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FY2013 ROPA Presentation: University of Southern Maine

Sightlines

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December 12, 2013



FY2013 ROPA Presentation

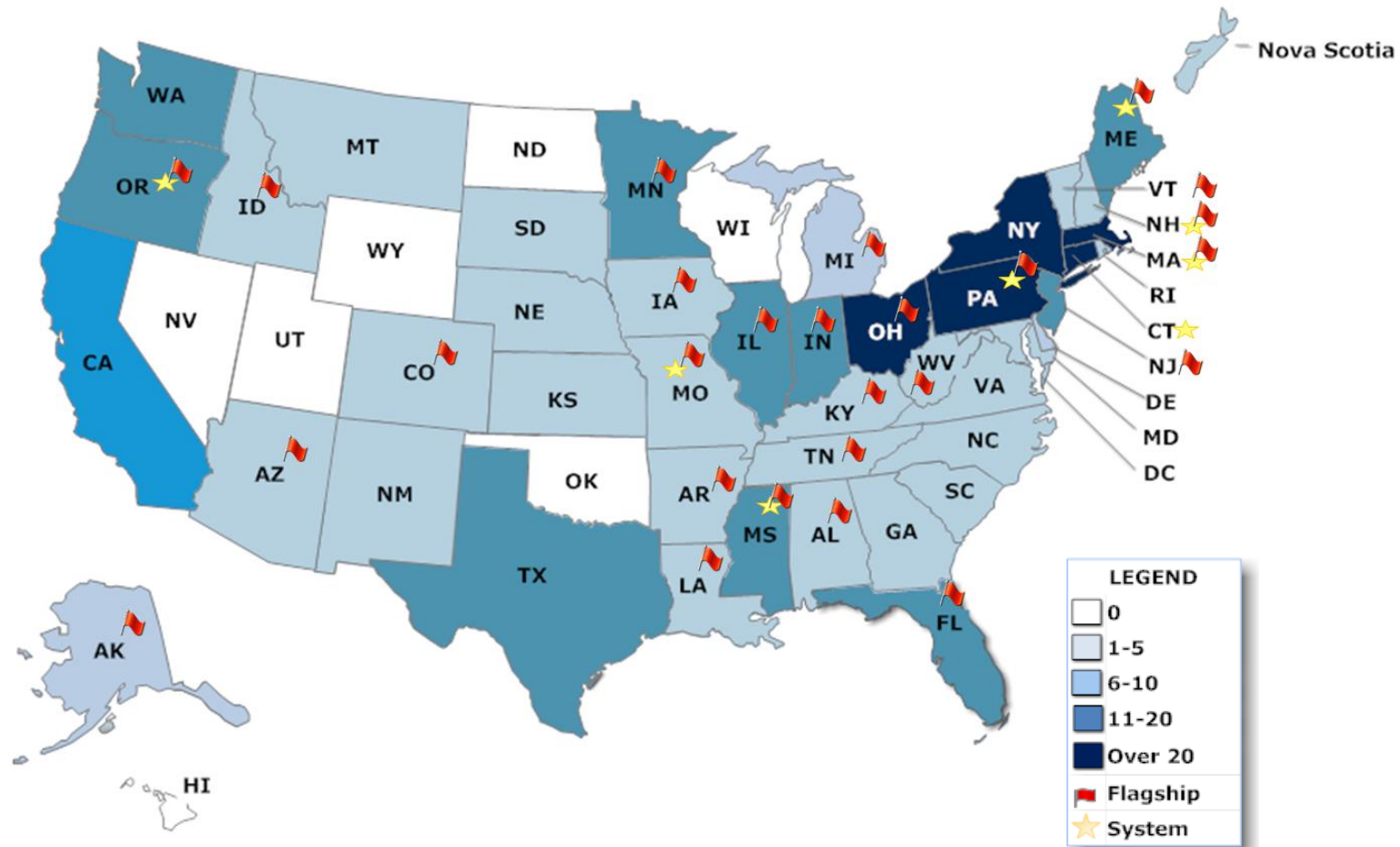
University of Southern Maine

Presented by:



Sightlines profile

Over 400 campuses across 43 states, Washington DC, and Nova Scotia



Common facilities
vocabulary

Consistent analytical
methodology

Context through
benchmarking

A vocabulary for measurement

The Return on Physical Assets – ROPASM

The annual investment needed to ensure buildings will properly perform and reach their useful life

“Keep-Up Costs”

**Annual
Stewardship**

The accumulated backlog of repair / modernization needs and the definition of resource capacity to correct them

“Catch-Up Costs”

**Asset
Reinvestment**

The effectiveness of the facilities operating budget, staffing, supervision, and energy management

**Operational
Effectiveness**

The measure of service process, the maintenance quality of space and systems, and the customers opinion of service delivery

Service

Asset Value Change

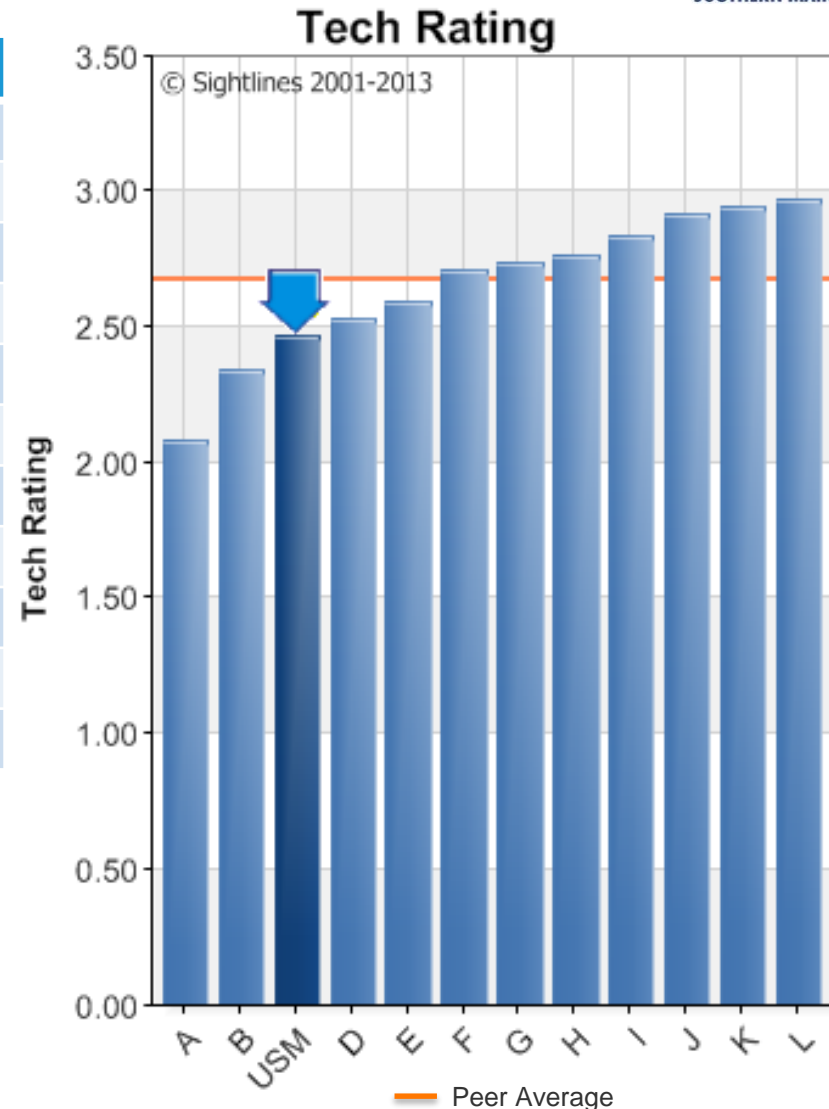
Operations Success

Comparative peer institutions for USM

Institution	Location
Fitchburg State University	Fitchburg, MA
Framingham State University	Framingham, MA
Indiana University of PA	Indiana, PA
Keene State College	Keene, NH
Kutztown University of PA	Kutztown, PA
Plymouth State University	Plymouth, NH
The University of Maine	Orono, ME
University of Maine at Farmington	Farmington, ME
University of Massachusetts Dartmouth	North Dartmouth, MA
University of Massachusetts Lowell	Lowell, MA
West Chester University of PA	West Chester, PA

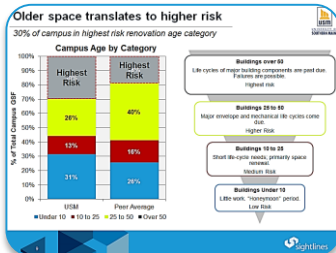
Comparative Considerations

Size, technical complexity, and setting are all factors included in the selection of peer institutions



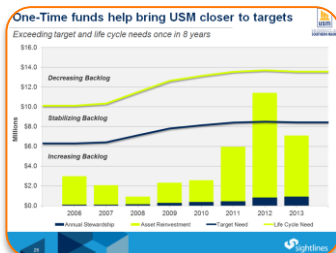
Key observations at Southern Maine

Physical Portfolio



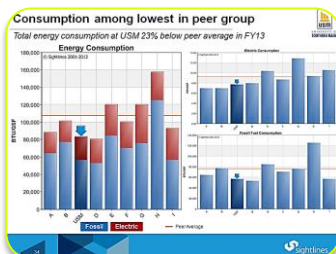
- Campus age has shifted dramatically since FY00, however, recent data suggest campus is aging at a swift pace.
- Opportunity exists in buildings over 50 with poor utilization and poor condition.

Asset Value Change



- Capital spending focus has shifted from new space to existing space and the envelope and mechanical needs inside these spaces.
- USM is unable to meet target levels with Annual Stewardship funds alone.
- As a result, backlog of need is growing at a more rapid rate than peers.

Operational Effectiveness



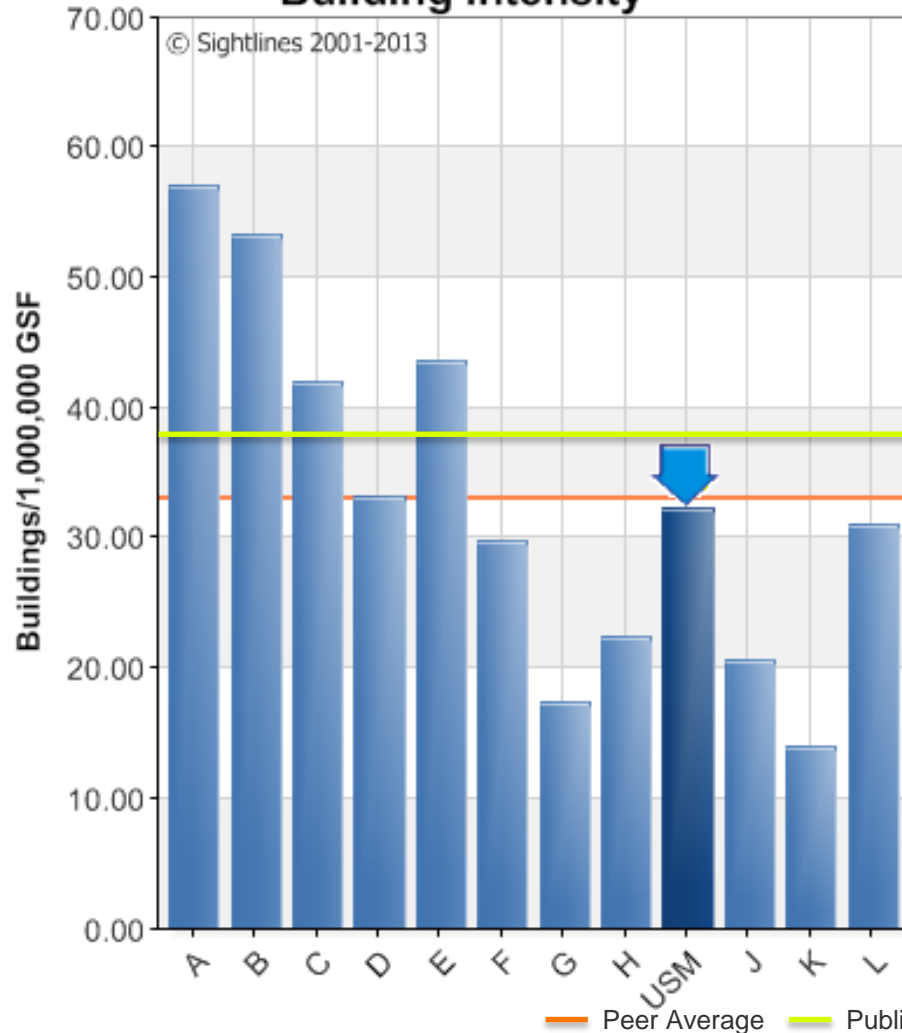
- Planned Maintenance is one of lowest in peer group; implementation of IWMS will increase tracking of Planned Maintenance.
- Energy consumption is among lowest in peer group and continually below peers each year.

Physical Portfolio

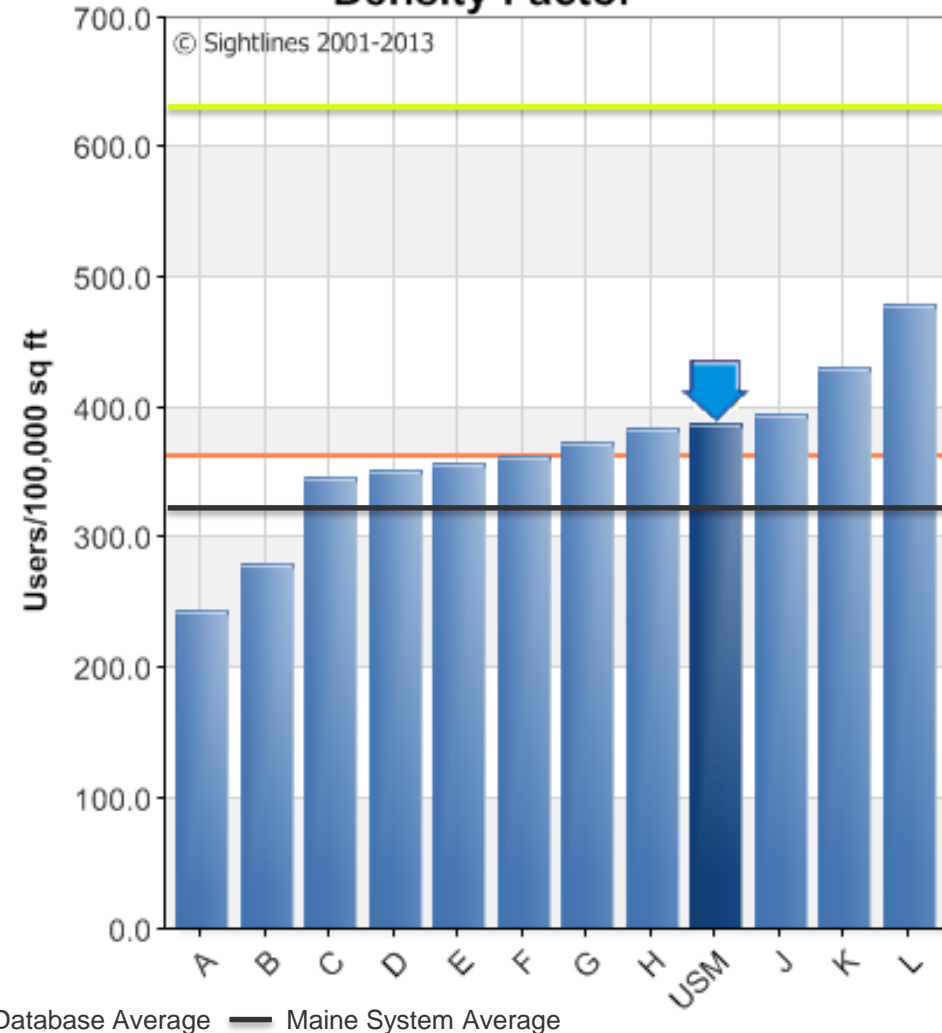
Key drivers of facilities metrics

Density aligned with peer group but well below public database

Building Intensity



Density Factor



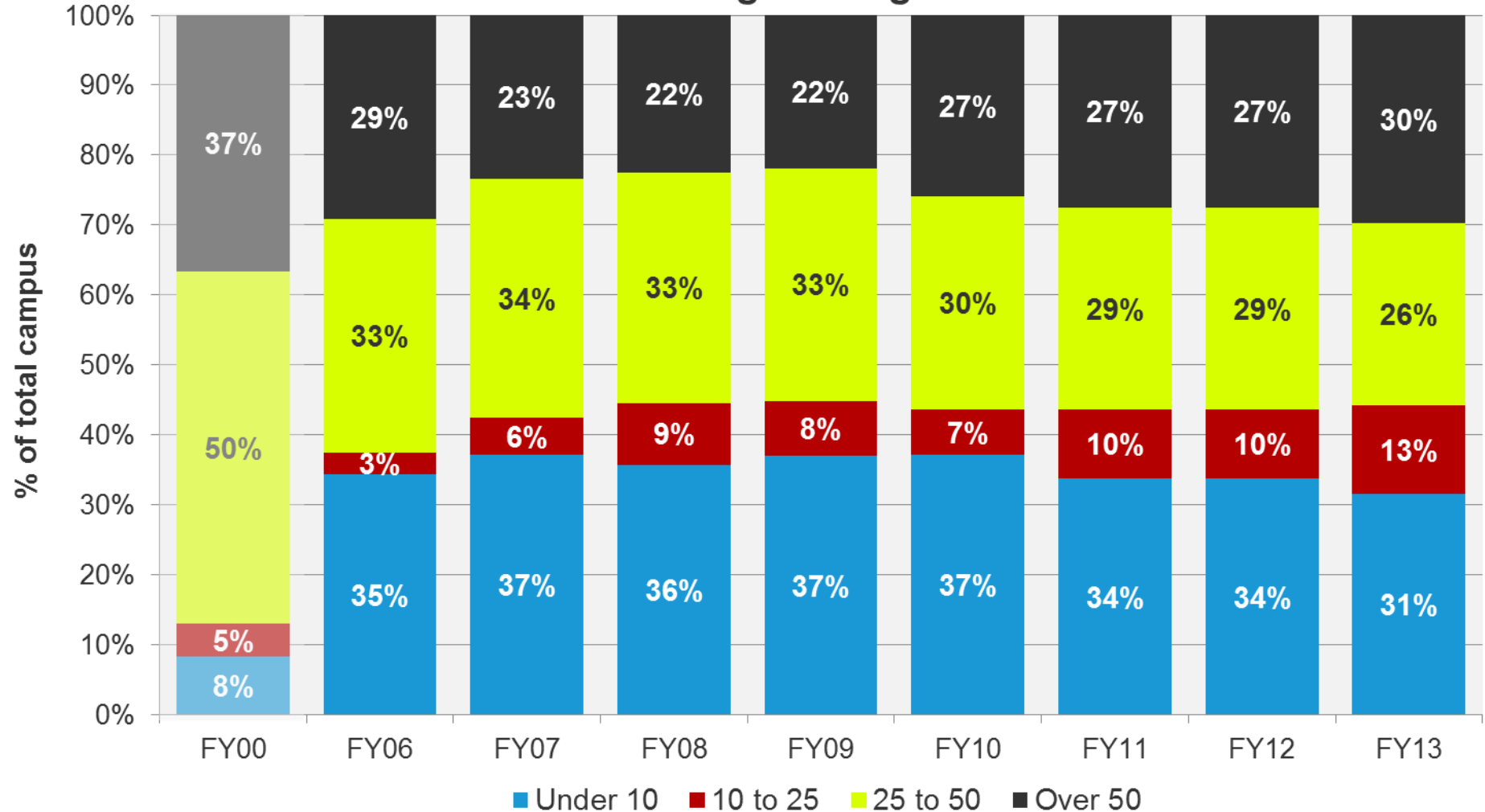
Evolution of building age at Southern Maine



