

University of Minnesota Morris Digital Well

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Planning Committee

Campus Governance

3-23-2016

Planning minutes 03/23/2016

Planning Committee

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sightlines

ROPA+

University of Minnesota – Morris

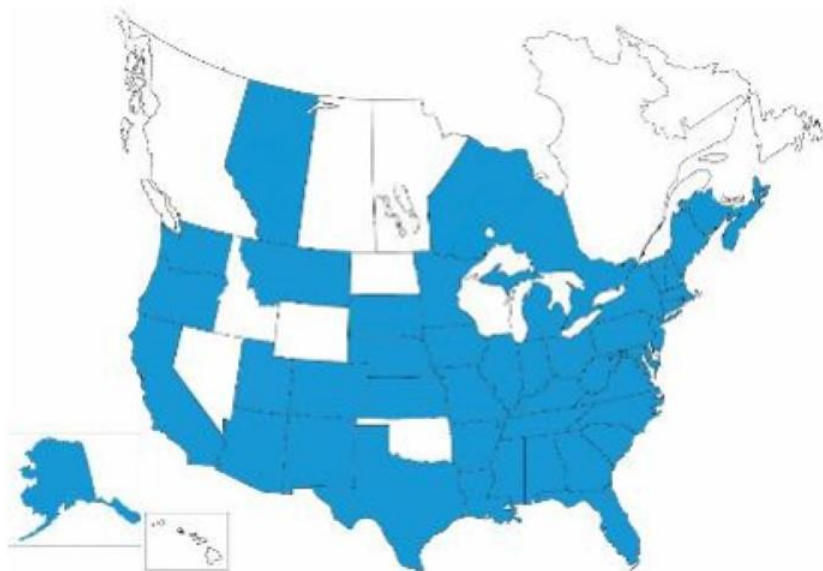
Presenters: Sophie Mason, James Fang

March 2016

- Vanderbilt University
- Virginia Commonwealth University
- Virginia Department of General Services
- Wagner College
- Wake Forest University
- Washburn University
- Washington University in St. Louis
- Wellesley College
- Wesleyan University
- West Chester University
- West Liberty University
- West Virginia Health Science Center
- West Virginia Institute of Technology
- West Virginia School of Osteopathic Medicine
- West Virginia State University
- West Virginia University
- Western Connecticut State University
- Western Oregon University
- Westfield State University
- Wheaton College
- Widener University

Who Partners with Sightlines?

Robust membership includes colleges, universities, consortiums and state systems



Serving the Nation's Leading Institutions:

- 70% of the Top 20 Colleges*
- 75% of the Top 20 Universities*
- 34 Flagship State Universities
- 13 of the 14 Big 10 Institutions
- 9 of the 12 Ivy Plus Institutions
- 8 of 13 Selective Liberal Arts Colleges

* U.S. News Rankings

Sightlines is proud to announce that:

- 450 colleges and universities are Sightlines clients including over 325 ROPA members.
- We enjoy an annual renewal rate over 90%
- We have clients in 42 states, the District of Columbia and four Canadian provinces
- More than 100 new institutions became Sightlines members since 2014

Sightlines advises state systems in:

- Alaska
- California
- Connecticut
- Hawaii
- Maine
- Massachusetts
- Minnesota
- Mississippi
- Missouri
- Nebraska
- New Hampshire
- New Jersey
- Pennsylvania
- Texas
- West Virginia

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 accumulation of repair and 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

Peer Institutions

Selected from the database of Sightlines members based on campus similarities

Peer Institutions

Carleton College

Delta State University

Edinboro University of PA

Grinnell College

Gustavus Adolphus College

Mansfield University of PA

Penn State – Erie

The University of Nebraska – Kearney

University of Maine at Farmington

University of Maine at Fort Kent

University of Maine at Machias

University of Maine at Presque Isle



Physical Profile

- While UMM has a comparable campus based on construction age, peers have been more consistent in renovating buildings, putting UMM at an operational disadvantage with older systems and buildings to maintain.
- Compared to peers, UMM's buildings are slightly less technically complex and campus is less busy than peers. This suggests there is still room for enrollment to grow.

Capital Investment

- HEAPR is a strong source of recurring capital, but the lack of one-time investment restricts UMM's ability to plan and complete large renovation projects.
- The resulting backlog of need on campus contains \$5.3M in immediate need that resides in high value buildings and systems.

Operations Success

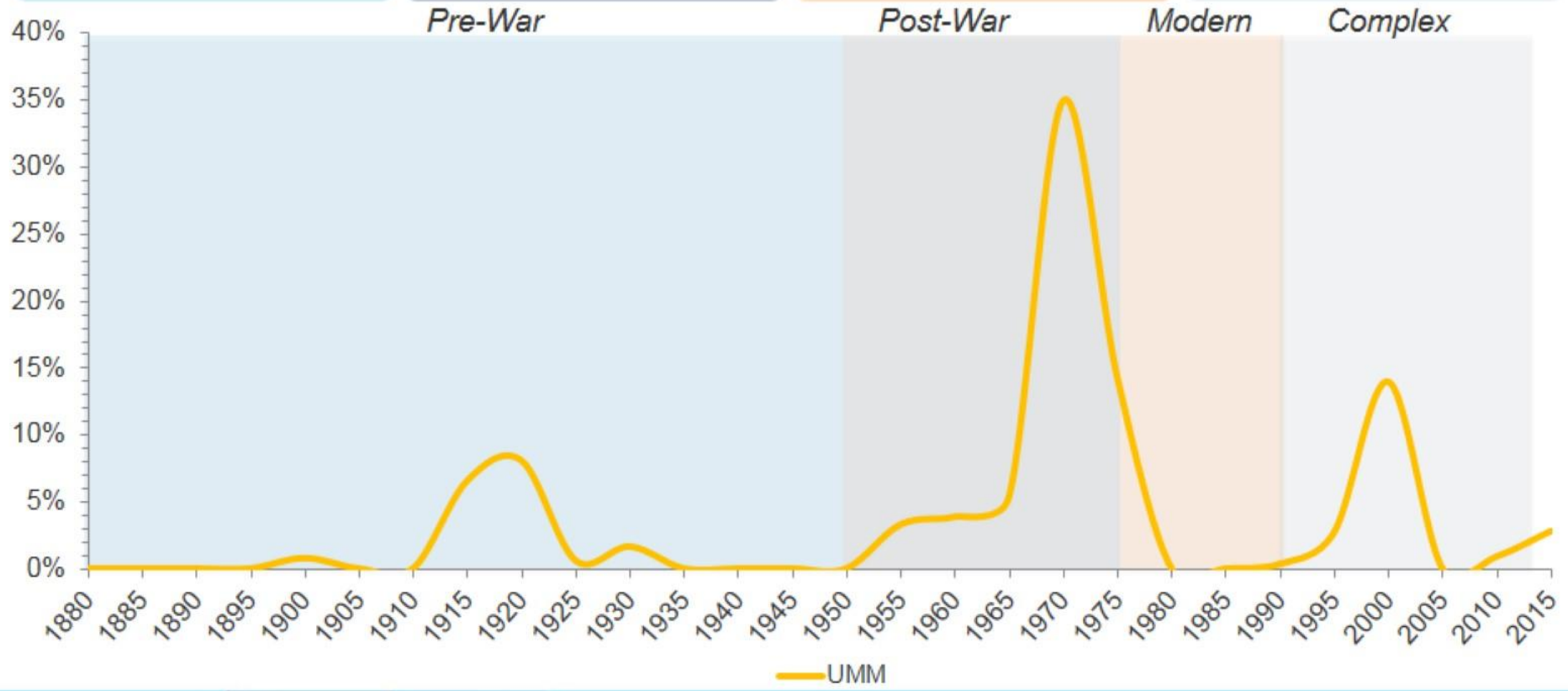
- Staffing resources are under pressure. All shops are understaffed compared to the database average, especially the custodial staff.
- Given these resource levels, the age of campus, and lack of one-time capital, operations staff are doing the best they can, and the campus inspection scores are evidence of this.

Space Profile

Creating Context for Campus Age

The campus age drives the overall risk profile

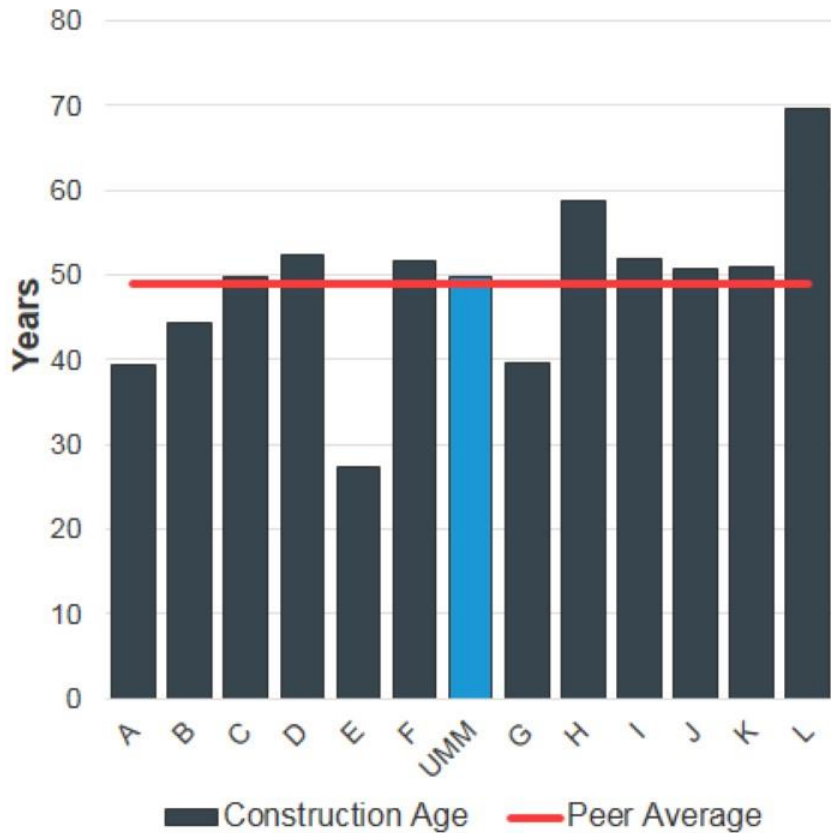
<p>Pre-War</p> <p>Built before 1951</p> <p>Durable construction</p> <p>Older but typically lasts longer</p>	<p>Post-War</p> <p>Built from 1951 to 1975</p> <p>Lower-quality construction</p> <p>Already needing more repairs and renovations</p>	<p>Modern</p> <p>Built from 1976 to 1990</p> <p>Quick-flash construction</p> <p>Low-quality building components</p>	<p>Complex</p> <p>Built in 1991 and newer</p> <p>Technically complex spaces</p> <p>Higher-quality, more expensive to maintain & repair</p>
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Impact of Renovations on Building Age

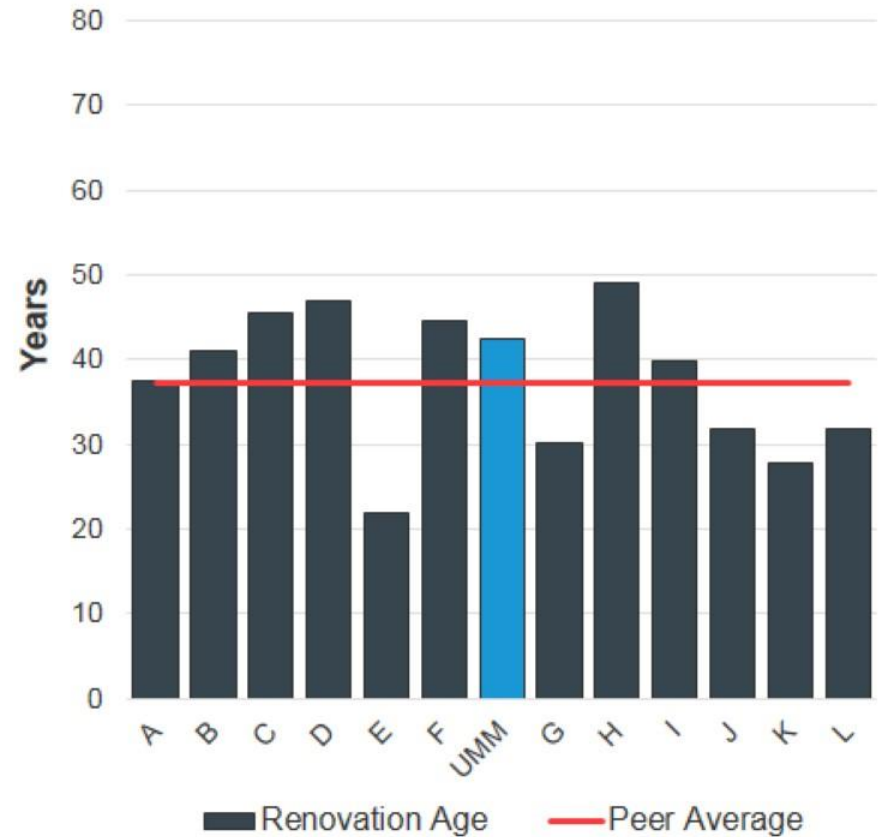
Peers have offset 37% more space through renovation work than UMM

