FY2014 ROPA Presentation

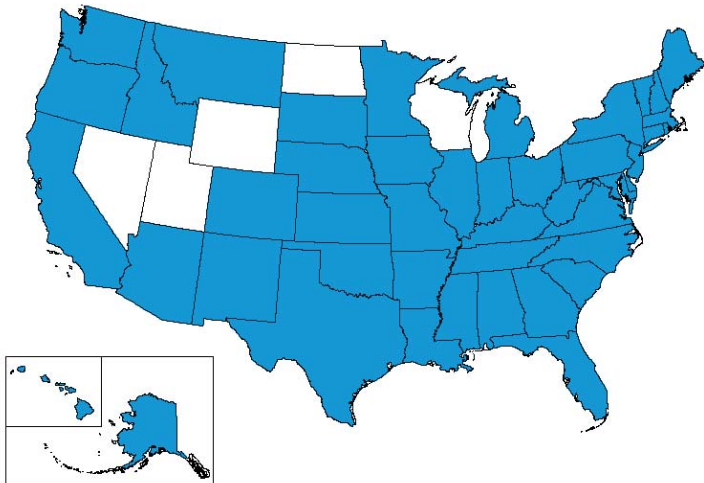University of Central Florida

sightlines

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

* U.S. News 2014 Rankings

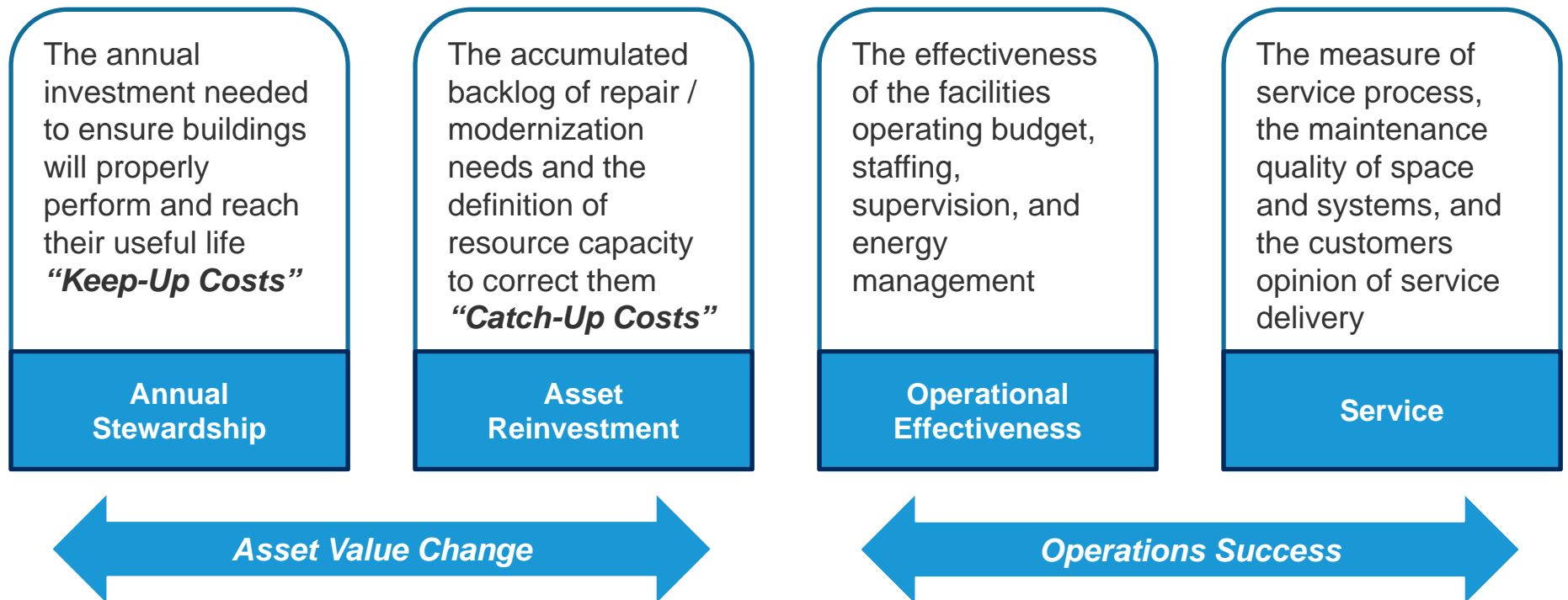**Sightlines is proud to announce that:**

- 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

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A vocabulary for measurement

The Return on Physical Assets – ROPA^{SM}

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

*Asset Value Change* → ← *Operations Success* →

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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
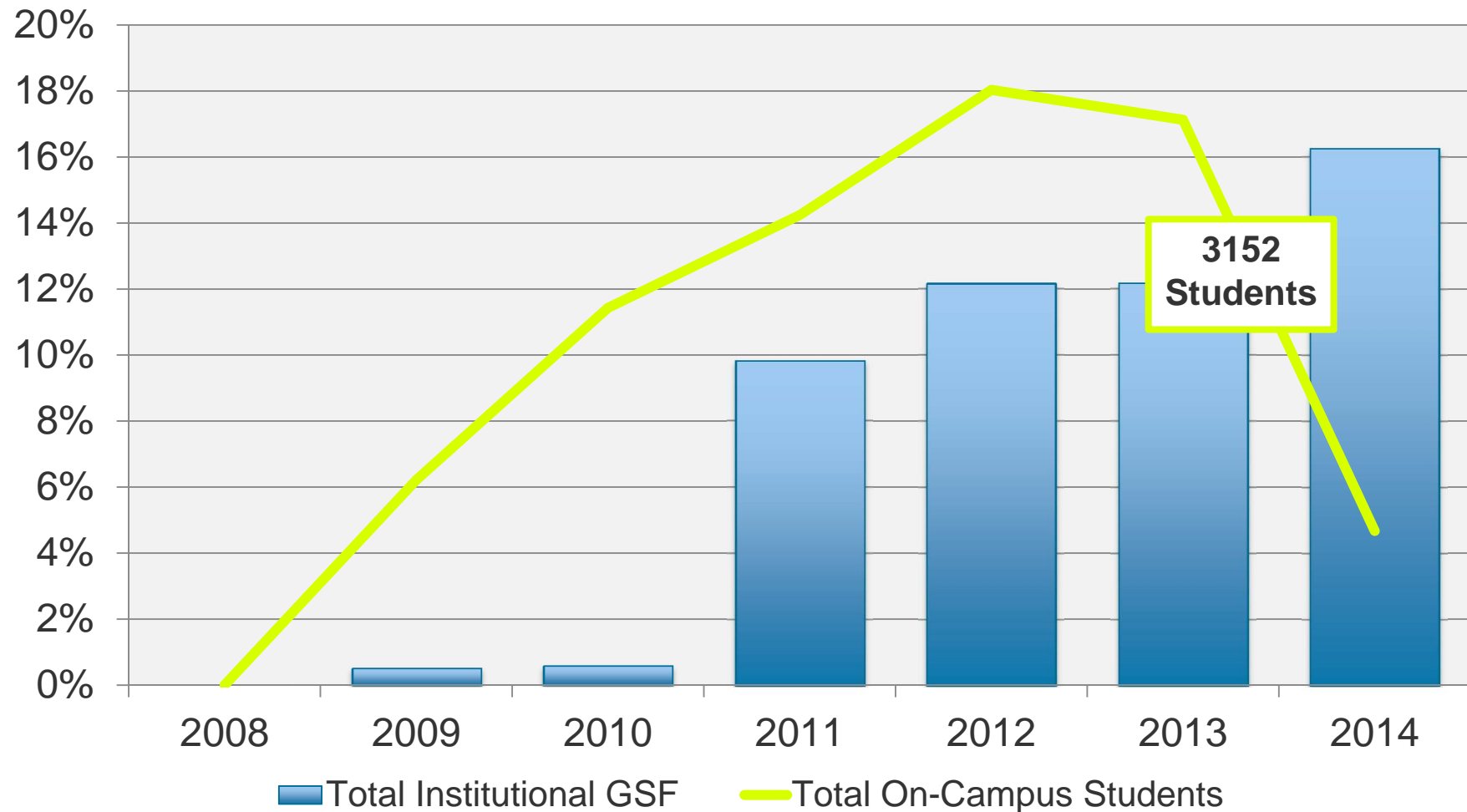- University of North Texas

Tech Rating
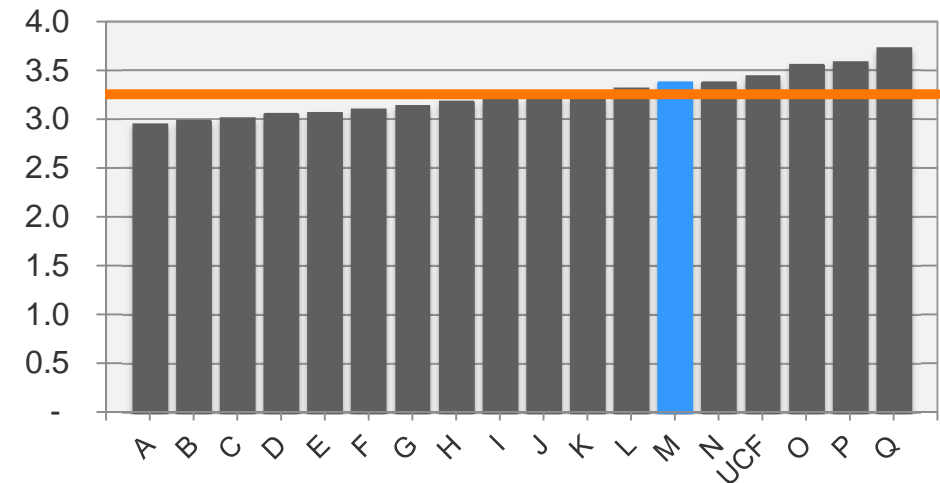
Building Intensity
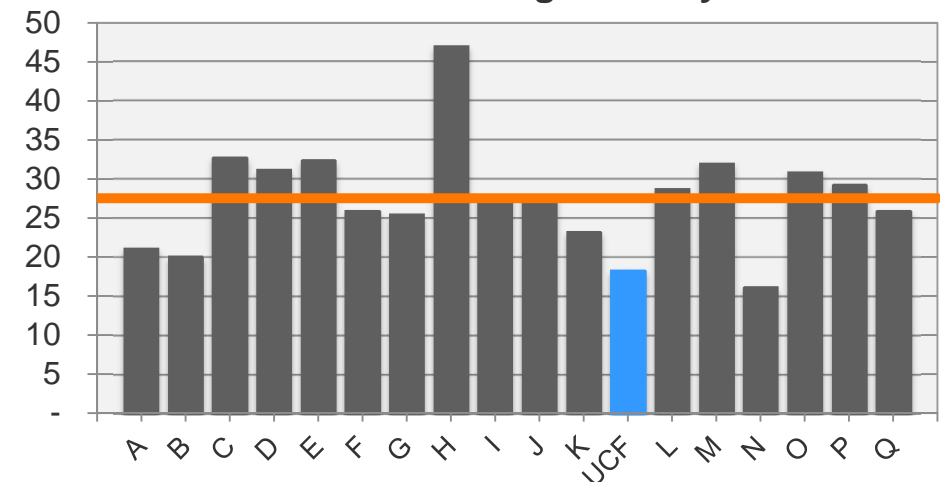
Core Issues

> 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)

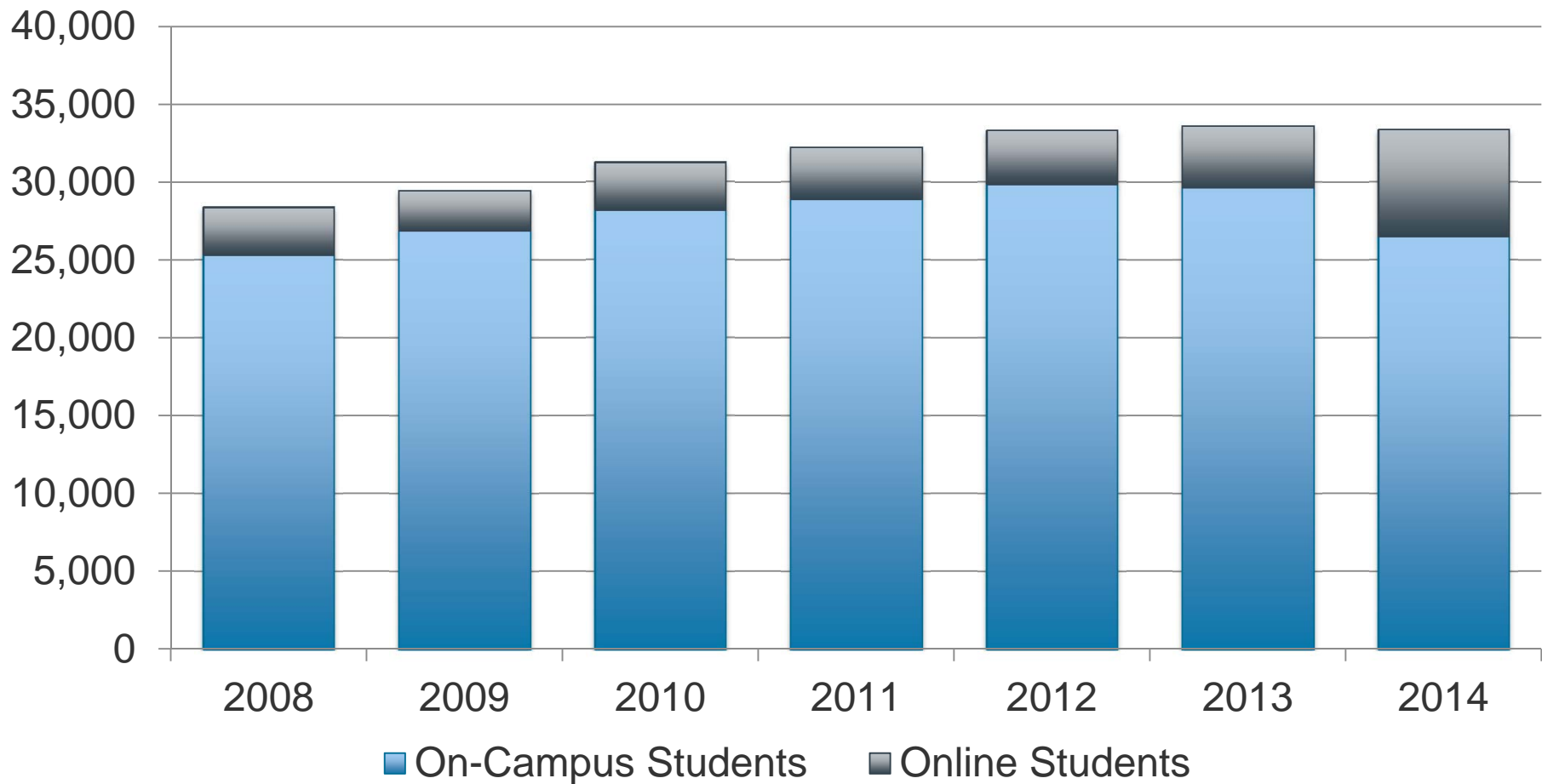>> Campus inspection scores are improving, despite fewer overall resources

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Decrease in On-Campus Students in FY14