UNIVERSITY OF
SOUTHERN MAINE

Renos & new space shift age dramatically since FY00, over 50 beginning to grow

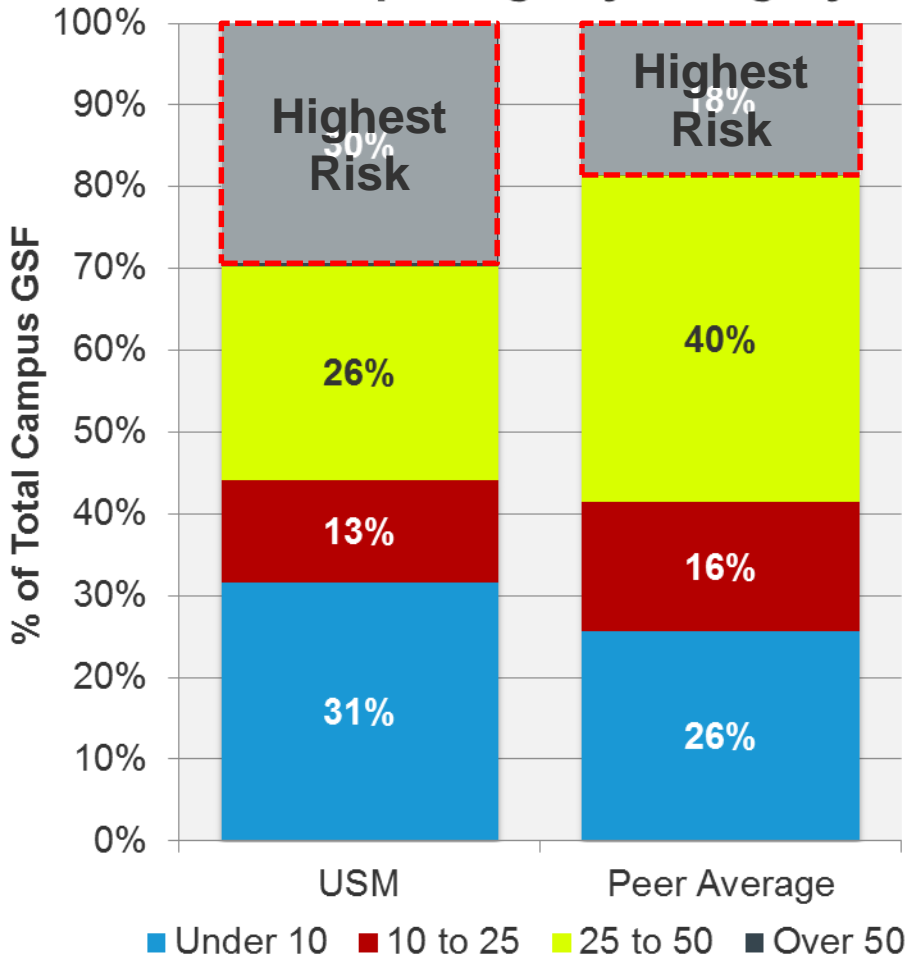
Renovation Age Changes Over Time



USM has a more favorable age distribution

30% of campus in highest risk renovation age category

Campus Age by Category



Buildings over 50

Life cycles of major building components are past due.
Failures are possible.
Highest risk

Buildings 25 to 50

Major envelope and mechanical life cycles come due.
Higher Risk

Buildings 10 to 25

Short life-cycle needs; primarily space renewal.
Medium Risk

Buildings Under 10

Little work. "Honeymoon" period.
Low Risk

Age profile impacts future capital strategy

Constructed Space Since 1900

Pre-War

Built before 1951
Durable construction
Older but typically lasts longer

Post-War

Built between 1951 and 1975
Lower-quality construction
Already needing more repairs and renovations

Modern

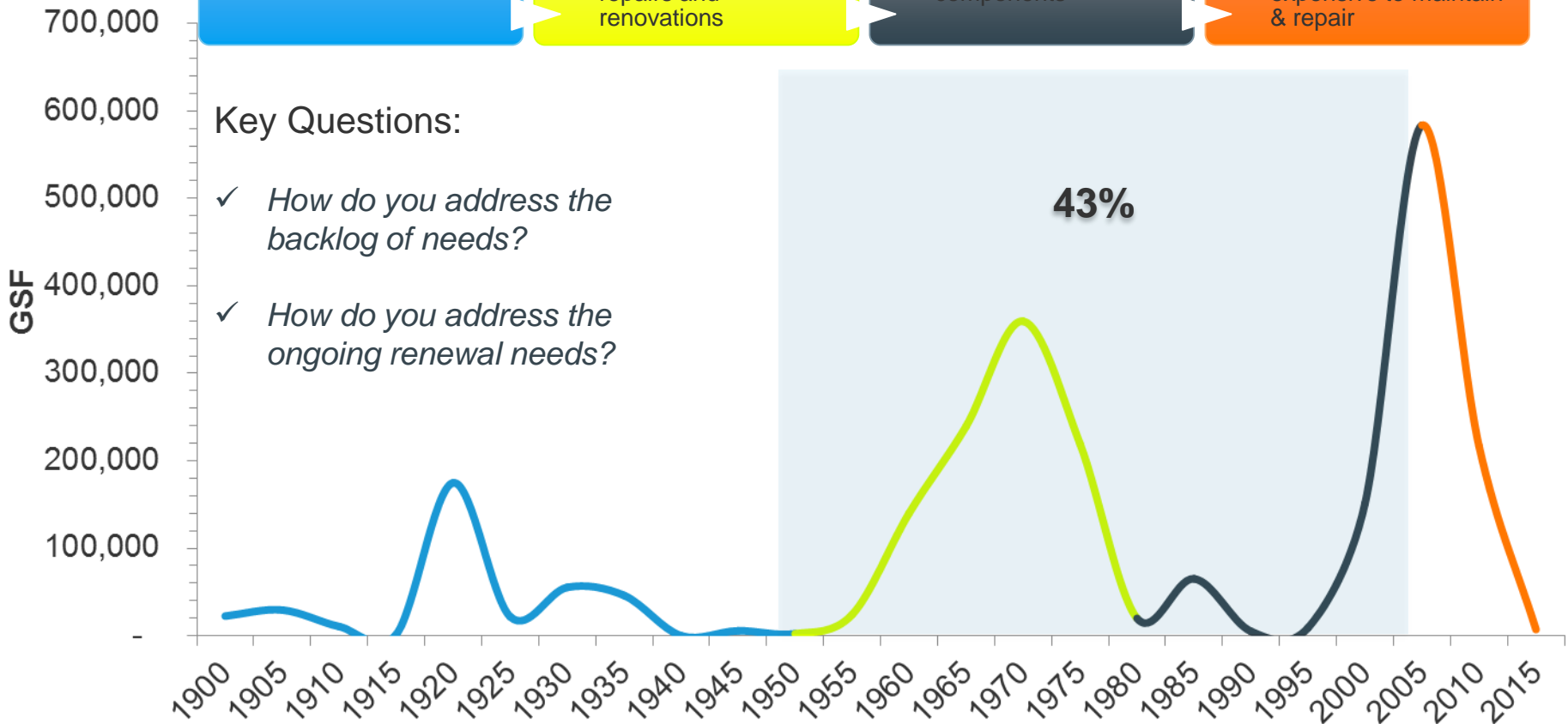
Built between 1975 and 1990
Quick-flash construction
Low-quality building components

Complex

Built in 1991 and newer
Technically complex spaces
Higher-quality, more expensive to maintain & repair

Key Questions:

- ✓ How do you address the backlog of needs?
- ✓ How do you address the ongoing renewal needs?



Campus space over 50 years old

Utilization data collected for all buildings over age 50

Utilization template distributed to, and completed by, each institution in the system.

Institution Name	Building Name	Campus	GSF	Program Use	Historic	Utilization Rate	Condition	Value to Program
University of Southern Maine	Glickman Library-Orig	Portland	110,243	Other	No	1: High	1: Excellent Condition	1: Valuable
University of Southern Maine	Robie-Andrews Hall	Gorham	78,122	Student Life	Yes	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Bailey Hall	Gorham	73,516	Science Building	No	1: High	3: Poor Condition	1: Valuable
University of Southern Maine	Upton-Hastings Hall	Gorham	55,567	Student Life	No	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Payson Smith Hall	Portland	52,603	Other	No	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Corthell Hall	Gorham	49,392	Other	Yes	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Forest Ave-501	Portland	26,157	Other	No	2: Moderate	1: Excellent Condition	1: Valuable
University of Southern Maine	Woodward Hall	Gorham	20,709	Student Life	No	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Russell Hall	Gorham	18,764	Student Life	No	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Stone House	Freeport	15,177	Other	No	3: Low	3: Poor Condition	2: Moderately Valuable
University of Southern Maine	Admissions-Phinney House	Gorham	10,811	Other	No	1: High	2: Fair Condition	1: Valuable
University of Southern Maine	Presidents Hse-USM	Gorham	10,528	Other	Yes	3: Low	2: Fair Condition	1: Valuable
University of Southern Maine	Bedford St-025, Facmgt	Portland	9,722	Other	No	1: High	1: Excellent Condition	1: Valuable
University of Southern Maine	College Ave-051	Gorham	9,622	Other	No	2: Moderate	2: Fair Condition	1: Valuable
University of Southern Maine	School St-128	Gorham	8,546	Other	No	2: Moderate	2: Fair Condition	1: Valuable
University of Southern Maine	McLellan House	Gorham	7,423	Other	No	3: Low	3: Poor Condition	2: Moderately Valuable
University of Southern Maine	Academy Bldg	Gorham	7,203	Other	Yes	1: High	3: Poor Condition	1: Valuable

The following slides will dig deeper into some of the buildings on this list.

Analyzing highest risk space at USM

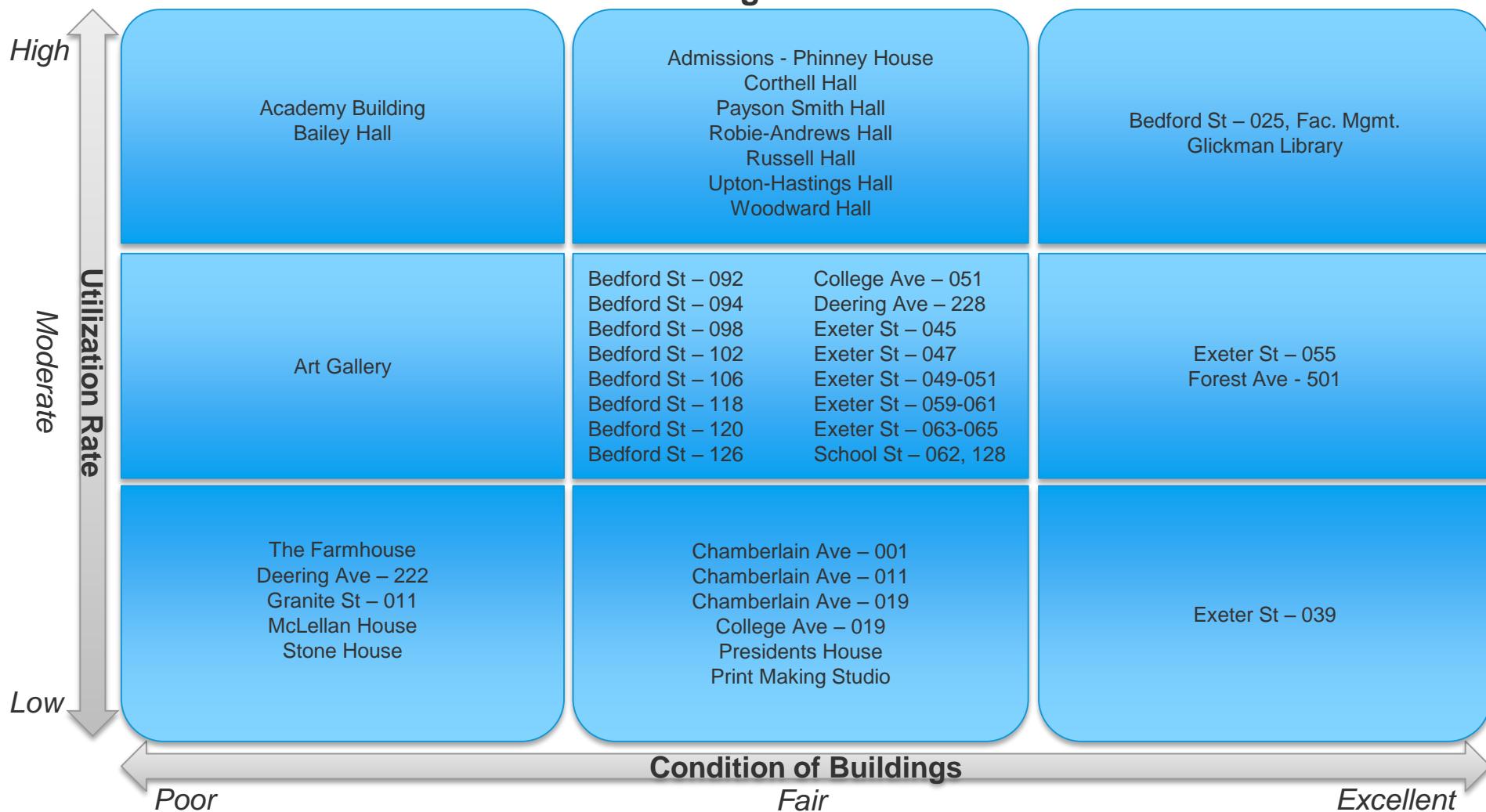
Strategies should focus on buildings with poor condition

Building Name:	Campus	GSF:	Utilization Rate:	Condition:	Value to Program:
Robie-Andrews Hall	Gorham	78,122	High	Fair	Valuable
Bailey Hall	Gorham	73,516	High	Poor	Valuable
Upton-Hastings Hall	Gorham	55,567	High	Fair	Valuable
Corthell Hall	Gorham	49,392	High	Fair	Valuable
Woodward Hall	Gorham	20,709	High	Fair	Valuable
Russell Hall	Gorham	18,764	High	Fair	Valuable
Admissions-Phinney House	Gorham	10,811	High	Fair	Valuable
Presidents Hse-USM	Gorham	10,528	Low	Fair	Valuable
McLellan House	Gorham	7,423	Low	Poor	Moderately Valuable
Academy Bldg	Gorham	7,203	High	Poor	Valuable
Chamberlain Ave-001	Portland	5,557	Low	Fair	Moderately Valuable
College Ave-019	Gorham	4,109	Low	Fair	Moderately Valuable
Deering Ave-222	Portland	3,420	Low	Poor	Moderately Valuable
Chamberlain Ave-011	Portland	3,133	Low	Fair	Moderately Valuable
The Farmhouse	Portland	3,095	Low	Poor	Moderately Valuable
Chamberlain Ave-019	Portland	2,706	Low	Fair	Moderately Valuable
Granite St-011	Portland	1,845	Low	Poor	Of Little or No Value
Print Making Studio	Gorham	1,526	Low	Fair	Valuable