Weighted Construction Age



UMM has offset campus age by **7** years

Weighted Renovation Age

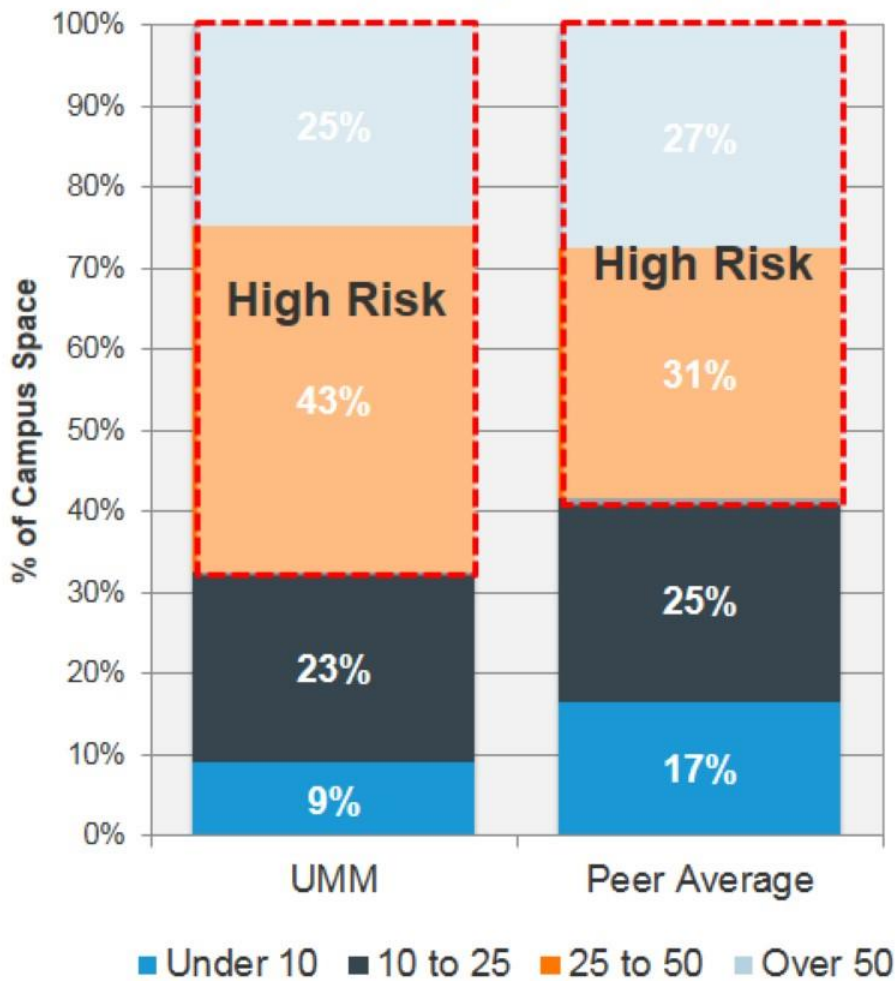


Peers have offset campus age by **12** years

Renovation Age Profile is Higher Risk Than Peers

Understanding the impact of age on capital & operations

Campus Age by Category



Buildings over 50

Life cycles of major building components are past due. Failures are possible. Core modernization cycles are missed.

Highest risk

Buildings 25 to 50

Major envelope and mechanical life cycles come due. Functional obsolescence prevalent.

Higher Risk

Buildings 10 to 25

Short life-cycle needs; primarily space renewal.

Medium Risk

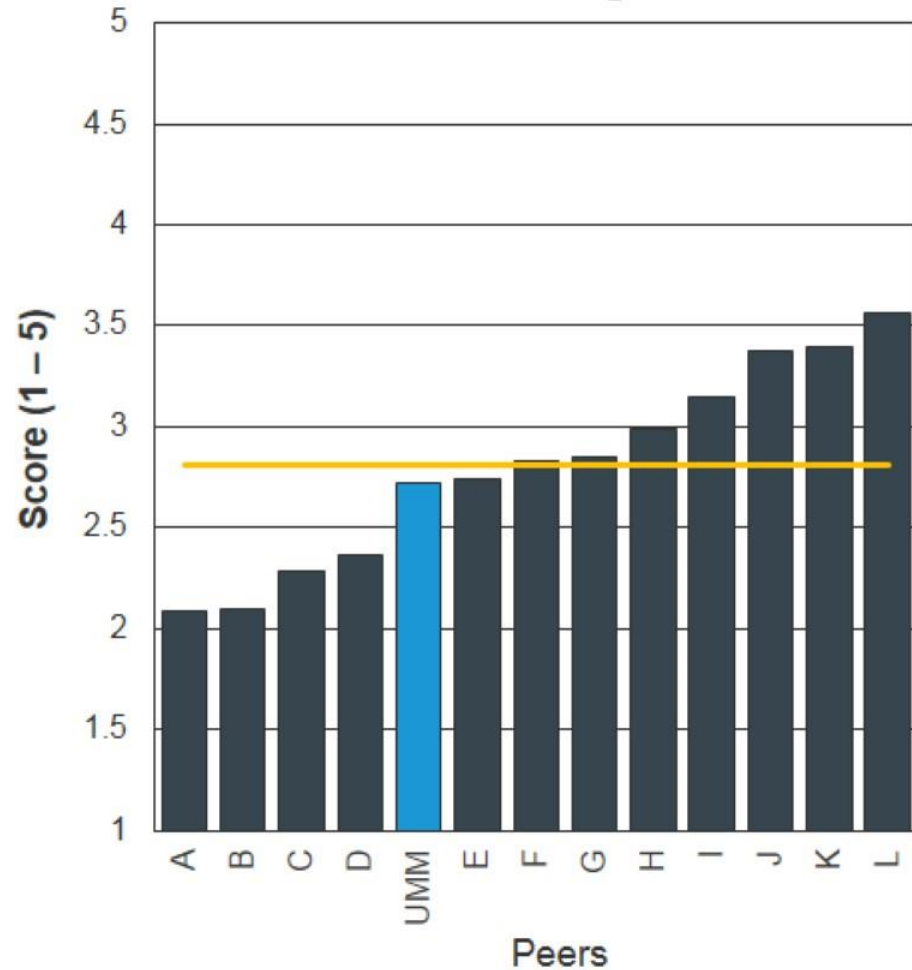
Buildings Under 10

Little work. "Honeymoon" period.