Growth in Space Versus "On-Campus" Students

Legend:
- Total Institutional GSF
- Total On-Campus Students

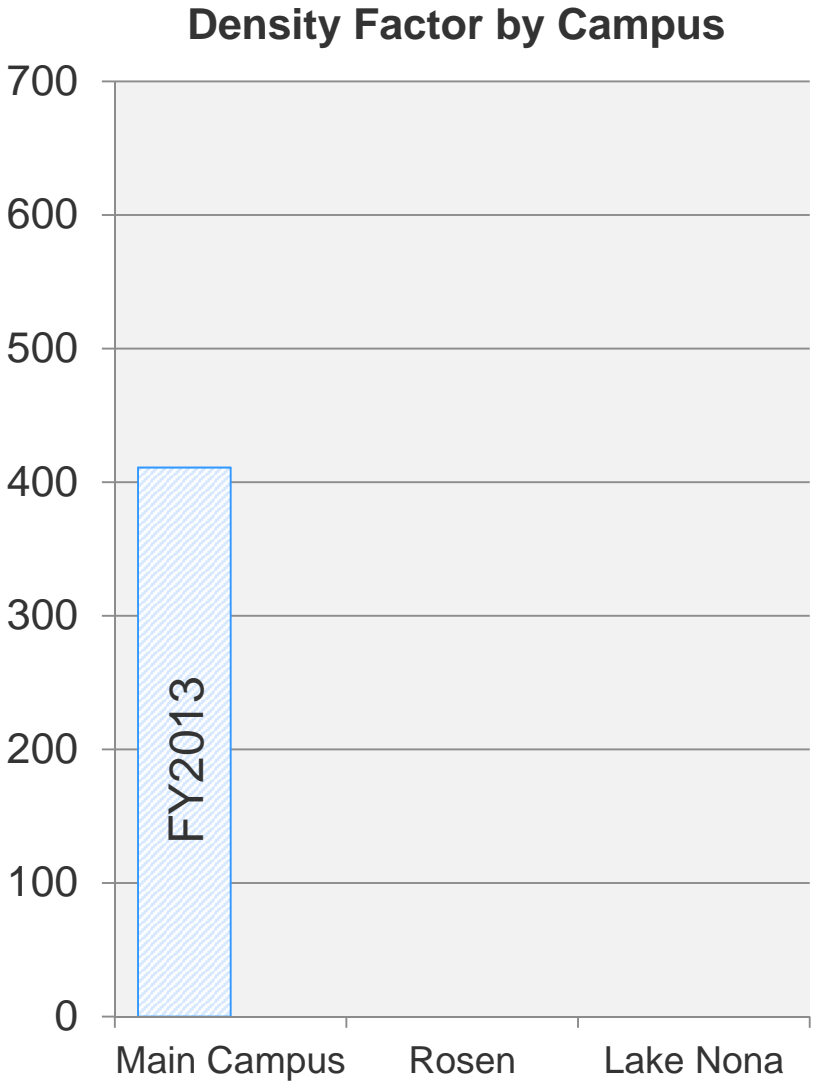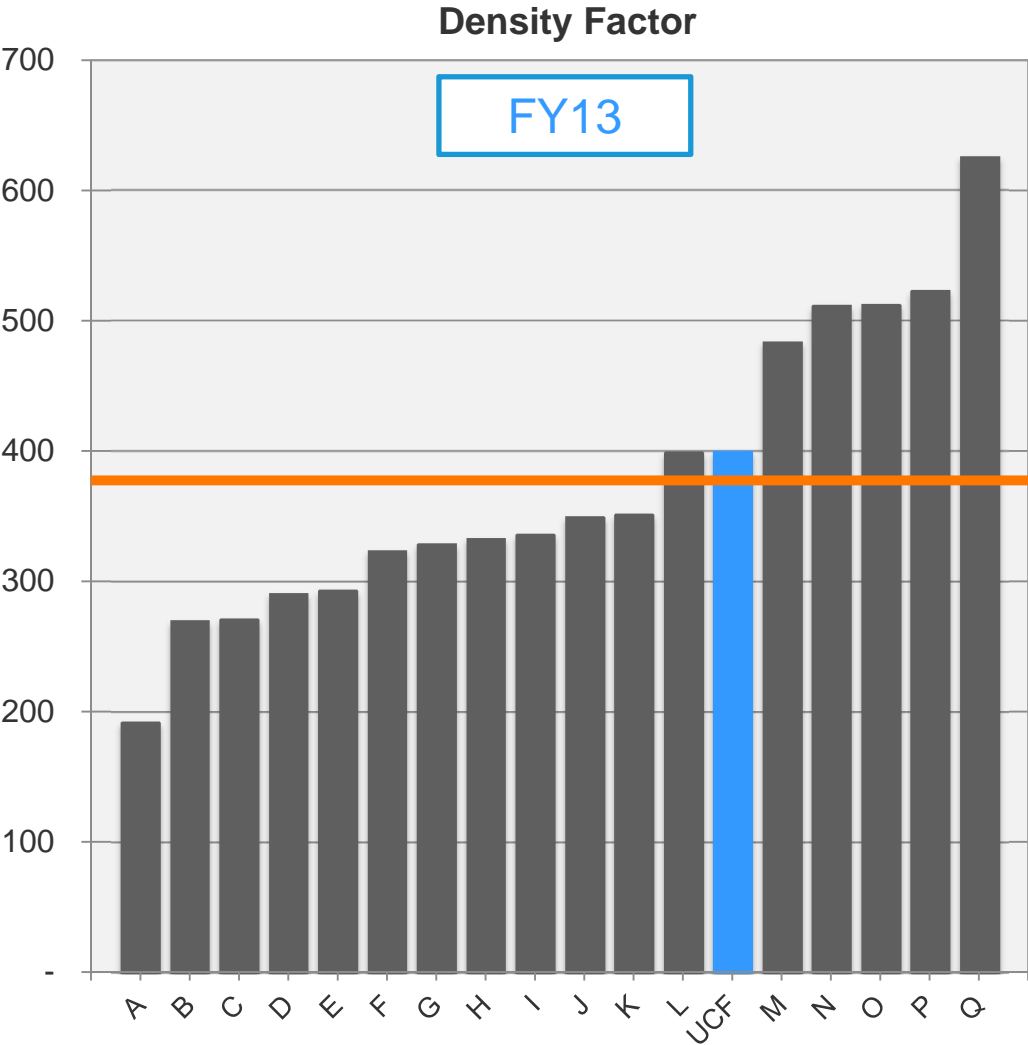Callout: **3152 Students**

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The Mix of Main Campus Students is Changing

Total Students Educated

Legend: ■ On-Campus Students ■ Online Students

Declining On-campus students reduces Density Factor

Density Factor

FY13

Density Factor by Campus

FY2013

Main Campus   Rosen   Lake Nona

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Declining On-campus students reduces Density Factor

Density Factor

FY14

Density Factor by Campus

FY2013 FY2014

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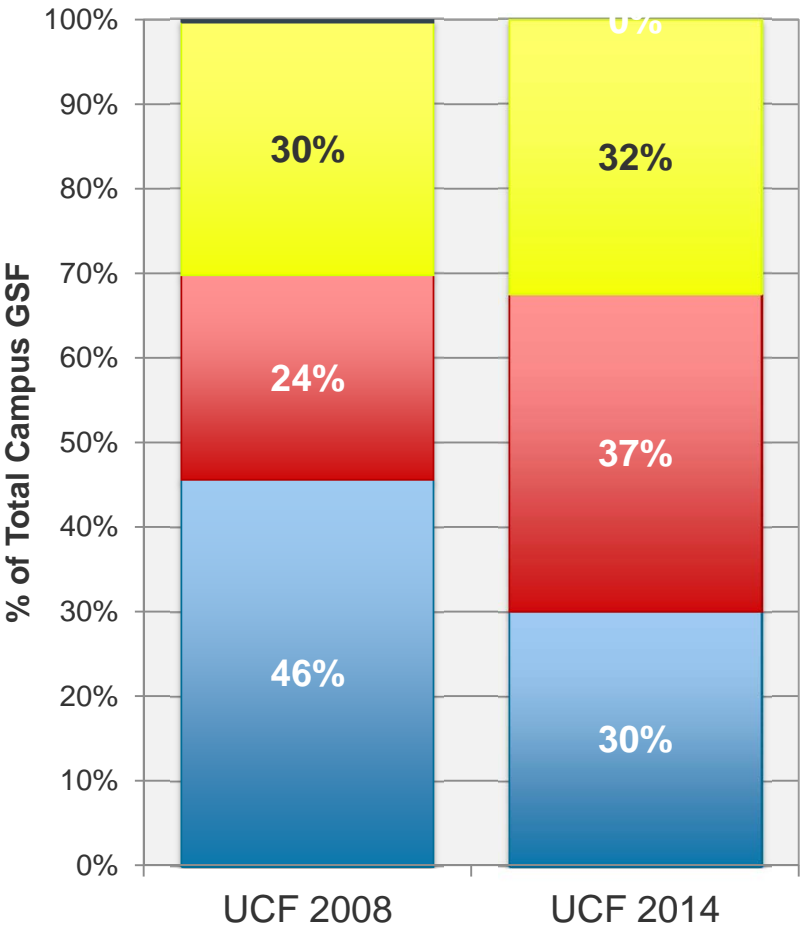
sightlines
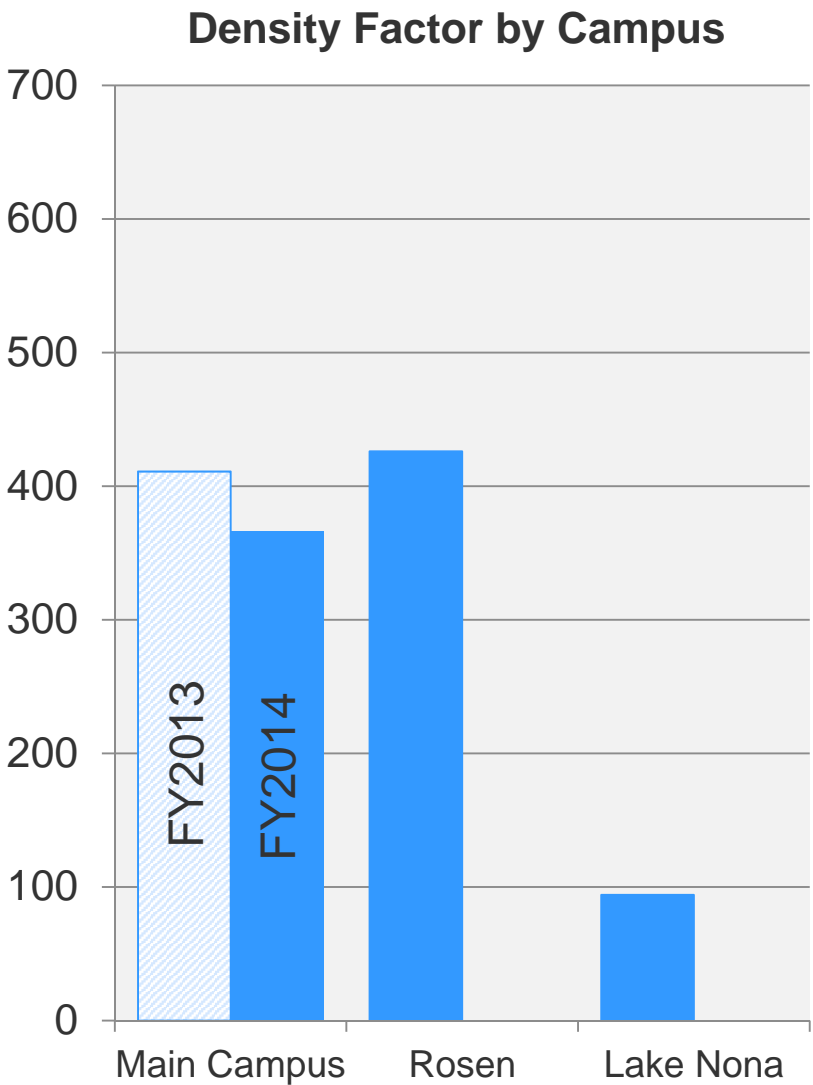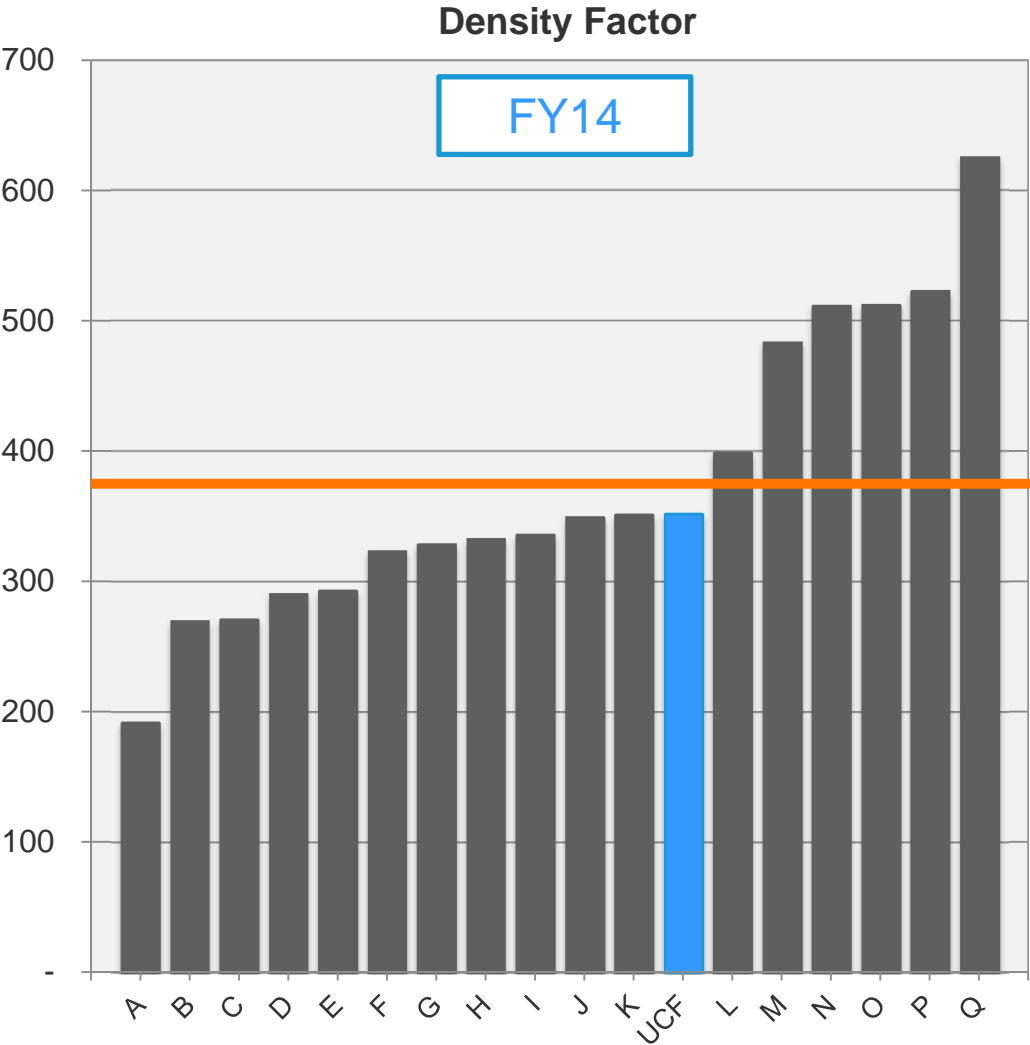
Despite New Space Spending, Campus Getting Older

Total Capital Investment 2008 - 2014

24%

76%
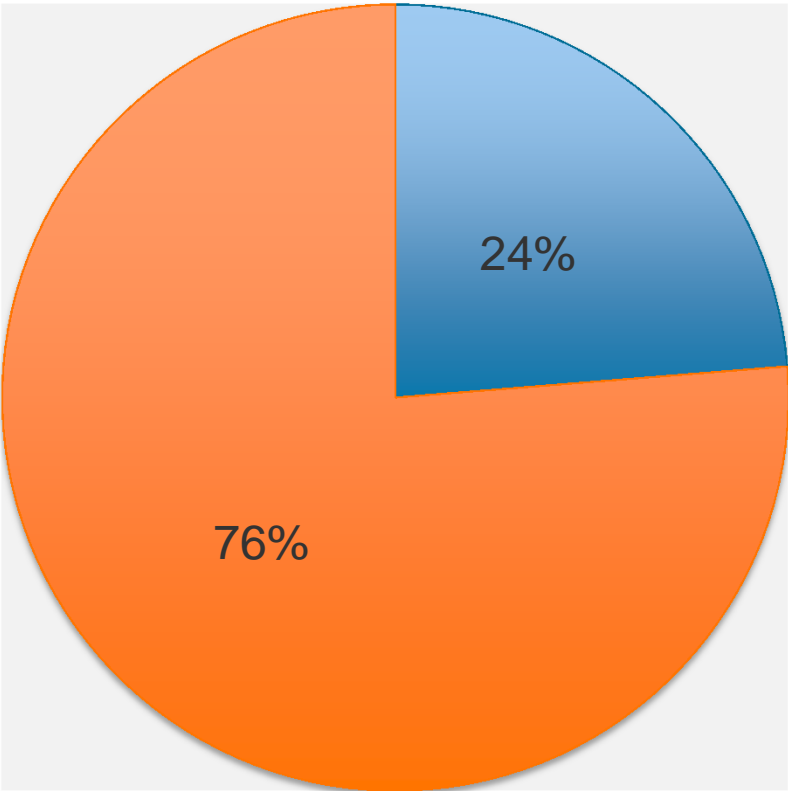
■ Total Existing Space Spending
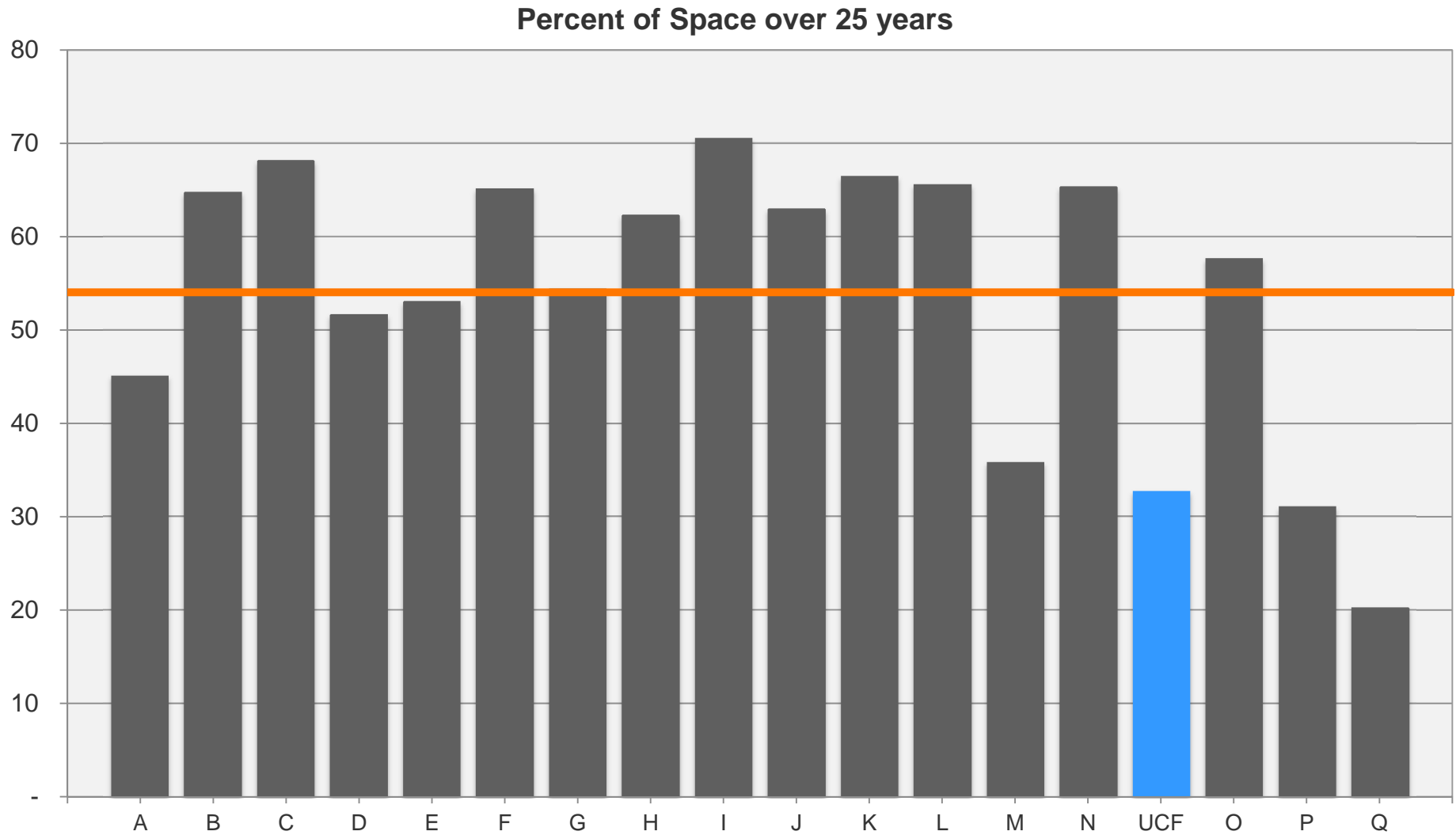■ Total New Space Spending