Match needs to building condition

USM facilities over 50 years old

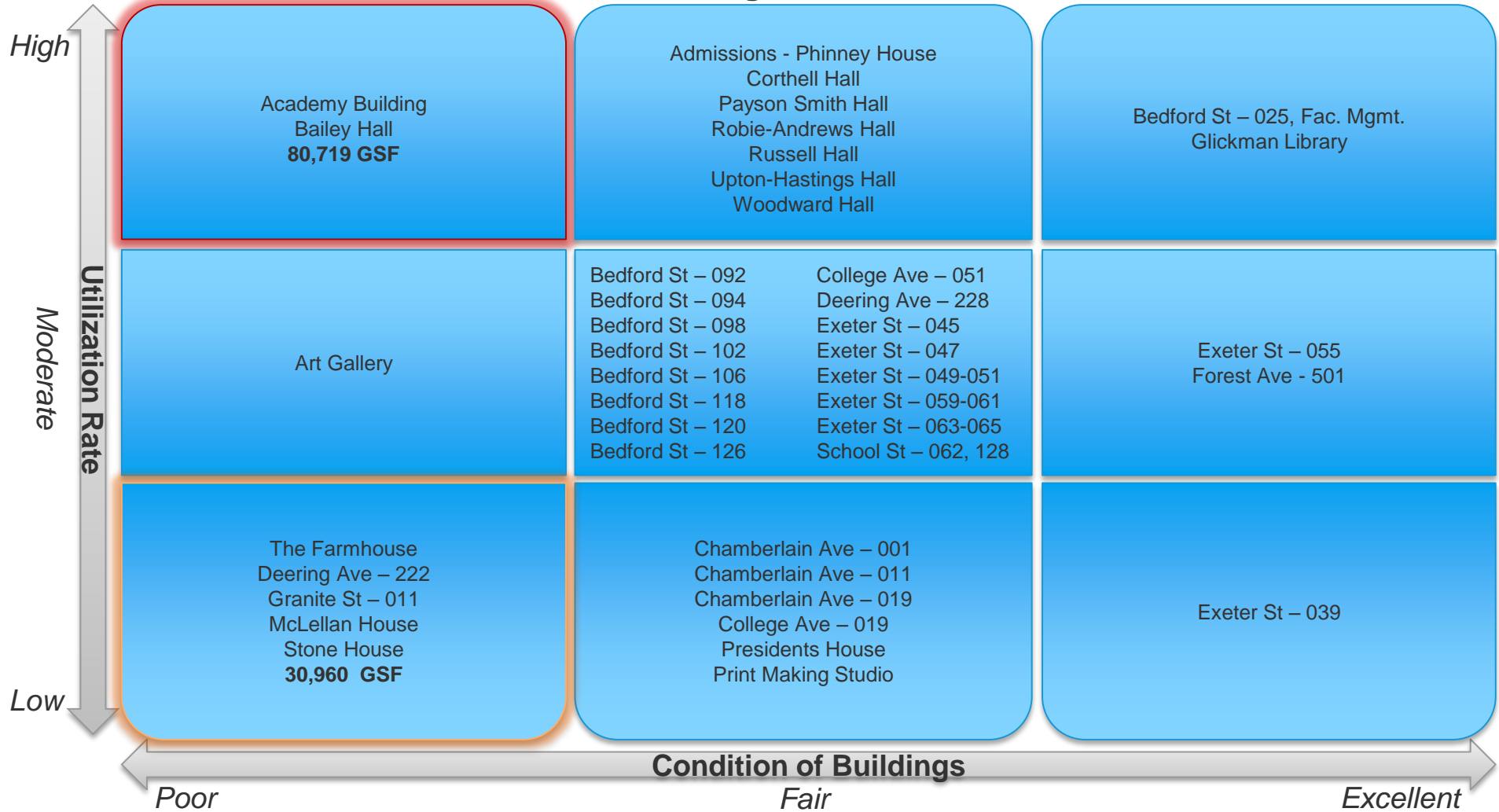
Building vs. Utilization



Identifying spaces worth addressing

Focus investments on highly utilized space with the most need

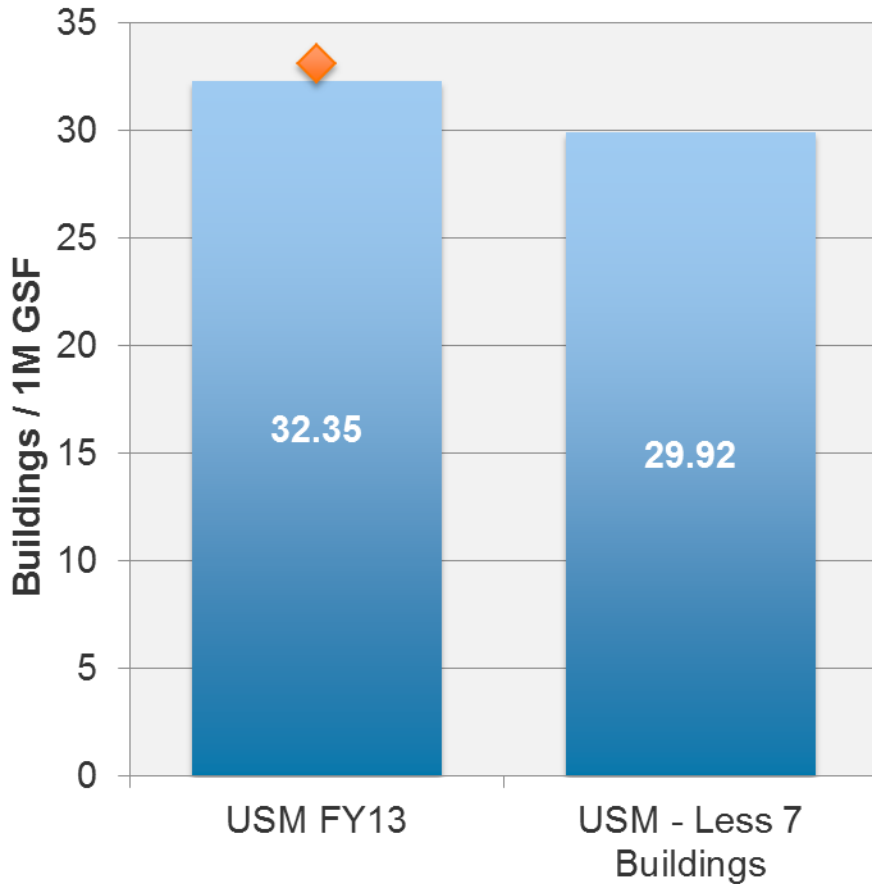
Building vs. Utilization



How campus change impacts operations

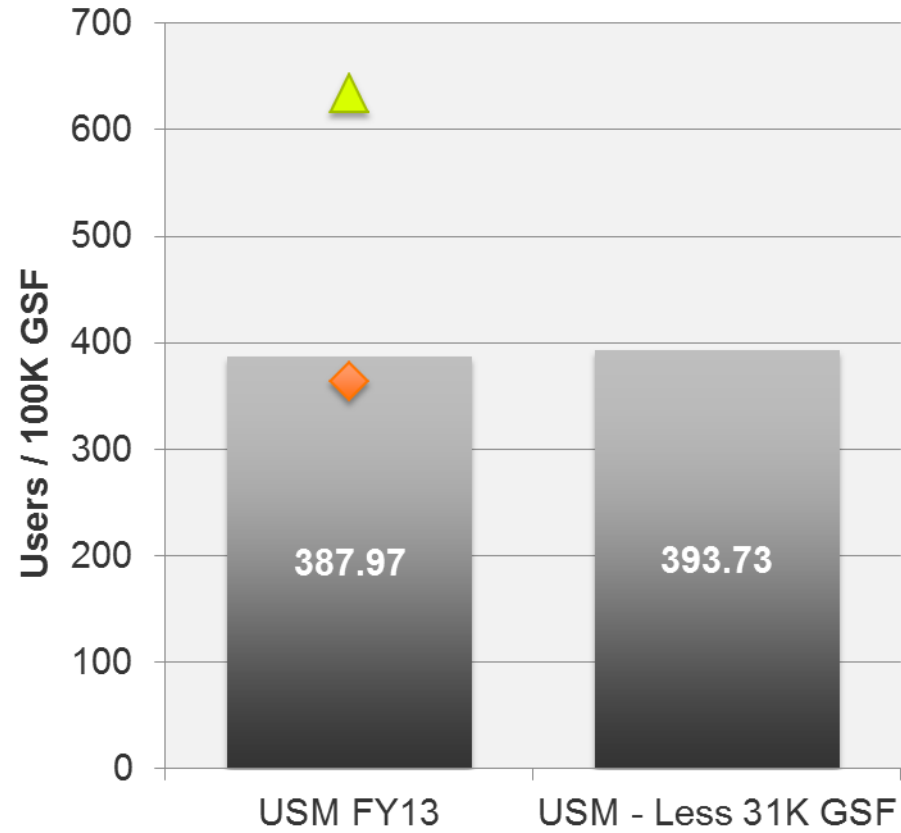
Loss of 7 poor condition, low utilization USM facilities

