FY2014 ROPA Presentation
University of Central Florida
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
A vocabulary for measurement

The Return on Physical Assets – ROPA<sup>SM</sup>

- **Annual Stewardship**: The annual investment needed to ensure buildings will properly perform and reach their useful life. 
  
- **Asset Reinvestment**: The accumulated backlog of repair/modernization needs and the definition of resource capacity to correct them.
  
- **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.

**Asset Value Change**

**Operations Success**
Peer Institutions

Institutions

- Virginia Commonwealth University
- University of Kentucky - Main Campus
- University of Florida
- George Mason University
- Mississippi State University
- The University of Alabama (Tuscaloosa)
- The University of Arizona - Main Campus
- The University of Mississippi
- Clemson University
- University of Arkansas
- Arizona State University
- Florida State University
- Louisiana State University
- The University of Tennessee - Knoxville
- University of Missouri - Kansas City
- University of Missouri - St. Louis
- University of North Texas
Core Issues

> Space Profile:
  > The changing student composition highlights opportunities in space utilization
  > A substantial shift in the age profile will occur over the next 10 years, predicting higher capital costs in the future.

> Capital Profile:
  > Historically high investment levels have receded in recent years, increasing the backlog in recent years
  > ISES data provides a strong framework for identifying investment priorities.

> Operations Profile:
  > Operational spending has been shifting towards more high value work (PM)
  > Campus inspection scores are improving, despite fewer overall resources
Decrease in On-Campus Students in FY14

Growth in Space Versus “On-Campus” Students

- Total Institutional GSF
- Total On-Campus Students

3152 Students
The Mix of Main Campus Students is Changing

Total Students Educated

- **On-Campus Students**
- **Online Students**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>27,000</td>
</tr>
<tr>
<td>2009</td>
<td>28,000</td>
</tr>
<tr>
<td>2010</td>
<td>29,000</td>
</tr>
<tr>
<td>2011</td>
<td>30,000</td>
</tr>
<tr>
<td>2012</td>
<td>31,000</td>
</tr>
<tr>
<td>2013</td>
<td>32,000</td>
</tr>
<tr>
<td>2014</td>
<td>33,000</td>
</tr>
</tbody>
</table>
Declining On-campus students reduces Density Factor
Declining On-campus students reduces Density Factor

Density Factor by Campus

- Main Campus
- Rosen
- Lake Nona

Density Factor

FY14

Density Factor by Campus FY2013 FY2014

Main Campus
Rosen
Lake Nona
Despite New Space Spending, Campus Getting Older

**Total Capital Investment 2008 - 2014**

- 76% Total Existing Space Spending
- 24% Total New Space Spending

**Campus Age by Category**

- **UCF 2008**
  - Under 10: 46%
  - 10 to 25: 24%
  - 25 to 50: 30%
  - Over 50: 0%

- **UCF 2014**
  - Under 10: 30%
  - 10 to 25: 32%
  - 25 to 50: 37%
  - Over 50: 0%
Space moving from “under 10” to “10 to 25” years

Campus Age by Category

<table>
<thead>
<tr>
<th>Year</th>
<th>Under 10</th>
<th>10 to 25</th>
<th>25 to 50</th>
<th>Over 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCF 2008</td>
<td>46%</td>
<td>28%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2009</td>
<td>46%</td>
<td>26%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2010</td>
<td>50%</td>
<td>21%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2011</td>
<td>42%</td>
<td>29%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2012</td>
<td>39%</td>
<td>31%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2013</td>
<td>36%</td>
<td>34%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2014</td>
<td>30%</td>
<td>37%</td>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>UCF 2025</td>
<td>0%</td>
<td>28%</td>
<td>51%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Campus Profile still one of the youngest in the peer group
Age Distribution - 2014

Analyzing Campus Space & Life Cycle Needs

UCF Age Distribution  Annual Life Cycle Cash Flow  Amortization of Life Cycle Expenses

Years

$/GSF

% of Space

0% 5% 10% 15% 20% 25%

$0 $5 $10 $15 $20 $25 $30 $35 $40 $45 $50 $55 $60
Analyzing Campus Space & Life Cycle Needs

UCF Age Distribution
Annual Life Cycle Cash Flow
Amortization of Life Cycle Expenses

Age Distribution - 2025
Total Capital Spending

Total Capital Investment 2008 - 2014

- **Total Project Spending**
- **Total New Space Spending**
Reduced funding in recent years vs. peers