Campus Age by Category

% of Total Campus GSF

	UCF 2008	UCF 2014
25 to 50	30%	32%
10 to 25	24%	37%
Under 10	46%	30%
Over 50		0%

■ Under 10   ■ 10 to 25   ■ 25 to 50   ■ Over 50

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Space moving from "under 10" to "10 to 25" years

Campus Age by Category

% of Total Campus GSF

	Under 10	10 to 25	25 to 50	Over 50
UCF 2008	46%	24%	30%	
UCF 2009	46%	26%	28%	0%
UCF 2010	50%	21%	30%	0%
UCF 2011	42%	29%	29%	0%
UCF 2012	39%	31%	30%	0%
UCF 2013	36%	34%	30%	0%
UCF 2014	30%	37%	32%	0%
UCF 2025	0%	51%	28%	21%

Legend: ■ Under 10 ■ 10 to 25 ■ 25 to 50 ■ Over 50

sightlines
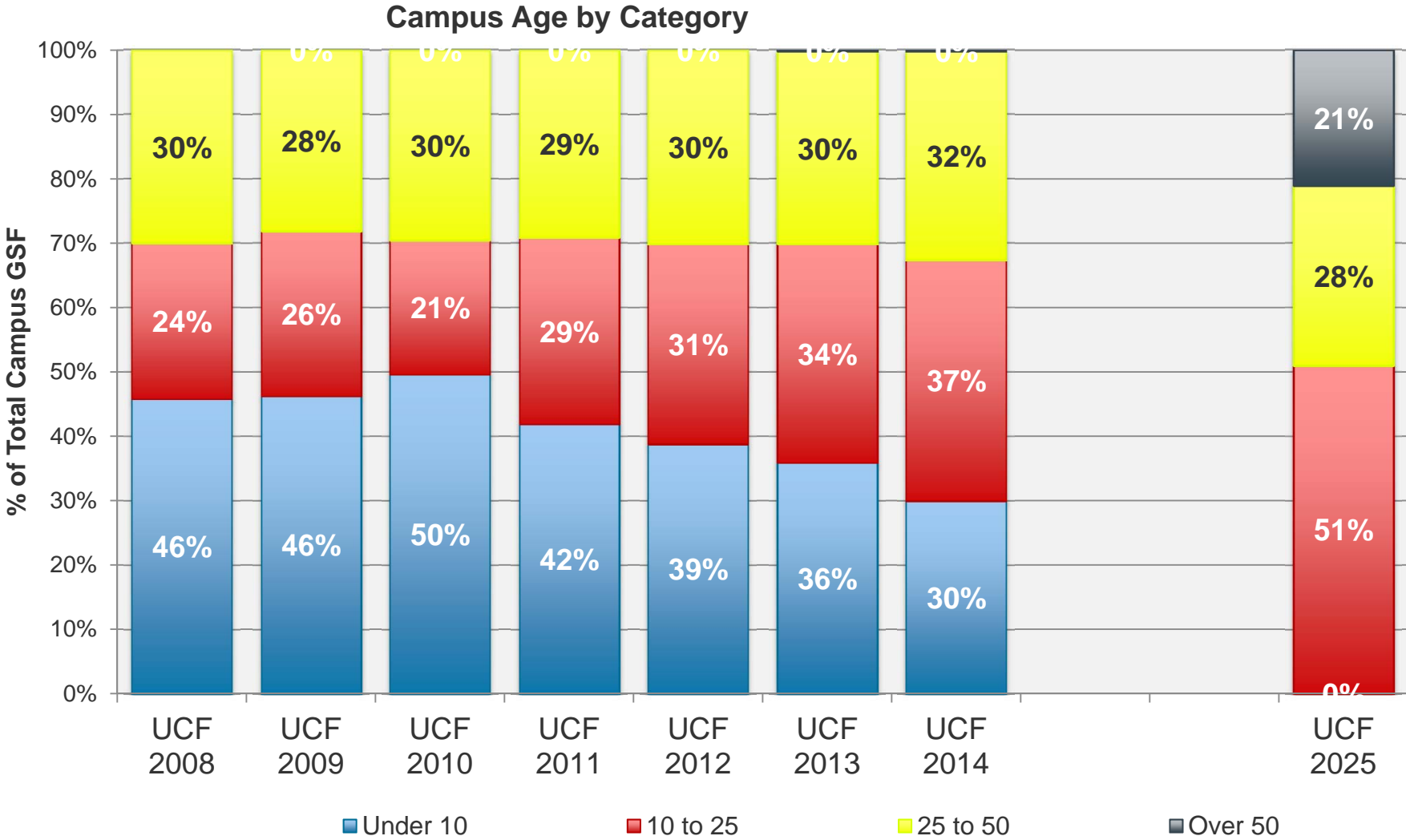
Campus Profile still one of the youngest in the peer group

Percent of Space over 25 years

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Age Distribution - 2014

Analyzing Campus Space & Life Cycle Needs

Legend: UCF Age Distribution | Annual Life Cycle Cash Flow | Amortization of Life Cycle Expenses

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Age Distribution - 2025

Analyzing Campus Space & Life Cycle Needs

Legend: UCF Age Distribution — Annual Life Cycle Cash Flow — Amortization of Life Cycle Expenses

X-axis: Years (0–50)
Left Y-axis: $/GSF ($0–$60)
Right Y-axis: % of Space (0%–25%)

sightlines
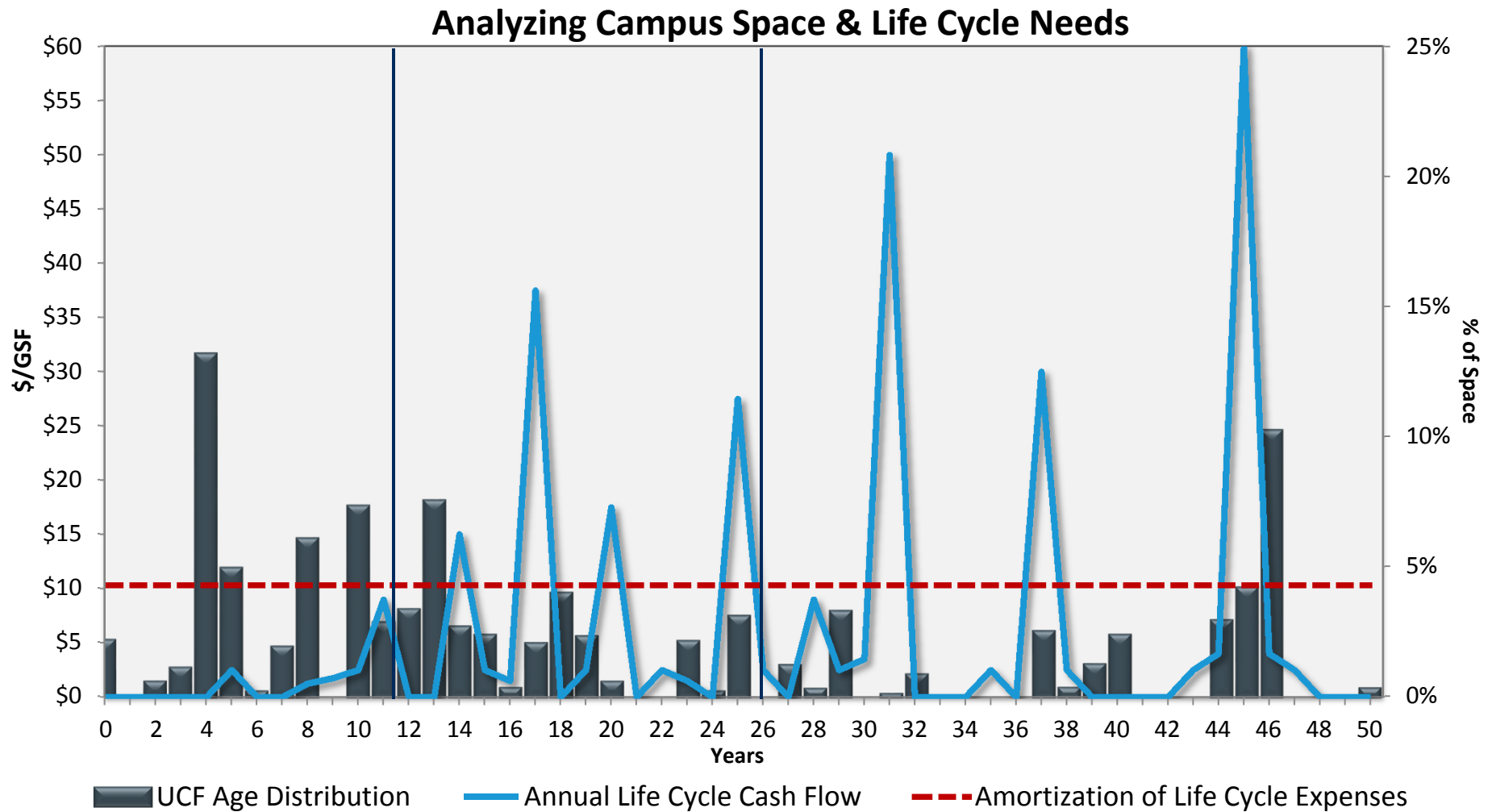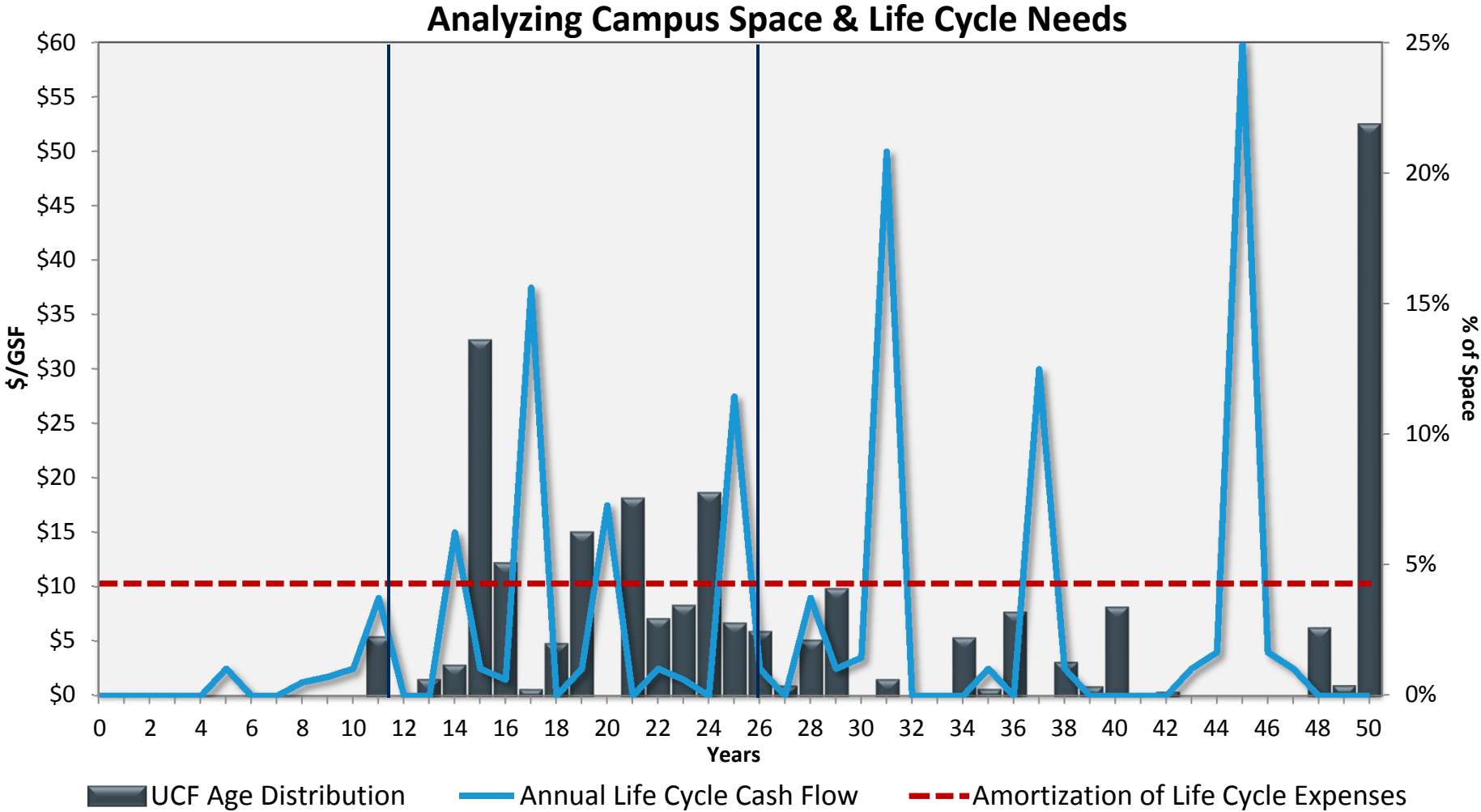
Total Capital Spending