Building Intensity Modeling



◆ ROPA Peers

Density Factor Modeling



◆ ROPA Peers

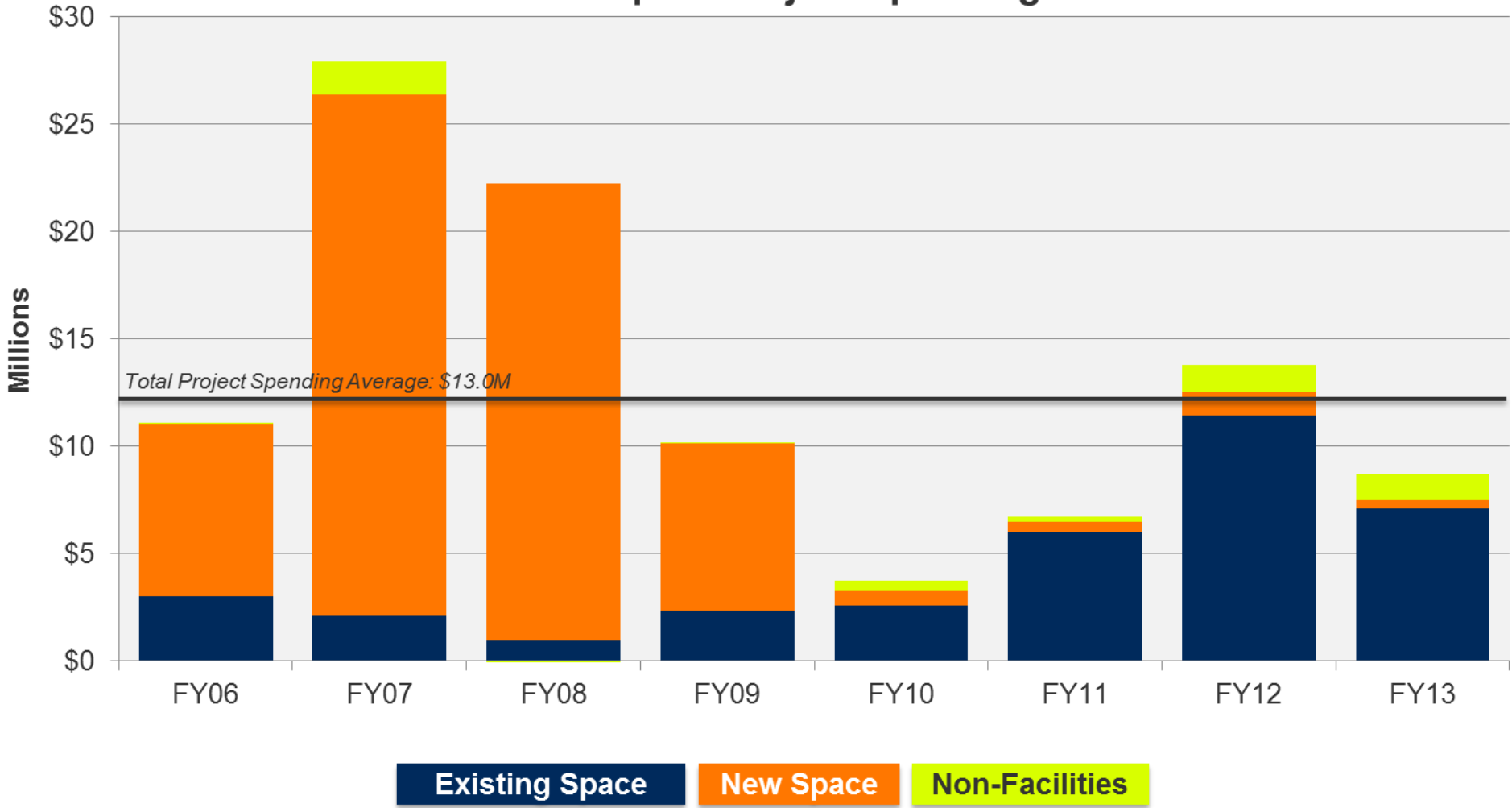
▲ Public database

Asset Value Change

Focus shifts from New Space to Existing Space

Total FY13 investment = \$8.7M

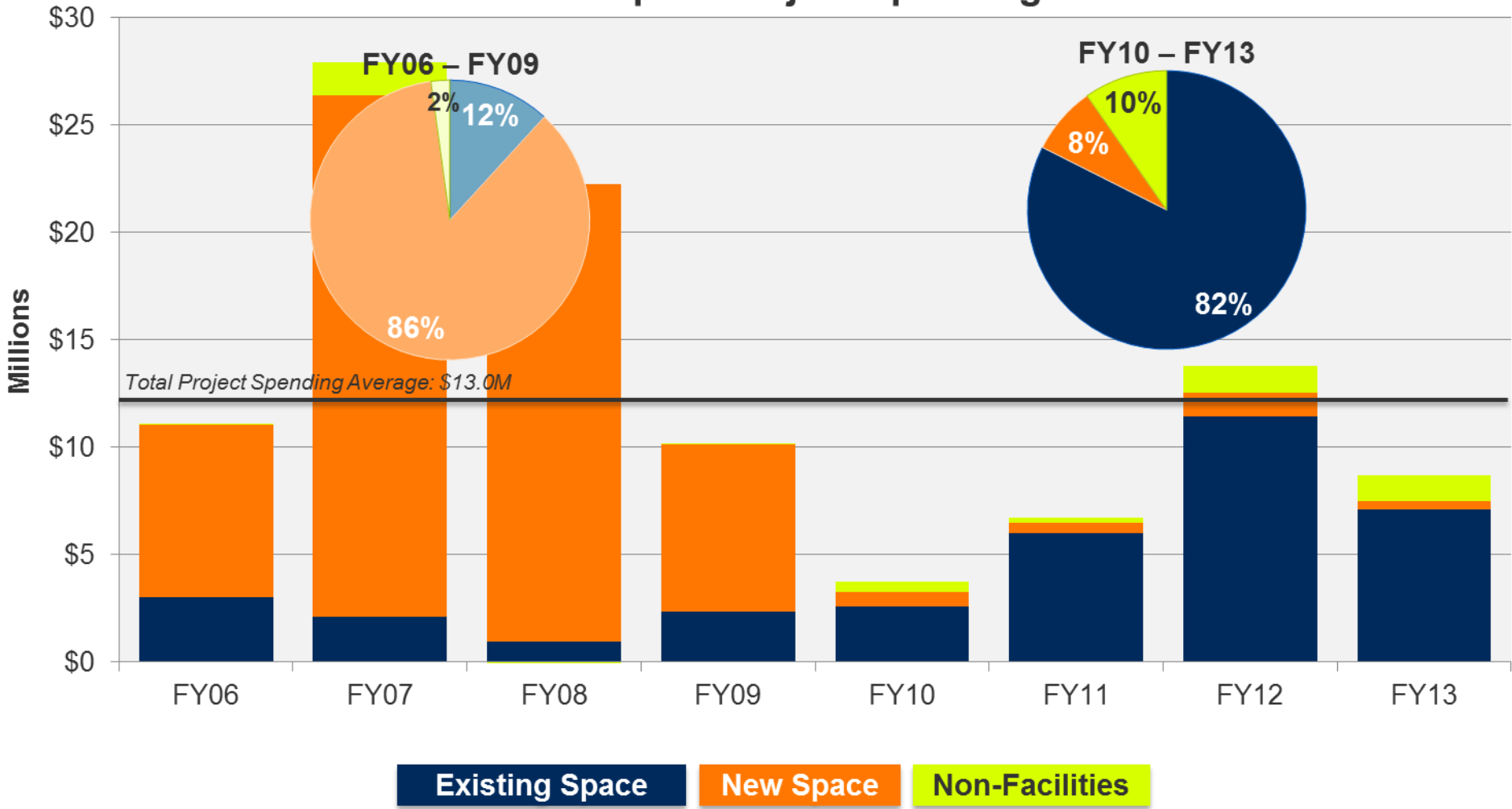
Capital Project Spending



Focus shifts from New Space to Existing Space

Total FY13 investment = \$8.7M

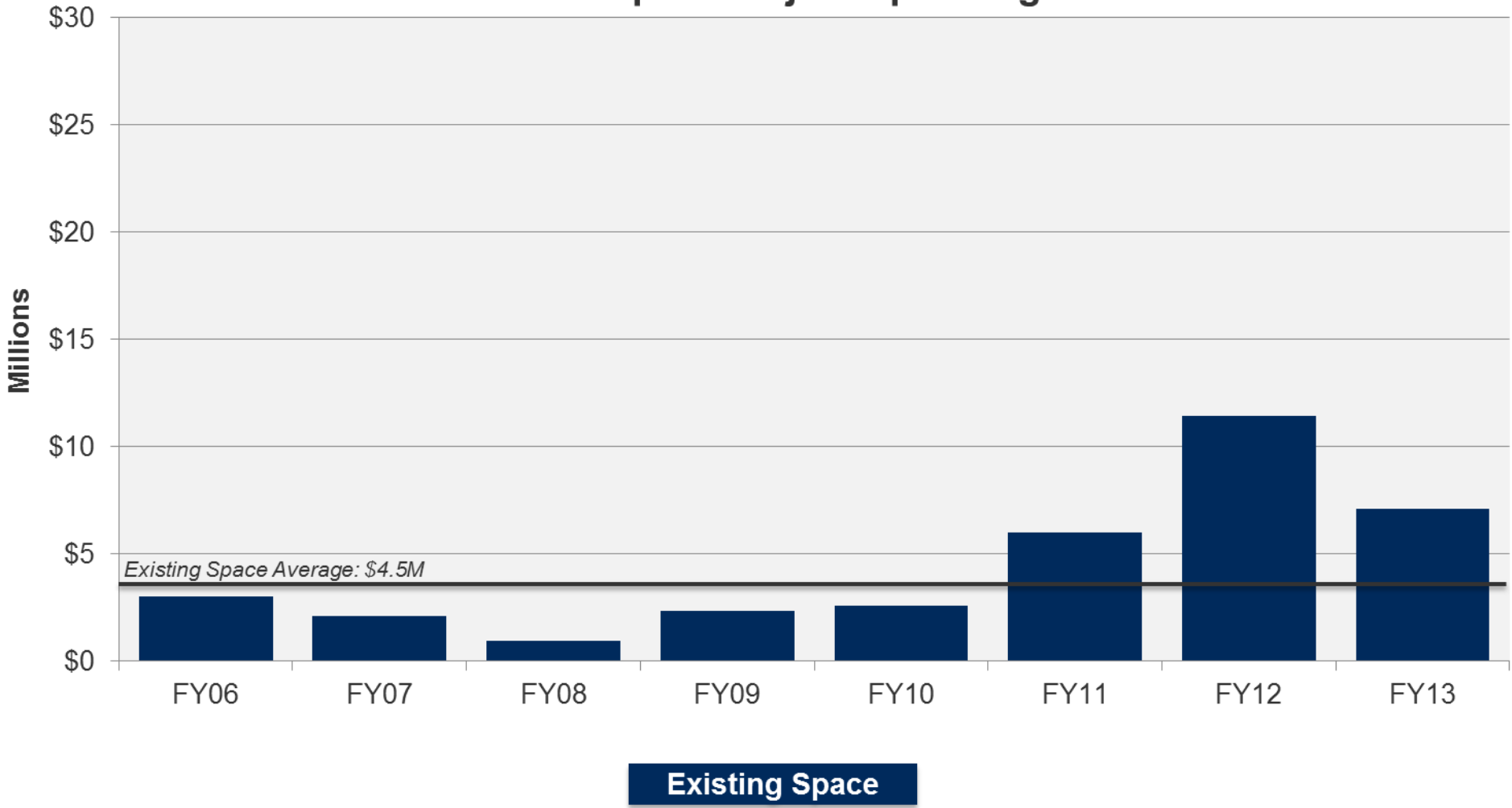
Capital Project Spending



Focus shifts from New Space to Existing Space

Total FY13 investment = \$8.7M

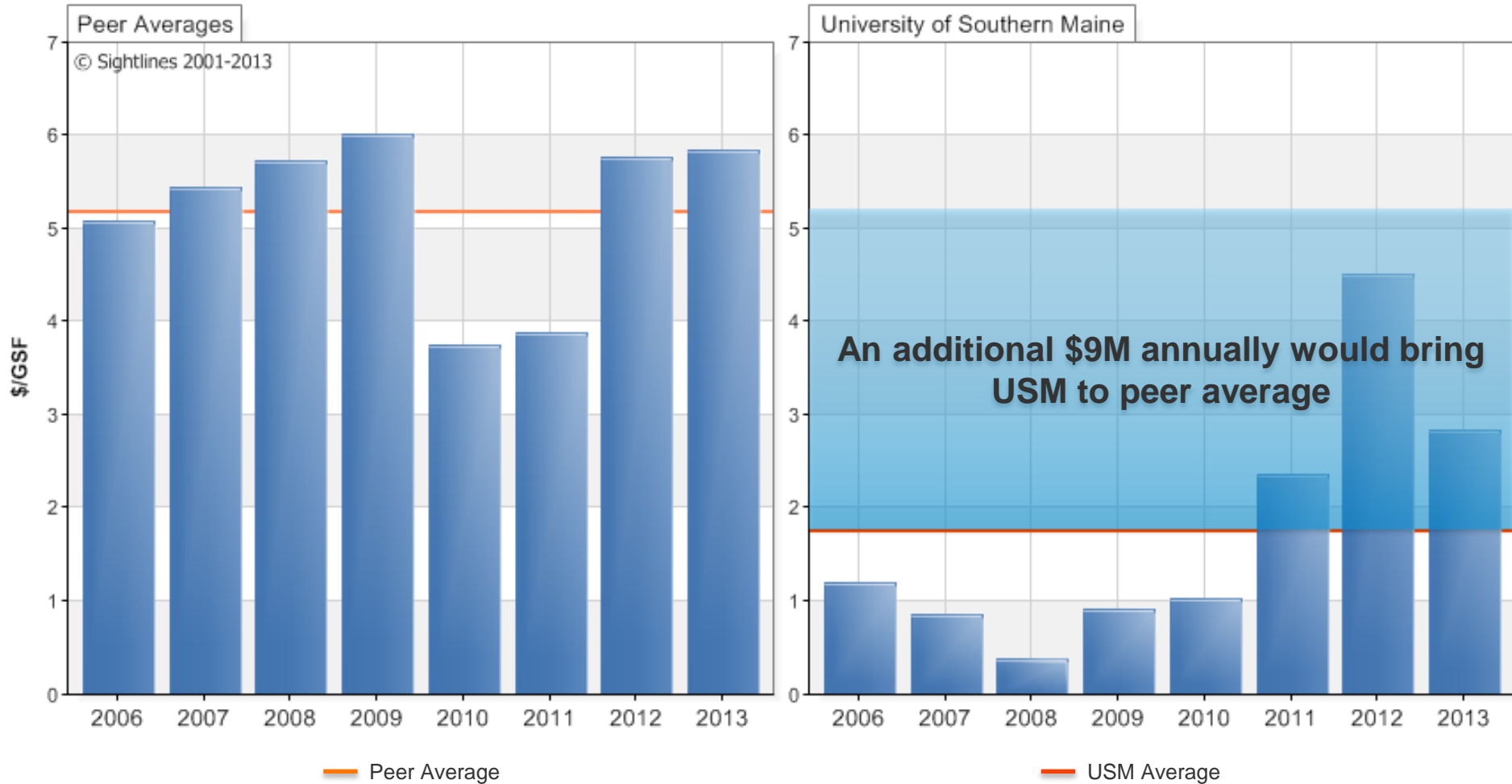
Capital Project Spending



Project spending at USM is volatile

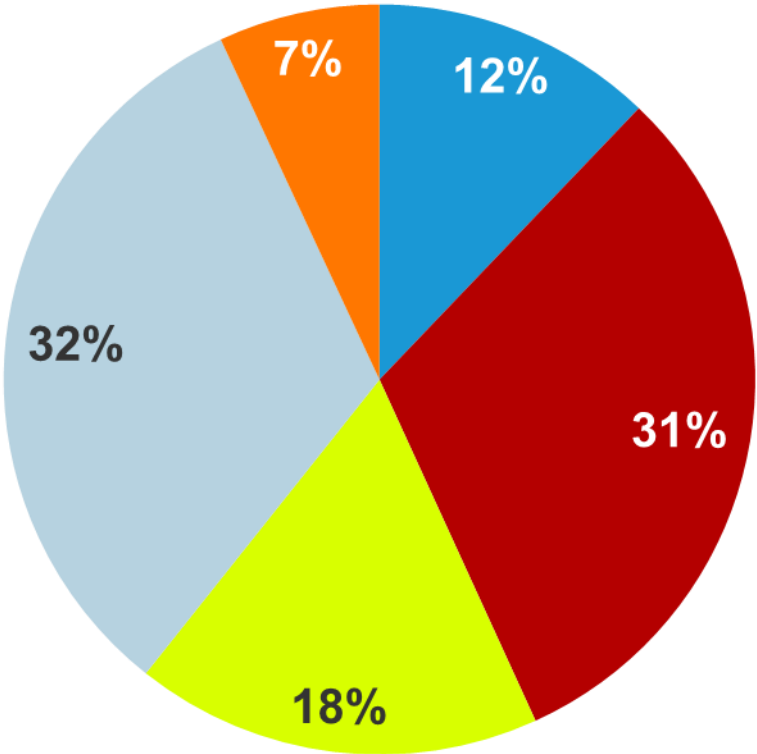
Historic focus on new construction results in “Catch Up” of existing space

Total Project Spending \$/GSF

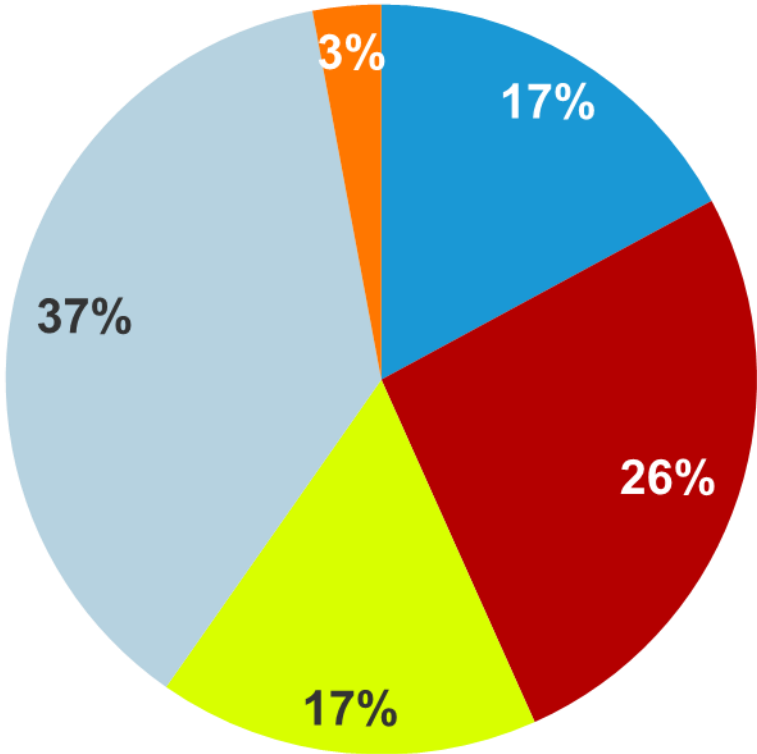


Similar investment profile at USM and peers

Peer Project Breakout
FY06 – FY13



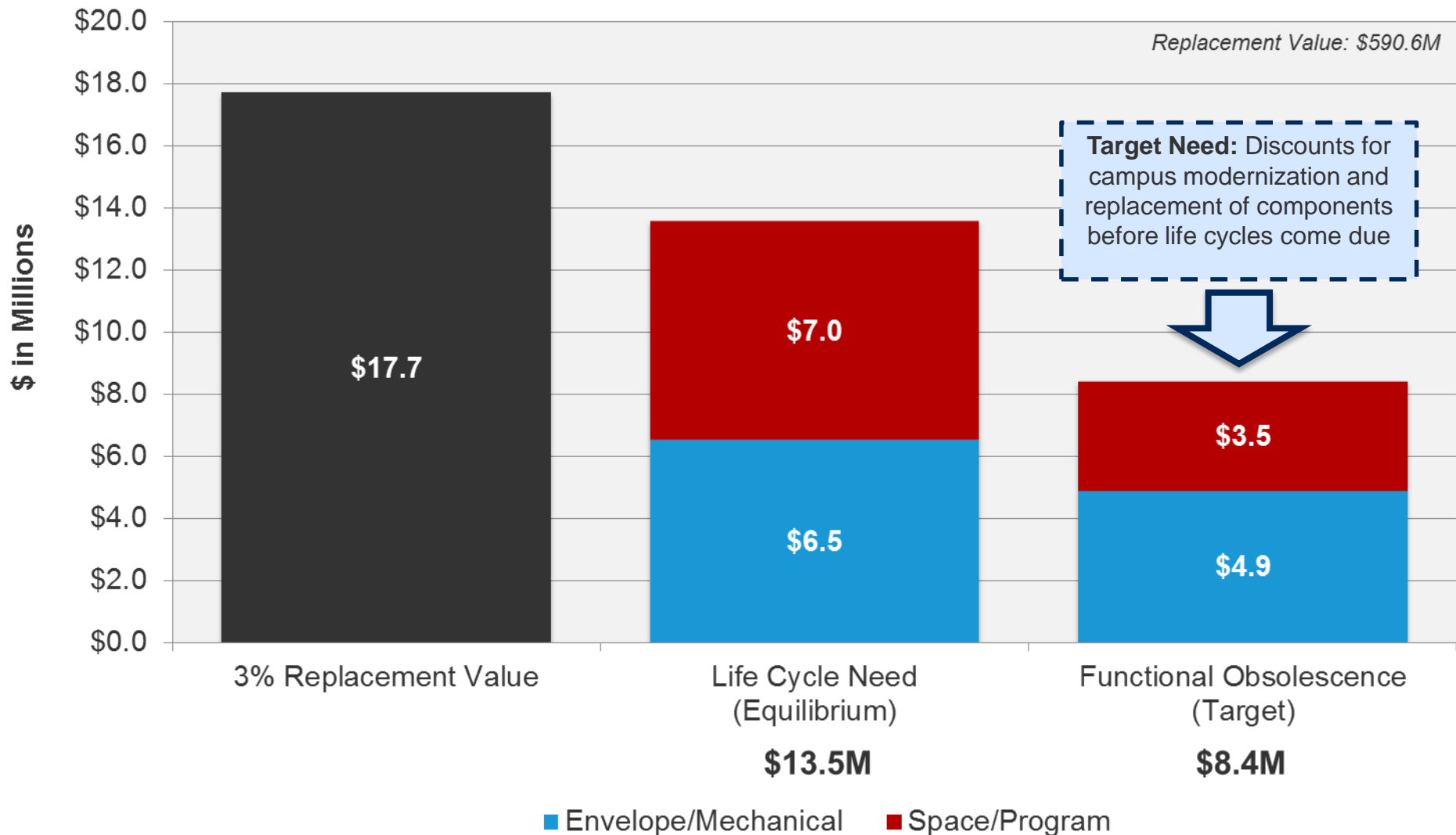
USM Project Breakout
FY06 – FY13



Envelope Building Systems Infrastructure Space Renewal Safety/Code

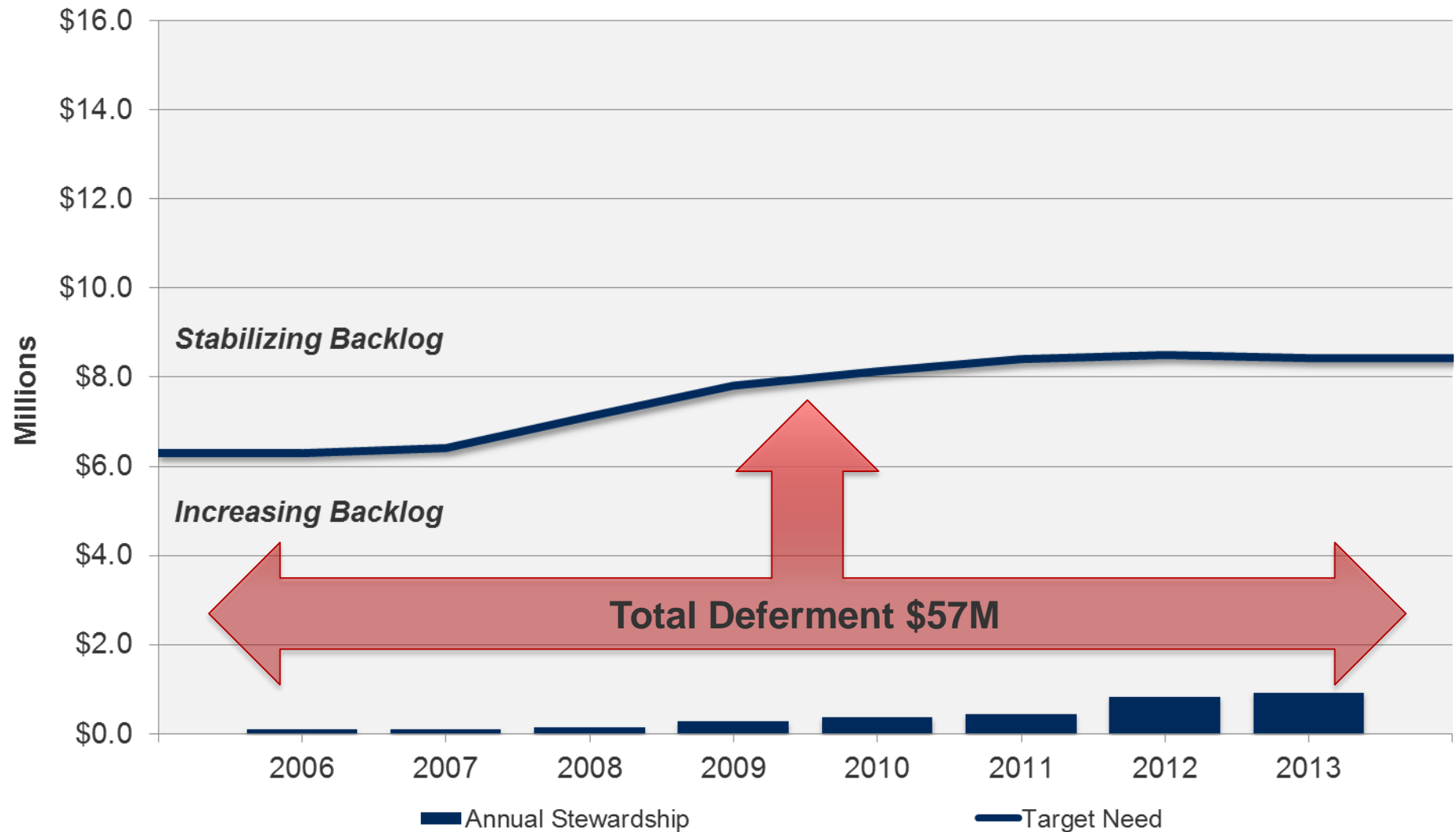
Defining stewardship investment targets

What is the right investment level for Southern Maine?



