A vocabulary for measurement

The Return on Physical Assets – ROPA\textsuperscript{SM}

- **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 / 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**
Who Partners with Sightlines?
Robust membership includes colleges, universities, consortia, and state systems

Serving the Nation’s Leading Institutions:
• 19 of the Top 25 Colleges*
• 17 of the Top 25 Universities*
• Flagship Public Universities in 32 States
• 8 of the 12 Ivy Plus Institutions
• 12 of the 14 Big 10 Institutions

Sightlines is proud to announce that:
• 450 colleges, universities, and K-12 institutions are Sightlines clients, including over 300 ROPA members.
• 93% of ROPA members renewed in 2013
• We have clients in 44 states, the District of Columbia, and Canada
• 57 institutions became Sightlines members in 2013

Sightlines advises state systems in:
• Alaska
• California
• Connecticut
• Hawaii
• Maine
• Massachusetts
• Minnesota
• Mississippi
• Missouri
• New Hampshire
• New Jersey
• New York
• Oregon
• Pennsylvania
• Texas

* U.S. News 2014 Rankings
## Determining Peers for Benchmarks

<table>
<thead>
<tr>
<th>Institution</th>
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<tr>
<td>Asnuntuck Community College</td>
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<td>Mt. Wachusett Community College</td>
<td>University of Cincinnati – Clermont College</td>
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### Comparative Considerations

Size, technical complexity, region, geographic location, and setting are all factors included in the selection of peer institutions.
Growth vs. Enrollment

Since FY11 Campus size has remained constant as Student Enrollment decreased
There have been no major renovations or new space additions in the last five years.
Campus Age

UC Blue Ash has a younger age profile than peers

Campus Age by Category

- **High Risk**
  - UC Blue Ash: 30%
  - Peer Average: 16%
  - Buildings over 50
    - Life cycles of major building components are past due.
    - Failures are possible.
    - Highest risk

- **Medium Risk**
  - Buildings 25 to 50
    - Major envelope and mechanical life cycles come due.
    - Higher Risk

- **Low Risk**
  - Buildings Under 10
    - Little work. “Honeymoon” period.
    - Low Risk

- **Honeymoon**
  - Buildings 10 to 25
    - Short life-cycle needs; primarily space renewal.
    - Medium Risk
Life cycle costs based on the average tech 3 academic space.
Density Factor

Institutions Ordered By: Density Factor
UC Blue Ash is right in line with Peer’s Technical Complexity

Tech Rating

Institutions Ordered By: Tech Rating

Operating Costs
Demand of Maintenance Staff on mechanical systems
Mix of Maintenance Staffing Levels
Energy Consumption
Amount of Space by Tech Rating

Total GSF by Tech Rating

Tech Rating

GSF

1 2 3 4 5

20,000 40,000 60,000 80,000 100,000 120,000 140,000 160,000 180,000 200,000
Capital
Investment vs. Peers

Total Project Spending by AS & AR

Peer Averages

© Sightlines 2001-2014

University of Cincinnati - Blue Ash

$/GSF

2009 2010 2011 2012 2013

Total AR $/GSF  Total AS $/GSF  Average (4.49)  Your Average (2.32)
FY13 Stewardship Investment Targets

Replacement Value: $103.1M

3% Replacement Value: $3.1

Equilibrium Need Determined by:
- Campus GSF
- Campus Age
- Function of Space
- Technical Complexity

Target Need - Discounts for campus modernization, and replacement of components before life cycles come due

- Target Need: $1.2 + $0.5 = $1.7
- Space/Program: $1.4 (Equilibrium Need) + $0.9 (Target Need) = $2.3
- Envelope/Mechanical: $3.1 (3% Replacement Value) - $2.3 (Total Need) = $0.8

Depreciation Model

Sightlines Recommendation
Spending into Existing Space vs. Targets

Spending within the target zone will help lower backlog levels

Stewardship Investment vs. Targets

- **Equilibrium need**
  - $2.5
  - $2.0
  - $1.5
  - $1.0
  - $0.5
  - $0.0

- **Target need**
  - $1.5
  - $1.0
  - $0.5
  - $0.0

- **Annual Stewardship**
  - 2009
  - 2010
  - 2011
  - 2012
  - 2013
Stewardship as a Percent of Target