Total Capital Investment 2008 - 2014

Legend: ■ Total Project Spending ■ Total New Space Spending

Y-axis: Total Dollars(Millions) — $0, $20, $40, $60, $80, $100, $120

X-axis: 2008, 2009, 2010, 2011, 2012, 2013, 2014
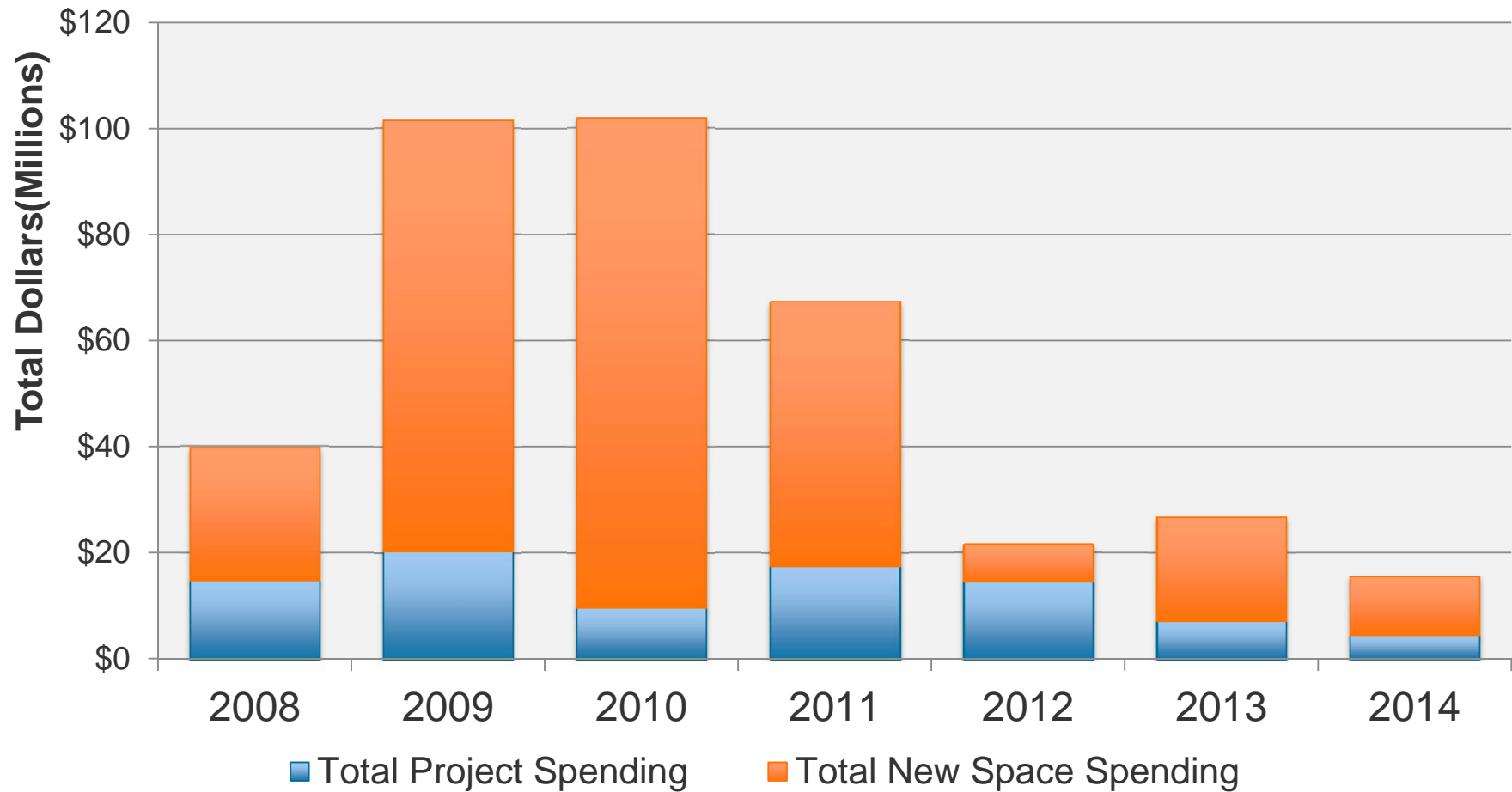
sightlines

Reduced funding in recent years vs. peers

University of Central Florida

Peer Institutions
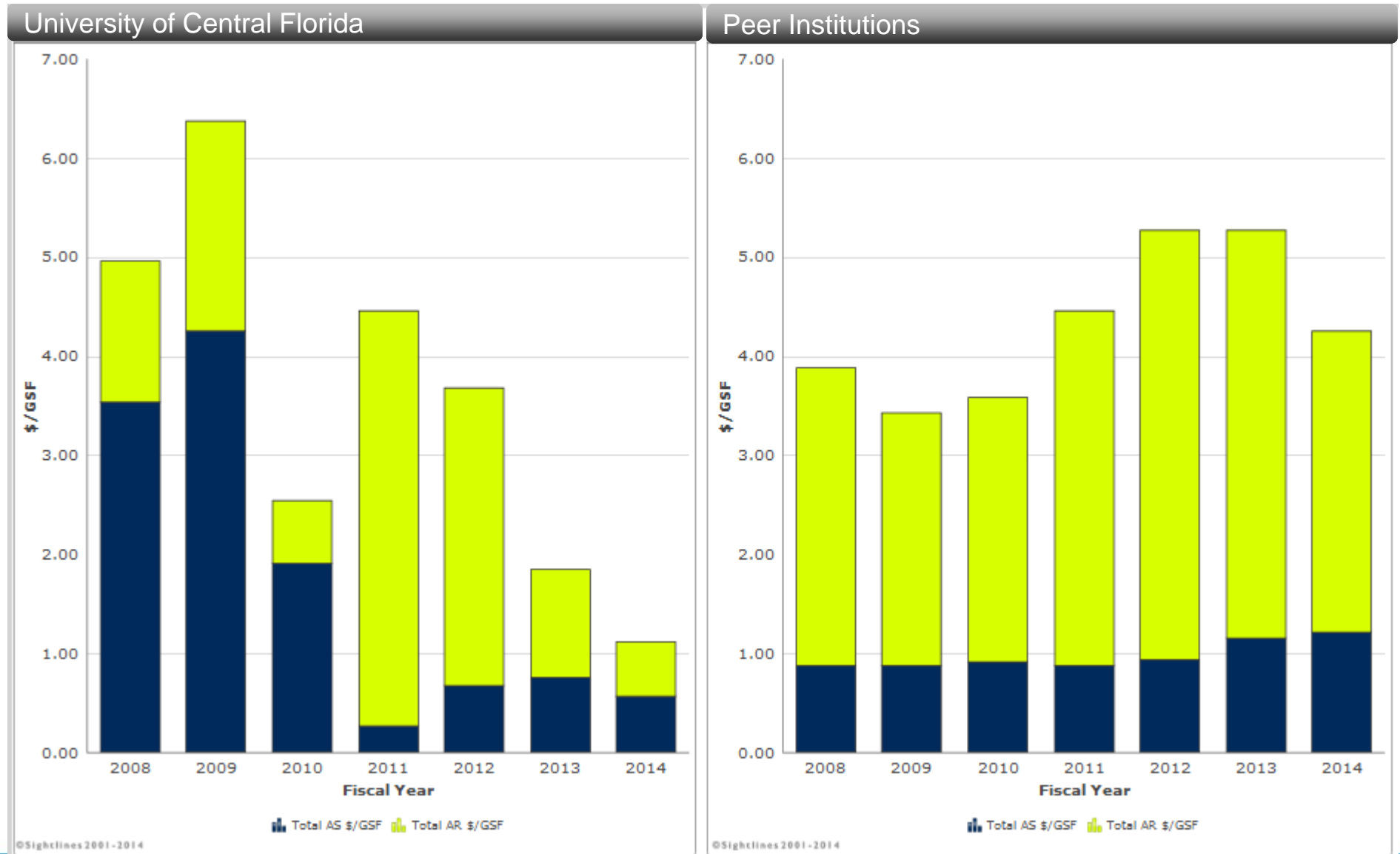
Campus Stewardship Targets

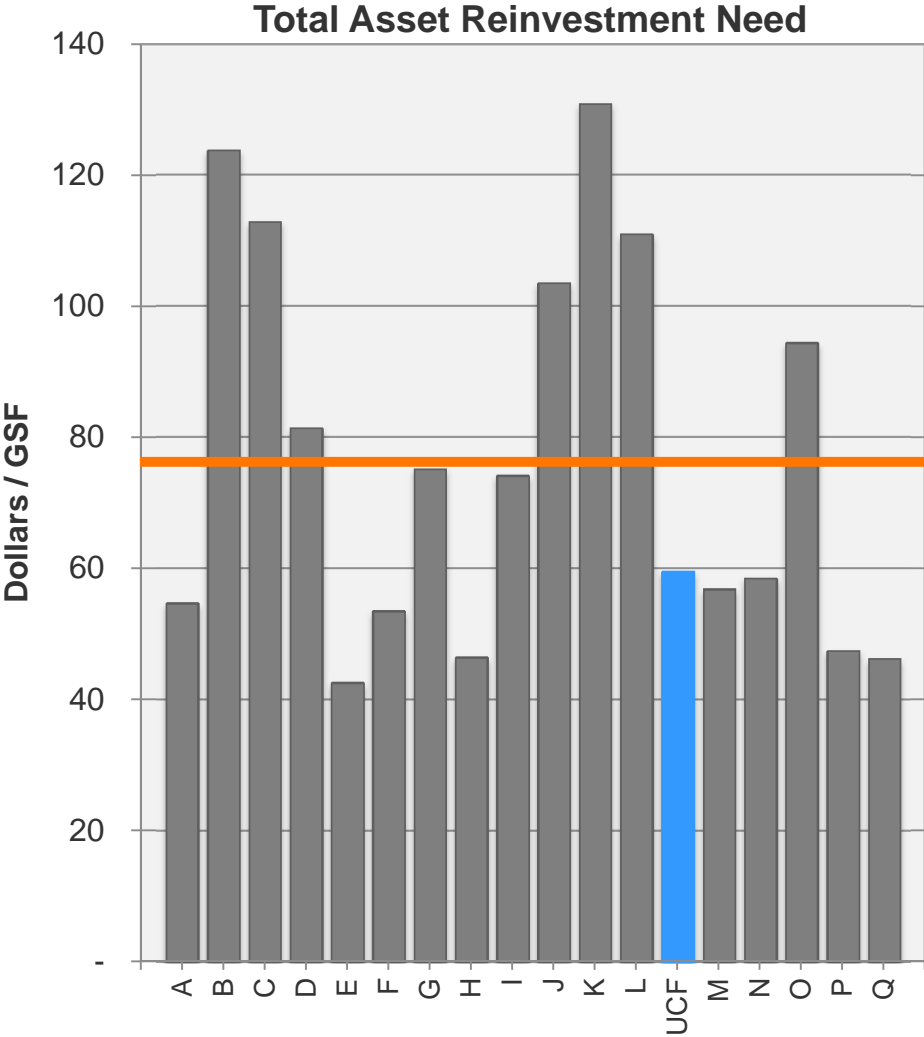*Defining an annual stewardship investment target*
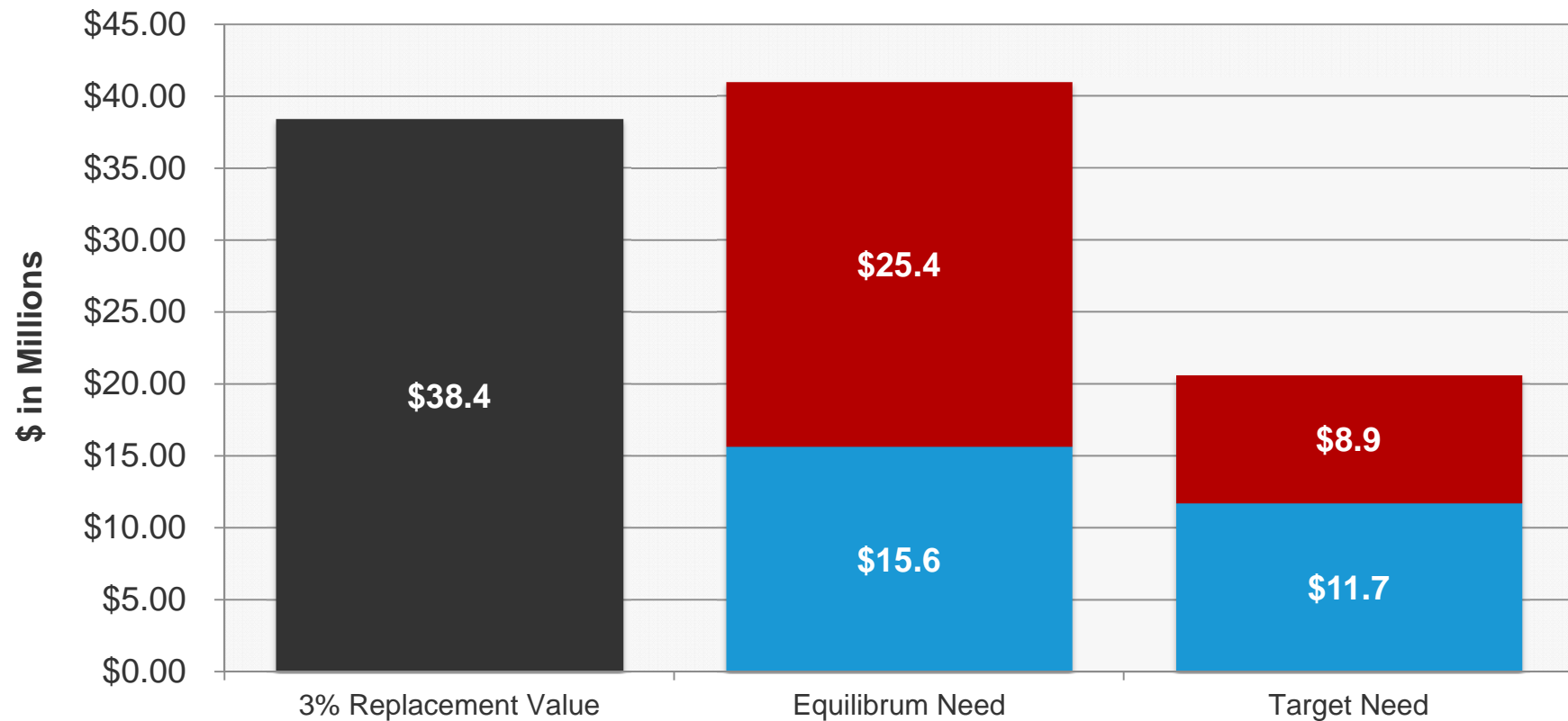
Current Investment falls short of growing need

Deferral rate increases in each subsequent year
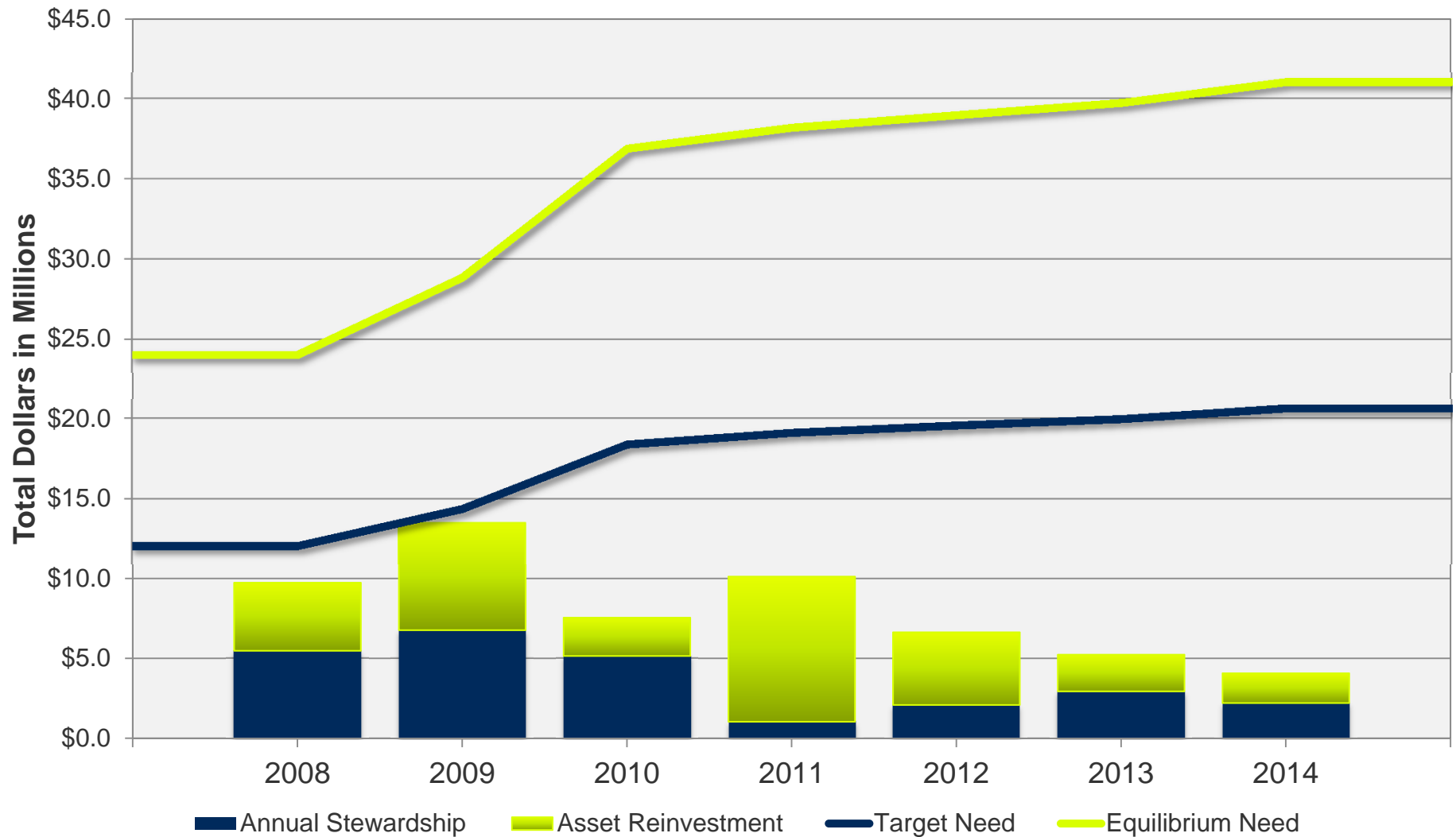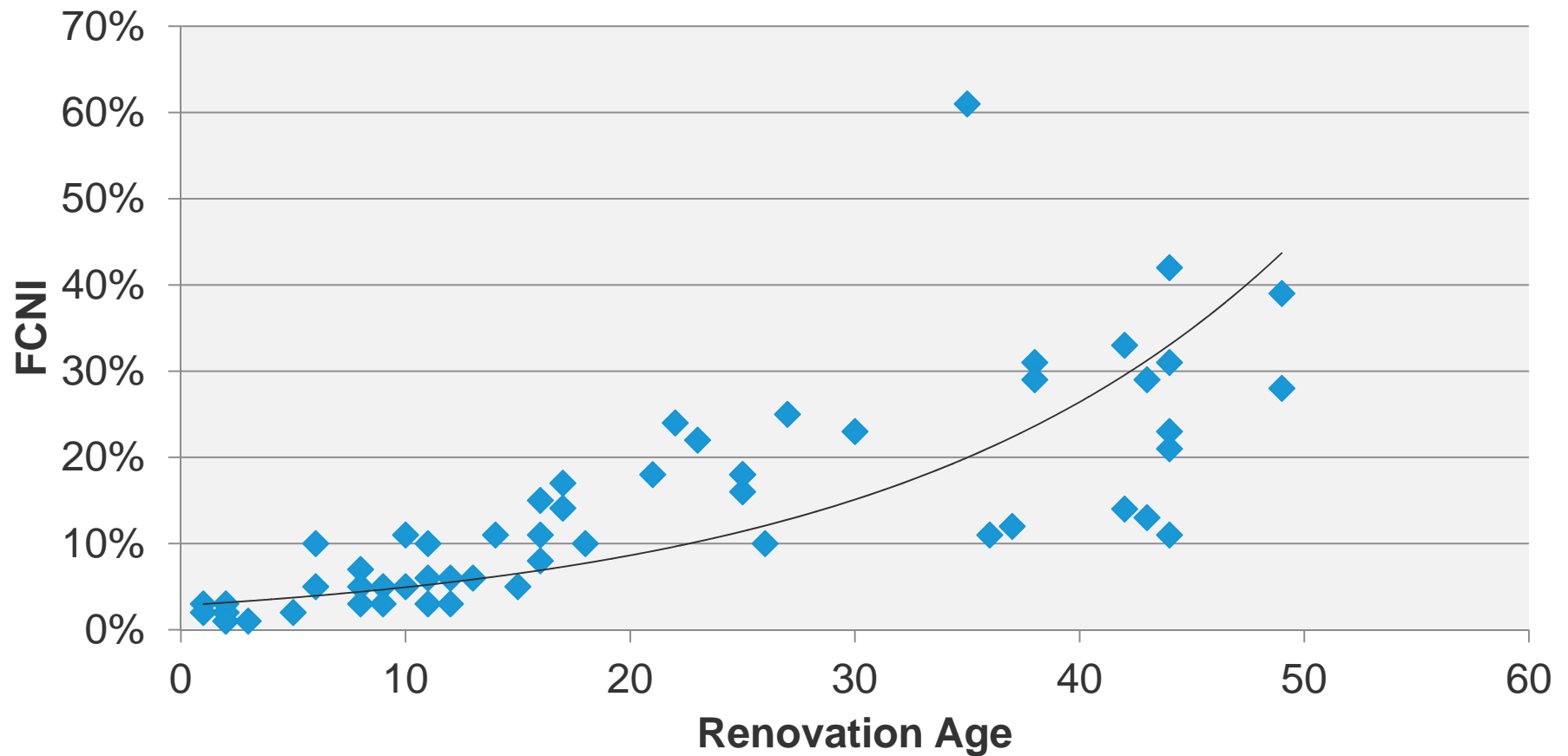
Backlog has been growing, still below peers