USM lacks dependable sources of Stewardship

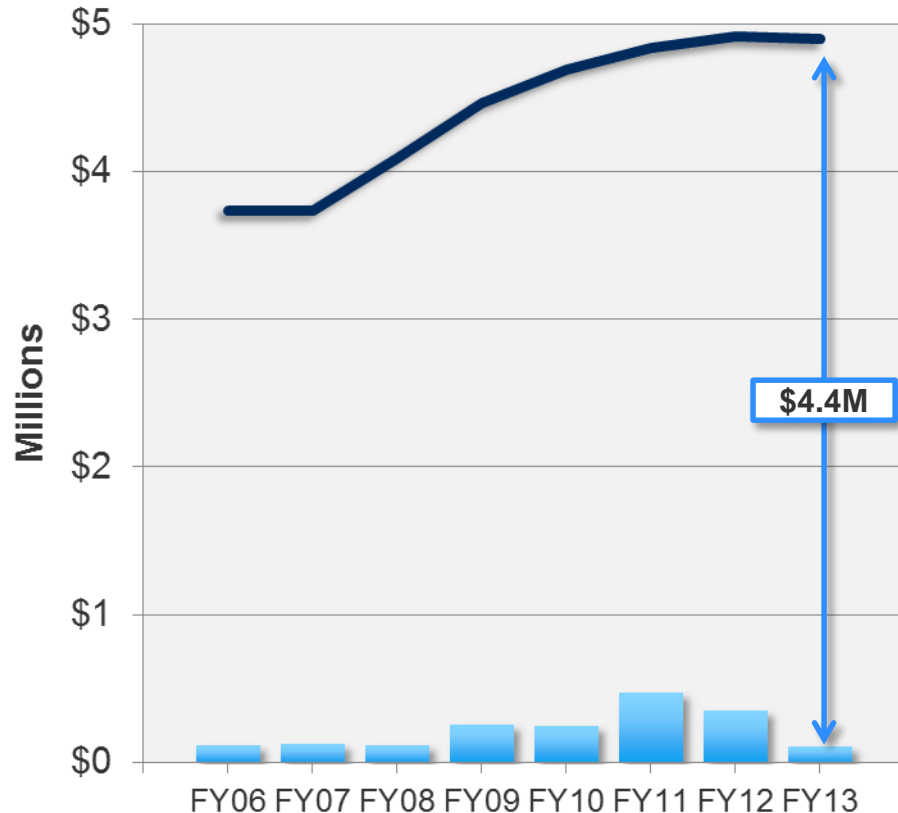
Southern Maine is unable to “Keep-Up” with renewal needs



Breaking out the Target investment level

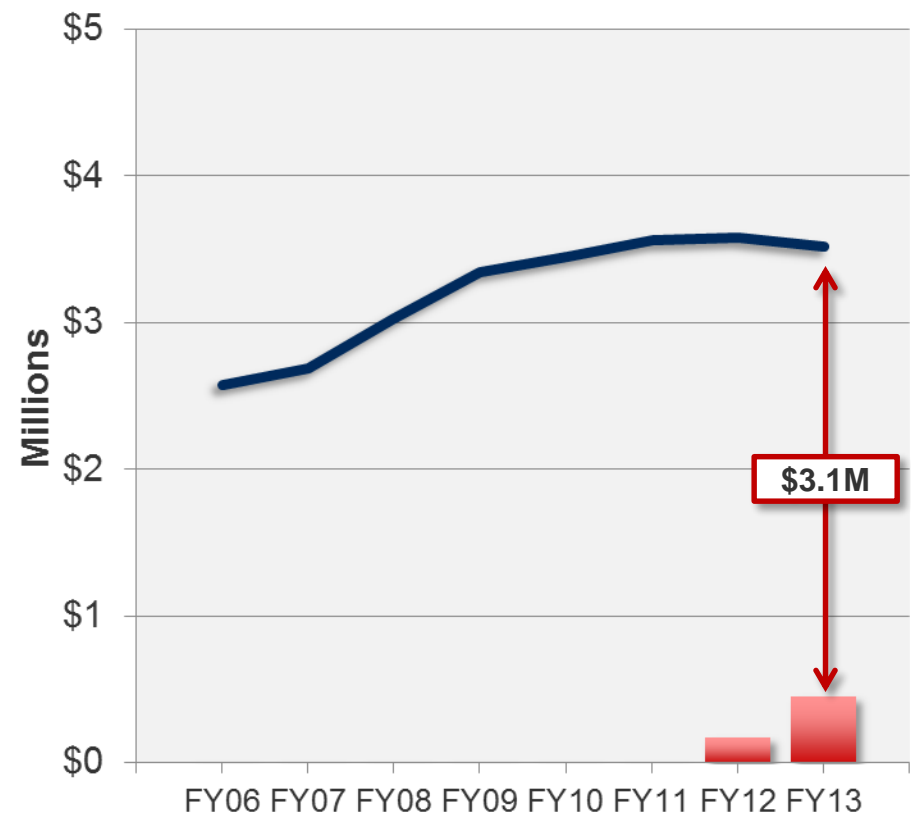
Despite not hitting target, USM allocates AS funds towards durable projects

Envelope/Mechanical Investment



Envelope/Mechanical Investment
Envelope/Mechanical Target Need

Space/Program Investment

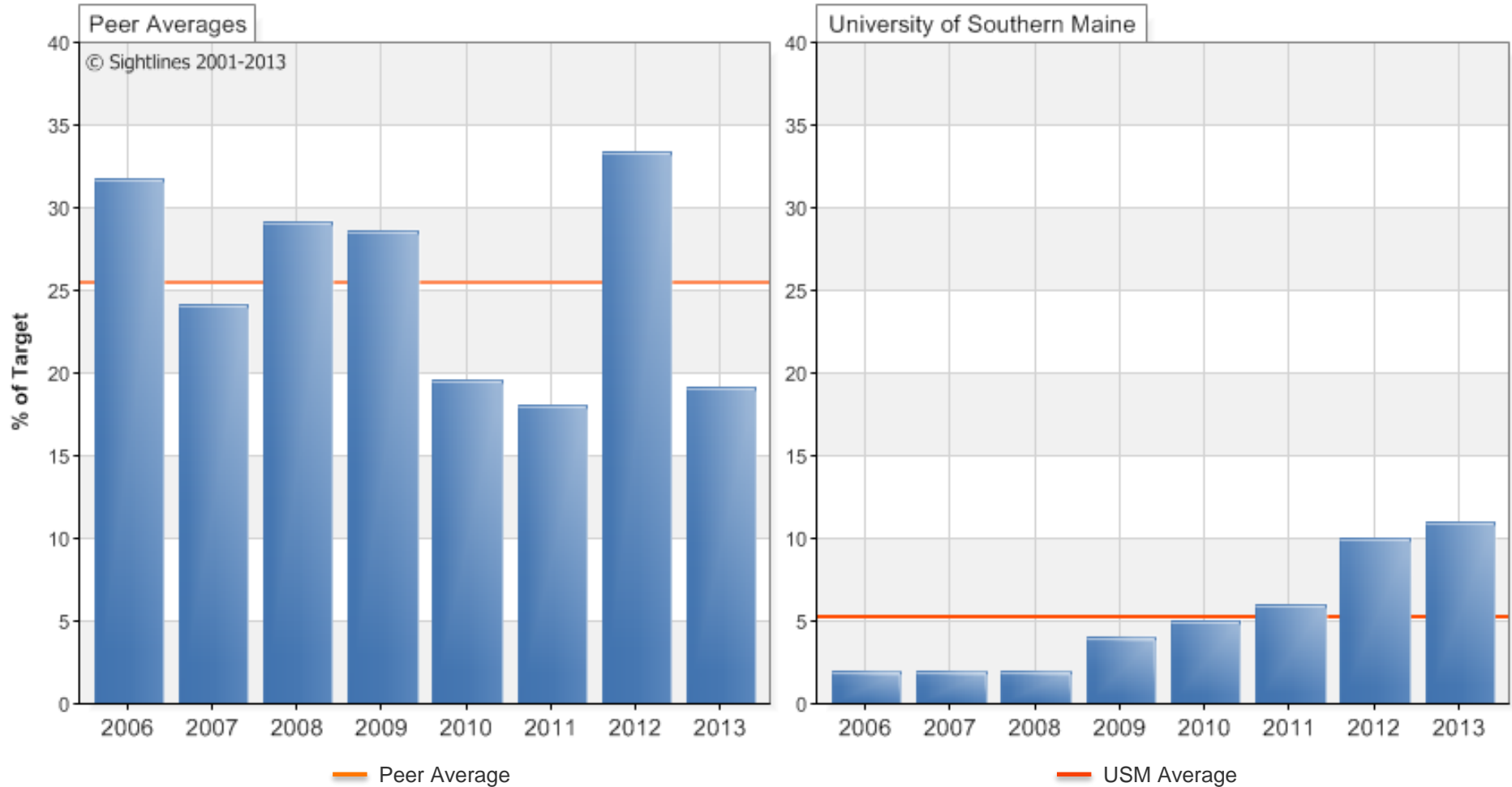


Space/Program Investment
Space/Program Target Need

Annual Stewardship as a percent of target

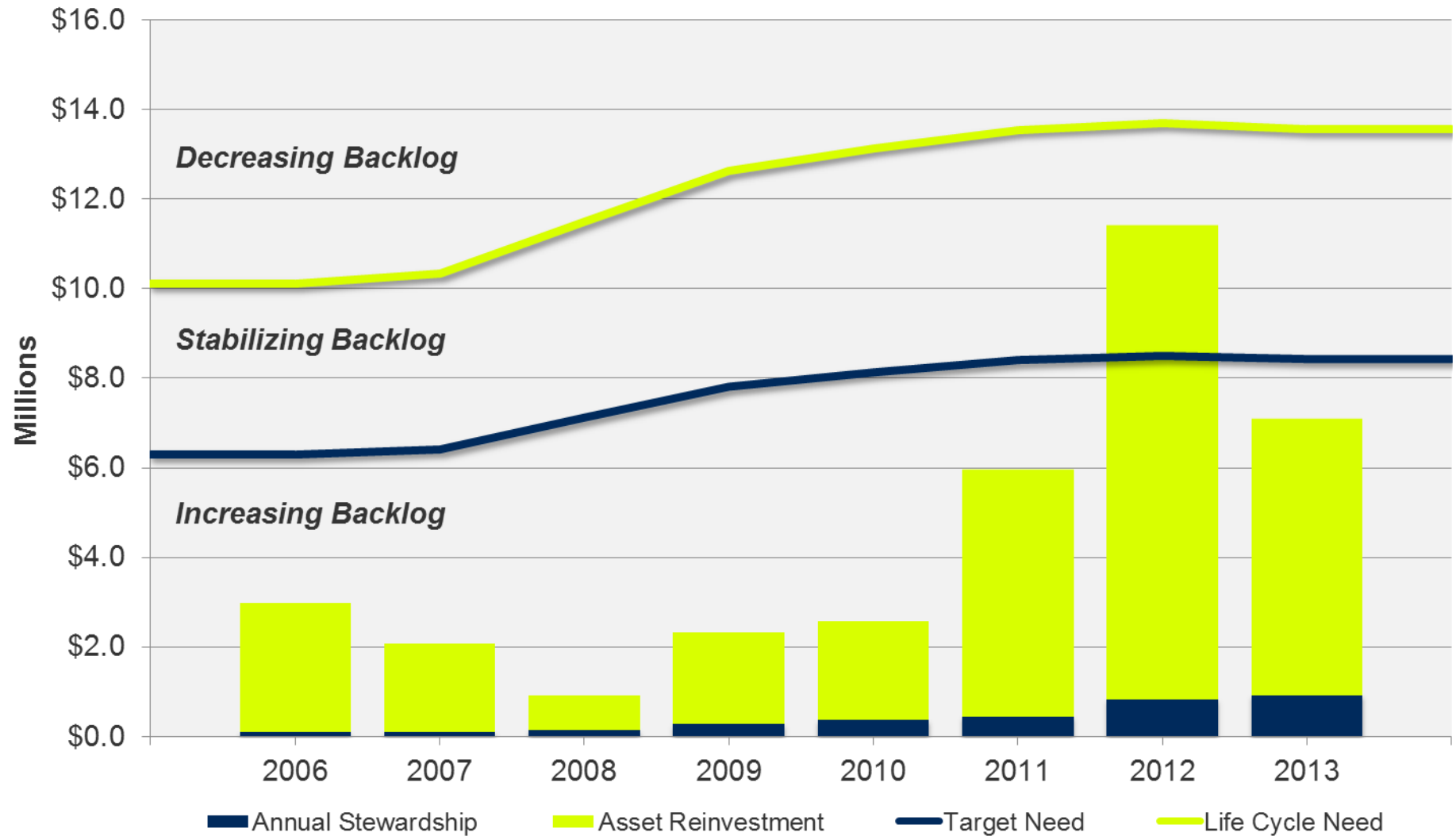
Peers come closer to meeting target needs each year than USM

Total Annual Stewardship



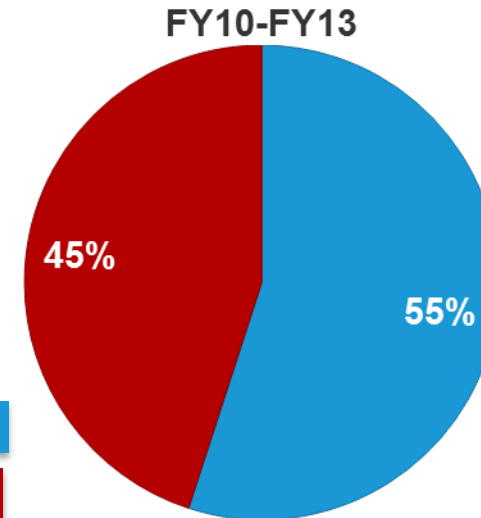
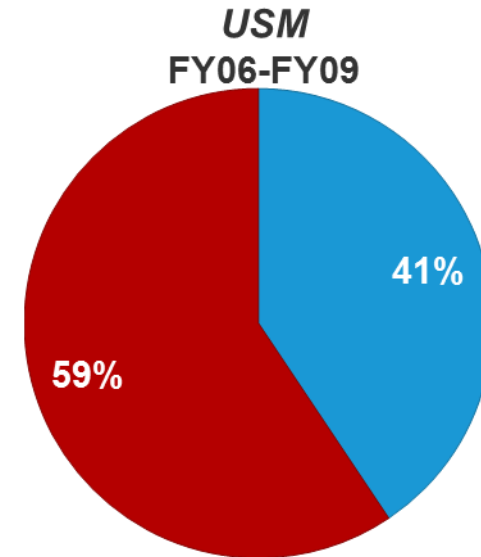
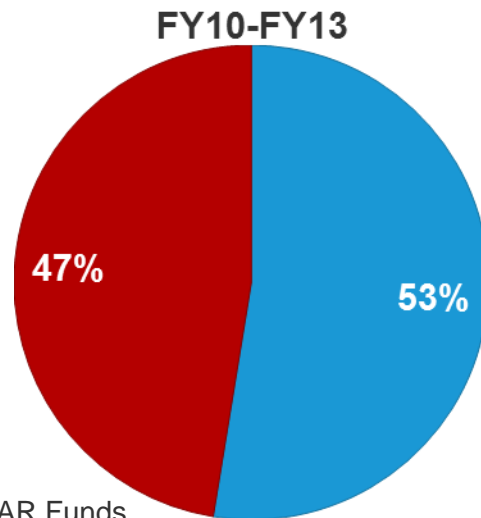
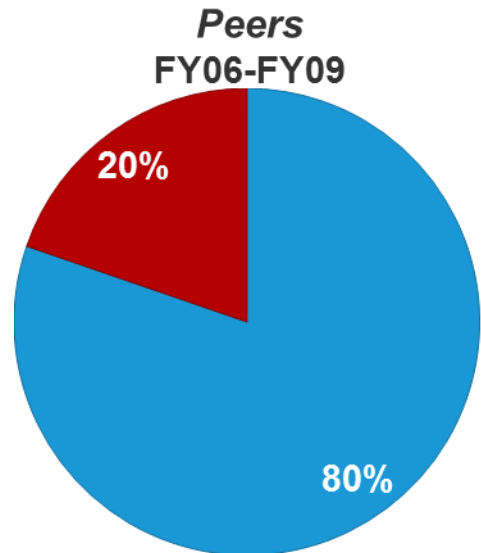
One-Time funds help bring USM closer to targets

Exceeding target and life cycle needs once in 8 years



USM shifts focus to secure key building components

Mix of spending further suggests USM is in a period of “catching up”