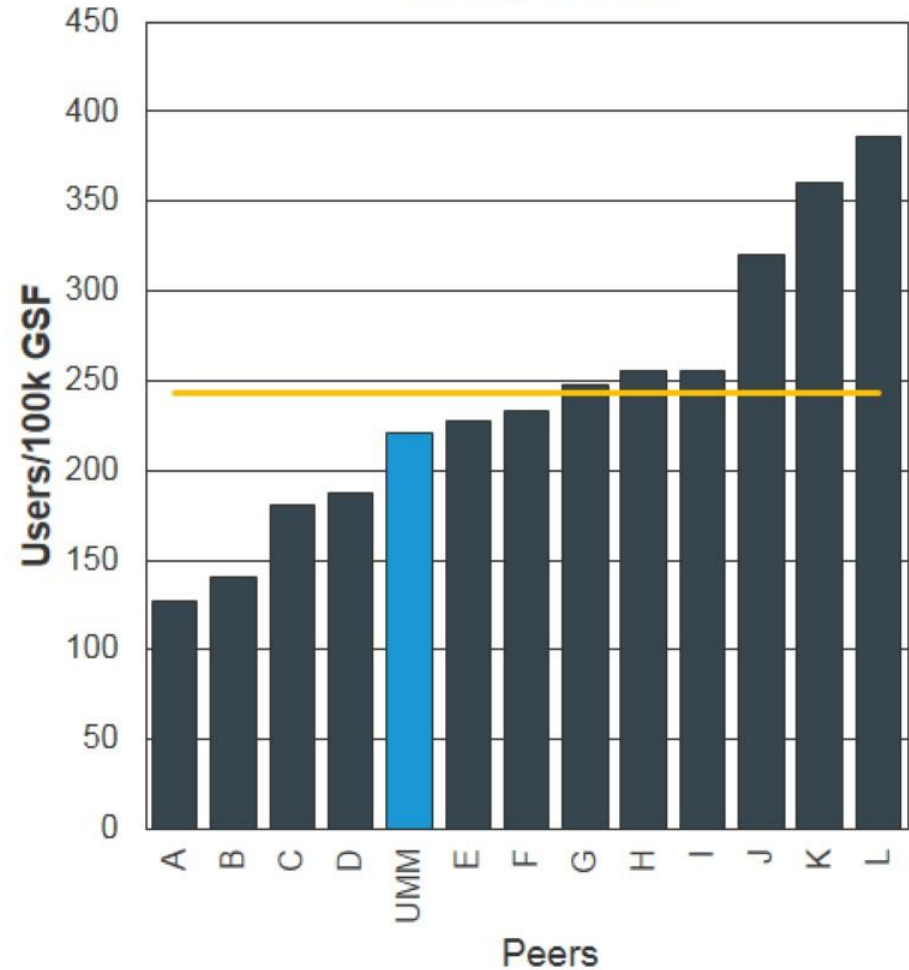
Low Risk

UMM is Similar to Peers in Density and Complexity

Tech Rating



Density Factor

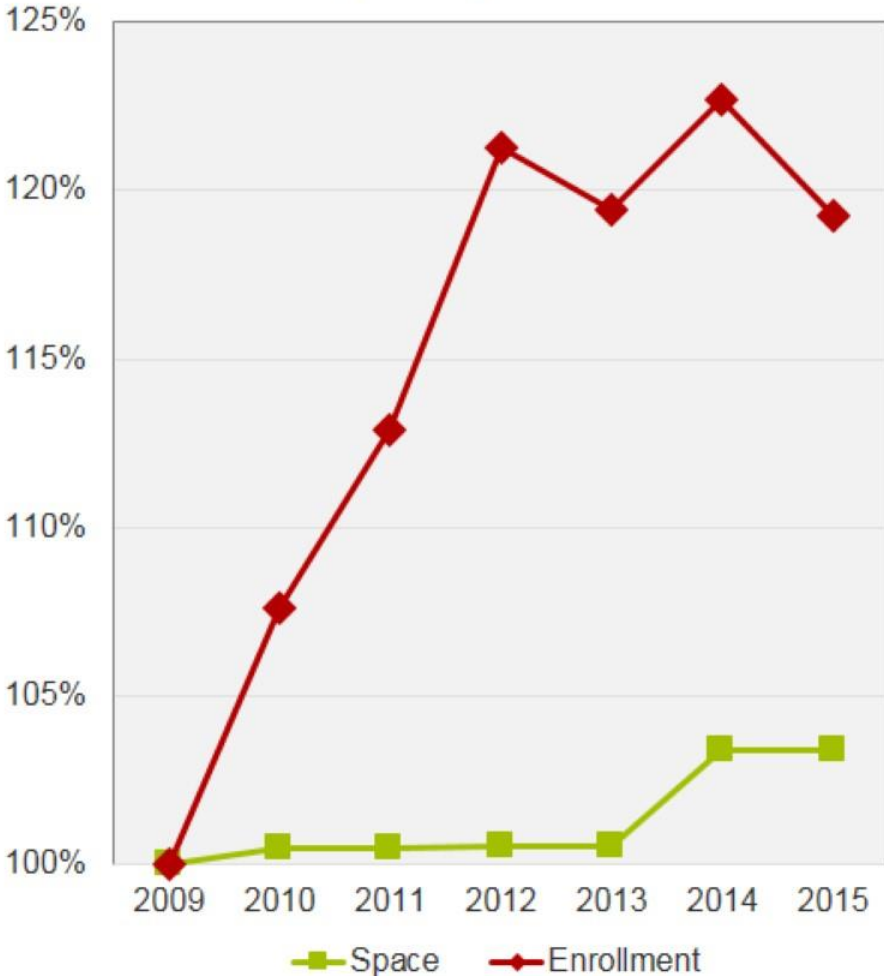


Space per Student Shows Still Room to Grow

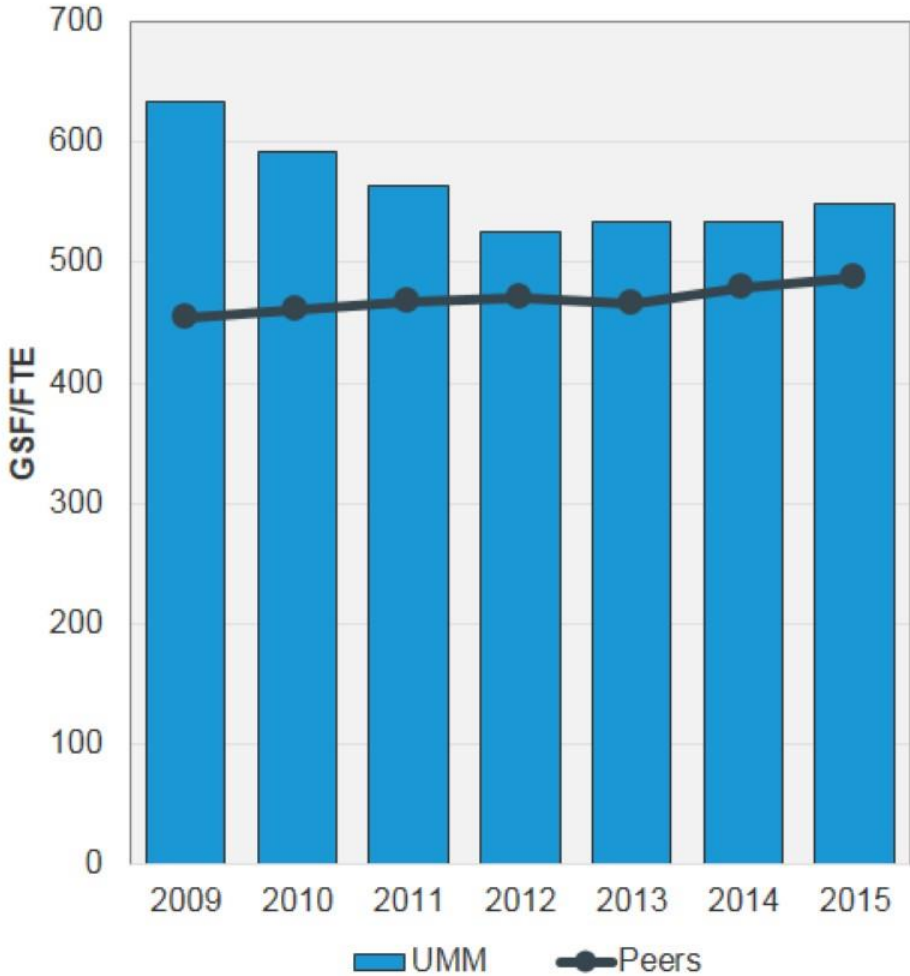


Enrollment growth has yielded less space per FTE, but still more than peers

UMM Change in Space and Enrollment



Campus Space per Student



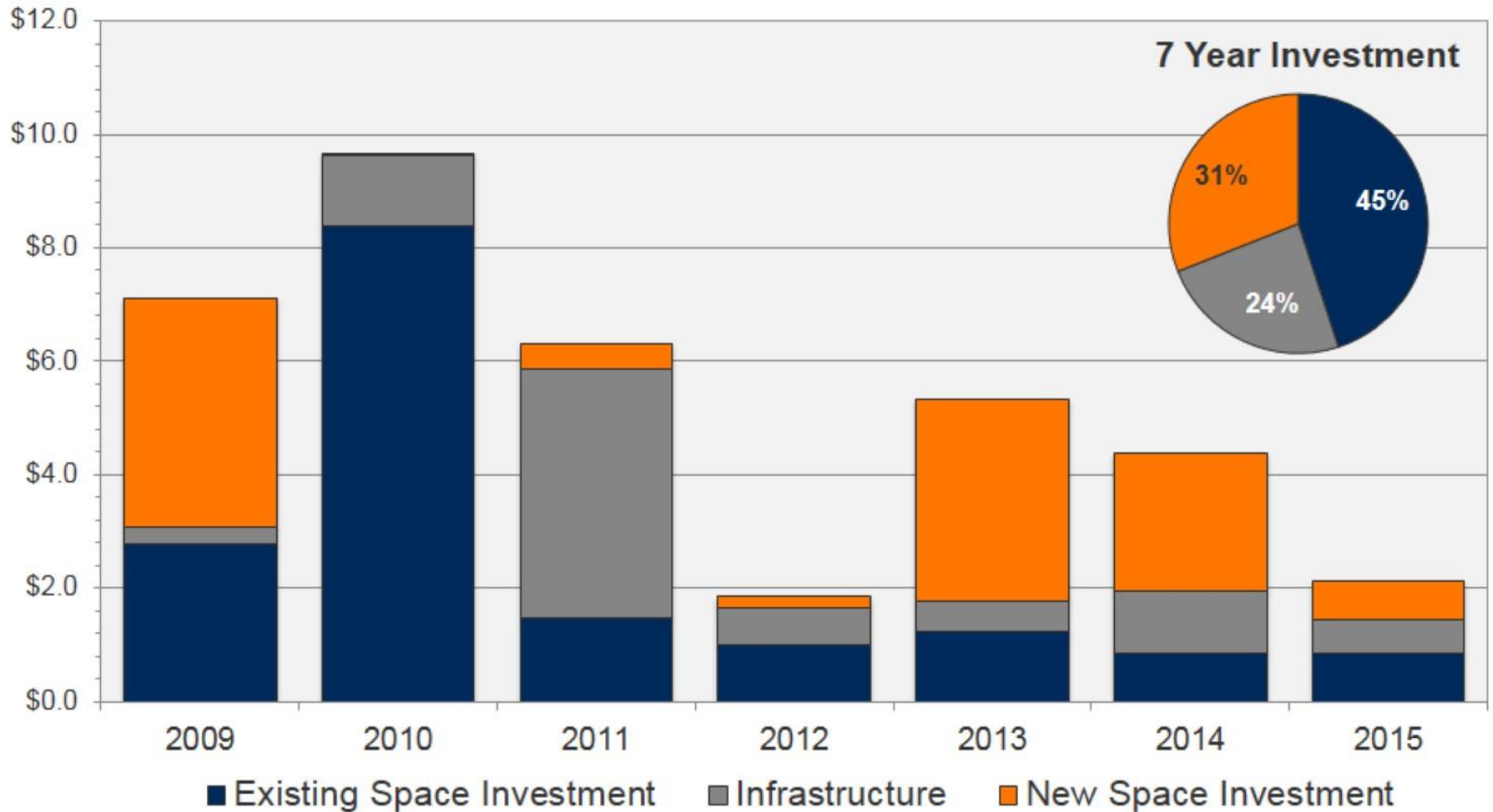
Capital Profile

Growth Has Driven Historic Investment

\$15.9M has been invested into existing facilities over 7 years



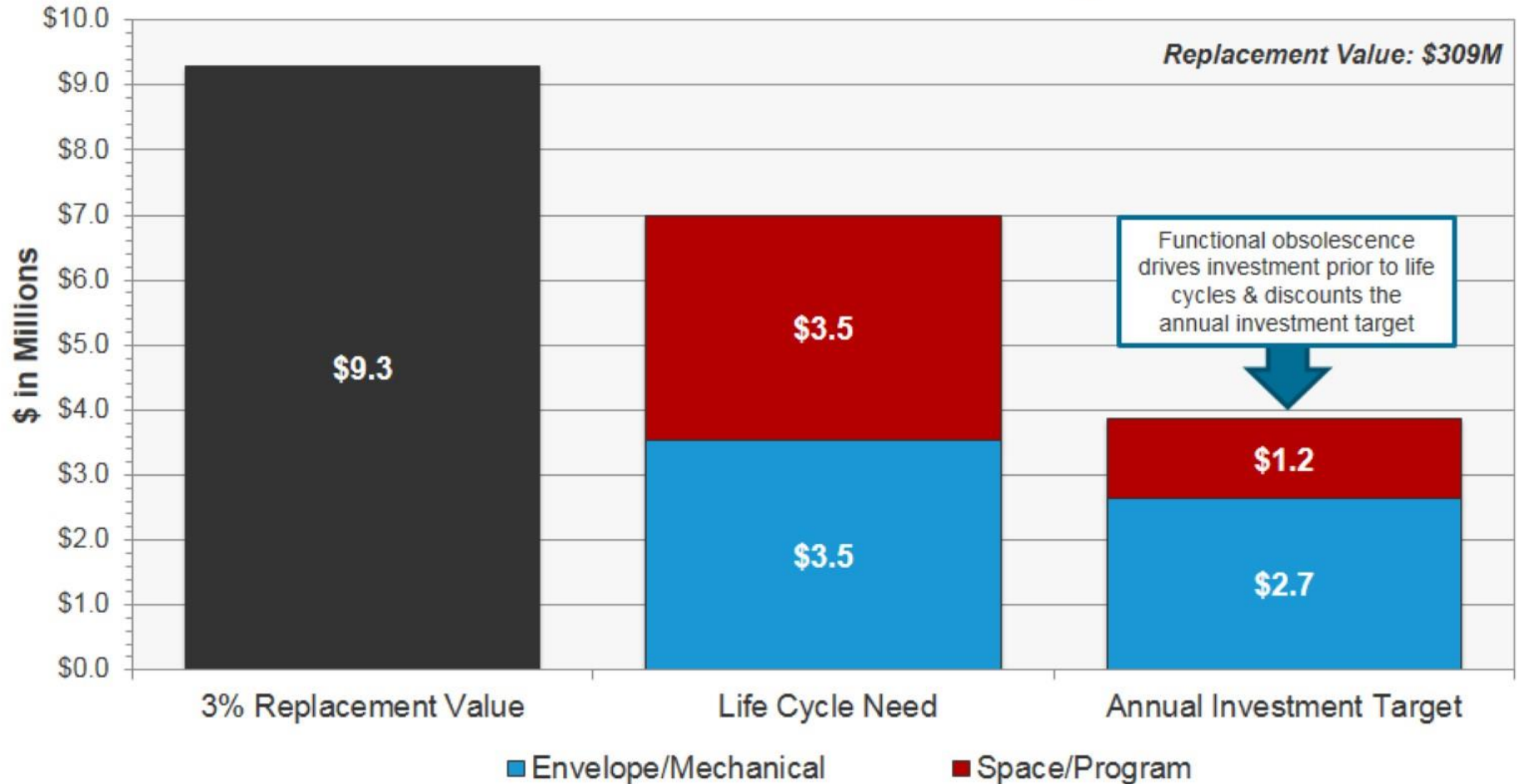
Total Capital Investment



What is the Right Level of Investment for UMM?