Total Asset Reinvestment Need

(Dollars / GSF, categories A–Q and UCF; UCF bar highlighted in blue at ~59, peer average line ~76)

UCF Asset Reinvestment Backlog, By Category

(Stacked bars 2008–2014)

- Maintenance/Repair $/GSF
- Modernization $/GSF
- Infrastructure $/GSF

sightlines
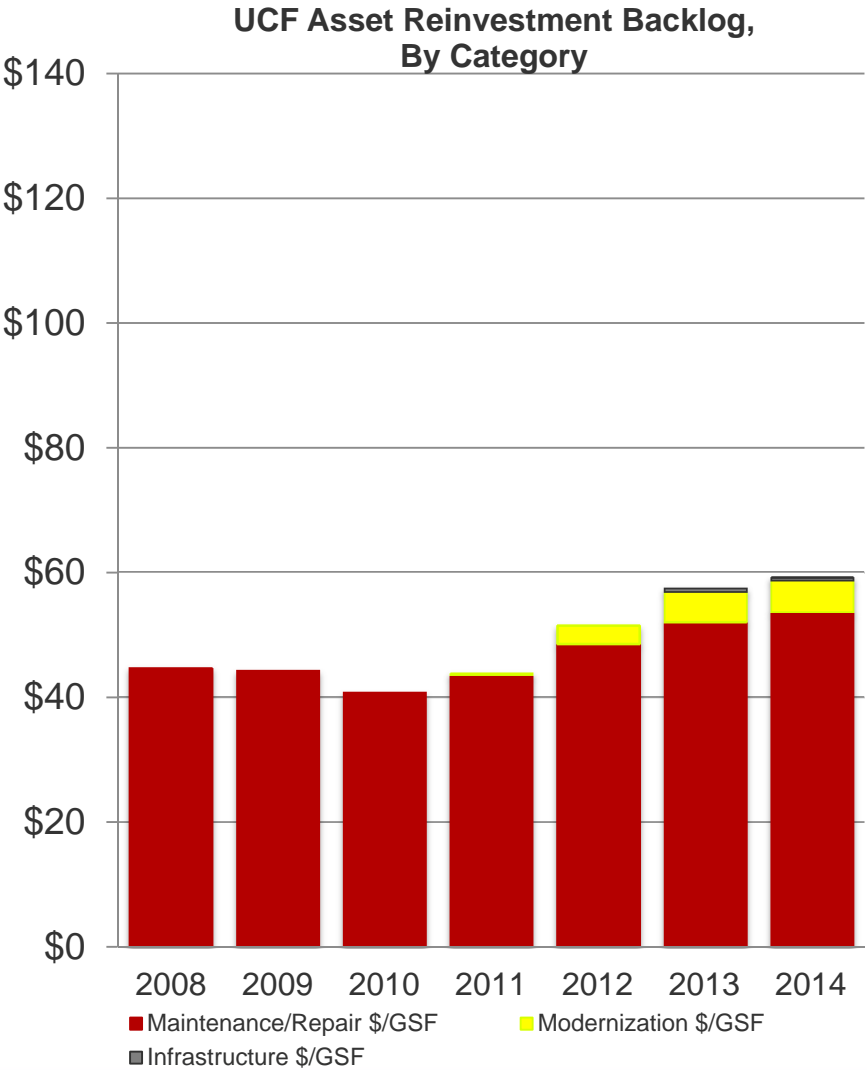
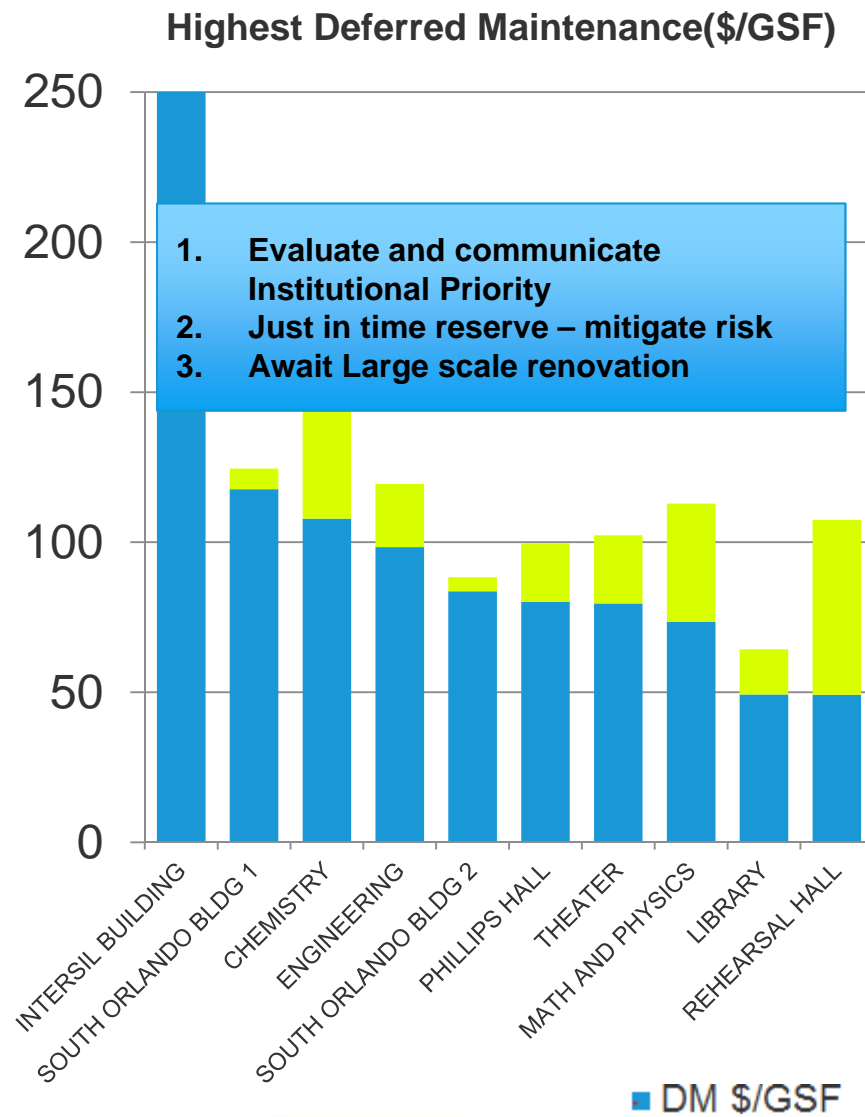# Understanding the backlog helps with prioritization

ISES provides foundation for making investment decisions

Building Age vs. FCNI
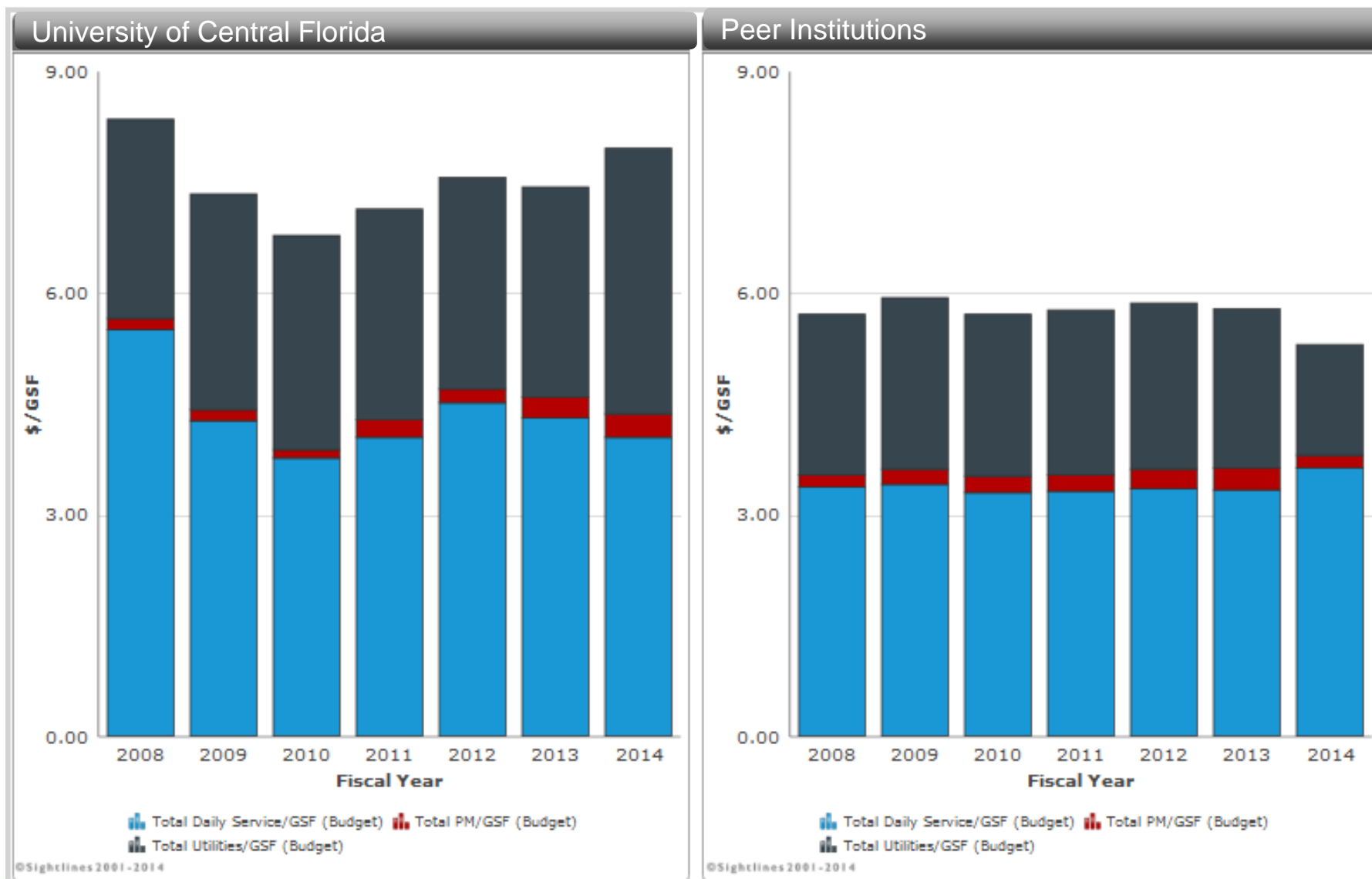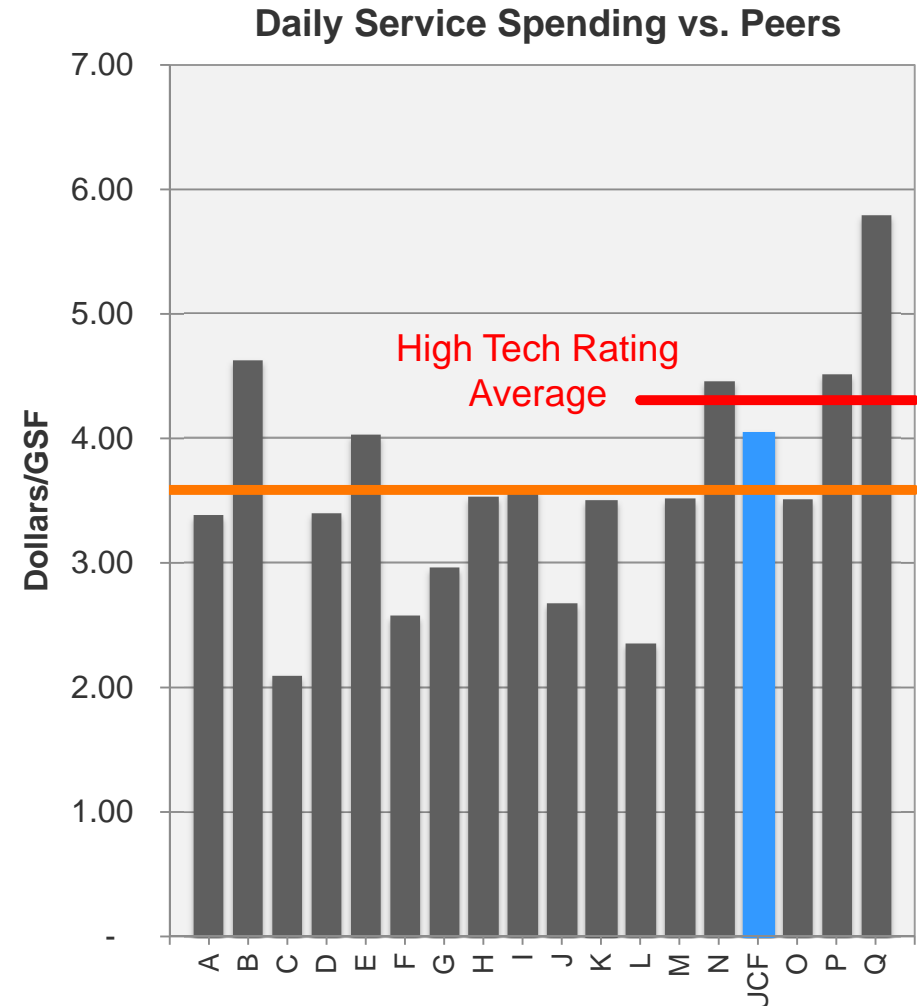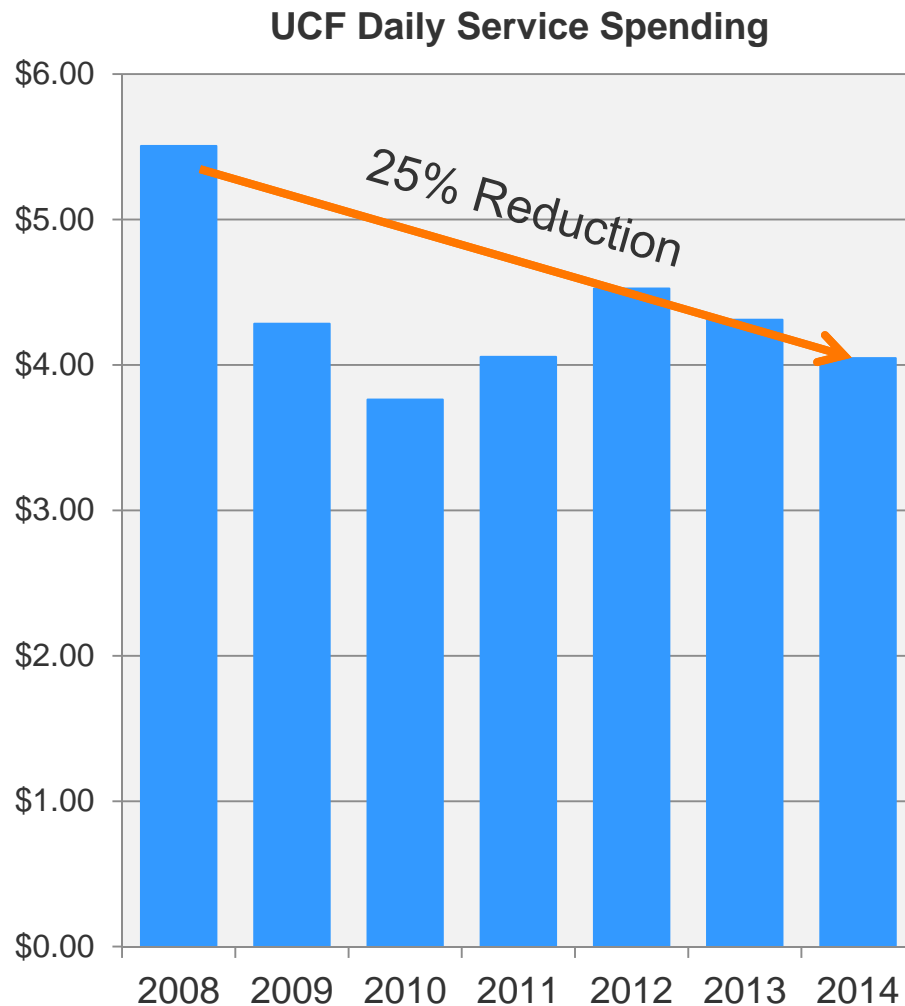*Buildings over 5,000GSF*

