Sightlines LLC
FY10 Facilities MB&A Presentation
University of Maine System

January 10th, 2011
Presented by: Jim Kadamus
A vocabulary for measurement

The Return on Physical Assets – ROPA℠

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<tr>
<th>Annual Stewardship</th>
<th>Asset Reinvestment</th>
<th>Operational Effectiveness</th>
<th>Service</th>
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<td>The annual investment needed to insure buildings will properly perform and reach their useful life “Keep-Up Costs”</td>
<td>The accumulated backlog of repair and modernization needs and the definition of resource capacity to correct them. “Catch-Up Costs”</td>
<td>The effectiveness of the facilities operating budget, staffing, supervision, and energy management</td>
<td>The measure of service process, the maintenance quality of space and systems, and the customers opinion of service delivery</td>
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Asset Value Change

Operations Success
Core Observations

Aging Campus Profile:
Although the Maine System has seen some recent new space and major renovations, 68% of System space is over 25 years of age, a time at which critical building needs come due and investment is needed.

Historically Low Capital Investment:
Annual Stewardship funding has been insufficient to meet Sightlines recommended investment targets across the System. Furthermore, one-time infusions of capital have been inadequate to make up the annual shortfall and address the growing backlog of needs.

Solid Operations Performance:
Solid operations metrics, generally satisfied customers, and strong energy management indicate effectiveness of campus facilities staff despite limited funds and generally inadequate service process.
UM System age profile – 68% of space over 25 years old

UM System Total GSF: 9.03 Million

Renovation Age Profile by Category
Density Factor

Density Factor varies across UM System; Augusta is unique to the system

Smaller Institutions

Larger Institutions

Impacts:

- Custodial operations
- Wear and tear on campus facilities
- Lifecycles of building components
System Total Project Spending - $253M Since FY06

University of Maine System Investment Profile

5-Year Capital Investment Distribution

New Space Investment Distribution

0% 20% 40% 60% 80%
UM USM UMF Remaining Campuses

Funding Sources: Appropriations, Revenue/State Bonds, Gifts/Grants, Reserves, & Funded Depreciation
Investment into existing space

Annual Investment level half that of Sightlines Public University average

Average Annual Capital Investment – Existing Space (FY06-FY10)

SL Public University Annual avg. - $4.31/GSF

UM System Annual avg. - $2.13/GSF

$5.00
$4.50
$4.00
$3.50
$3.00
$2.50
$2.00
$1.50
$1.00
$0.50
$0.00

UM
USM
UMA
UMF
UMFK
UMM
UMPI

$/GSF
Total Project Spending in Existing Space

UM System investment lower than public database; investment mix comparable

Total Project Spending

UM System 5 Year Investment Mix
- Building Envelope: 15%
- Building Systems: 28%
- Infrastructure: 32%
- Space Renewal: 12%
- Safety/Code: 13%

Sightlines Public University 5 Year Investment Mix
- Building Envelope: 8%
- Building Systems: 28%
- Infrastructure: 32%
- Space Renewal: 19%
Annual Stewardship

Setting Investment goals to maintain System
Defining stewardship investment targets

Meeting targets enables System to maintain Net Asset Value

FY2010 Stewardship Targets

UM System Replacement Value: $2.2 Billion

3% Replacement Value: $65.7

UM Life Cycle Need: $27.7
- Envelope/Mechanical: $24.5
- Space/Program: $13.8

Annual Funding Target: $18.4
- Envelope/Mechanical: $10.0
- Space/Program: $8.4

Straight Line Depreciation Model

Sightlines Recommendation
Total capital investment over time

UM System reaching target zone in only one of the last five years

Total Capital Investment FY06-FY10

- **Increasing Asset Value**
- **Stabilizing Asset Value**
- **Declining Asset Value**

FY2006: $20.0 million
FY2007: $15.0 million
FY2008: $20.0 million
FY2009: $30.0 million
FY2010: $25.0 million

- Recurring Capital
- One-Time Capital

UM System Life Cycle Need
Annual Funding Target

FY06 FY07 FY08 FY09 FY10

$0.0 $5.0 $10.0 $15.0 $20.0

$20.0 $25.0 $30.0 $35.0 $40.0 $45.0 $50.0 $55.0 $60.0

$ in Millions
Total Project Spending

UM System historically funding less than other public institutions

SL Public Database

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<thead>
<tr>
<th>Year</th>
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University of Maine System

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Annual Funding Target
Asset Reinvestment Backlog Estimation

Regional cost differences impact $/GSF backlog vs. public database average

**Total Asset Reinvestment Backlog $/GSF**

- UM System: $680M - $720M ($75 - $80/GSF)
- SL Public University Avg.: Approximately $80/GSF

**Maintenance Repair Backlog $/GSF**

- UM System- Maint/Repair: $350M - $400M ($40 - $45/GSF)
- SL Public University Avg- Maint/Repair: Approximately $45/GSF

**Total Asset Reinvestment Backlog $/GSF by Campus**

Campus Backlog $/GSF Range: $70 – $92
System NAV Index

Campus NAV’s: FY10

Capital Upkeep Stage: Primarily new or recently renovated buildings w/ sporadic building repair & life cycle needs; “You pick the projects”

Repair and Maintain Stage: Buildings are beginning to show their age and may require more significant investment on a case-by-case basis

Systemic Renovation Stage: Buildings may require more significant repairs; large-scale capital infusions/renovations are inevitable; “The projects pick you”

Demolition/Transitional Stage: Major buildings components are in jeopardy of complete failure. Reliability issues are widespread throughout campus.

NAV = \frac{\text{Replacement Value} - \text{AR Backlog}}{\text{Replacement Value}}
Campus Operations
Facilities Operating Budget

System budget higher than Public University Average

FY2010 Facilities Operating Budget

UM System: 5-Year Distribution
- UM System: $1.14/GSF
  - 36% Daily Service
  - 62% Utilities
  - 2% Planned Maintenance

Public Database: 5-Year Distribution
- Public Database: $0.12
  - 34% Daily Service
  - 61% Utilities
  - 5% Planned Maintenance

UM System 5-Year Budget: $5.00
- $4.00
  - Daily Service
- $1.00
  - Planned Maintenance
- $0.00
  - Utilities
UM System achieved approx. $3.2M of energy savings in FY10 due to reductions in both unit costs and consumption.
Service Process in need of improvement across System

Improved service process will make facilities operations more proactive and efficient

Smaller Institutions

Larger Institutions

Enhancing your Service Process

- Install a functioning system
- Make sure the system provides more than data
- Streamline your work-order process
- Clearly define who does what
- Track and report frequently for reliable data
Bringing it all together
Key UM System recommendations based on ROPA Study:

1. Develop an annual stewardship investment strategy focused on envelope/mechanical lifecycle replacements. Initial funding targets should be set at peer levels with a plan to increase funding to the full annual stewardship target.

2. A portion of the annual investment should continue to come from campus operating budgets, possibly supported by increasing efficiencies in daily operations and reducing energy costs.

3. Update/expand the database of deferred maintenance projects. This is a necessary step to target future capital investments in buildings that have the highest priorities and most significant problems.

4. Develop a request for capital funding that targets priority projects that will raise the overall Net Asset Value of campuses in the system as a whole. A capital allocation for existing space of $40M-$50M/year over the next 5 years is needed to begin drawing down on the deferred maintenance backlog.

5. Limit funding for new space unless that space is replacing obsolete buildings with significant reliability problems.


7. Develop a comprehensive energy plan to identify and implement campus projects that will provide additional energy savings.