program is essential, as PPV O&M funds may be limited, and R&R funds may not be available for premature replacement.
- Develop performance metrics to monitor building systems, condition, and energy performance.
- Metrics should be developed for each facility in a way that can be used to benchmark against other PPV's within the institution and USG.

# 5. Pro forma Development

- Facilities Officers should familiarize themselves with the Bond Documents and PPV Pro forma.
- Pro forma should identify annual operating budget for the PPV, as well as any escalation factors
- Bond Documents will identify who is responsible for M&O.
- Bond Documents and/or pro forma will identify annual R&R contribution and under what conditions these funds may be disbursed.
- If possible, participate in the early development of the PPV pro forma to help ensure that sufficient funds are in place for M&O and R&R.



# Thank You!

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UWG Planning



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