Differentiating investment strategies

Highest Deferred Maintenance($/GSF)

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

Buildings (left to right): INTERSIL BUILDING, SOUTH ORLANDO BLDG 1, CHEMISTRY, ENGINEERING, SOUTH ORLANDO BLDG 2, PHILLIPS HALL, THEATER, MATH AND PHYSICS, LIBRARY, REHEARSAL HALL

Highest Capital Renewal ($/GSF)

1. **Understand Upcoming Life Cycles**
2. **Focus on key MEP projects**
3. **Project to reduce energy/operational demands**

Buildings (left to right): BIOLOGICAL SCIENCES, CHEMISTRY, COMPUTER CENTER 2, FSEC 2 - LAB BLDG, BUSINESS ADMINISTRATION 1, BENNETT BUILDING 1, REHEARSAL HALL, FSEC 1 - OFFICE BLDG, COLLEGE OF SCIENCE, COLBOURN HALL, VISUAL ART

Legend: ■ DM $/GSF ■ CR $/GSF

21

sightlines

UCF total budget remains above peers

University of Central Florida

Peer Institutions

Daily service budget has been decreasing

Now competitive with high tech rating peers

UCF Daily Service Spending

25% Reduction

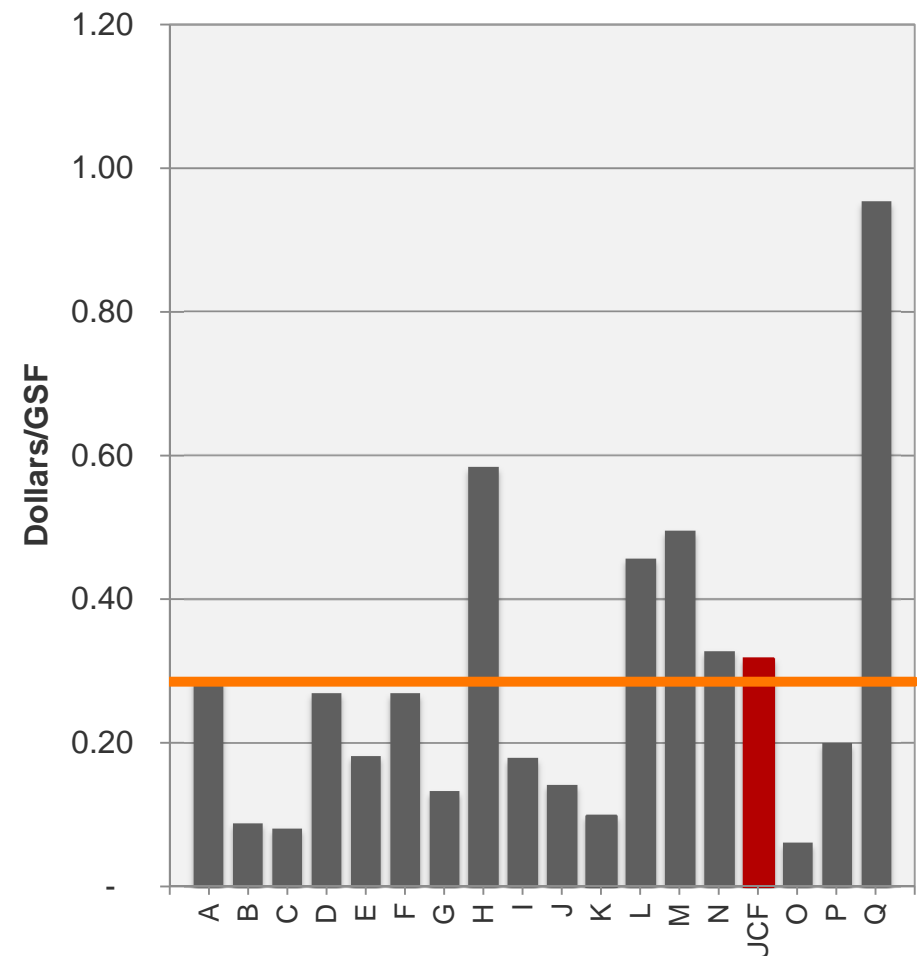### Daily Service Spending vs. Peers

High Tech Rating Average

Dollars/GSF

sightlines

Steadily increase in value added work

UCF Planned/Preventative Maintenance

100% Growth

2008 2009 2010 2011 2012 2013 2014
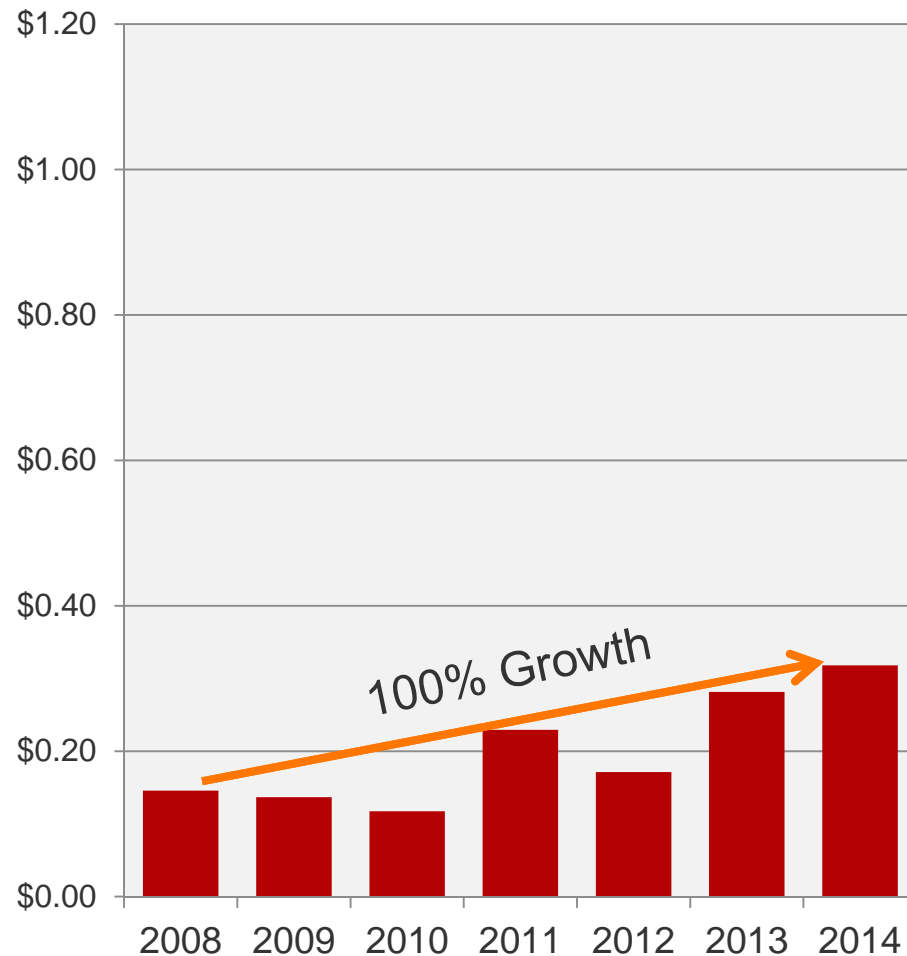
Planned/Preventative Maintenance vs. Peers

Dollars/GSF

A B C D E F G H I J K L M N UCF O P Q

sightlines

Higher maintenance resources compare to peers

Maintenance Coverage

Maintenance Supervision

Maintenance Materials
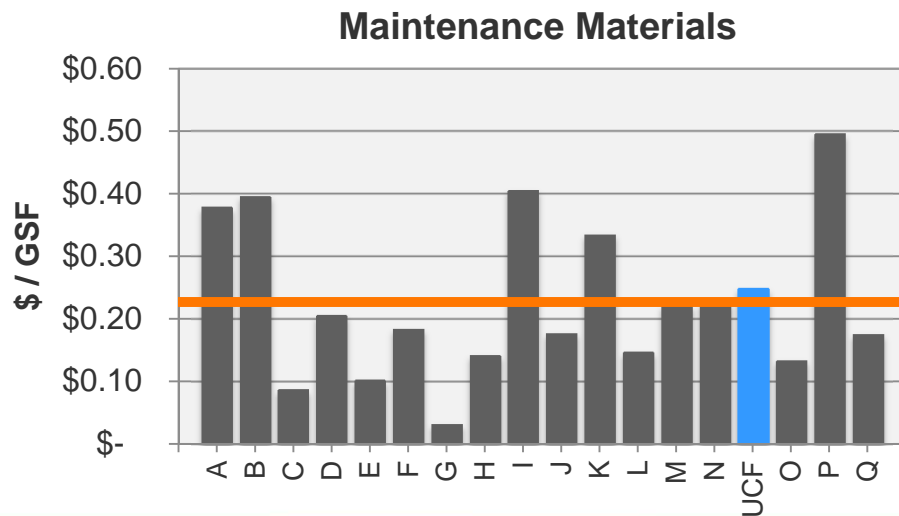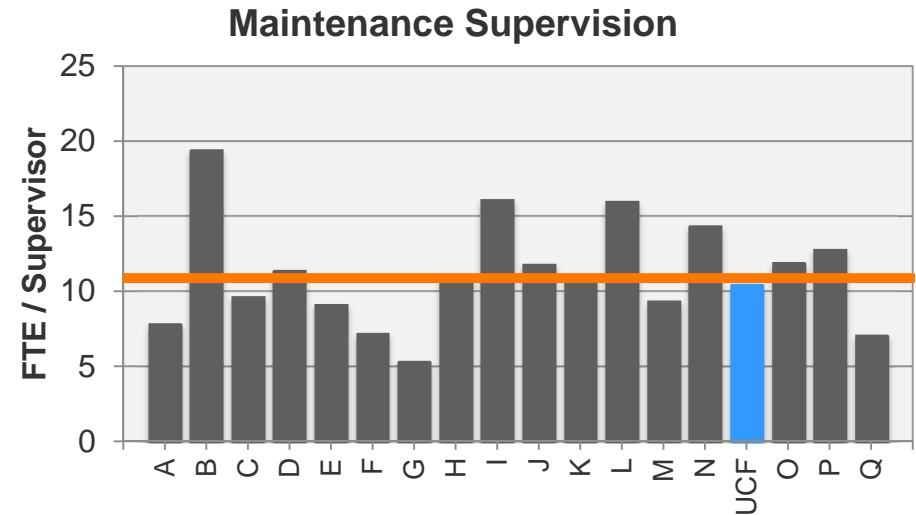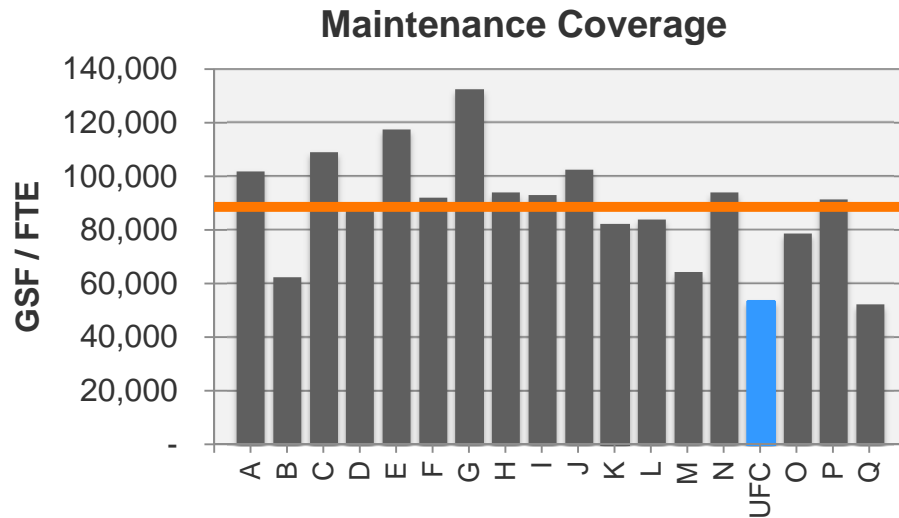
General Repair Scores

UCF 2013 Score	3.6
UCF 2014 Score	3.8
Peer Score	3.8

*Institutions ordered by tech rating

sightlines

Custodial supervision is now inline with peers

Custodial Coverage

Custodial Supervision

Custodial Materials
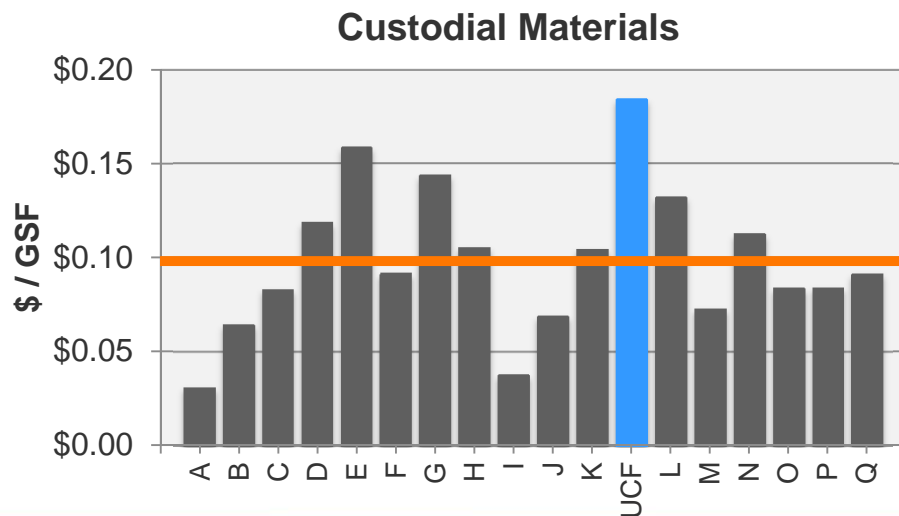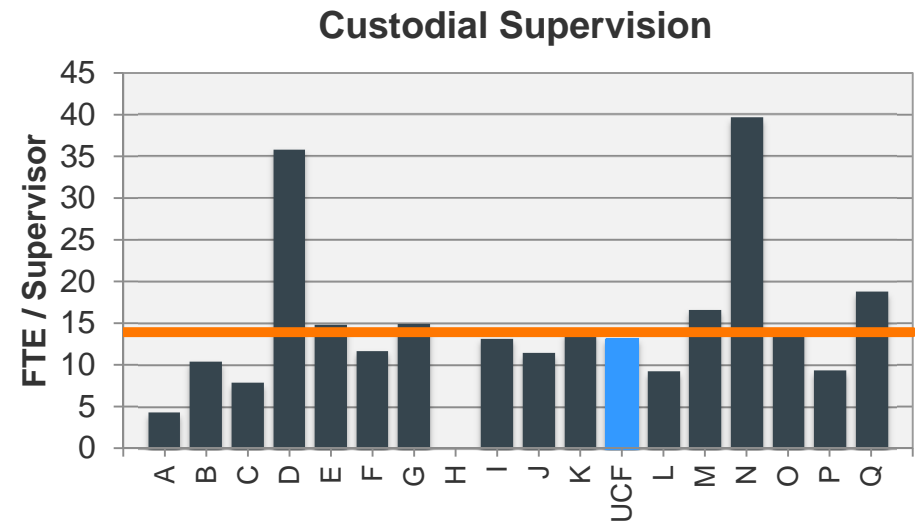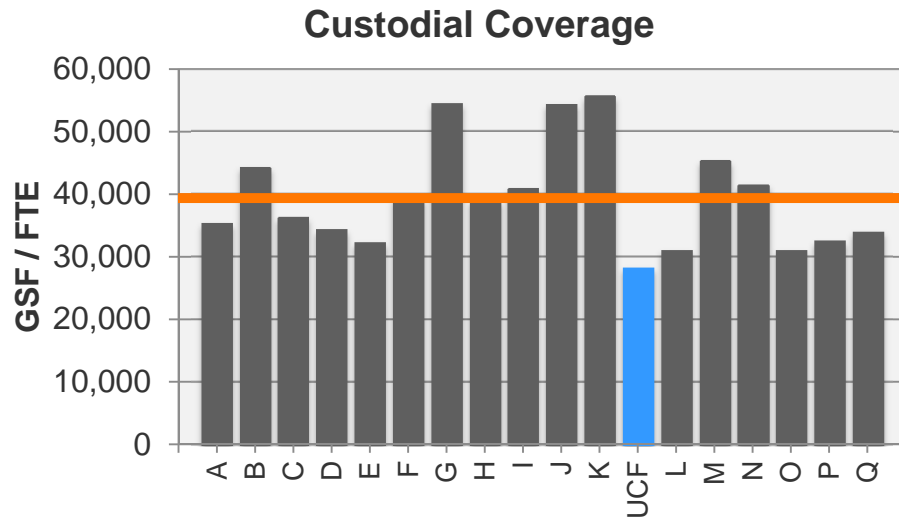
Cleanliness Scores