Envelope/Mechanical

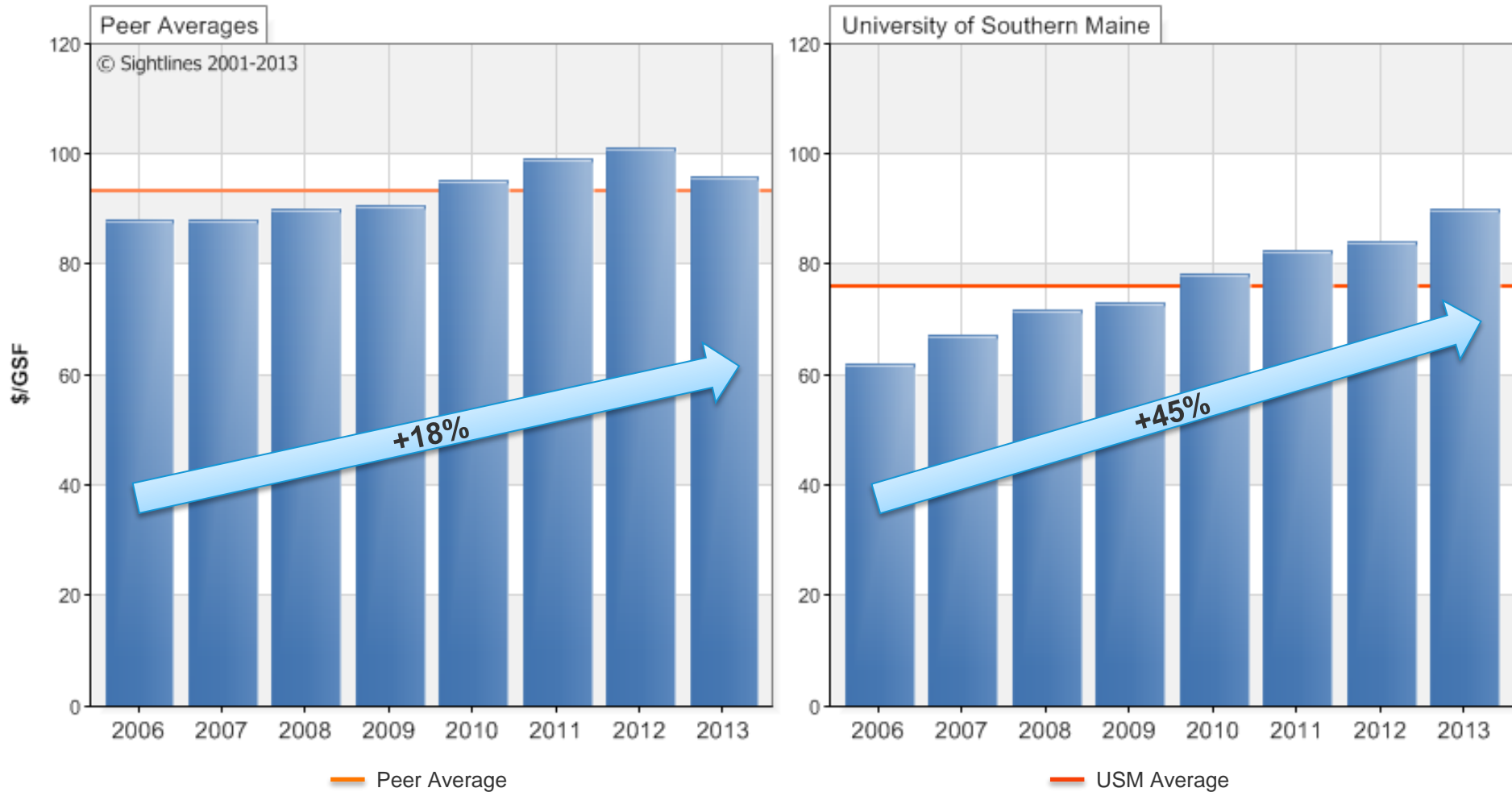
Space/Programming

*includes AS and AR Funds

Backlog growing more rapidly than peers

Total backlog of need exceeds \$225M in FY13

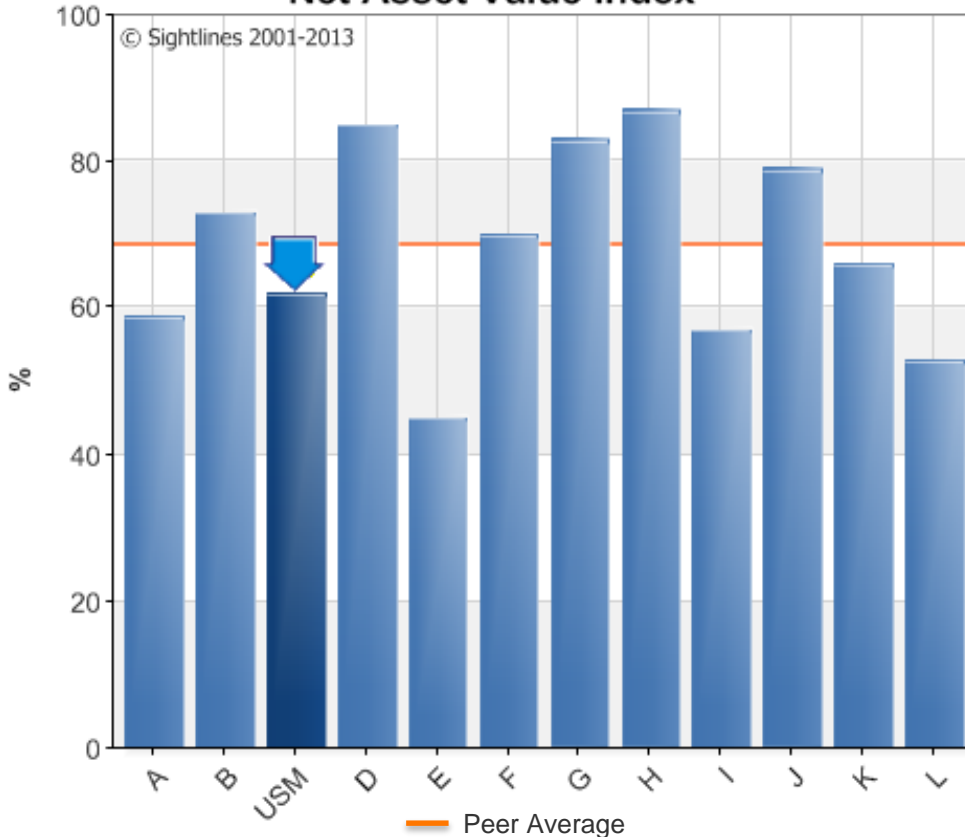
Total Asset Reinvestment Backlog \$/GSF



Growing backlog decreases NAV

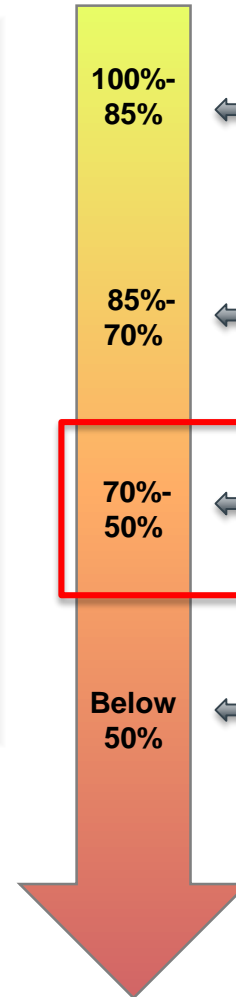
Net Asset Value at USM in the Systemic Renovation stage

Net Asset Value Index



$$\text{NAV Index} = \frac{(\text{Replacement Value} - \text{Building Needs})}{\text{Replacement Value}} \times 100$$

NAV of Index



Investment Strategy

Capital Upkeep stage: Primarily new or recently renovated buildings with 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

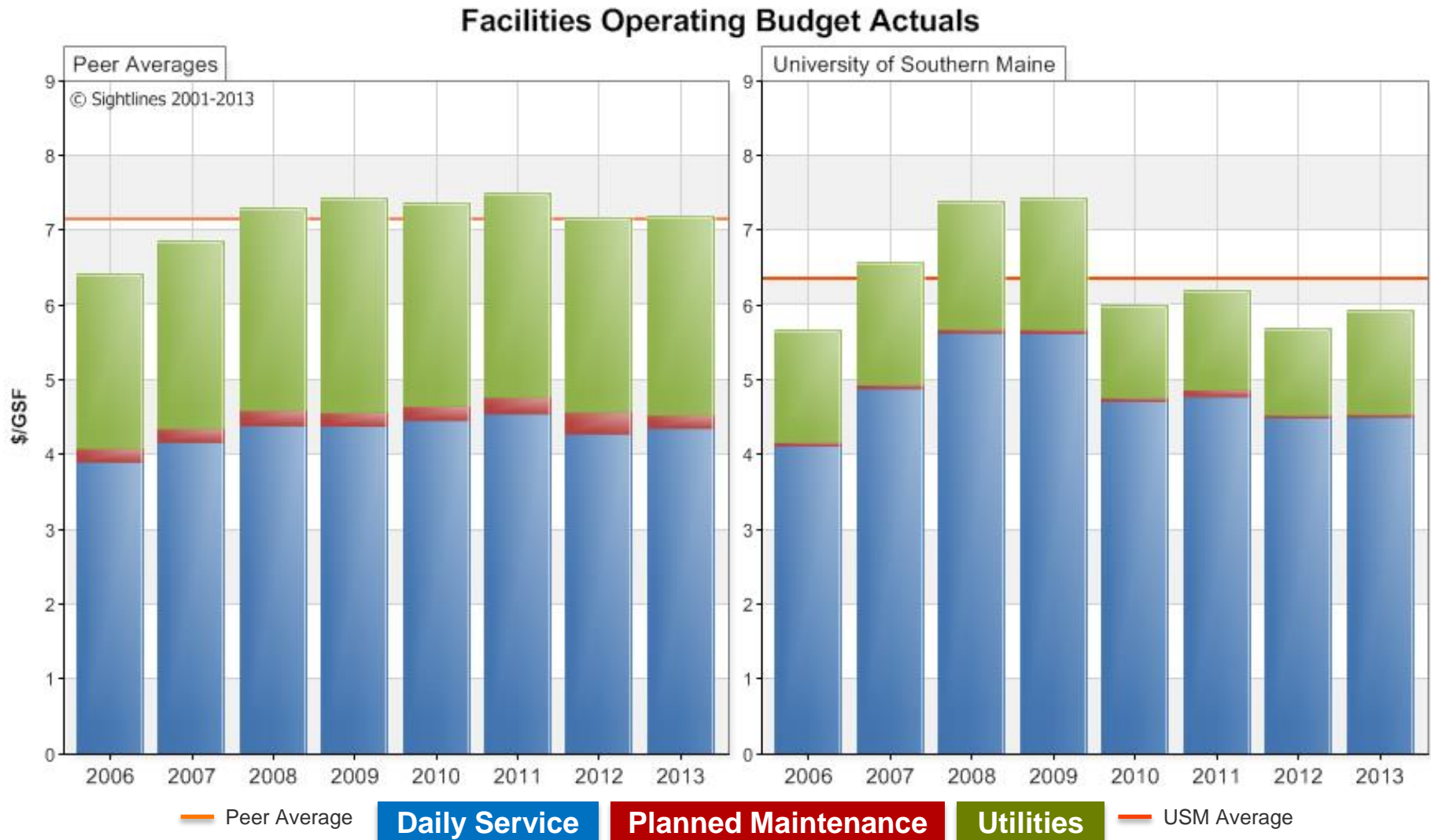
Systemic Renovation stage: Buildings may require more significant repairs; large capital infusions; “The projects pick you”

Transitional/Gut Renovation/Demo stage: Major buildings components are in jeopardy of failure. Reliability issues are widespread throughout the building.

Operations

Overall operating levels below peer average

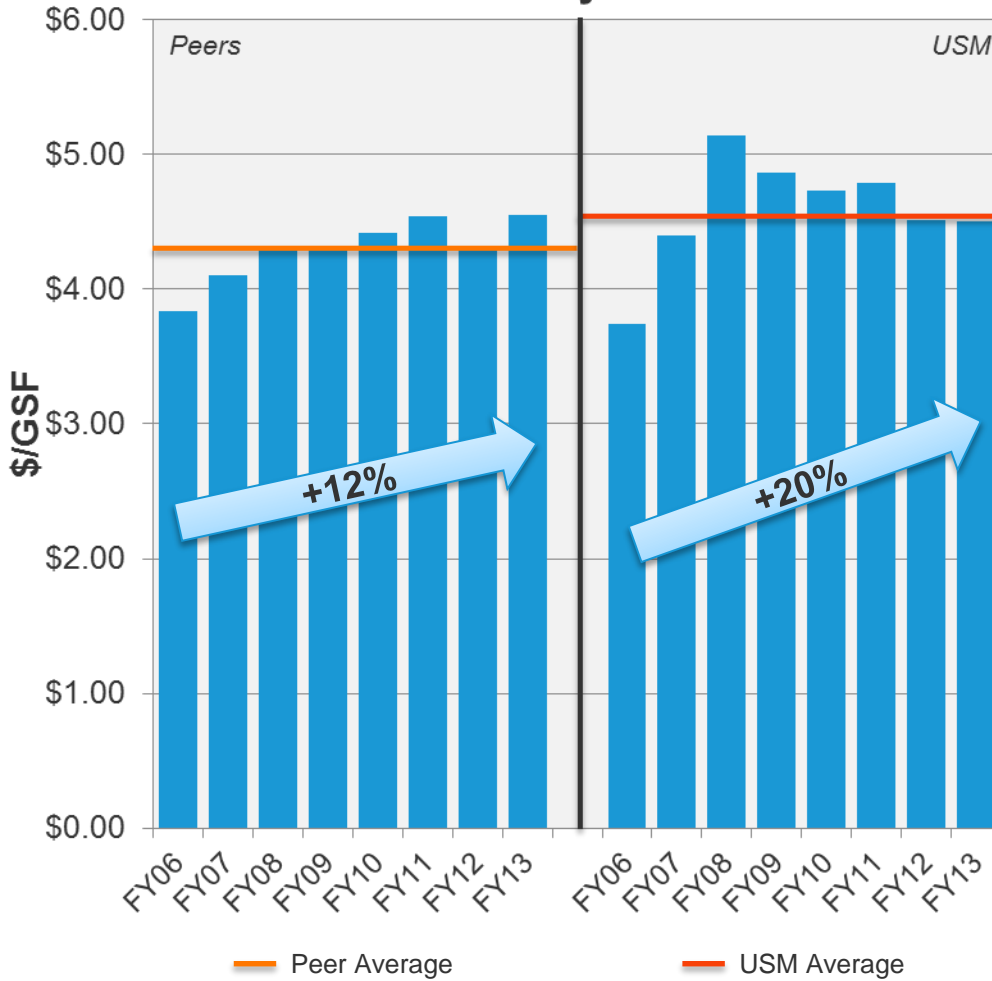
FY13 expenditures \$1/GSF below peer levels



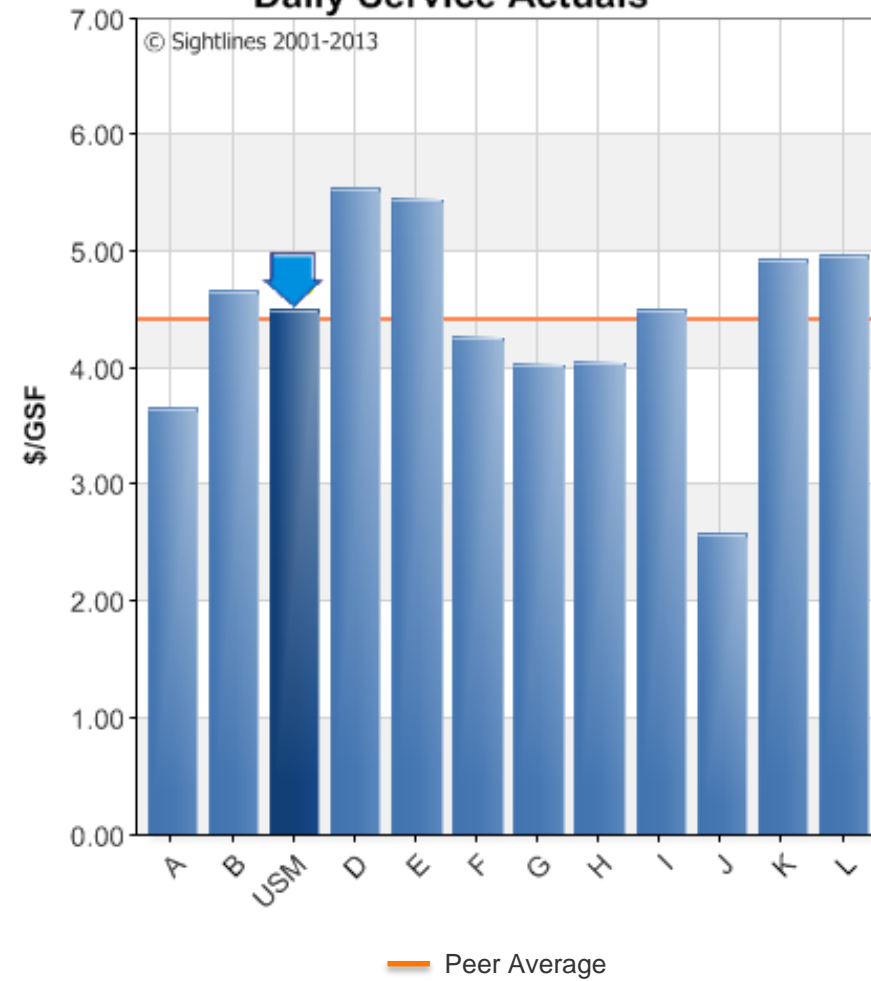
Daily Service reaches peer average in FY13