Total Annual Stewardship

Peer Averages

© Sightlines 2001-2014

University of Cincinnati - Blue Ash

% of Target

2009 2010 2011 2012 2013

Total Pct. of Annual Target Funded

Average (30) Your Average (8.00)
Spending into Existing Space vs. Targets

Total Investment vs. Targets

$0.0
$0.5
$1.0
$1.5
$2.0
$2.5
$3.0
$ in Millions
$0.0
$0.5
$1.0
$1.5
$2.0
$2.5
$3.0
Equilibrium need
Target need
2009 2010 2011 2012 2013

Equilibrium need
Target need

2009 2010 2011 2012 2013

Annual Stewardship  Asset Reinvestment
Capital Expenditures, by Package

Non-Facilities and New Space excluded from analysis

Blue Ash 5 Year Average: By Package

- Envelope: 17%
- Building Systems: 28%
- Space Renewal: 8%
- Safety/Code: 47%

Peer 5 Year Average: By Package

- Envelope: 16%
- Building Systems: 33%
- Space Renewal: 28%
- Safety/Code: 17%
- Infrastructure: 6%
Backlog of Need on Campus

Total Asset Reinvestment Backlog $/GSF

Institutions Ordered By: Tech Rating

Average 100.27
Operations
Historical Operating Budgets

Facilities Operating Budget Actuals

Peer Averages
© Sightlines 2001-2014

University of Cincinnati - Blue Ash

$/GSF

2009 2010 2011 2012 2013

Actuals Total Utilities /GSF
Actuals Planned Maintenance /GSF
Actuals Total Daily Service /GSF

Average (8.10)
Your Average (8.87)
Total Operating Costs vs. Peers

Facilities Operating Budget Actuals

© Sightlines 2001-2014

Institutions Ordered By: Tech Rating

Average 7.74
Historical Energy Consumption

Energy Consumption

© Sightlines 2001-2014

2009 2010 2011 2012 2013

Electric BTU/GSF
Fossil BTU/GSF
Average 190,384
Comparing Energy to Peers

Energy Consumption

Institutions Ordered By: Tech Rating

- Electric BTU/GSF
- Fossil BTU/GSF
- Average 85,539
Planned Maintenance

Greater levels of PM extend system life cycles
Growing Cost of Daily Service

Possible Drivers of Daily service:

1. Density Factor – Highest in peer group.
2. Higher than average Tech Rating
3. Age of campus
**Maintenance**

**General Repair Score (out of 5)**

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<td>Peers</td>
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*Two outlier institutions excluded from benchmark*
Custodial

Cleanliness Score (out of 5)

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<th>Score</th>
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Custodial Staffing

Custodial Materials $/GSF

Custodial Supervision
# Grounds

## Grounds Inspection (out of 5)

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<td>Peers</td>
<td>3.83</td>
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</tbody>
</table>
Two institutions without data excluded from benchmark.
Campus Inspection

Campus Inspection Index

FY13 Campus Inspection

Cleanliness  |  Mechanical Spaces  |  Exterior  |  Grounds
---         |                    |           |   
3.9        |  3.7               |  3.8      |  3.8
3.8        |  3.9               |  4.0      |  3.9

Peer Average  |  UCBA
---           |   
3.9        |  3.6

Institutions Ordered By: Density Factor

Inspection Summary Index

Average 76

© Sightlines 2001-2014
Concluding Comments

Young Campus

• There have been no renovations or new space added in last 5 years to change campus age.
• With a constant campus GSF and student enrollment has decreasing, campus density has decreased as a result.

Strong Historical Spending

• Low stewardship dollars have forced UCBA to rely on influxes of one-time money to complete projects on campus.
• With the exception of FY13, UCBA has not been able to spend to targets, thereby adding more to your backlog each year.

High Operations Output

• UCBA’s operating budget has been increasing since FY08 to above the peer average by almost $1.50/GSF