UCF Score 2013	3.9
UCF Score 2014	4.0
Peer Score	4.1

Institutions ordered by density factor

sightlines

Strong Grounds Performance

Grounds Coverage
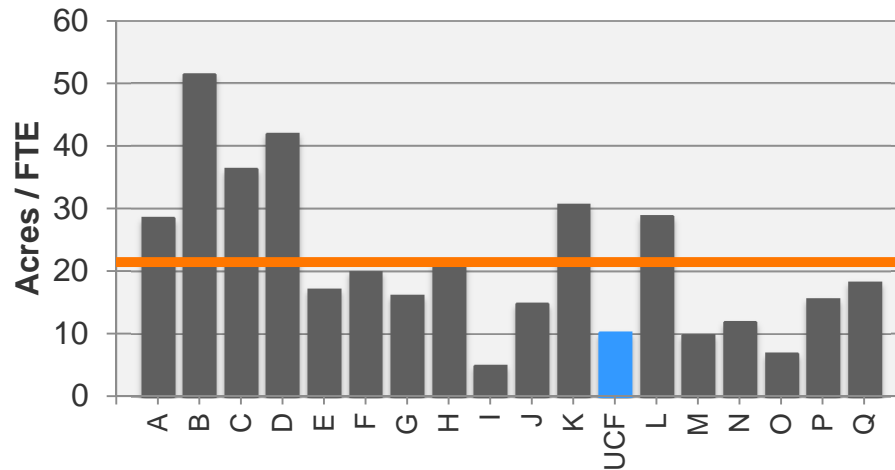
Grounds Supervision
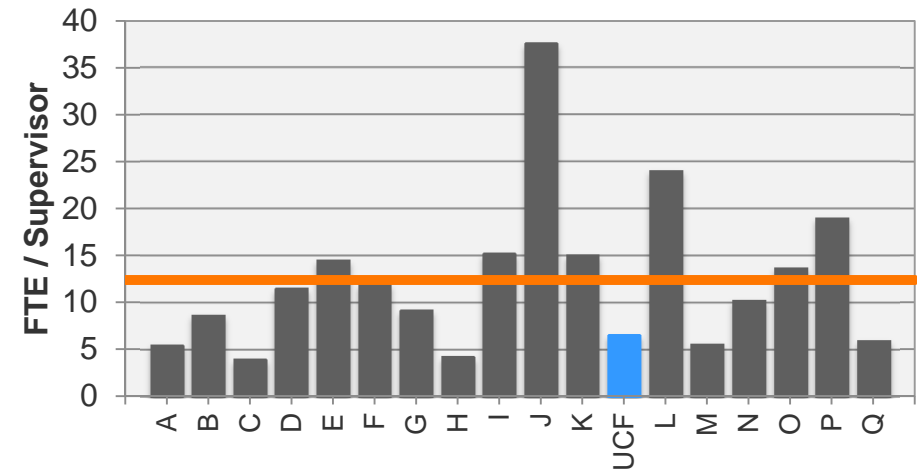
Grounds Materials
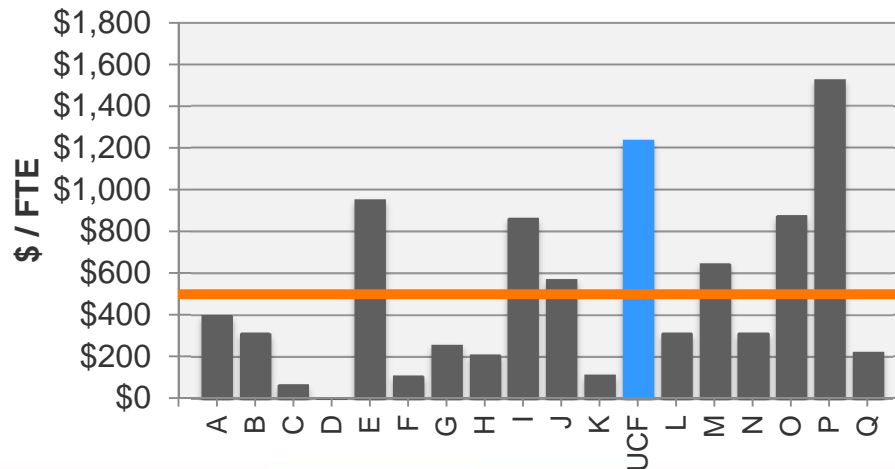
Grounds Scores

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

Institutions ordered by grounds intensity

sightlines

Energy peer group

UCF is in climate zone 1

Climate Zones

- Zone 1 is less than 2,000 CDD and greater than 7,000 HDD.
- Zone 2 is less than 2,000 CDD and 5,500-7,000 HDD.
- Zone 3 is less than 2,000 CDD and 4,000-5,499 HDD.
- Zone 4 is less than 2,000 CDD and less than 4,000 HDD.
- Zone 5 is 2,000 CDD or more and less than 4,000 HDD.
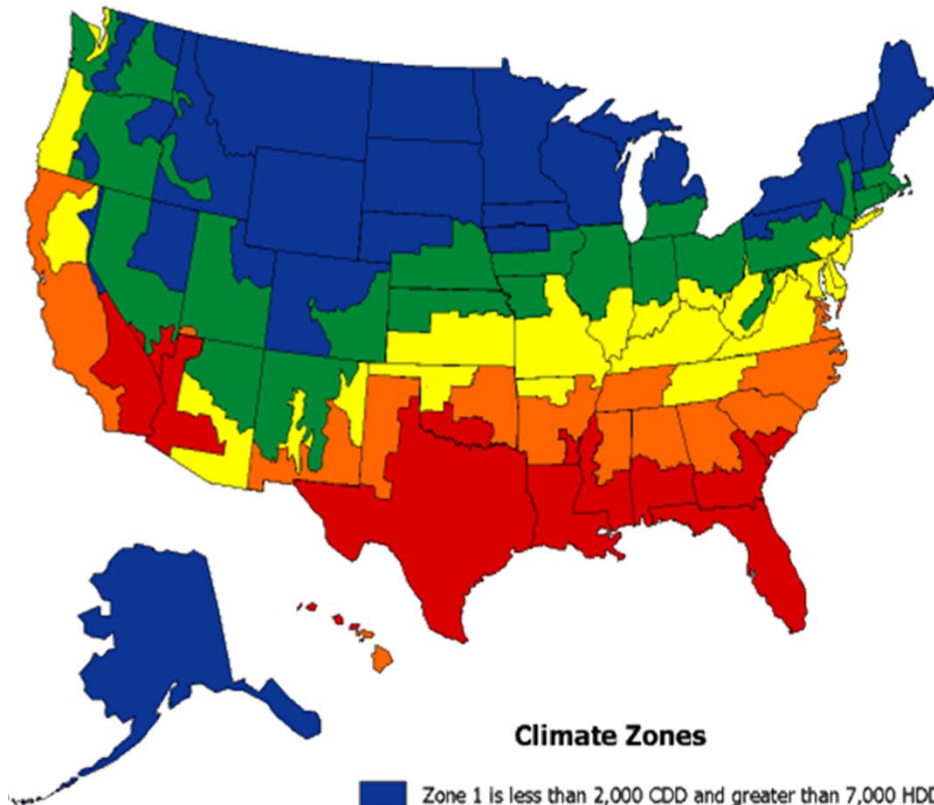
| Institution |
| --- |
| University of Florida - E&G |
| Georgia Institute of Technology - Facilities |
| Nova Southeastern University - Main Campus |
| University of Southern Mississippi |
| Eckerd College |
| Clemson University - E&G |
| Florida State University |

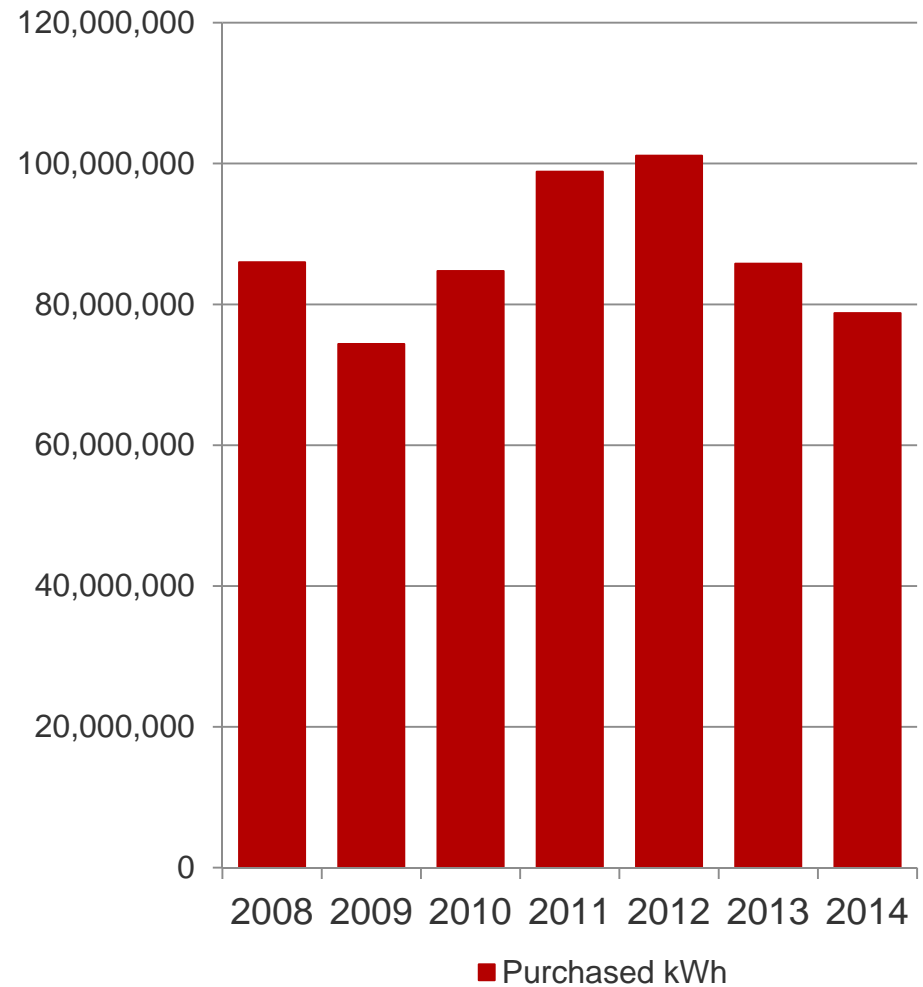**Comparative Considerations**

Size, technical complexity, and geographic location.

sightlines

# Purchased Utilities – Increasing fossil with Cogen

Purchased Fossil Fuel

- Purchased Fossil for Generating kWh
- Purchased Fossil for Heating

Purchased Electric

- Purchased kWh

sightlines
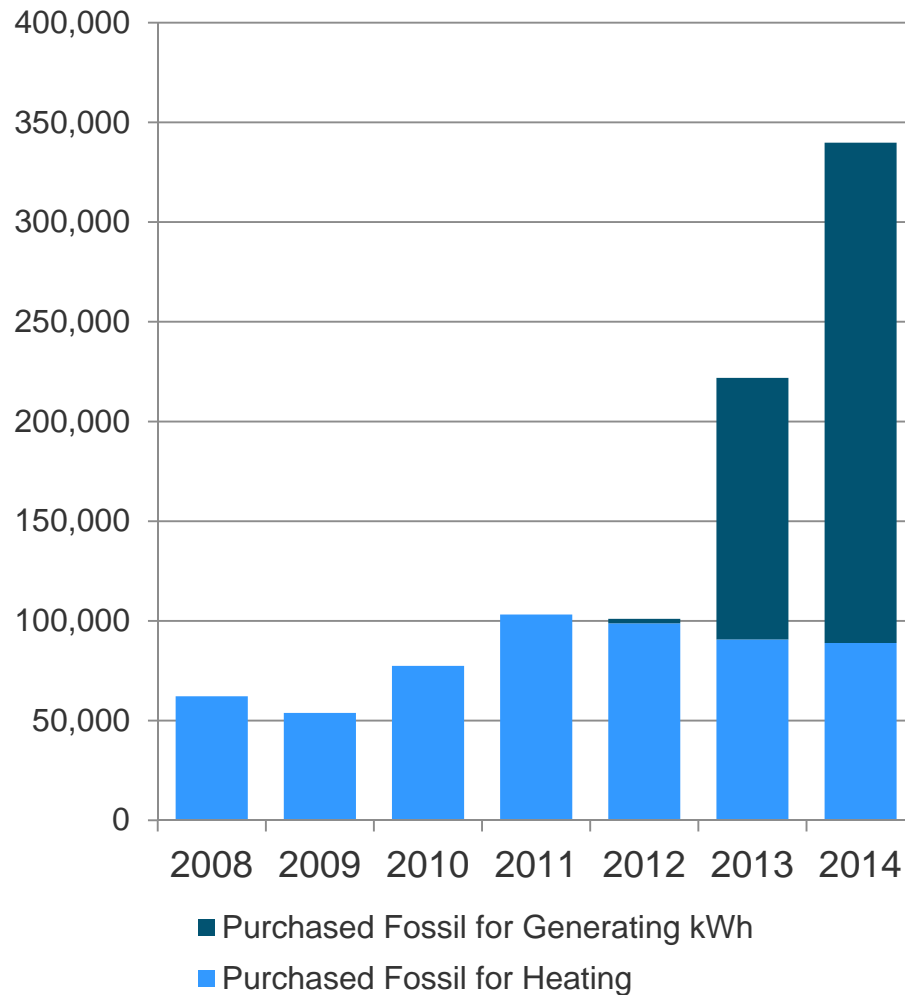
Unit Cost by Fuel type

Fossil cost lower and declining compared to electric

Comparing Unit Costs ($/MMBTU)