Annual Investment Target: \$3.9M

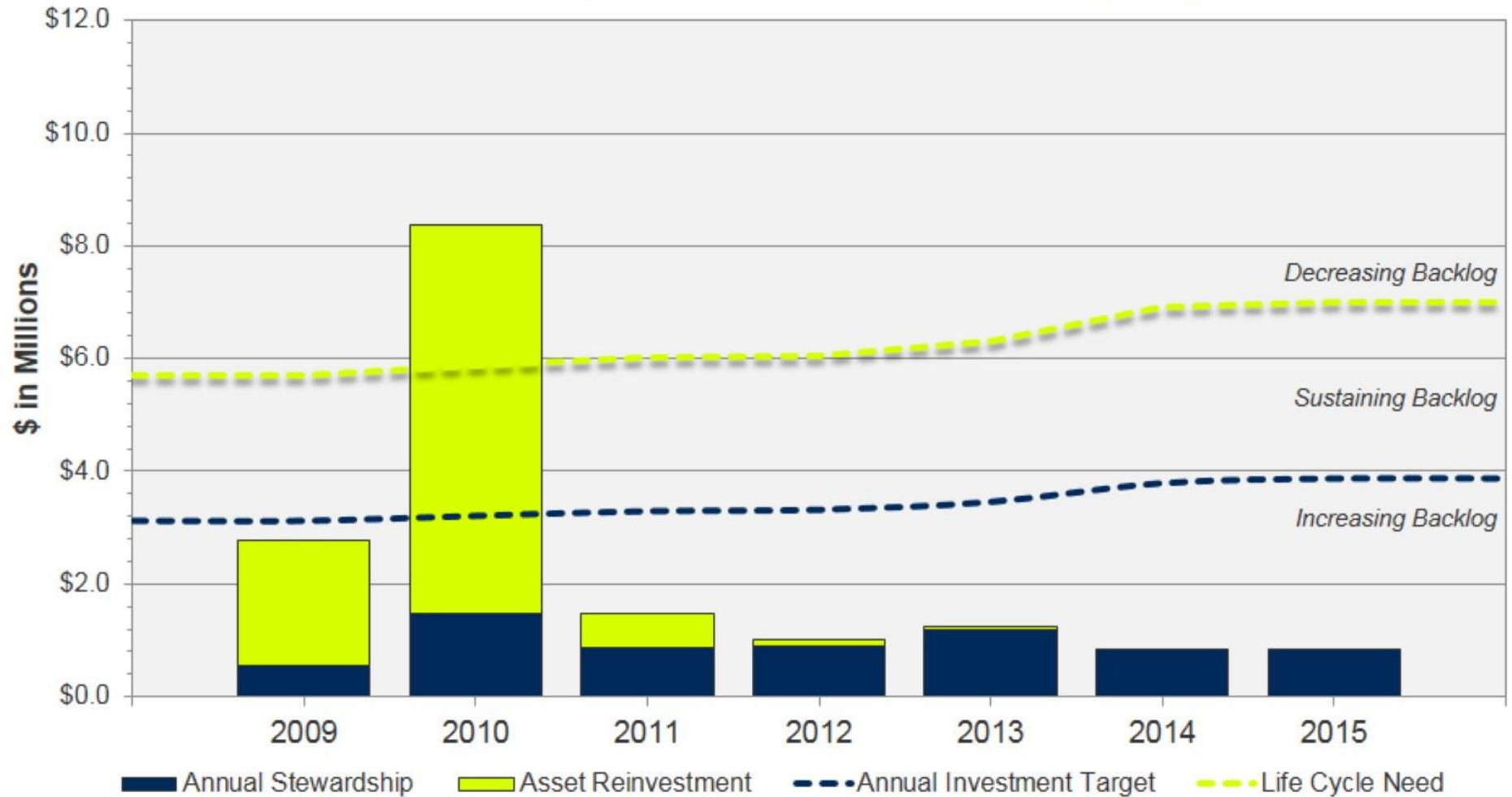
FY15 Annual Investment Target



Capital Investment vs. Funding Target

\$3.0M shortfall in funding in 2015

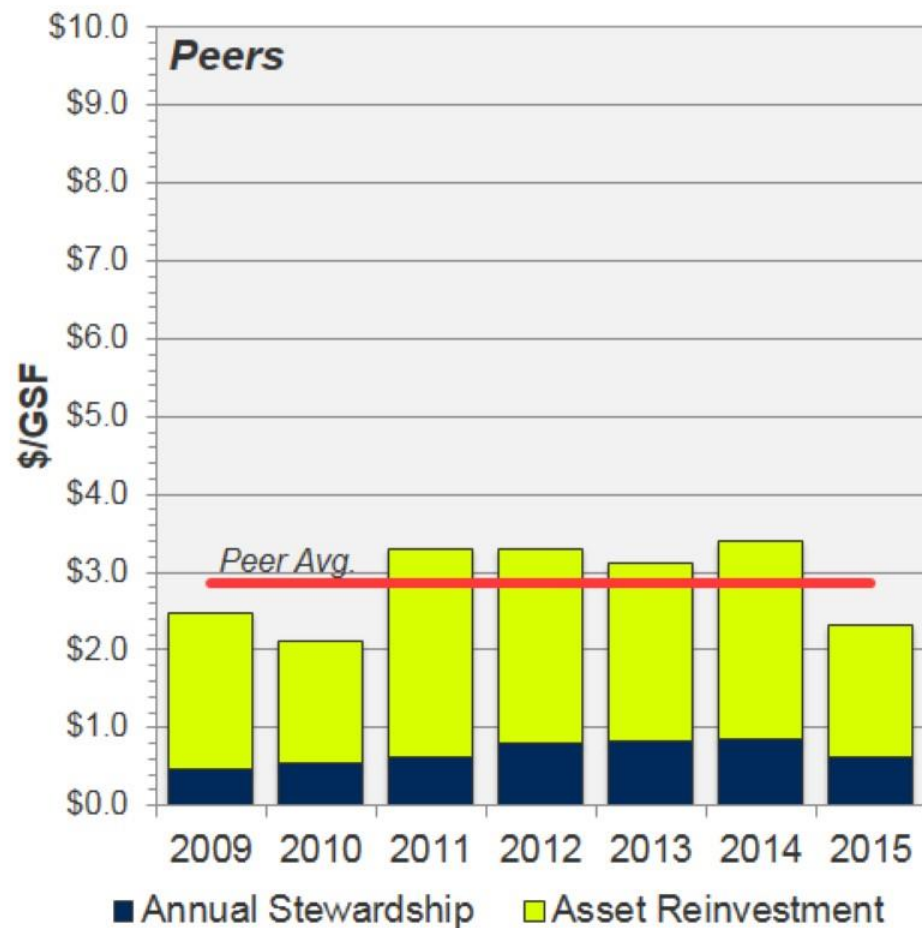
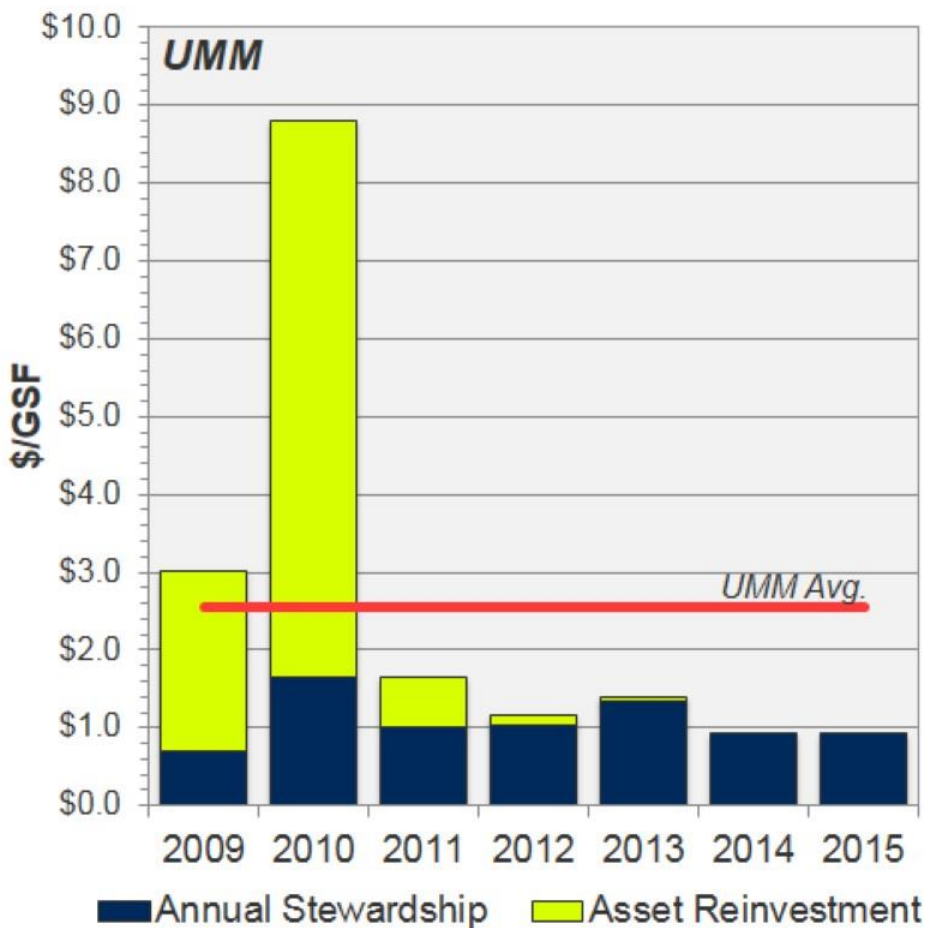
Total Capital Investment vs. Funding Target



UMM and Peer Funding Profiles Differ

UMM has more stewardship, but peers outspend UMM with more consistent one-time capital

Investment by Funding Source

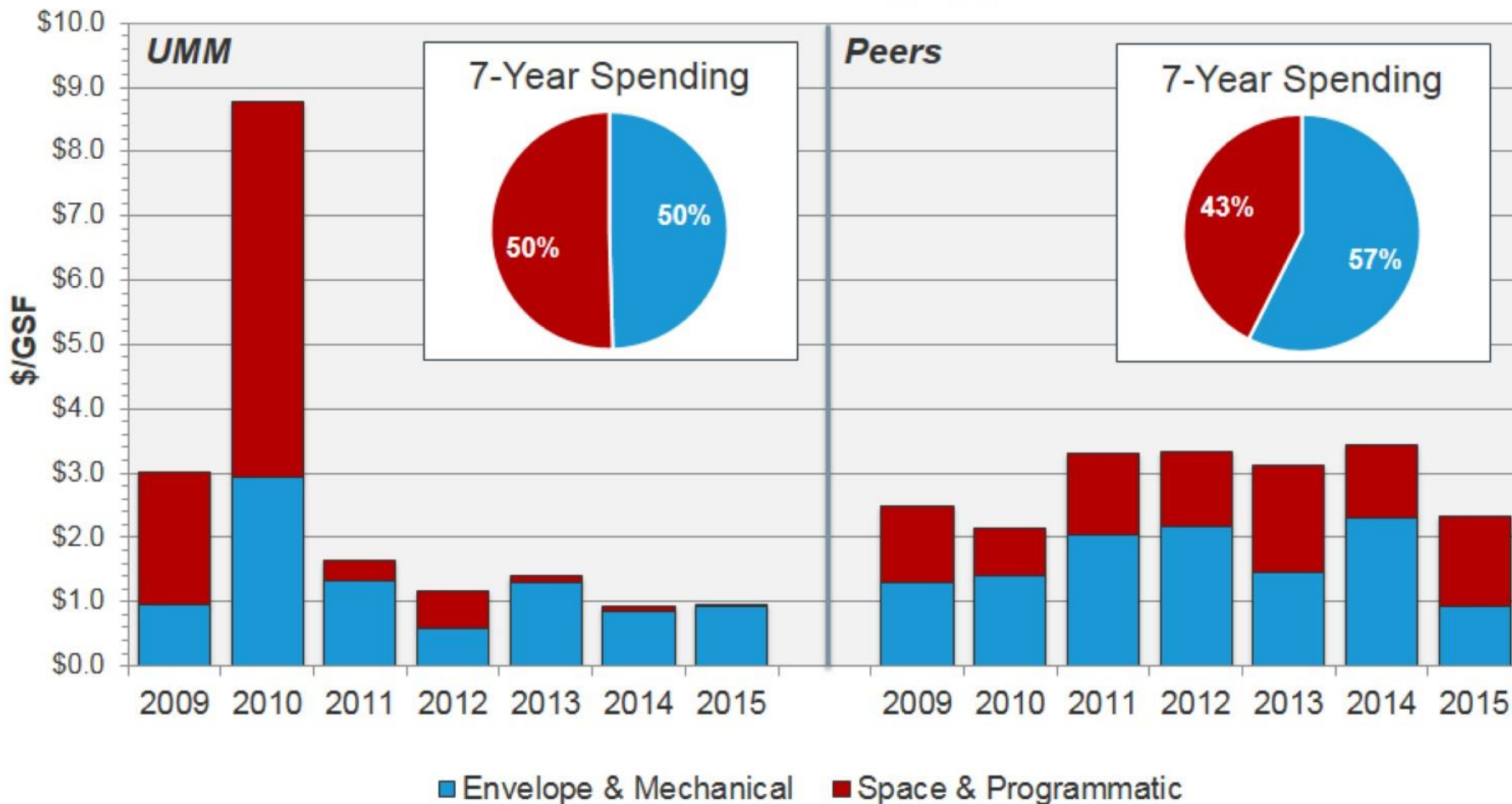


A Balanced Investment Profile is Important

Aside from renovations, focus has been on envelope & mechanical projects



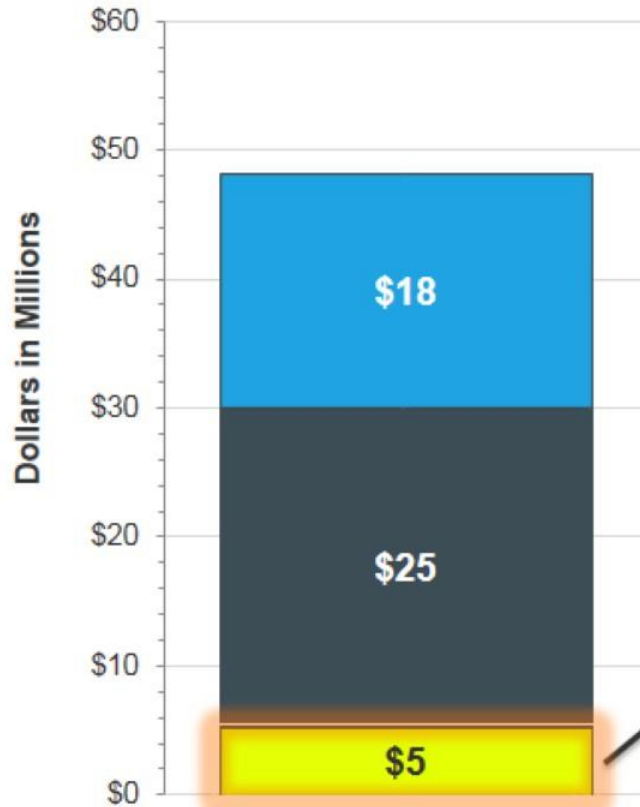
Investment by Type



Need of Campus Growing Without Sufficient Funding

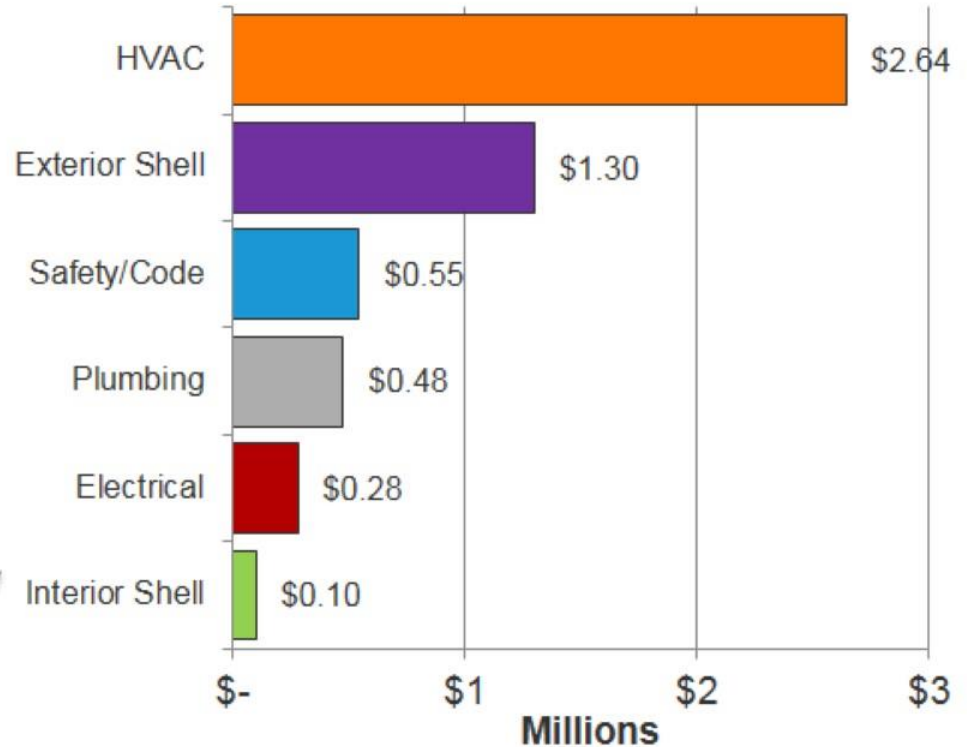
\$5.3M of this need is immediate, with \$25M in upcoming lifecycles

Total Identified Need*



- Modernization and Infrastructure
- Renewal Need - Lifecycles coming due within the next 10 years
- Current Need - Deferred maintenance