Daily service appears to stabilize from FY12 to FY13

Total Daily Service



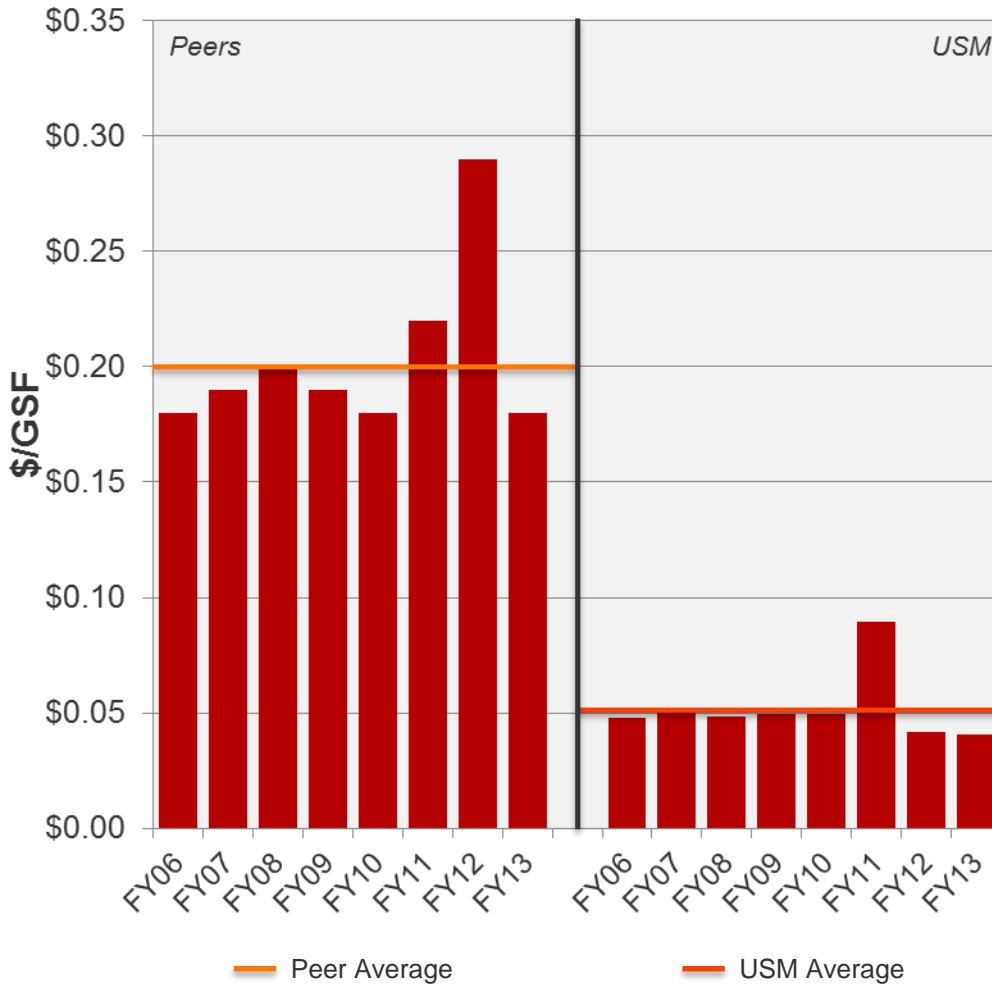
Daily Service Actuals



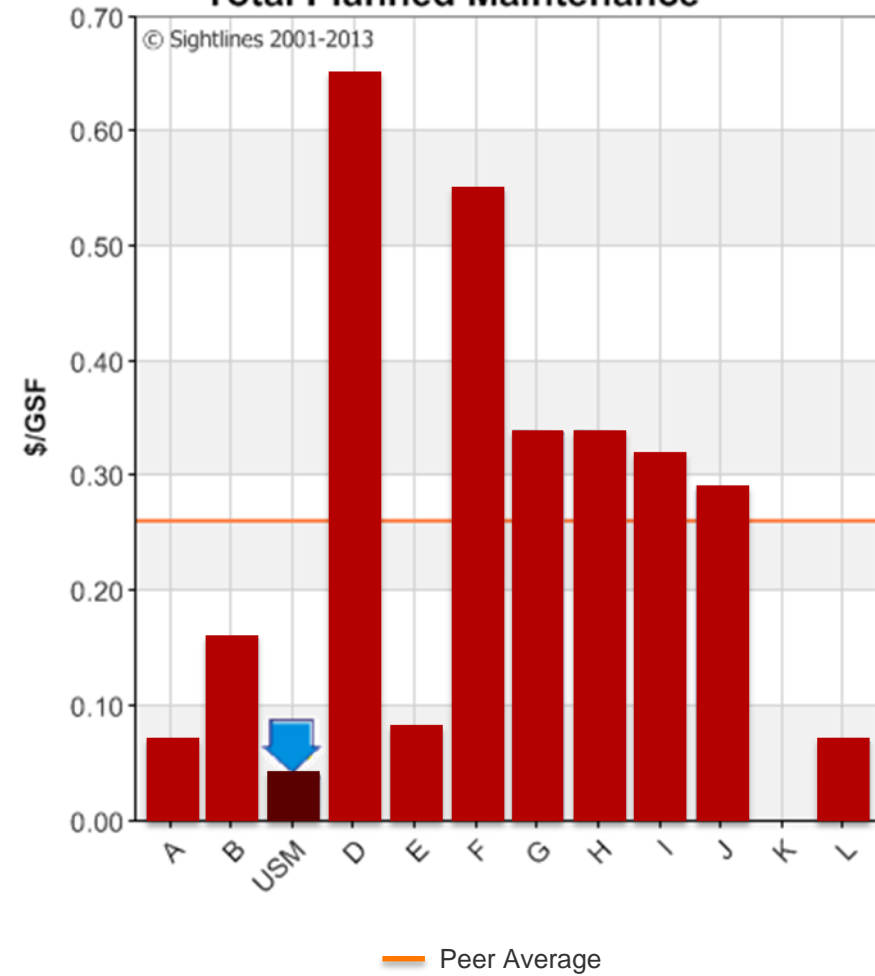
PM among lowest in peer group

Implementation of IWMS will increase tracking of Planned Maintenance

Total Planned Maintenance

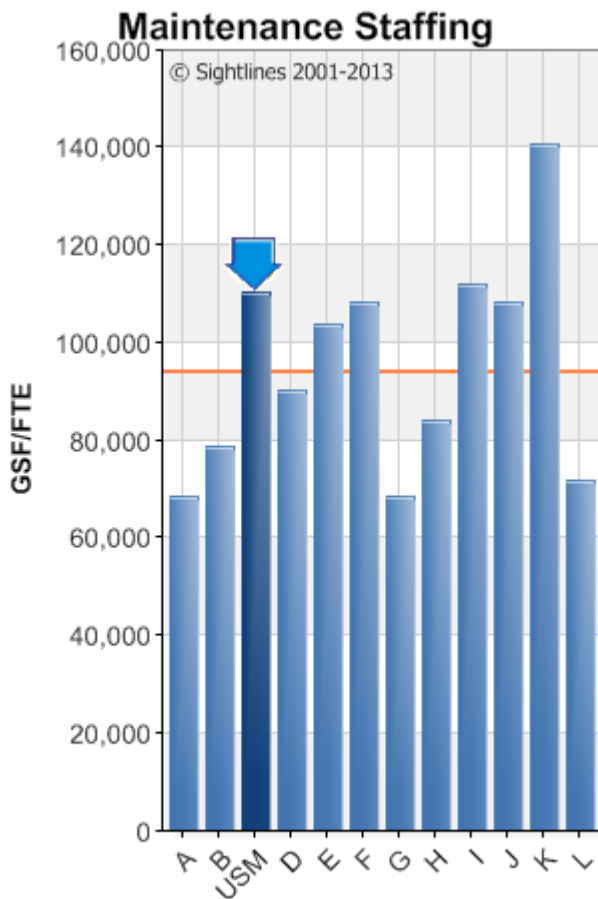


Total Planned Maintenance

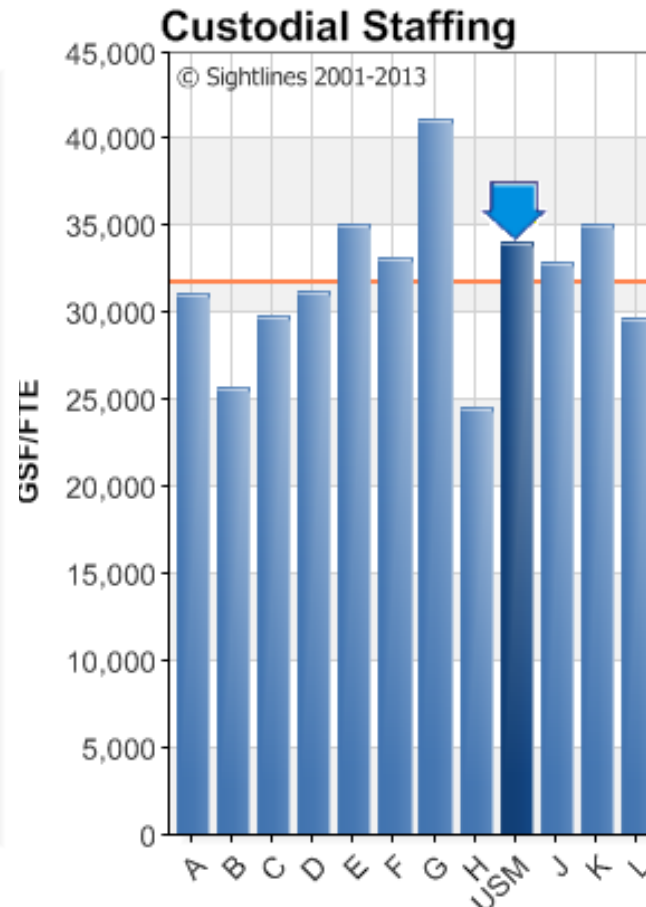


Custodial & Maintenance staff cover more space

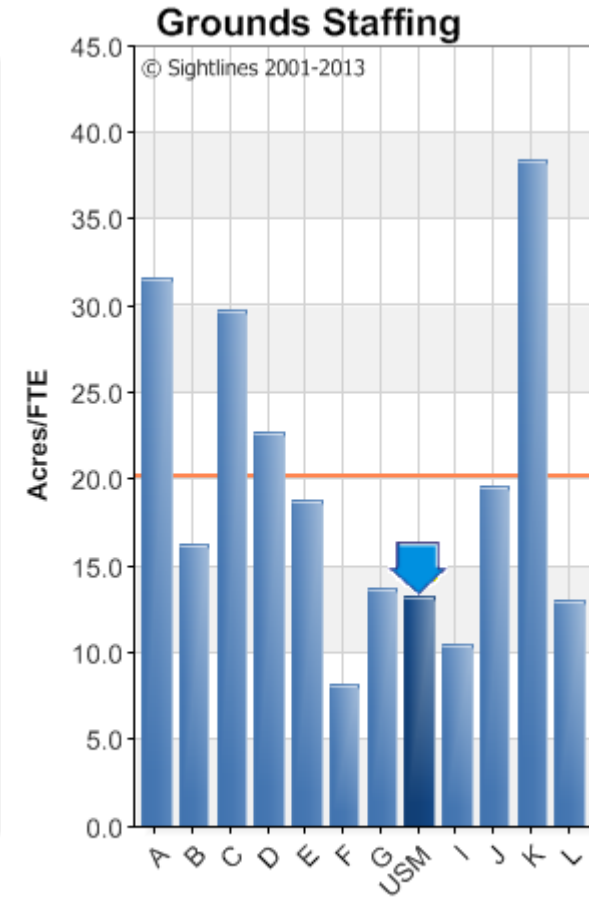
Urban setting presents more challenging grounds care



Institutions Ordered By: Tech Rating



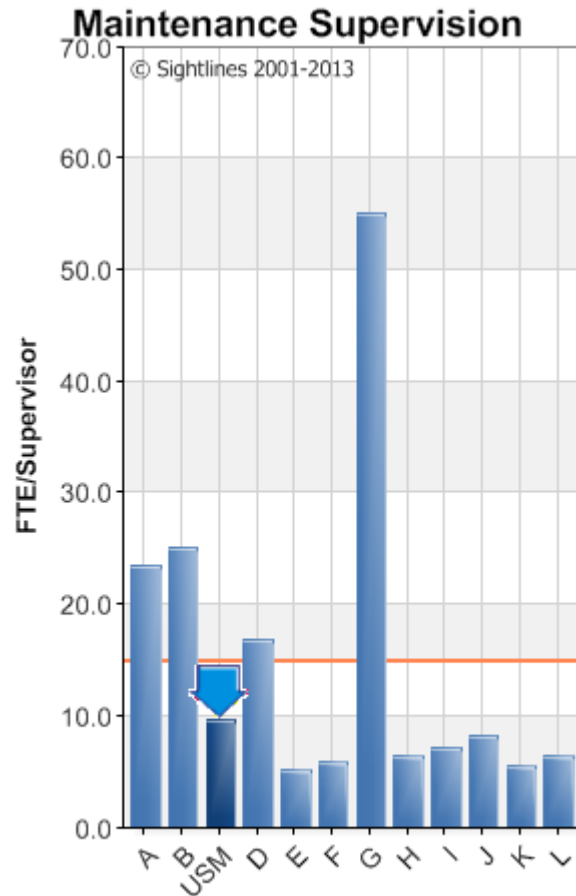
Institutions Ordered By: Density Factor



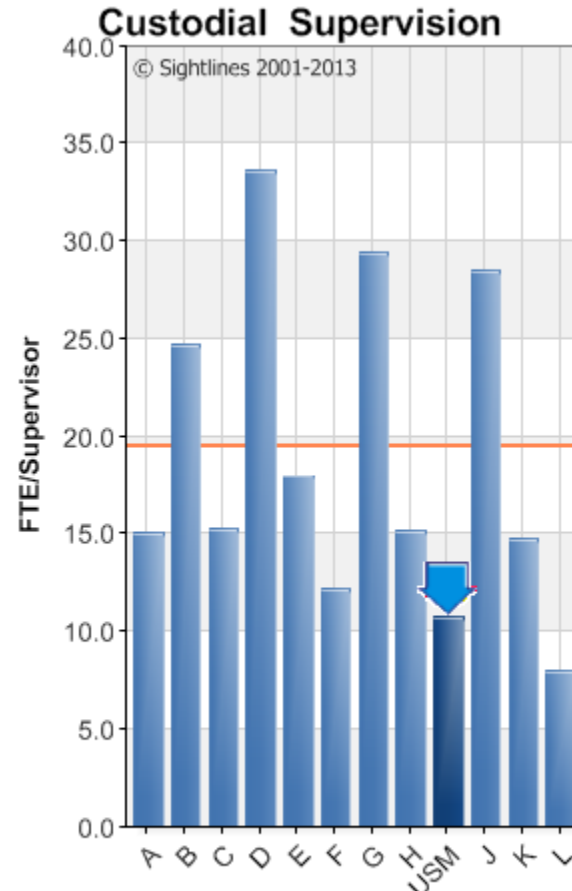
Institutions Ordered By: Grounds Intensity

— Peer Average

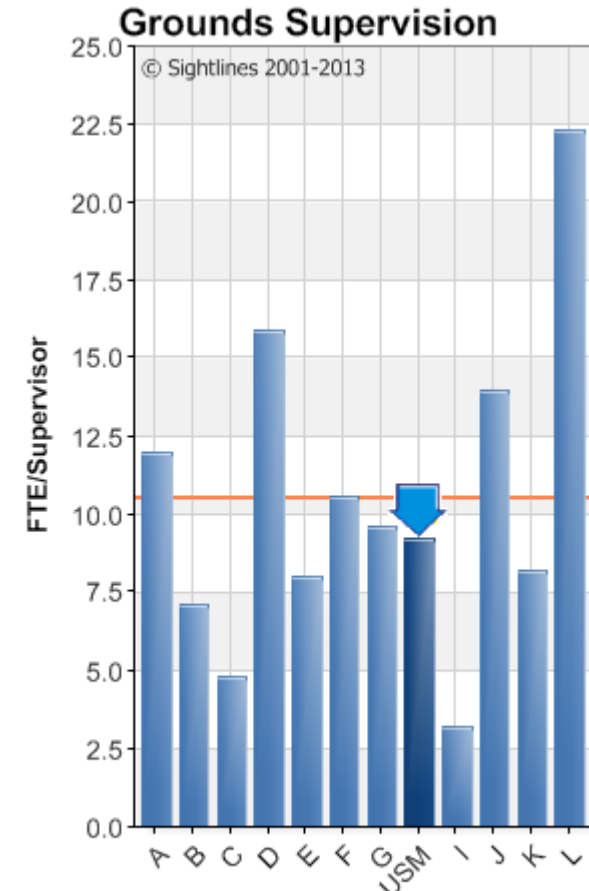
Heavier sup. lessens strain of higher coverage on GSF/FTE



Institutions Ordered By: Tech Rating



Institutions Ordered By: Density Factor



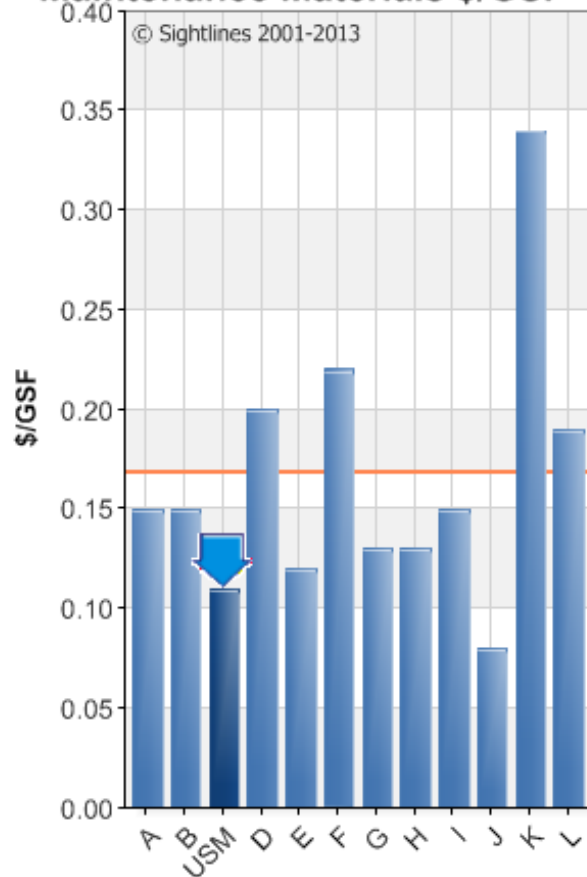
Institutions Ordered By: Grounds Intensity

— Peer Average

Fewer resources for staff

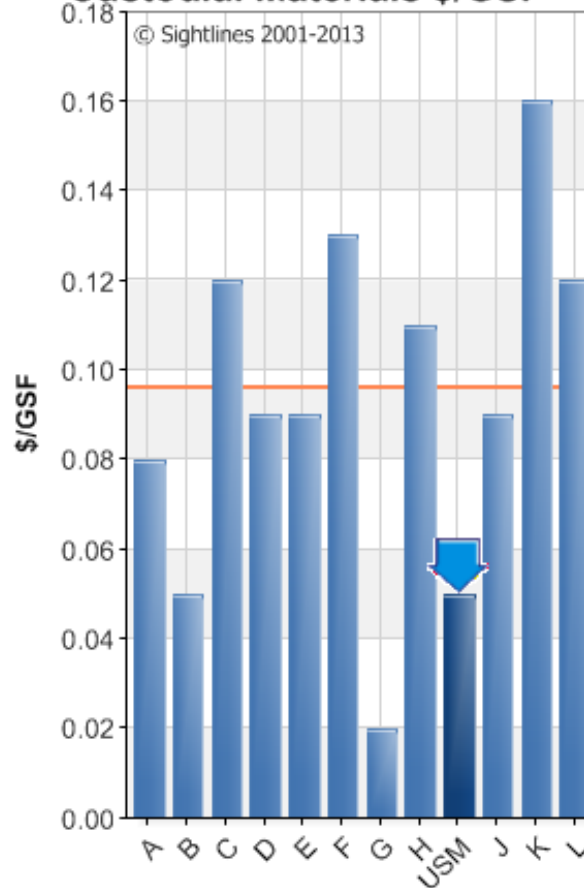
Limited material spending impacts inspection scores across the board