Legend: ■ Purchased Fossil Unit Cost ■ Purchased Electric Unit Cost
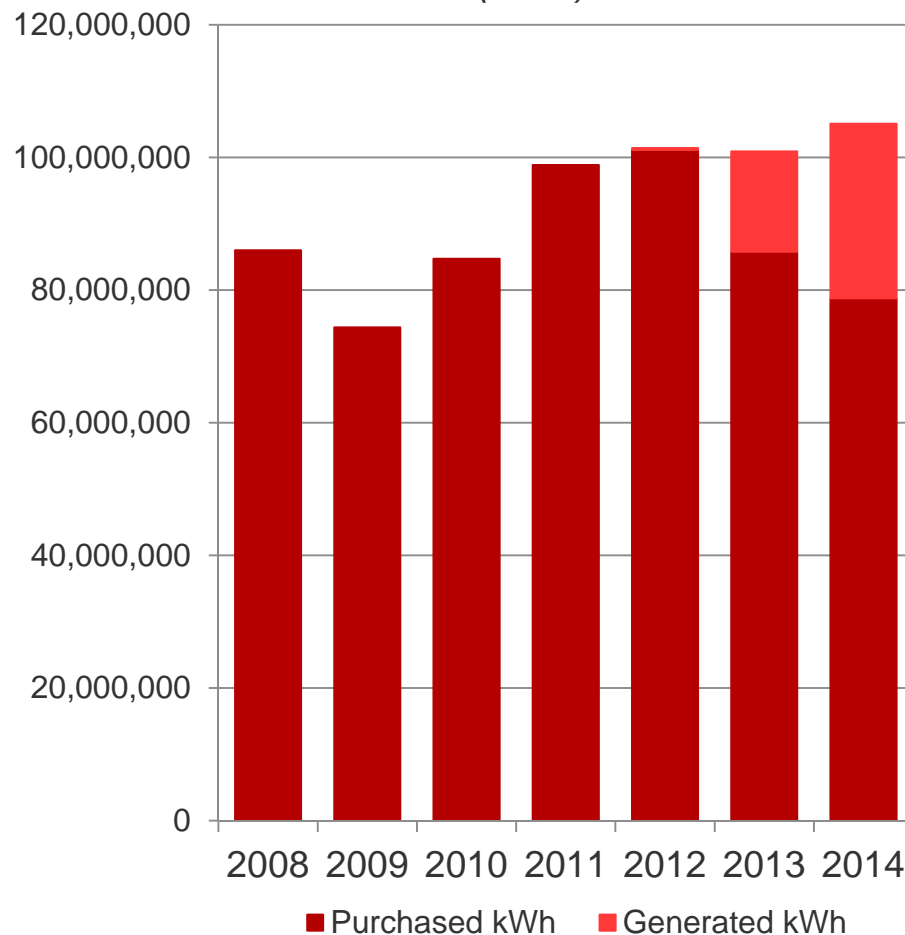
sightlines
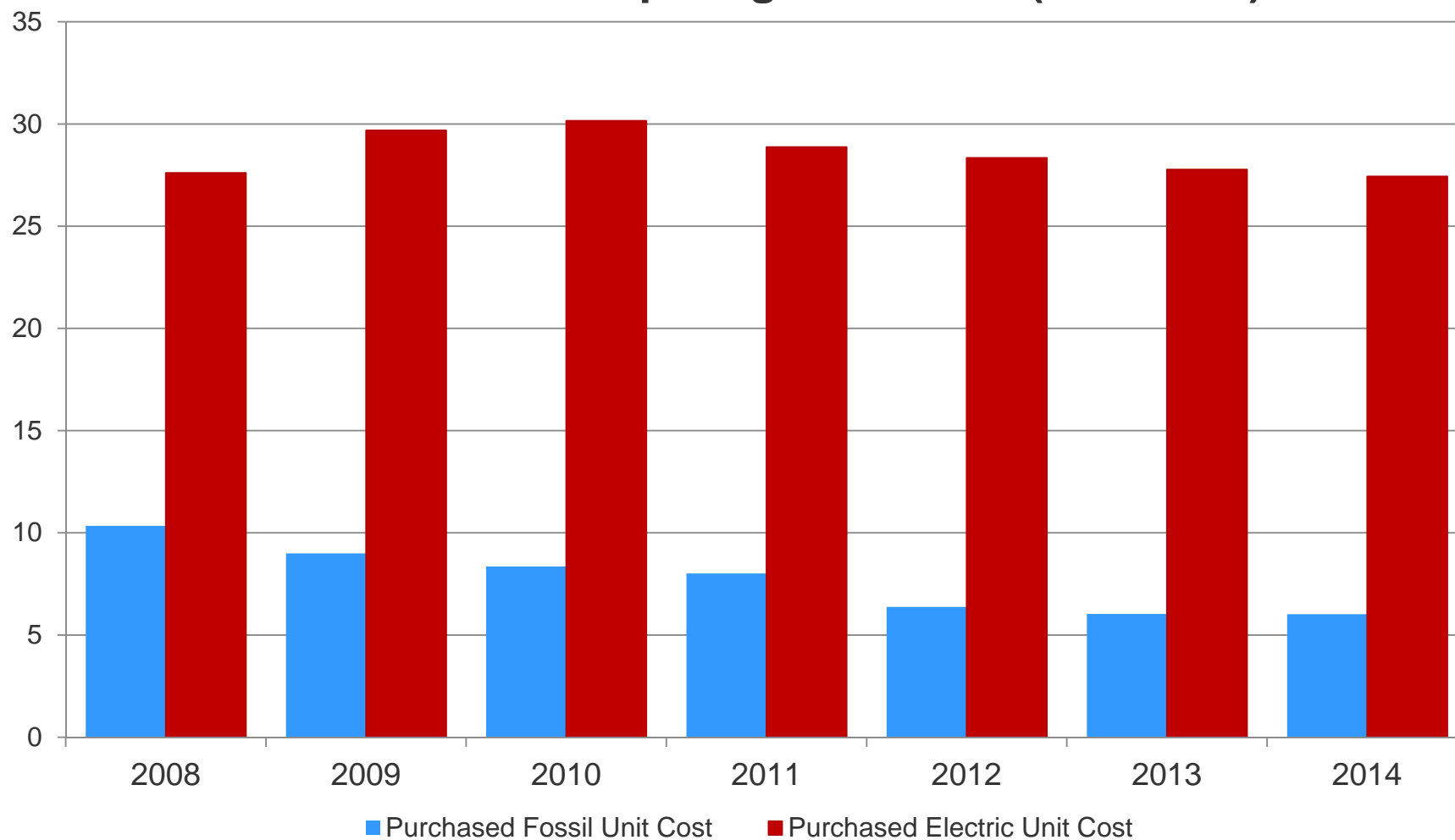
"Qualified" Utilities

Account for Electric Generation

Qualified Fossil Fuel
(MMBTU)

Qualified Fossil Fuel

Purchased Electric
(kWh)

Purchased kWh   Generated kWh

sightlines
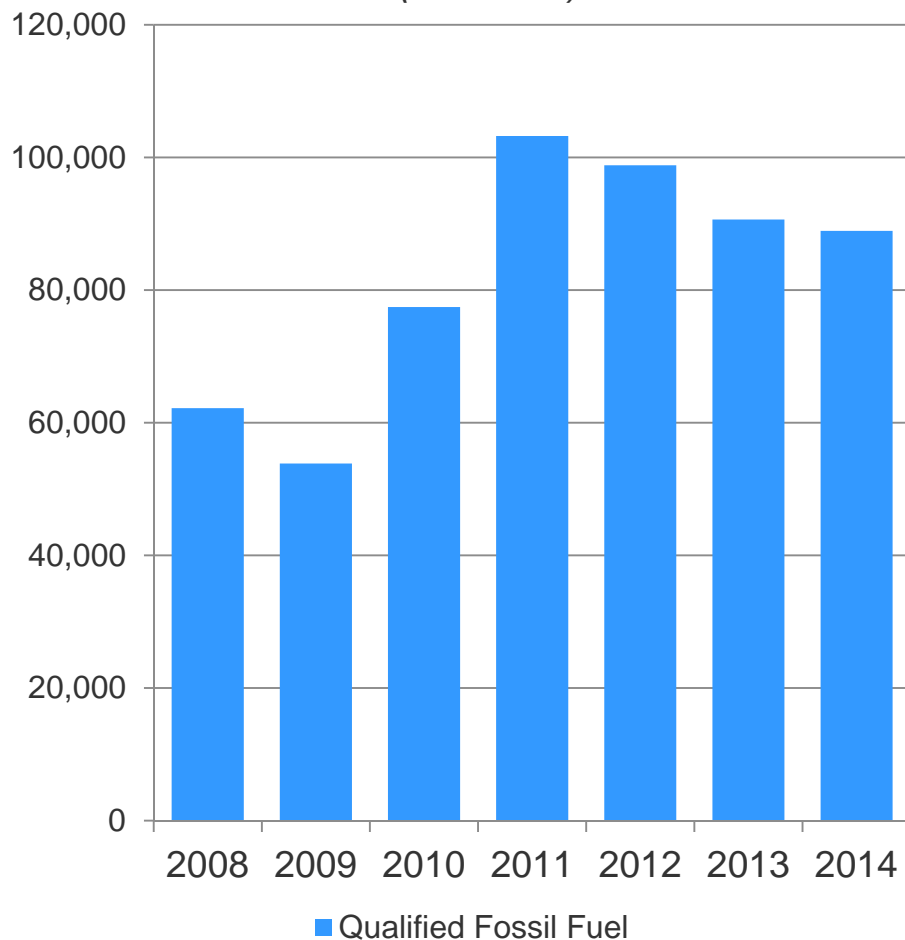
Cost avoidance realized with Cogeneration

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

■ Purchased Electric Unit Cost   ■ Purchased + Generated Electric Unit Cost
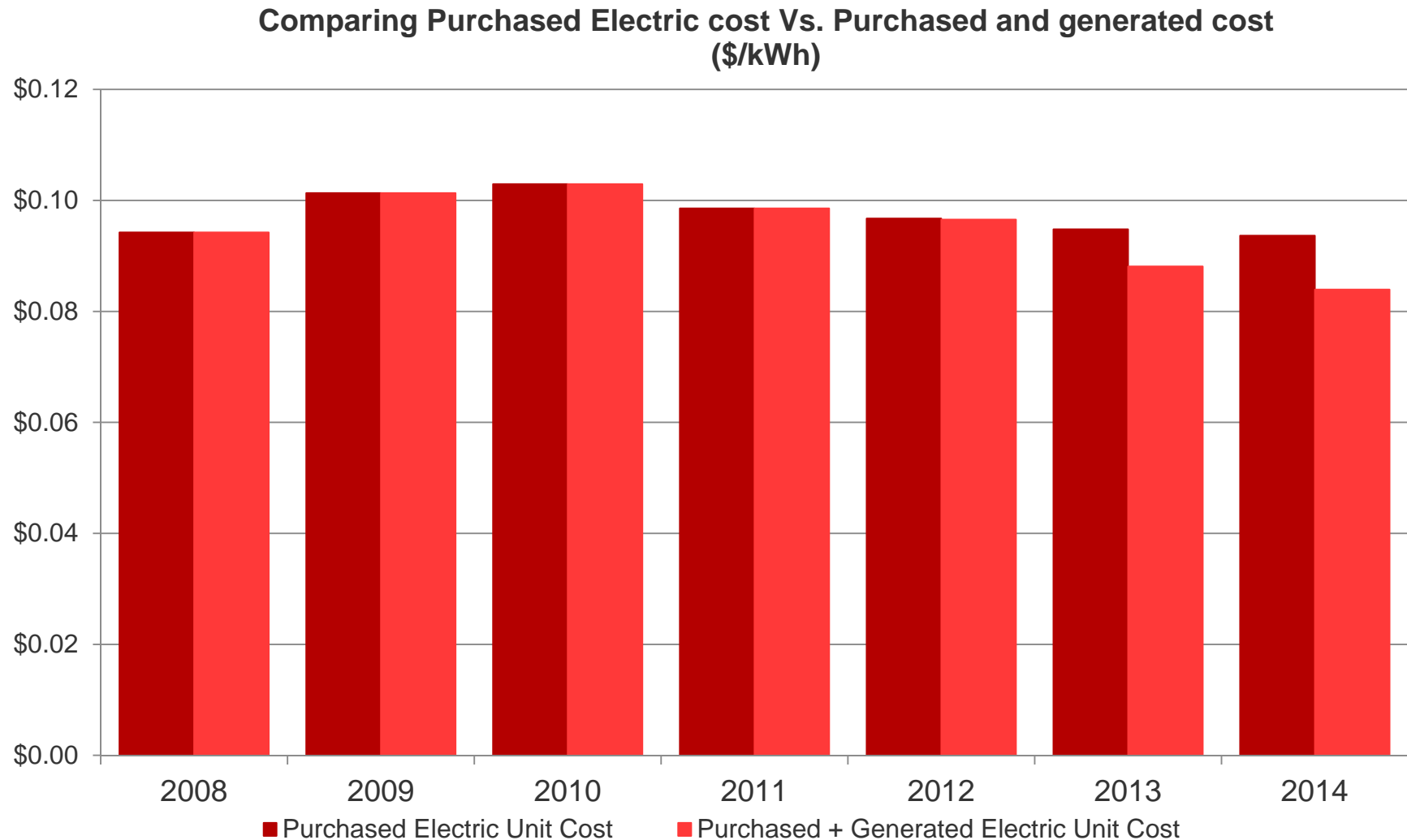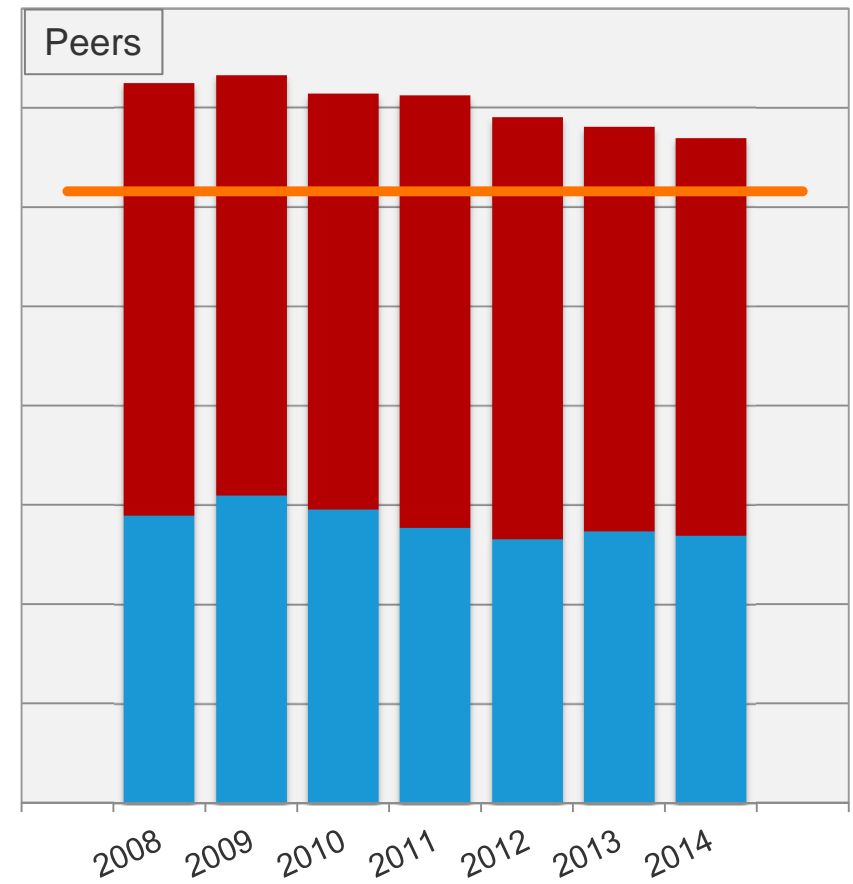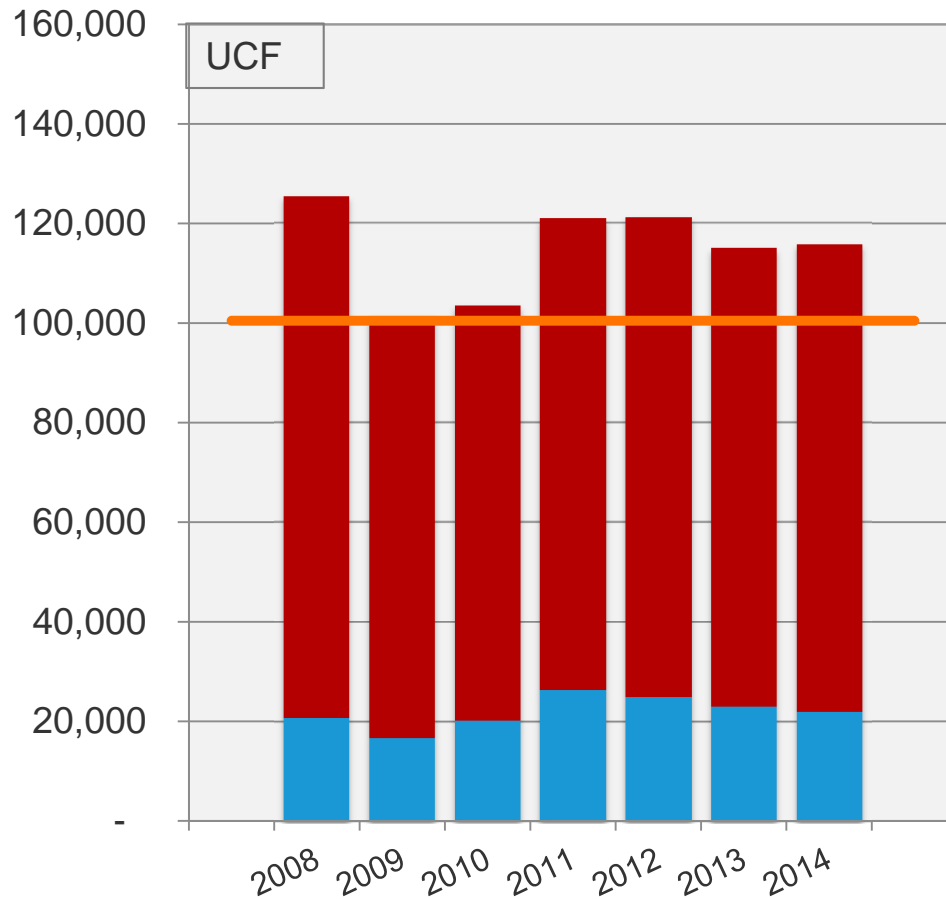
*Unit cost and cost avoidance do not factor for the steam byproduct, actual savings are likely greater

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.

sightlines