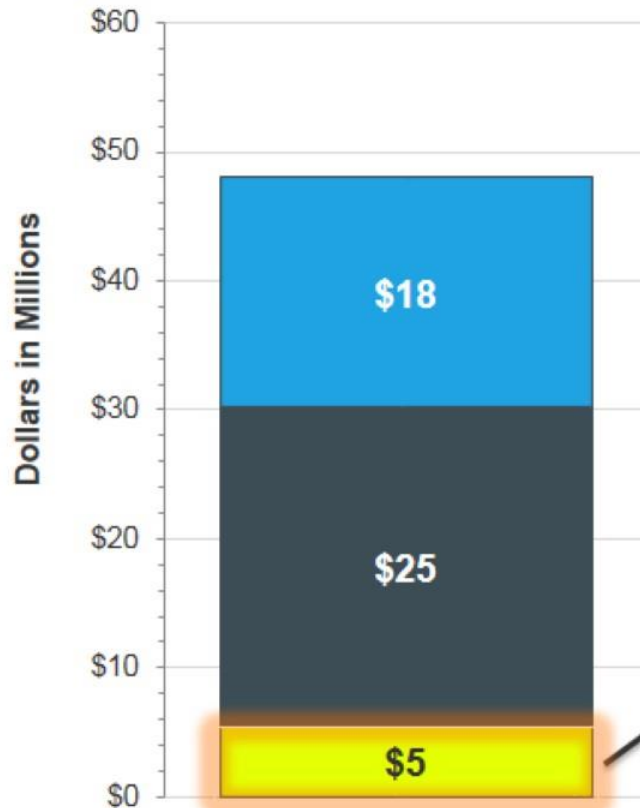
Current Need by System



*Total Need does not include ORL building specific needs

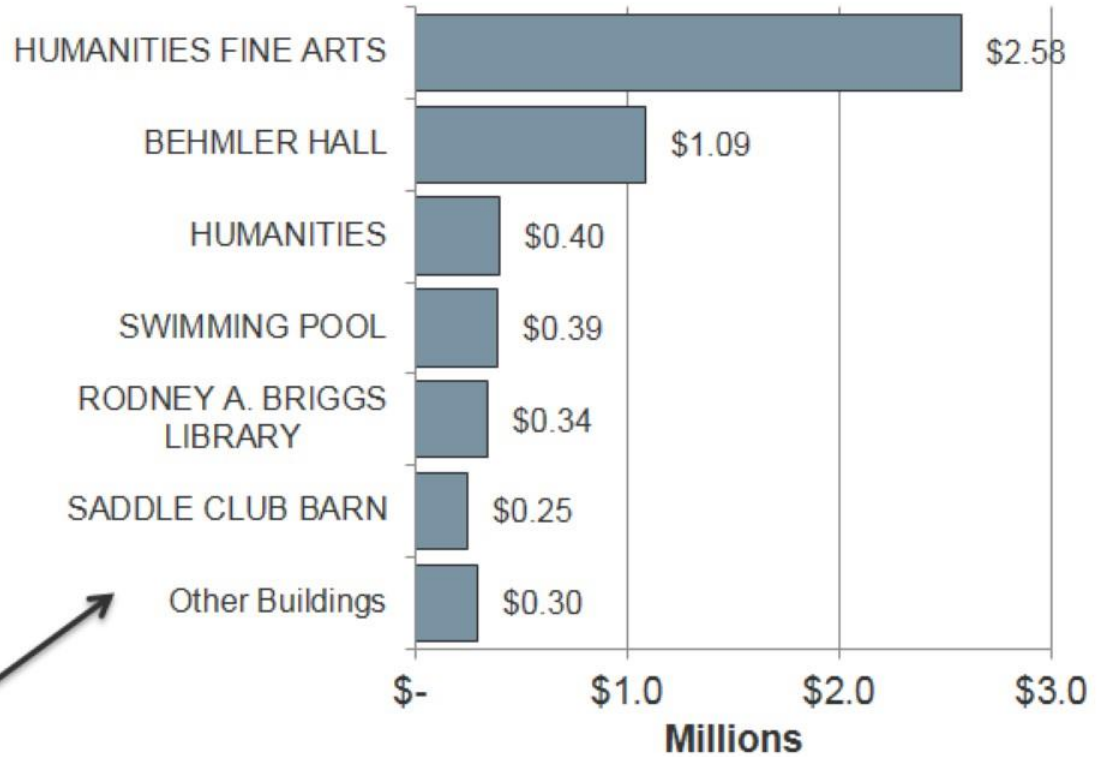
Current Need Focused Within a Few Buildings

Total Identified Need*



- Modernization and Infrastructure
- Renewal Need
- Current Need

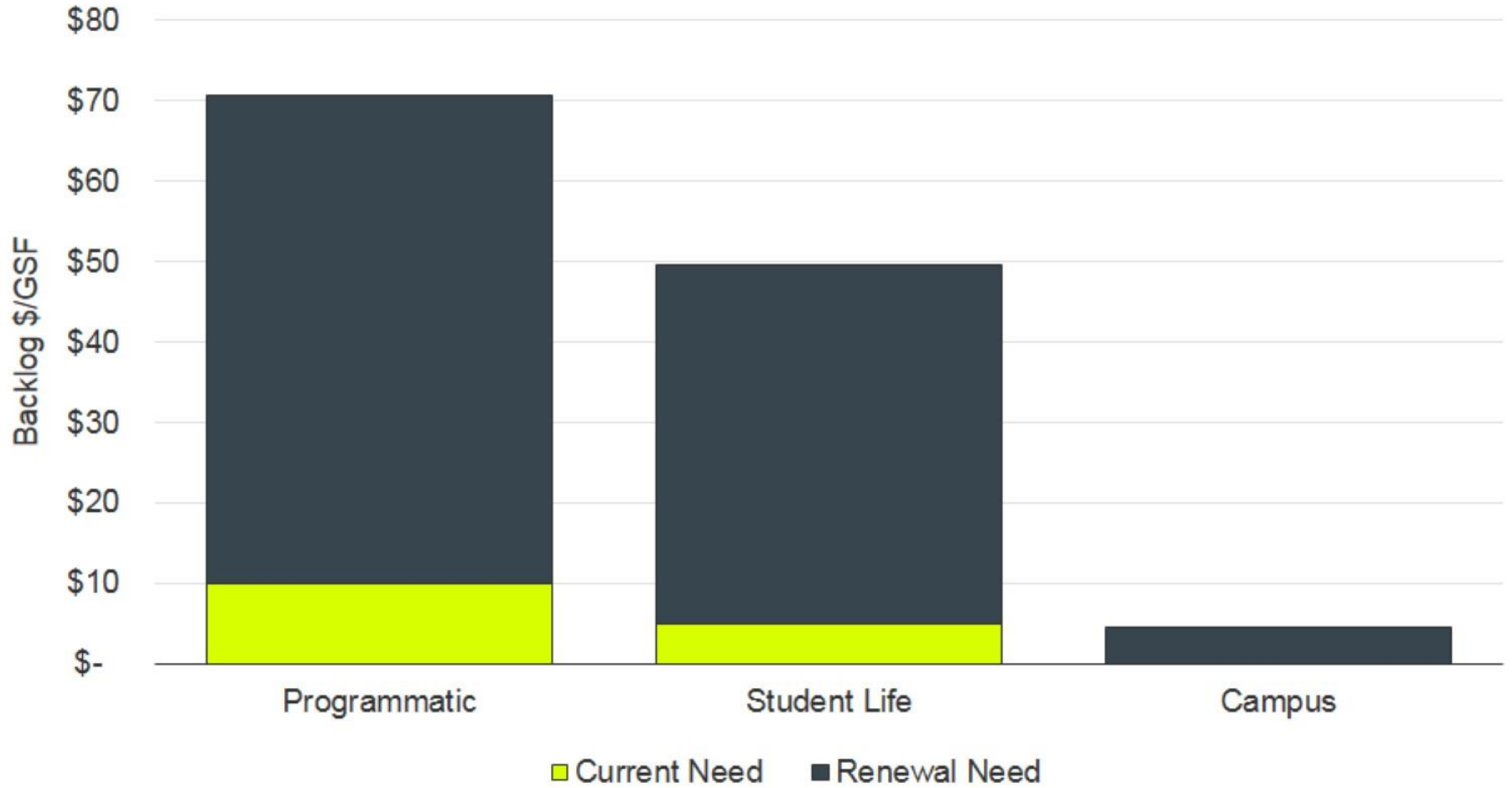
Current Need by Building



*Total Need does not include ORL building specific needs

Need broken out by building type

Immediate and Renewal Need

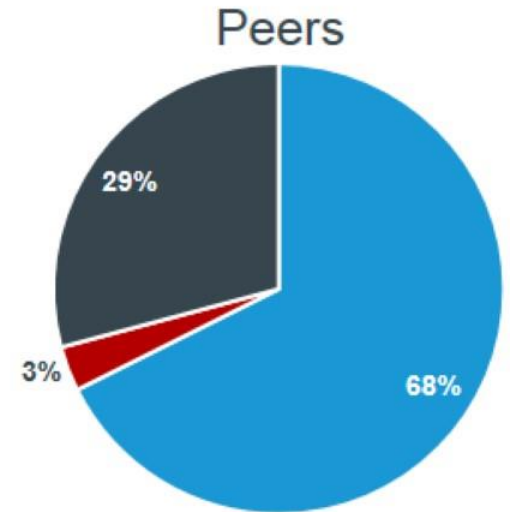
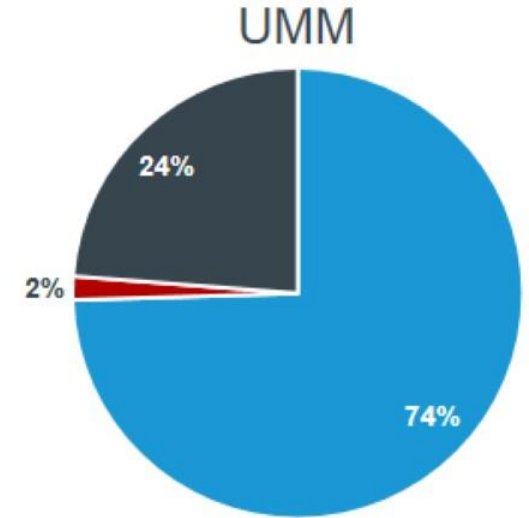
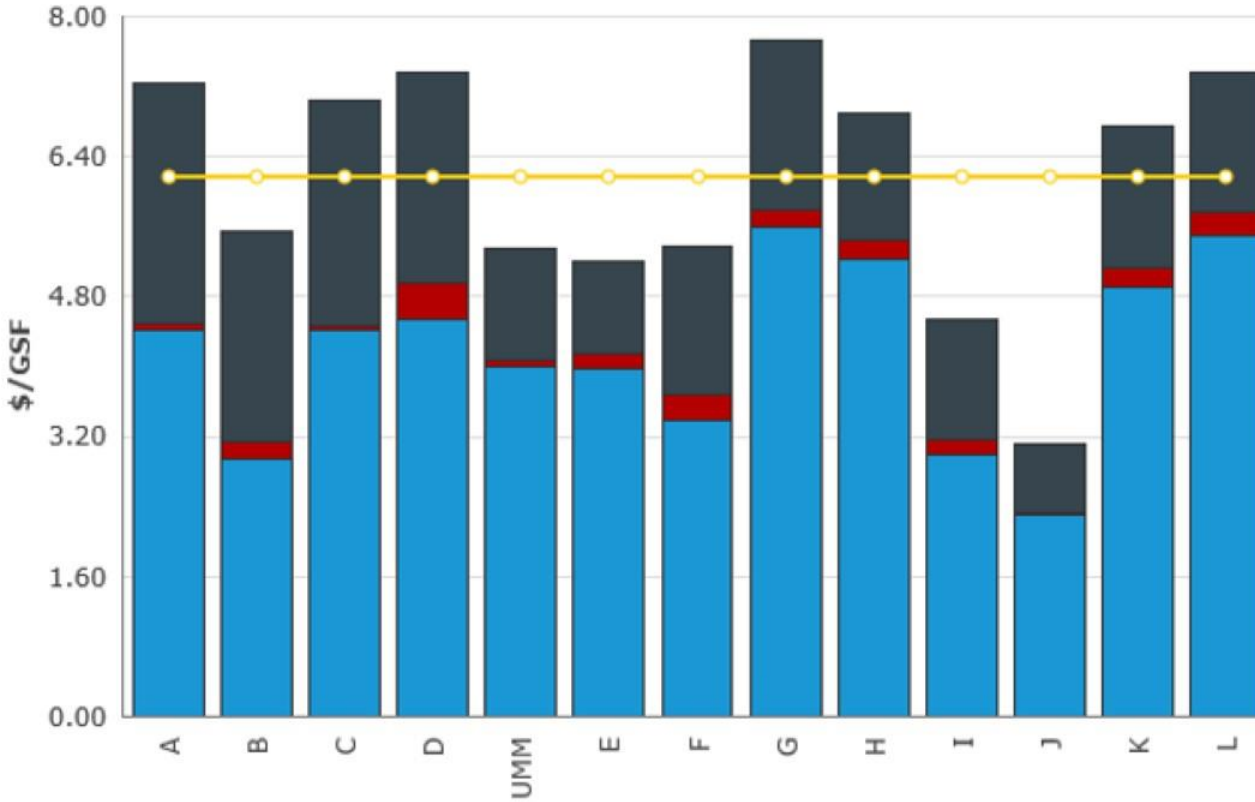


Operations Success

Operating Expenditures

Facilities expenditures among middle group of peers

Facilities Operating Actuals



-  Daily Service Actual \$/GSF
-  Total PM/GSF (Actual)
-  Total Utilities/GSF (Actual)
-  Peer Group Member Average

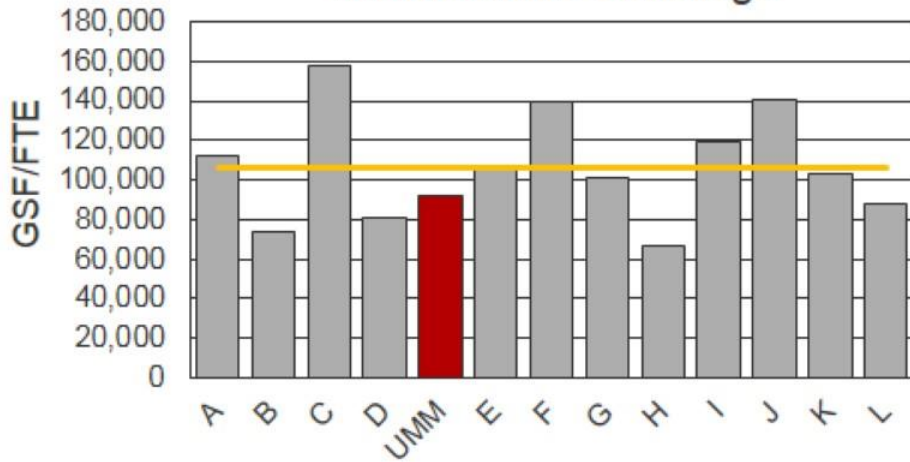
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*Institutions are sorted by Tech Rating

