Sightlines LLC
FY11 Facilities Measurement Benchmarking & Analysis Presentation
Wesleyan University

Date: November 18th 2011
10 year old company based in Guilford, CT
95% Annual retention rate
Tracking $5.9 billion in operations budgets and $4.2 billion in capital projects
Database of 23,500 buildings and 825 million GSF
Background
The Return on Physical Assets – ROPA℠

**Developed a tool based on:**
- Common vocabulary
- Consistent analytical methodology
- Credibility through benchmarking

- **Annual Stewardship**
  - The annual investment needed to ensure buildings will properly perform and reach their useful life. "Keep-Up Costs"

- **Asset Reinvestment**
  - The accumulated backlog of repair and modernization needs and the definition of resource capacity to correct them. "Catch-Up Costs"

- **Operational Effectiveness**
  - The effectiveness of the facilities operating budget, staffing, supervision, and energy management.

- **Service**
  - The measure of service process, the maintenance quality of space and systems, and the customers' opinion of service delivery.

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**Asset Value Change**

**Operations Success**
Developed a tool based on:
- Common vocabulary
- Consistent analytical methodology
- Credibility through benchmarking
Campus portfolio facts

Distribution of Square Footage by Function

- Residential, 1,217,408
- Academic / Administrative, 1,146,275
- Athletic, 243,925
- Student Life, 139,342
- Support, 86,744

Campus Portfolio Stats:
- Building Count: 311
- GSF: 2,853,694
- Total Acreage: 316
- Maintained Acreage: 219
Comparison Institutions

Peer Institutions

- Amherst College
- Brown University
- Dartmouth College
- Middlebury College
- Tufts University – Medford
- Vassar College
- Williams College
Understanding the impact of unique space

To get to peer average:
• Add 150 Students
• Remove 150 K GSF

*Planned Enrollment Growth: +60 Students
*Class of 2015 short – term spike
Understanding the space v. wealth relationship

Database Distribution – Wealth v. Space

Less Resources

More Resources

Less Students

More Students

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Wesleyan University

Peers

Wealth per Student

$0 $200,000 $400,000 $600,000 $800,000 $1,000,000 $1,200,000 $1,400,000 $1,600,000

GSF/Student

0 200 400 600 800 1,000 1,200 1,400 1,600

0 200,000 400,000 600,000 800,000 1,000,000 1,200,000 1,400,000 1,600,000
Replacing smaller facilities with larger ones

Change in campus square footage from 2002: (+1%)
Change in campus building count from 2002: (-18%)

In FY11, there were 249 main campus and 62 rental property buildings
Numerous small buildings reflected in building intensity

Removing 164 buildings would bring Wesleyan to peer average.

Impacts of higher building intensity:
• Lower operational efficiency – Travel time, Independent Building systems
• Higher capital investment needs – More Roofs, windows, heating systems, etc.
• Lower energy efficiency
Renovation age of campus significantly older than peers

Wesleyan Campus Age 2004
- 2% over 25 Years Old
- 98% under 25 Years Old

Wesleyan Campus Age 2011
- 11% over 25 Years Old
- 89% under 25 Years Old

Campus Renovation Age FY2011
- Peers FY 2011: 2% Less than 10 Years, 24% 10 - 25 Years, 34% 25-50 Years, 40% Over 50 Years
- FY 2011: 9% Less than 10 Years, 5% 10 - 25 Years, 46% 25-50 Years, 39% Over 50 Years

% of Space over 25 Years Old:
- Peers: 53%
- Wesleyan: 89%
Similar investment, despite older campus profile

Total Project Spending – Annual Stewardship vs. Asset Reinvestment

- Total Annual Stewardship $/GSF
- Total Asset Reinvestment $/GSF

Recurring Funding Sources
- Major Maintenance
- Planned Maintenance

One – time Sources
- CHEFA projects
- Capital Projects
- Gifts
Defining stewardship investment target

**FY2011 Stewardship Targets**

- **3% Replacement Value**
  - $32.2M

- **Life Cycle Need** (Equilibrium)
  - $11.7M
  - $12.0M (Envelope/Mechanical)
  - $12.0M (Space/Program)