University of Central Florida

Peer Institutions
Campus Stewardship Targets

Defining an annual stewardship investment target

3% Replacement Value: $38.4
Equilibrium Need: $25.4
Target Need: $8.9

$ in Millions

Envelope/Mechanical
Space/Program

Depreciation Model
Sightlines Recommendation
Current Investment falls short of growing need

Deferral rate increases in each subsequent year
Backlog has been growing, still below peers
Understanding the backlog helps with prioritization

*ISES provides foundation for making investment decisions*

**Building Age vs. FCNI**

*Buildings over 5,000GSF*
Differentiating investment strategies

1. Evaluate and communicate Institutional Priority
2. Just in time reserve – mitigate risk
3. Await Large scale renovation

1. Understand Upcoming Life Cycles
2. Focus on key MEP projects
3. Project to reduce energy/operational demands
UCF total budget remains above peers
Daily service budget has been decreasing

Now competitive with high tech rating peers

UCF Daily Service Spending

25% Reduction

Daily Service Spending vs. Peers

High Tech Rating
Average

Dollars/GSF
Steadily increase in value added work

UCF Planned/Preventative Maintenance

100% Growth

Planned/Preventative Maintenance vs. Peers
Higher maintenance resources compare to peers

![Maintenance Coverage Chart]

![Maintenance Supervision Chart]

![Maintenance Materials Chart]

![General Repair Scores]

*Institutions ordered by tech rating*
Custodial supervision is now inline with peers

Custodial Coverage

Custodial Supervision

Custodial Materials

Cleanliness Scores

UCF Score 2013: 3.9
UCF Score 2014: 4.0
Peer Score: 4.1

*Institutions ordered by density factor
Strong Grounds Performance

**Grounds Coverage**

- Y-axis: Acres / FTE
- X-axis: Institutions (A to O)

**Grounds Supervision**

- Y-axis: FTE / Supervisor
- X-axis: Institutions (A to O)

**Grounds Materials**

- Y-axis: $ / FTE
- X-axis: Institutions (A to O)

**Grounds Scores**

- UCF Score 2013: 4.0
- UCF Score 2014: 4.1
- Peer Score: 3.9

*Institutions ordered by grounds intensity
Energy peer group

UCF is in climate zone 1

**Institution**
- University of Florida - E&G
- Georgia Institute of Technology - Facilities
- Nova Southeastern University - Main Campus
- University of Southern Mississippi
- Eckerd College
- Clemson University - E&G
- Florida State University

**Comparative Considerations**
Size, technical complexity, and geographic location.
Purchased Utilities – Increasing fossil with Cogen

**Purchased Fossil Fuel**
- Purchased Fossil for Generating kWh
- Purchased Fossil for Heating

**Purchased Electric**
- Purchased kWh

Graphs showing the increase in purchased fossil fuel and electric over the years from 2008 to 2014.
Unit Cost by Fuel type

Fossil cost lower and declining compared to electric

Comparing Unit Costs ($/MMBTU)

- Purchased Fossil Unit Cost
- Purchased Electric Unit Cost
“Qualified” Utilities

Account for Electric Generation

Qualified Fossil Fuel (MMBTU)

Purchased Electric (kWh)

- Qualified Fossil Fuel
- Purchased kWh
- Generated kWh

Graphs showing data for Qualified Fossil Fuel and Purchased Electric from 2008 to 2014.
Cost avoidance realized with Cogeneration

Comparing Purchased Electric cost Vs. Purchased and generated cost
($/kWh)

*Unit cost and cost avoidance do not factor for the steam byproduct, actual savings are likely greater
Energy Consumption

*Lower consumption, trending down on a GSF basis*
Concluding Remarks

> Space Profile:
  > If the trend of on campus students being replace by online students continues, identify ways to improve utilization of current facilities.
  > As some key buildings reach critical life cycles, evaluate if the facilities continue to meet the needs of the university or if they should be repurposed/eliminated

> Capital Profile:
  > Without having funding to address all needs:
    > For younger facilities, predict upcoming life cycles and attempt to fund them as they come due(minimize deferral)
    > For those facilities with needs already past due, identify institutional priorities for renovation and communicate those priorities to campus constituents.

> Operations Profile:
  > Continue to shift the operational spending profile from reactive to proactive work, through increase PM and operational resource allocation
  > Allow energy savings to be recycled back into facilities to maximize the impact of those savings.