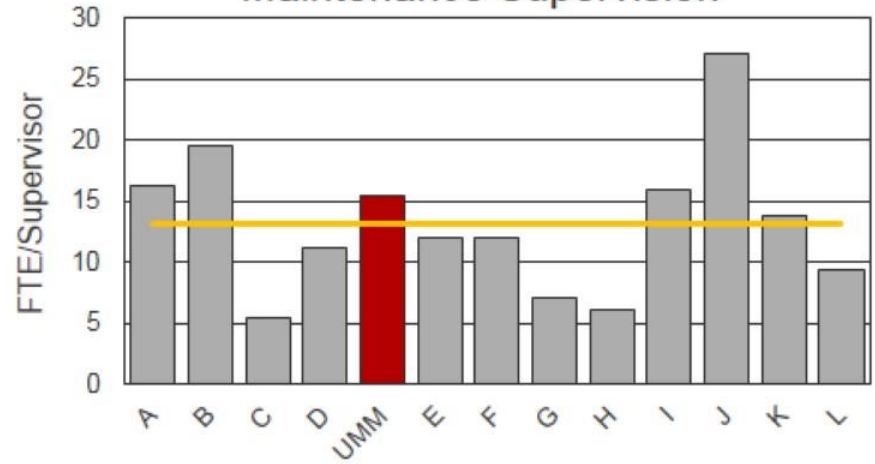
Maintenance Staff



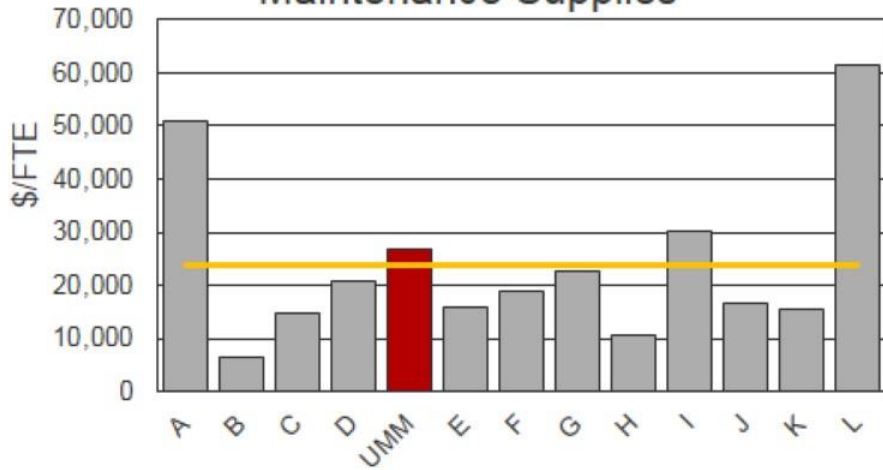
Maintenance Coverage



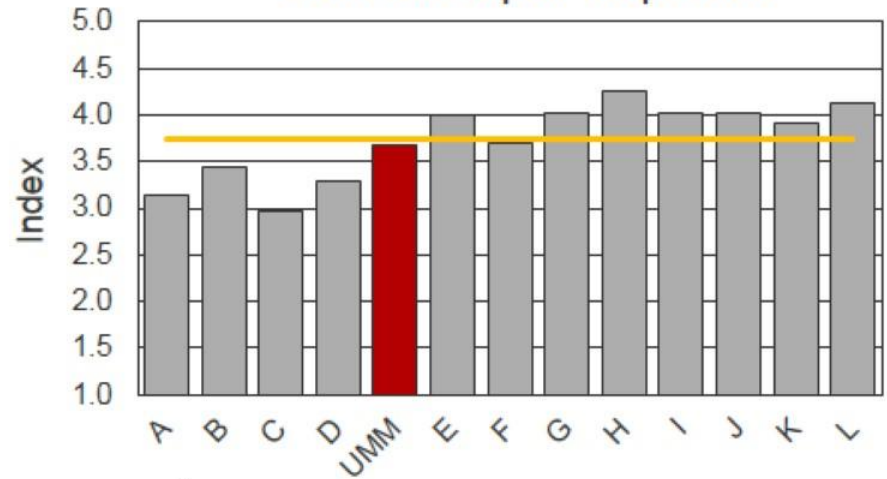
Maintenance Supervision



Maintenance Supplies



General Repair Inspection



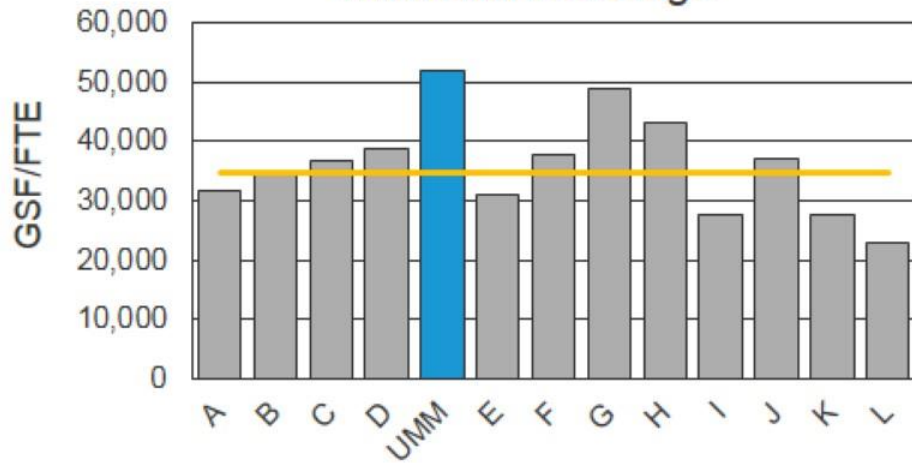
— Peer average

Benchmarks arrayed by increasing technical complexity

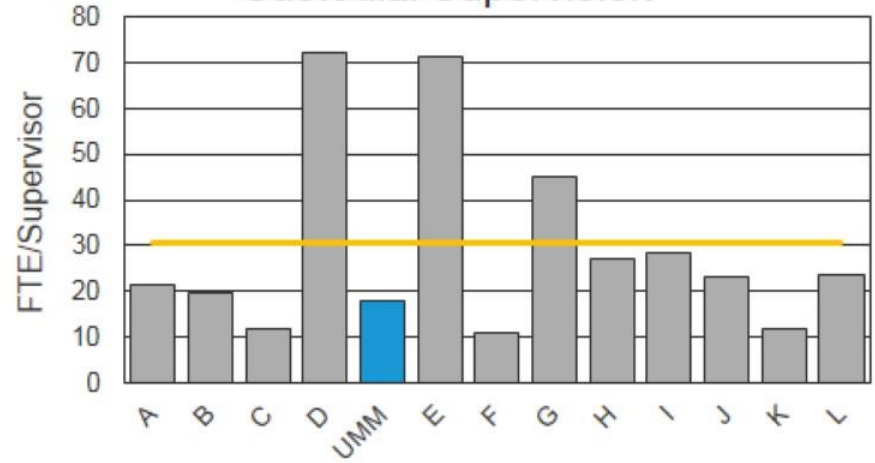
Custodial Staff



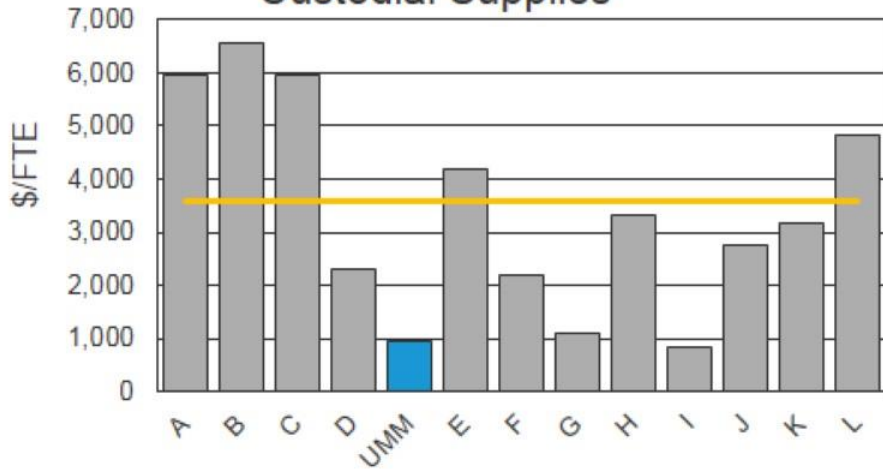
Custodial Coverage



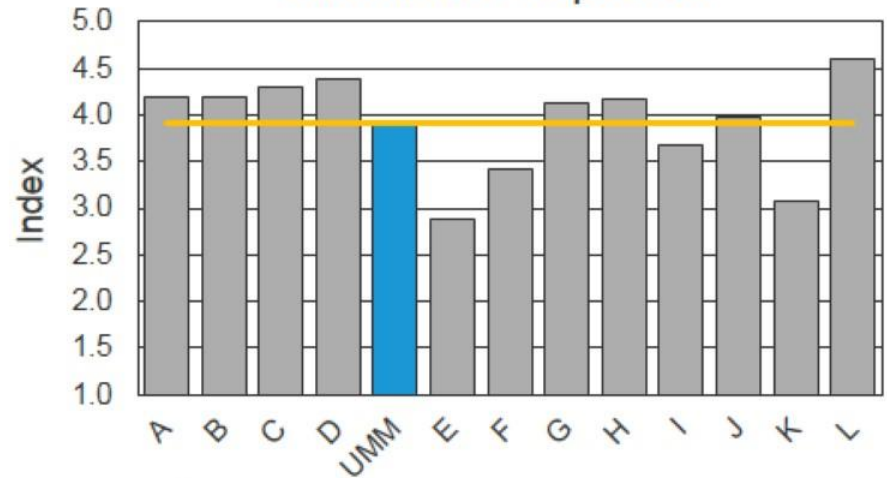
Custodial Supervision



Custodial Supplies



Cleanliness Inspection



— Peer average

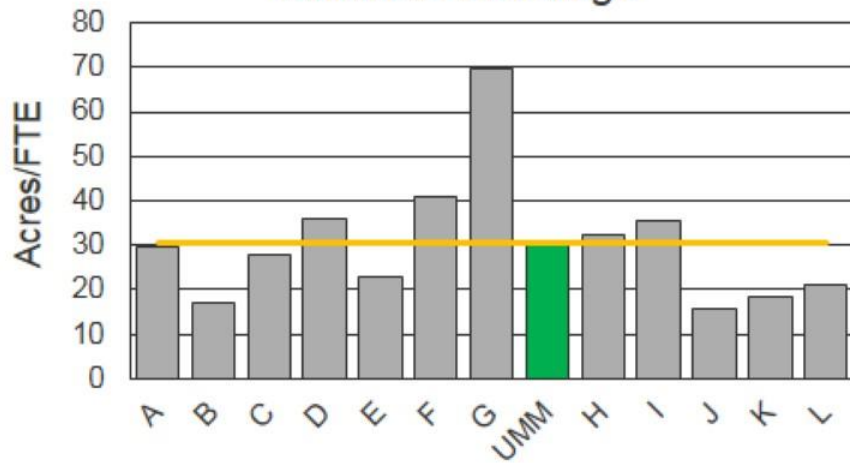
Benchmarks arrayed by increasing density