Maintenance Materials \$/GSF



Institutions Ordered By: Tech Rating

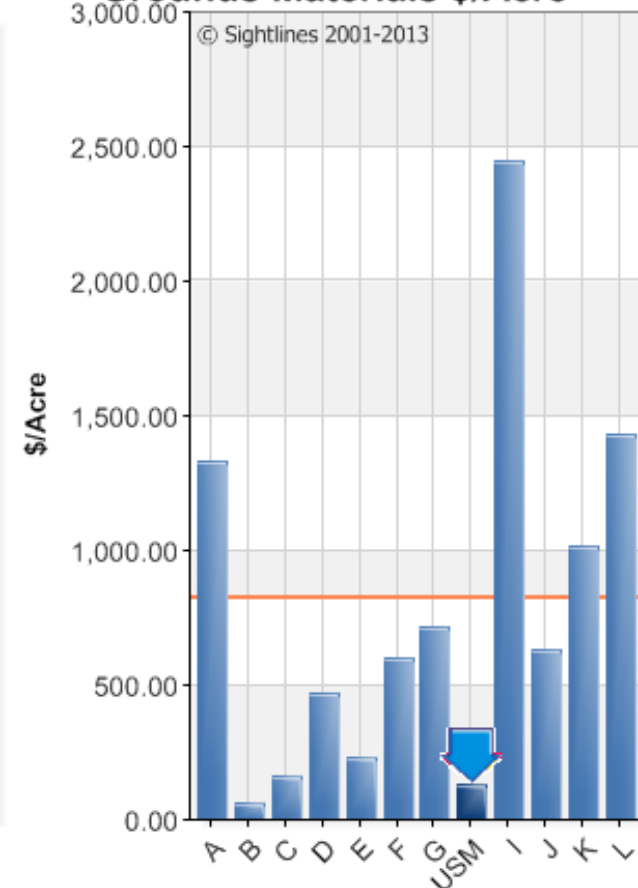
Custodial Materials \$/GSF



Institutions Ordered By: Density Factor

— Peer Average

Grounds Materials \$/Acre



Institutions Ordered By: Grounds Intensity

Consumption among lowest in peer group

USM benefits from lower unit costs compared to peers

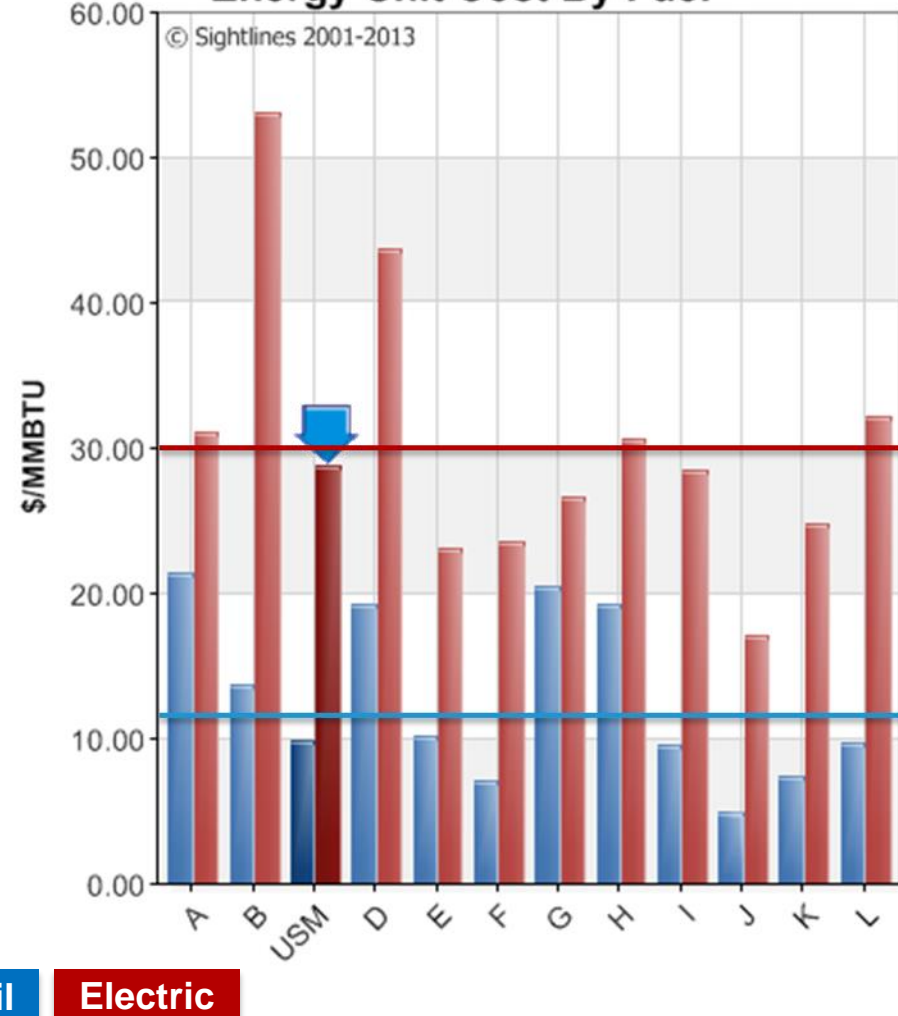
Energy Consumption

© Sightlines 2001-2013



Energy Unit Cost By Fuel

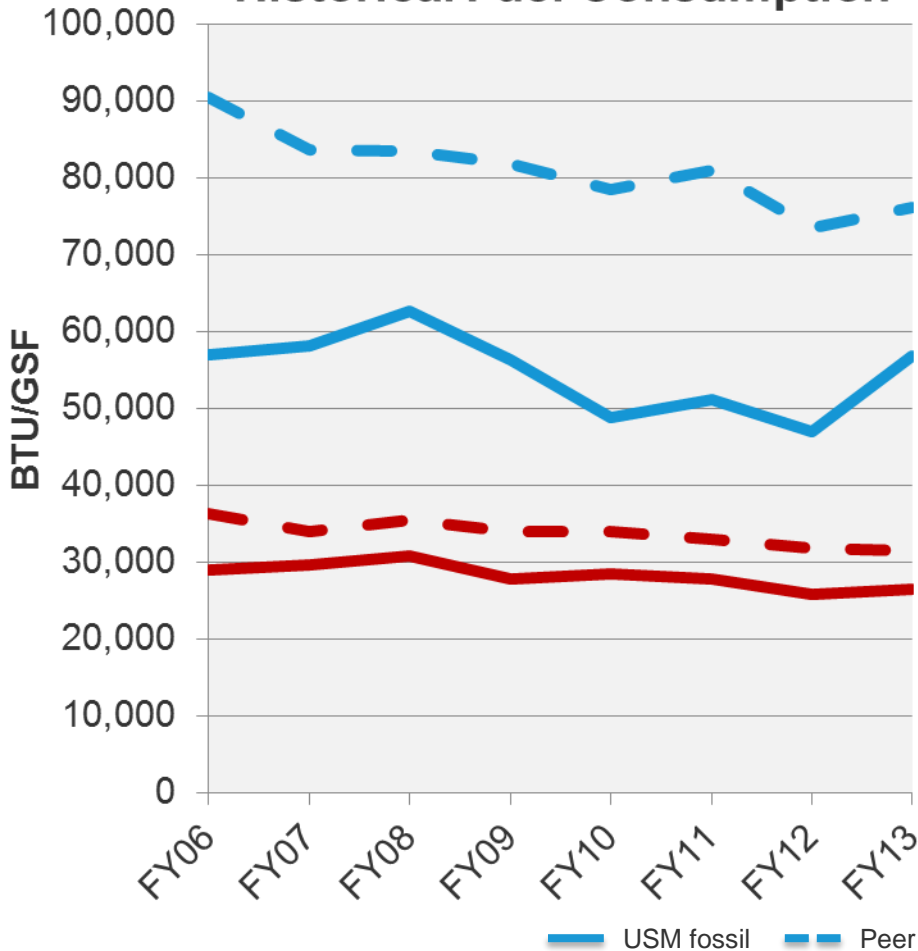
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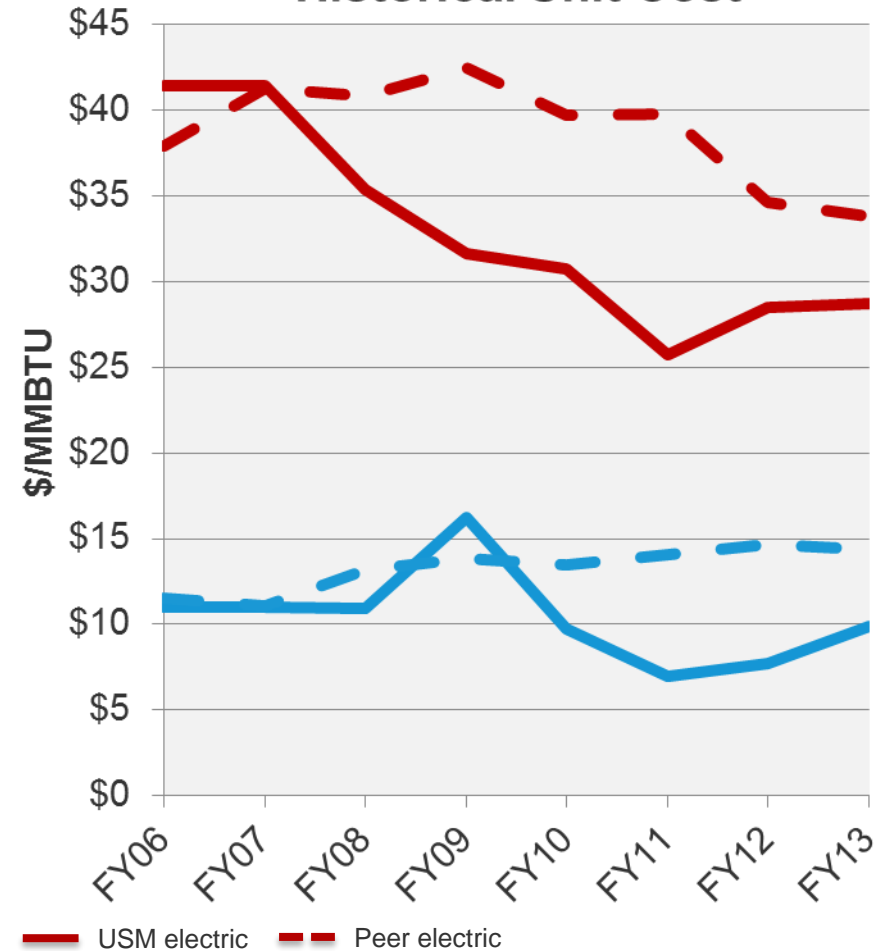
Energy conservation continues to be a highlight

USM has decreased consumption by 11% since peak in FY08

Historical Fuel Consumption



Historical Unit Cost



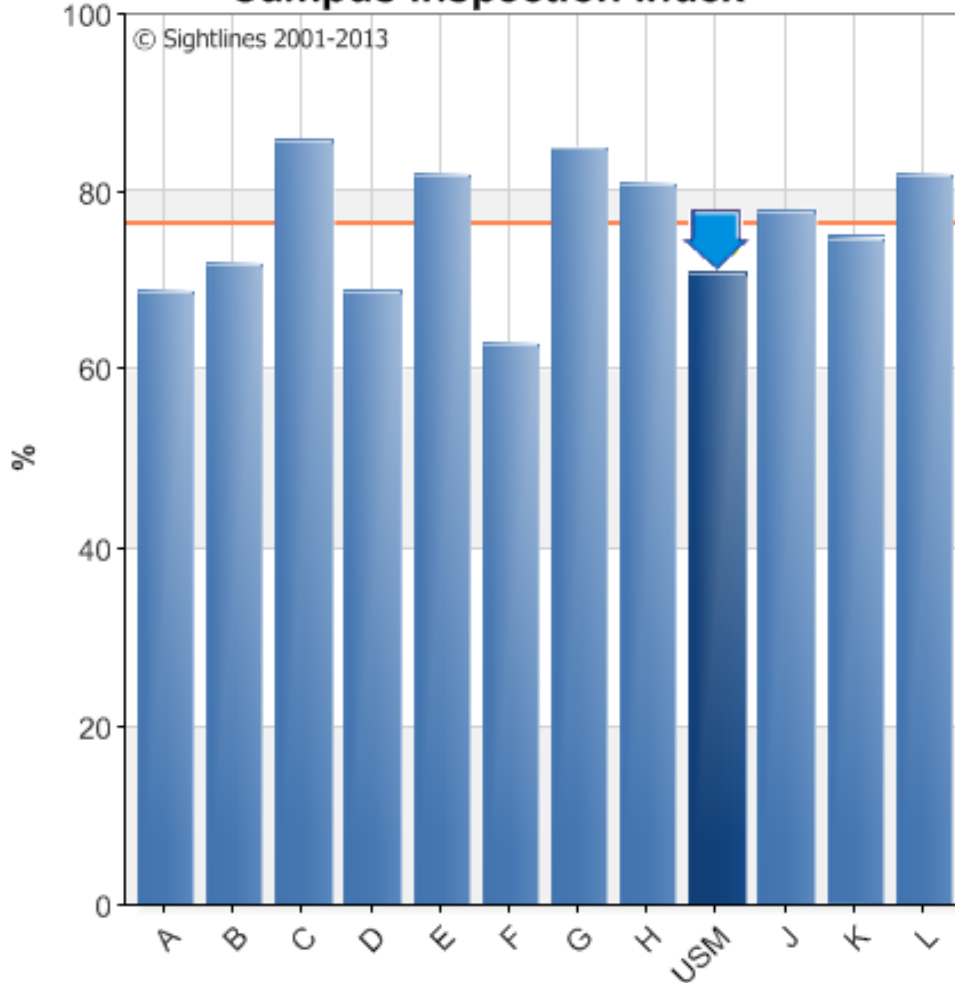
— USM fossil — Peer fossil — USM electric — Peer electric

Energy Peers: Fitchburg State University, Framingham State University, Keene State College, Mount Holyoke College, Plymouth State University, The University of Maine, University of Massachusetts Dartmouth, Worcester State University

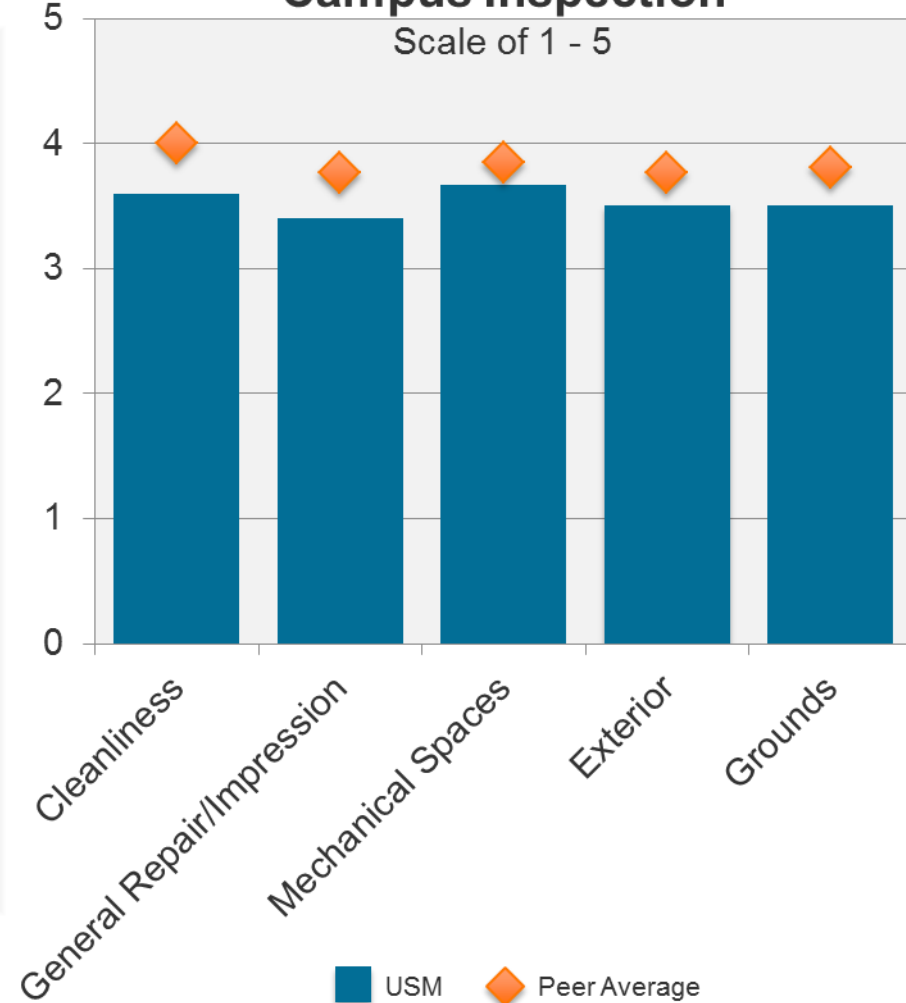
Age of campus plays important role in inspection

Pockets of opportunity exist at USM

Campus Inspection Index



Campus Inspection



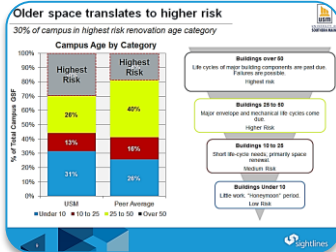
FY13 campus inspection photos



UNIVERSITY OF
SOUTHERN MAINE

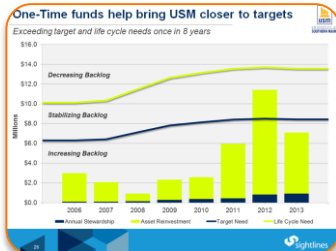


Concluding Comments for Southern Maine



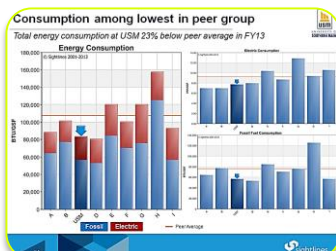
Physical Portfolio

- USM's density calculation suggest some flexibility in addressing buildings over 50 with poor condition and low utilization. USM should consider renovating spaces with high utilization and poor condition.
- Buildings under 25 have ongoing renewal needs that if addressed through PM and recurring funds on an annual basis can extend the useful life of costly building components.



Asset Value Change

- Due to large investments into new construction from FY06-FY09 USM is in a period of "Catch-Up" where Annual Stewardship funds are playing dual roles.
- Growing the Annual Stewardship funds to address the ongoing renewal or "Keep-Up" needs of buildings will be critical to ensure buildings run at peak performance.



Operational Effectiveness

- Implementation of the IWM system will provide USM the tools to track and grow the internal Planned Maintenance program. This data will be helpful in understanding the different needs of buildings and assist in future project selections.
- Continuing to reduce energy consumption will increase cost savings that should be recycled back into the operating budget for PM work.

Questions & Comments