- **Functional Obsolescence** (Target)
  - $4.1M
  - $9.0M

**Industry Standard**

**Sightlines Recommendation**

Wesleyan Building Replacement Value = $1.1B

Life cycle is discounted for the coordination of modernization and renovation.
Approximately $42 Million of work has been deferred over the last 10 years
Peers also experiencing reductions in funds

In 2010, Wesleyan was still spending above peer average despite reductions.
Investments have returned to the target zone in FY11

Strong investments historically

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Stewardship (Major Maintenance, Planned Maintenance)</th>
<th>Asset Reinvestment (Capital Projects, CHEFA, Gifts)</th>
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<tr>
<td>2011</td>
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</table>

Target Need

Life Cycle Need

Decreasing Backlog

Increasing Backlog

Annual Investment Target

Money in Millions
Funding changes reflected in backlog

Maintaining service levels will be challenged with an increasing backlog of needs

- Wesleyan’s backlog is approximately 30% higher than peers
- Major Maintenance should be used to stabilize backlog
- One-time capital should be used to buy down backlog
Facilities Operating Budget Similar to peers

Wesleyan had a 25% reduction in Utility Costs from FY09
Cogen start-up contributed to FY09 utility cost increase & subsequent decrease
Daily Service and PM are at similar levels to peers

*Increased costs associated with Storms cause an increase in Daily Service costs FY11*
Effectiveness of maintenance staffing higher than peers

Highest general repair scores in peer group despite fewer resources

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Peer Average Wesleyan

General Repair Inspection

Maintenance Staffing

Peer Averages

Wesleyan University - Summary

GSFTE

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Maintenance Coverage  Average (75.943)  Your Average (74.626.00)

General Repair/Impression

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Wesleyan

Peer Average

2009 2010 2011

• Wesleyan has fewer trades workers/GSF
• Inspection scores have been maintained
• Wesleyan has highest General Repair scores of the peer group
Strong performance with fewer resources

**Custodial Staffing**

- Wesleyan has fewer custodians workers/GSF
- Lower custodial material costs
- Maintaining a higher cleanliness score than peers

**Cleanliness Inspection**

- Wesleyan has fewer custodians workers/GSF
- Lower custodial material costs
- Maintaining a higher cleanliness score than peers
First Impressions, lasting Impressions helping grounds scores

Grounds Staffing

Peer Averages
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Wesleyan University - Summary

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Grounds Inspection

Peer Average Wesleyan

2009 2010 2011

• Reduced grounds staff in recent years
• Significantly less landscape materials $ than peers
• Grounds improvement plan has yielded higher inspection scores
Campus shows well versus Selective Liberal Arts peers

**General Repair Inspection Scores**

- Bowdoin
- MHC
- Swarthmore
- Williams
- Smith
- Hamilton
- Carleton
- Wellesley
- Wesleyan
- Amherst
- Pomona
- Bryn Mawr

**Cleanliness Inspection Scores**

- Smith
- Williams
- Amherst
- Swarthmore
- Bowdoin
- Pomona
- Hamilton
- Wellesley
- Wesleyan
- Carleton
- MHC
- Bryn Mawr

**Grounds Inspection Scores**

- Hamilton
- Wellesley
- Swarthmore
- Bryn Mawr
- Bowdoin
- Pomona
- Smith
- Carleton
- Amherst
- MHC
- Wesleyan
Wesleyan has significantly decreased consumption versus peers

*FY11 had 15% more Heating degree days compared to FY10
Producing fewer GHGs with steady GSF
Downward trend in emissions since start of cogeneration program

### Historical Emissions by Scope

<table>
<thead>
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<th>Scope 1</th>
<th>Scope 2</th>
<th>Scope 3</th>
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25% Reduction in Emissions
Lower campus density impacts emission metrics

Emissions profile trends are the result of shrinking scope 2 emissions

Go-Green Peers: Babson College, Bryn Mawr College, Hamilton College, Hampshire College, Mount Holyoke College, Union College, Vassar College
Concluding Comments

• Wesleyan has had successful efforts to reduce the number of buildings in its portfolio

• Wesleyan’s campus age is one with significant upcoming capital needs

• The historical level of capital investment is not sufficient to reduce the growing backlog of needs on campus

• Operational efficiencies have been realized in maintenance, custodial, and grounds

• Campus appearance has improved and is competitive with the top liberal arts institutions.

• Energy Consumption decreases have lead to smaller utility budgets and reduced GHG emissions