*Does not include ORL buildings

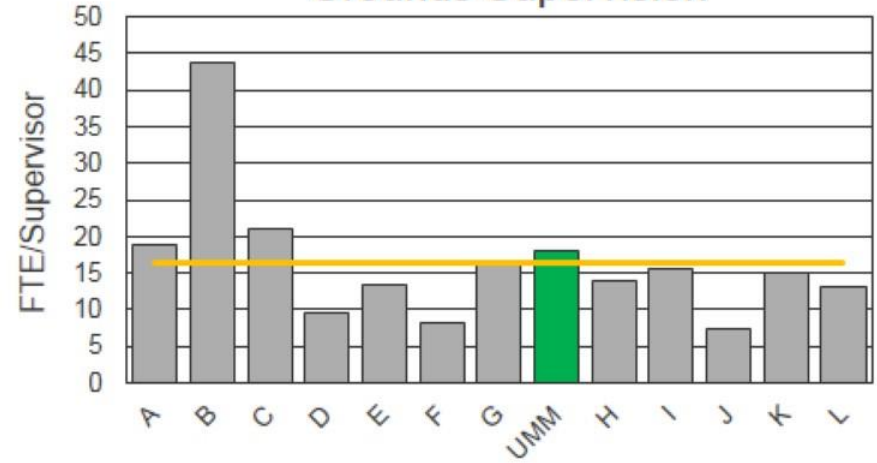
Grounds Staff



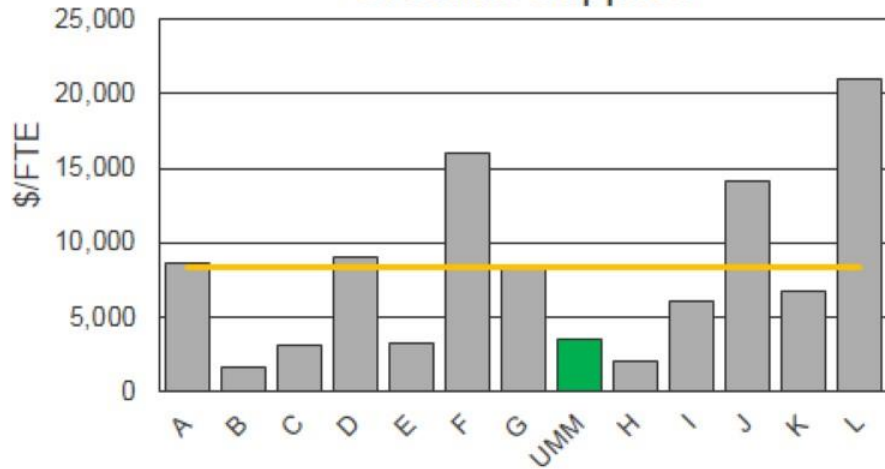
Grounds Coverage



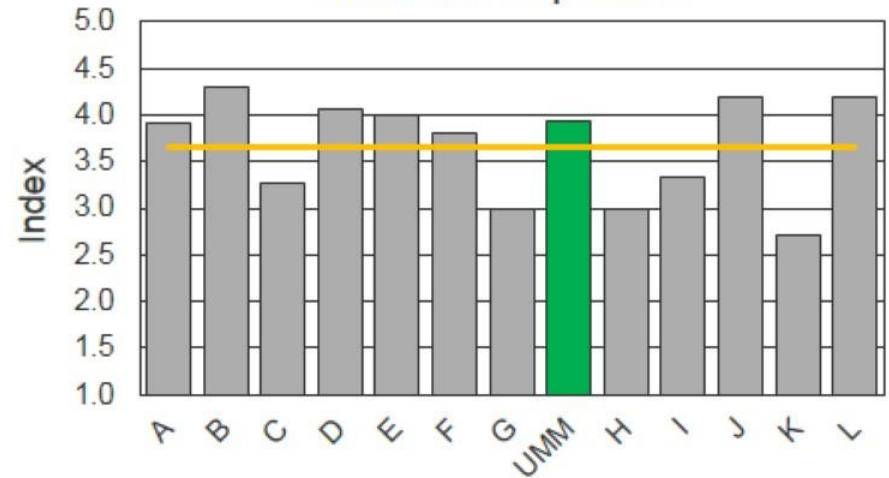
Grounds Supervision



Grounds Supplies



Grounds Inspection



— Peer average

Benchmarks arrayed by increasing grounds intensity

Energy Peer Institutions

Carleton College

Clarion University of PA

College of Saint Benedict

Edinboro University of PA

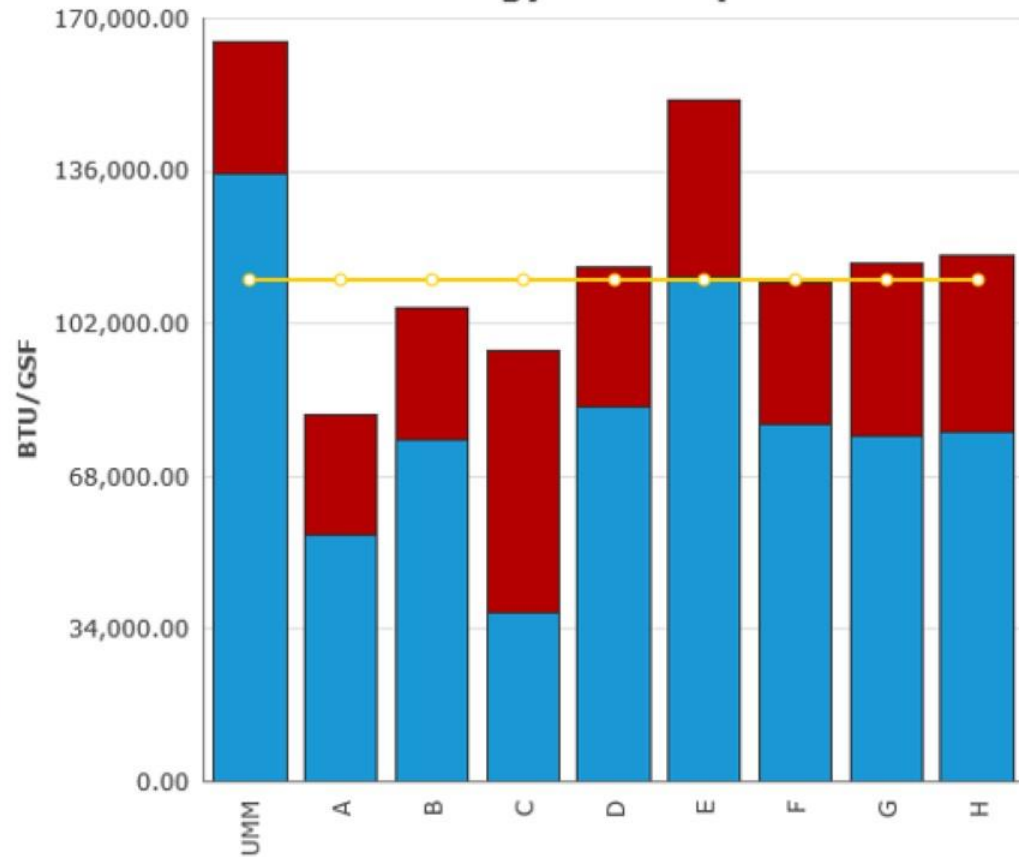
Grinnell College

Gustavus Adolphus College

Hamline University

Mansfield University of PA

Energy Consumption

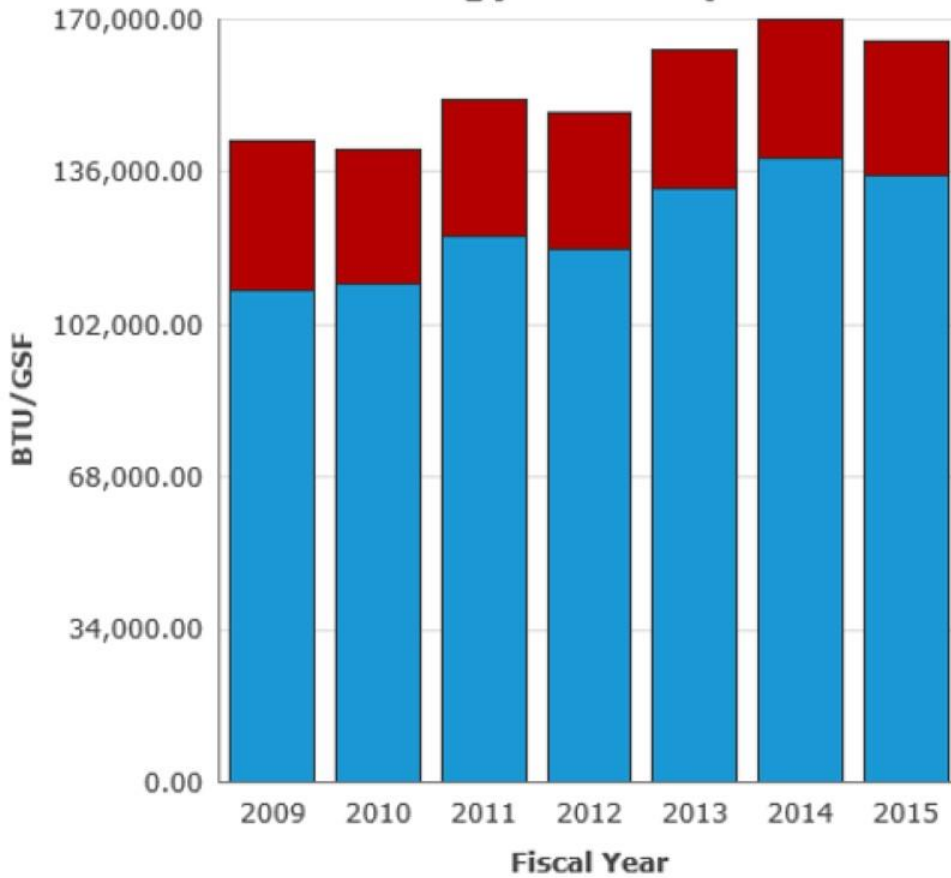


 Composite Fossil BTU/GSF
 Composite Electric BTU/GSF
 Peer Group Member Average

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Energy Use Over Time

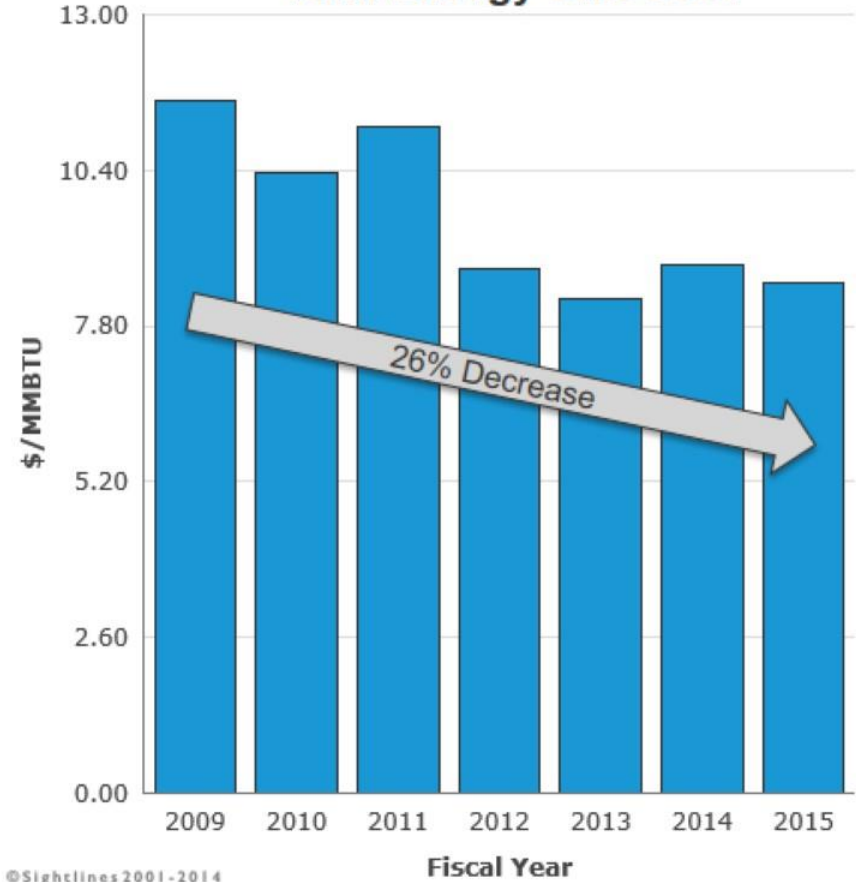
Energy Consumption



■ Composite Fossil BTU/GSF
■ Composite Electric BTU/GSF

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Total Energy Unit Cost

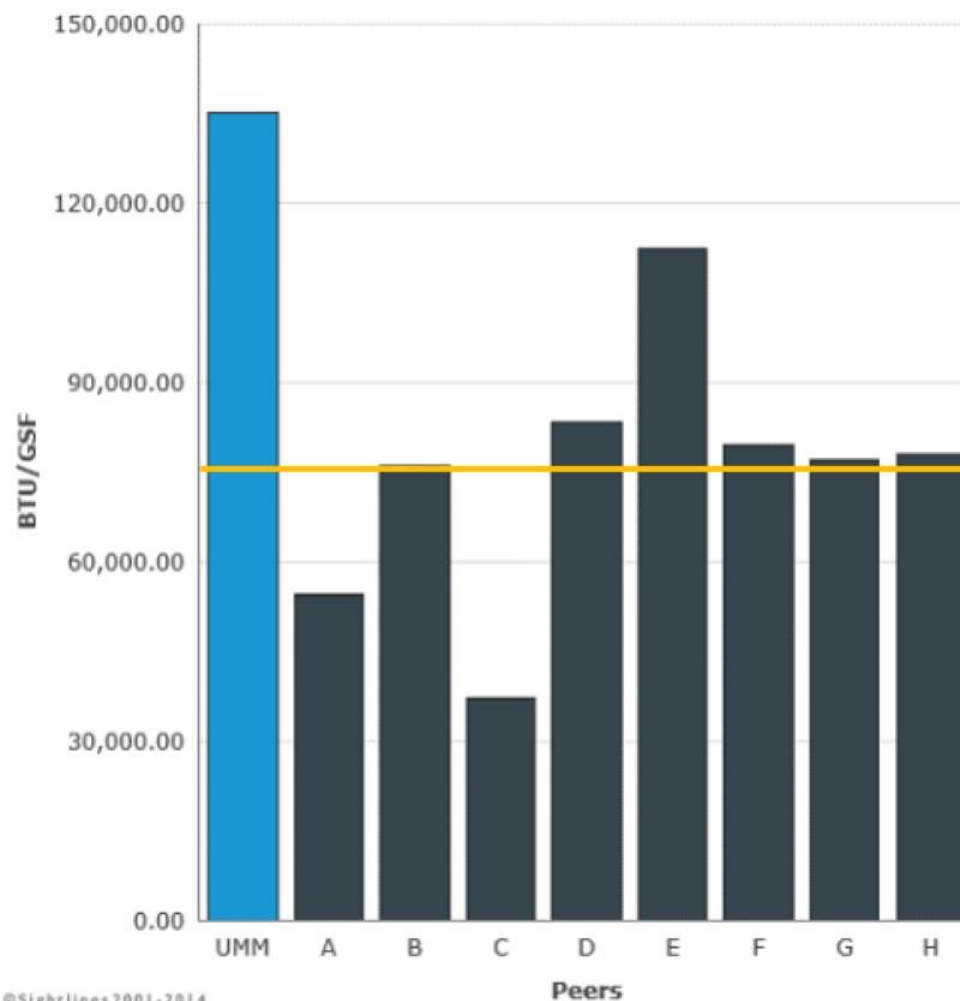


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Carbon Based Fuel Metrics

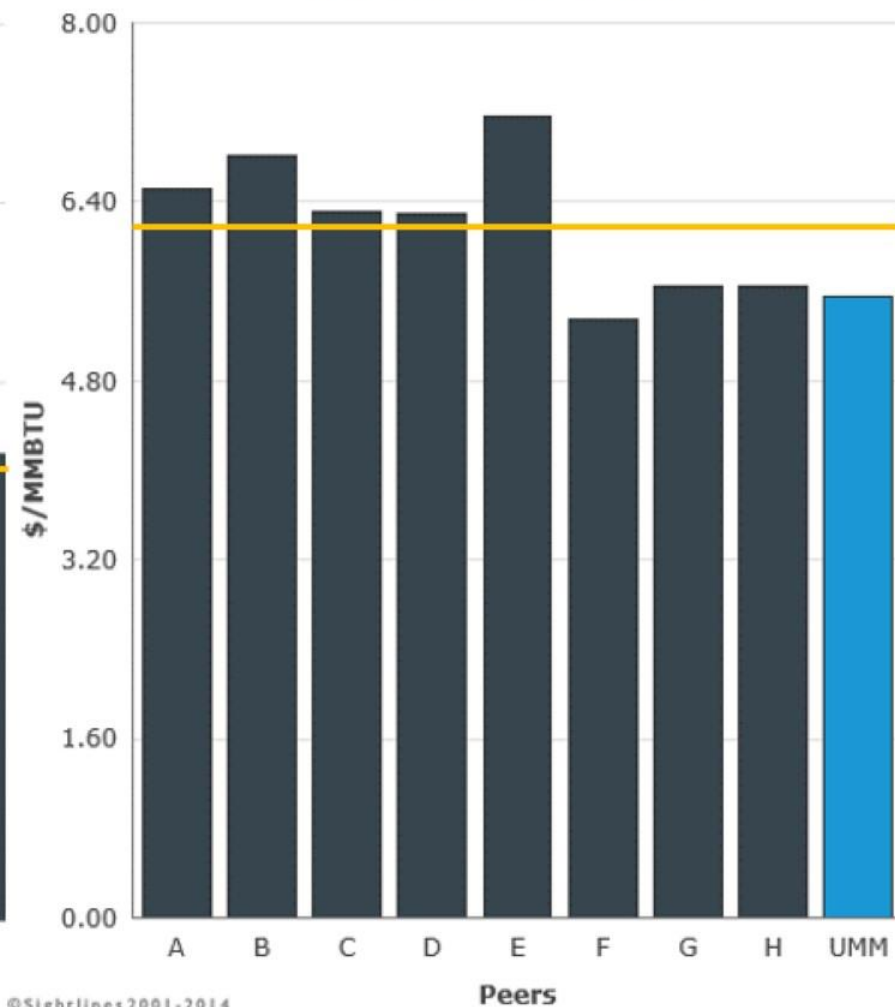
Fossil unit costs have decreased 23% in the last seven years

Carbon Based Fuel Consumption



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Fuel Cost \$/MMBTU

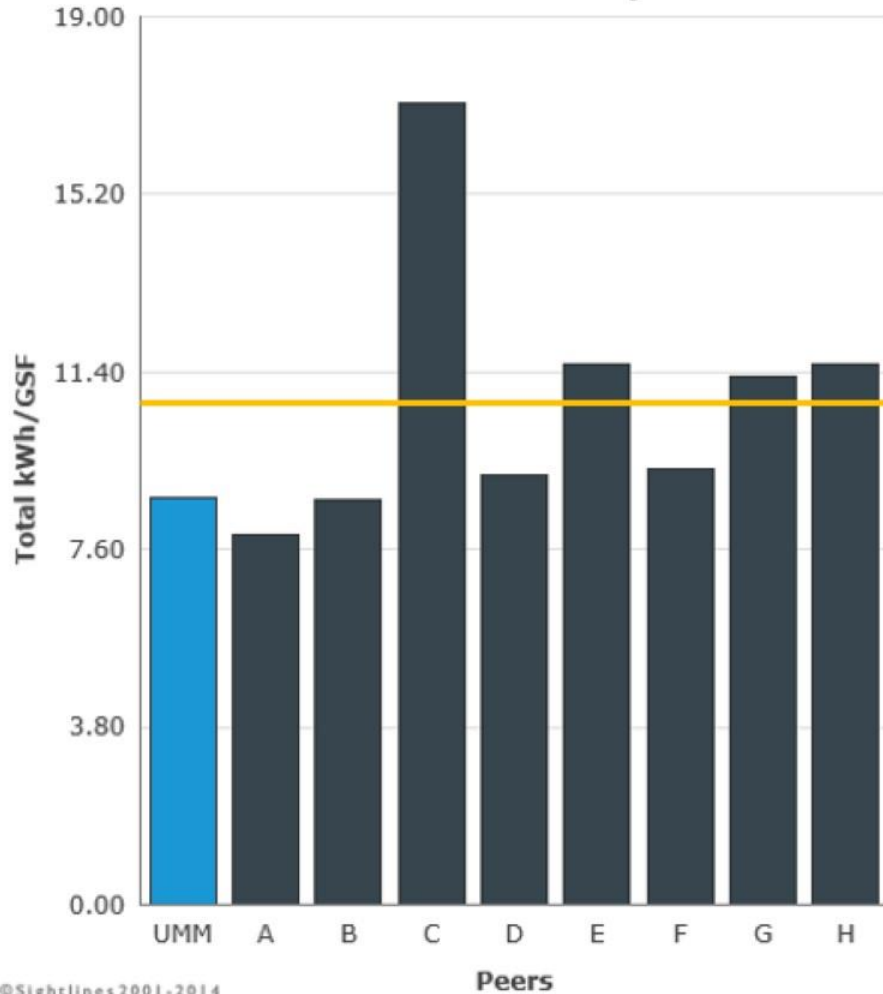


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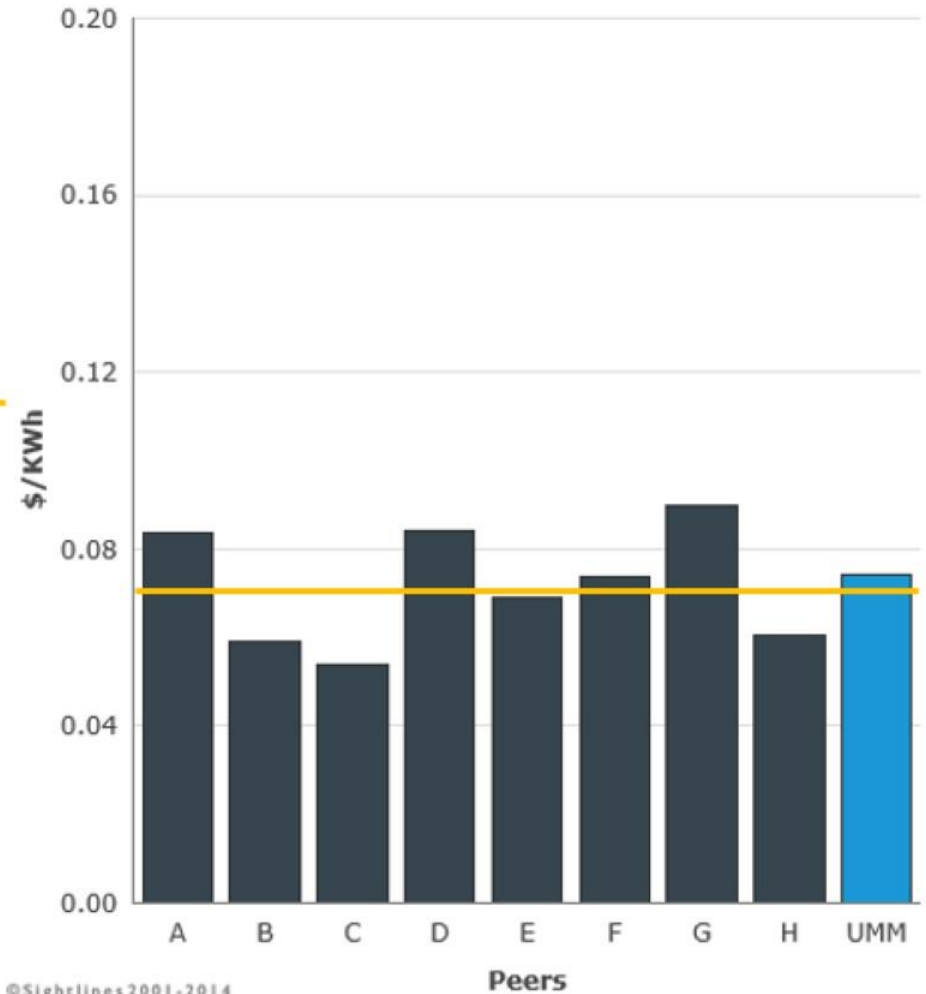
Electricity Metrics

Electricity costs have decreased 22% over the last seven years

Electric Consumption



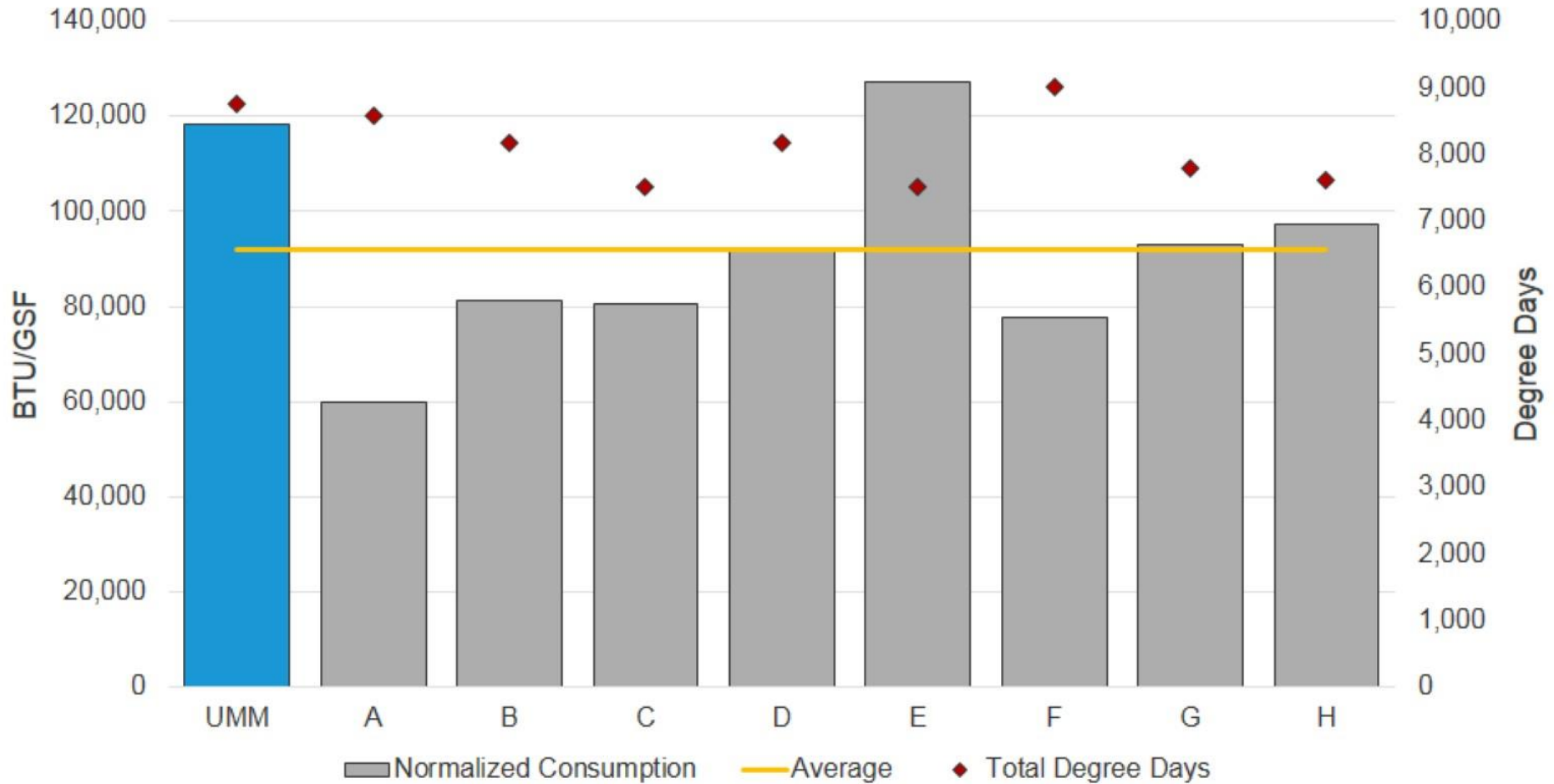
Electric Cost



Normalized Energy Consumption

Accounting for weather considerations, UMM's consumption profile improves

Normalized Carbon Based Fuel Consumption



*Institutions are sorted by Tech Rating

Concluding Comments

UMM has an old and aging campus in need of renovations. Doing so would relieve stress on operations and utilities.

UMM has a similar campus to peers but have had much fewer renovations

- Without renovations, the campus makeup puts facilities at a disadvantage operationally
- With almost 70% of space over 25 years of age, many challenges will surface in the next decade

A capital plan is needed to address the need across campus

- The backlog of need on campus is large but not unsurmountable. However, if funding levels don't increase managing the need will be a challenge
- In particular, more frequent infusions of larger one-time funding would allow for major renovations that help to manage the age and risk of campus

Monitor how operations is performing, especially as buildings continue to age

- Inspection scores are positive, but this may change as staff is stressed by a greater quantity and urgency of calls if issues aren't resolved through capital funding
- Utility consumption is high, even when accounting for weather related challenges, signaling the impact of age and deferred maintenance on efficiency