



# The University of Maine

## FY22 ROPA Final Presentation

Presenters: Jordan Morris and Emma Viles

- University of the Sciences in Philadelphia
- University of Toledo
- University of Vermont
- University of Washington
- University of West Florida
- University of Wisconsin - Madison
- Vanderbilt University
- Virginia Commonwealth University
- Wake Forest University
- Washburn University
- Washington State University
- Washington State University - Tri-Cities Campus
- Washington State University - Vancouver
- Washington University in St. Louis
- Wayne State University
- Wellesley College
- Wesleyan University
- West Chester University
- West Virginia Health Science Center
- West Virginia University
- Western Oregon University
- Westfield State University
- Widener University
- Williams College
- Worcester Polytechnic Institute
- Worcester State University

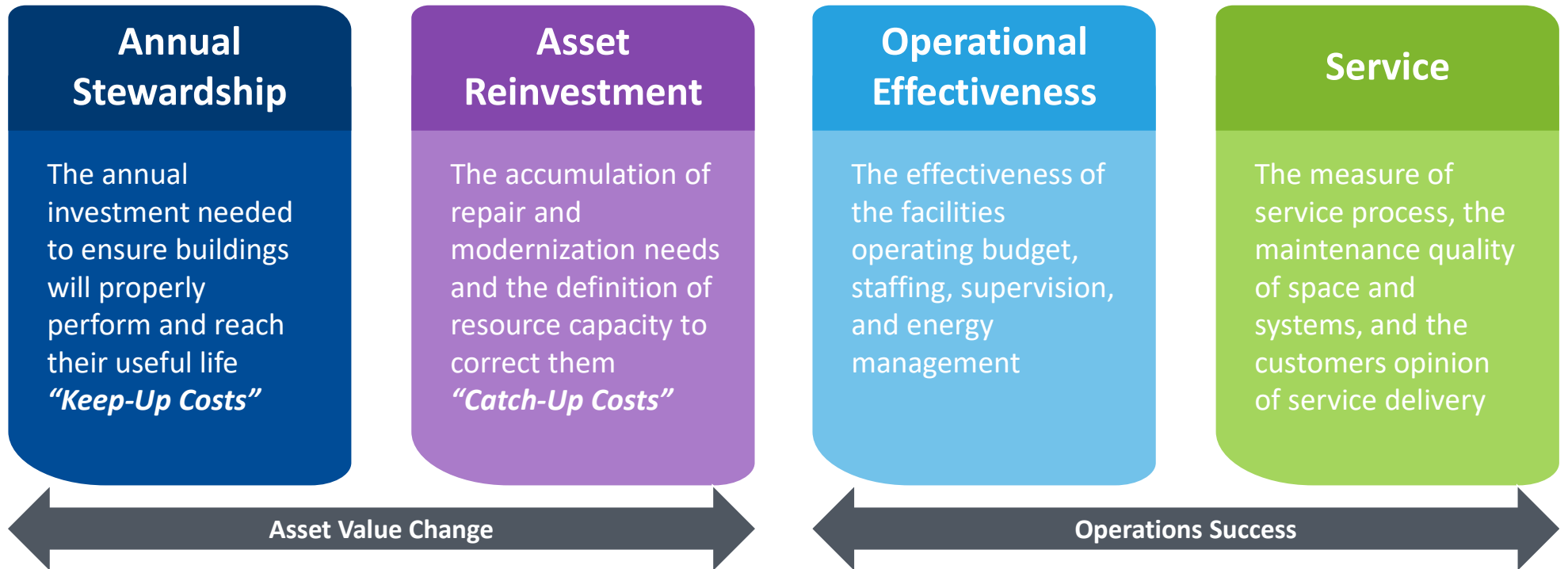


# Introduction



# A Vocabulary for Measurement

Facilities Measurement, Benchmarking & Analysis



# Core Observations



## Space:

- UMaine is an older campus than peers, and is comprised of smaller, less complex buildings.



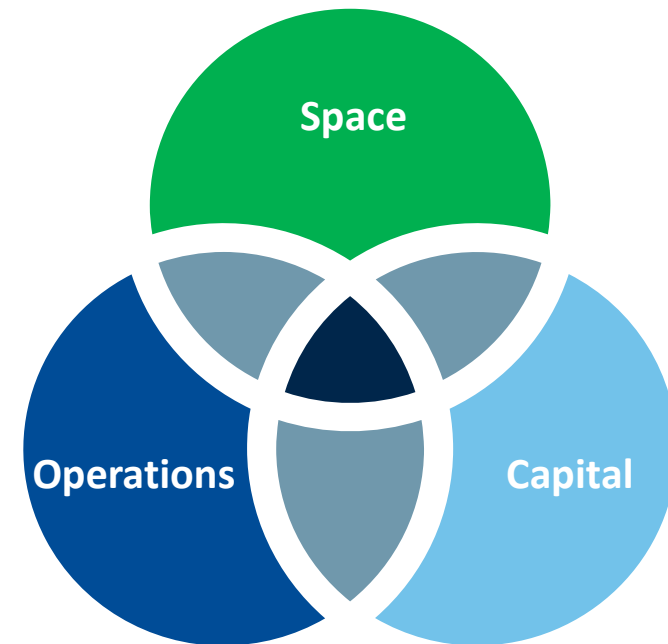
## Capital:

- UMaine has funded under the Annual Investment Target for the last 8 years of analysis, adding an estimated \$100 M to the Asset Reinvestment backlog over that span.



## Operations:

- Operating costs increased in 2022 across all categories (people 13%, expenses 17%, utilities 16%)



# UM Facilities Peer Institutions

Benchmarking analysis includes all campus facilities totaling 4.45M GSF

Institution	Location
Indiana University of PA	Indiana, PA
University of Alaska Fairbanks	Fairbanks, AK
University of Maryland – College Park	College Park, MD
University of Massachusetts – Dartmouth	North Dartmouth, MA
University of Massachusetts – Lowell	Lowell, MA
University of Massachusetts Amherst	Amherst, MA
University of New Hampshire	Durham, NH
University of Rhode Island	Kingston, RI
University of Vermont	Burlington, VT
West Chester University of PA	West Chester, PA

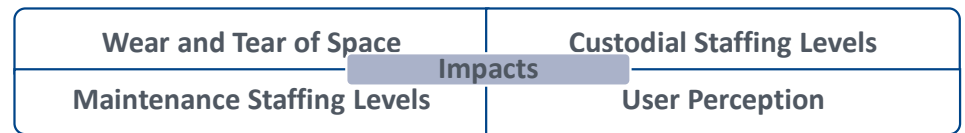
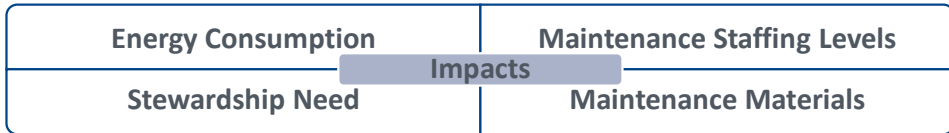
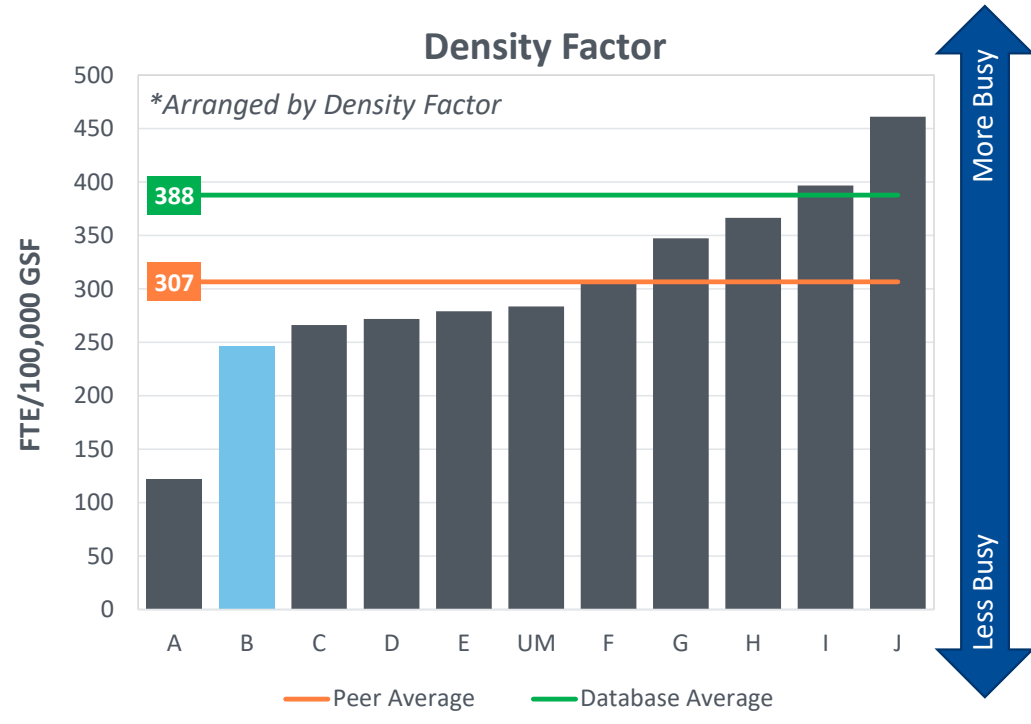
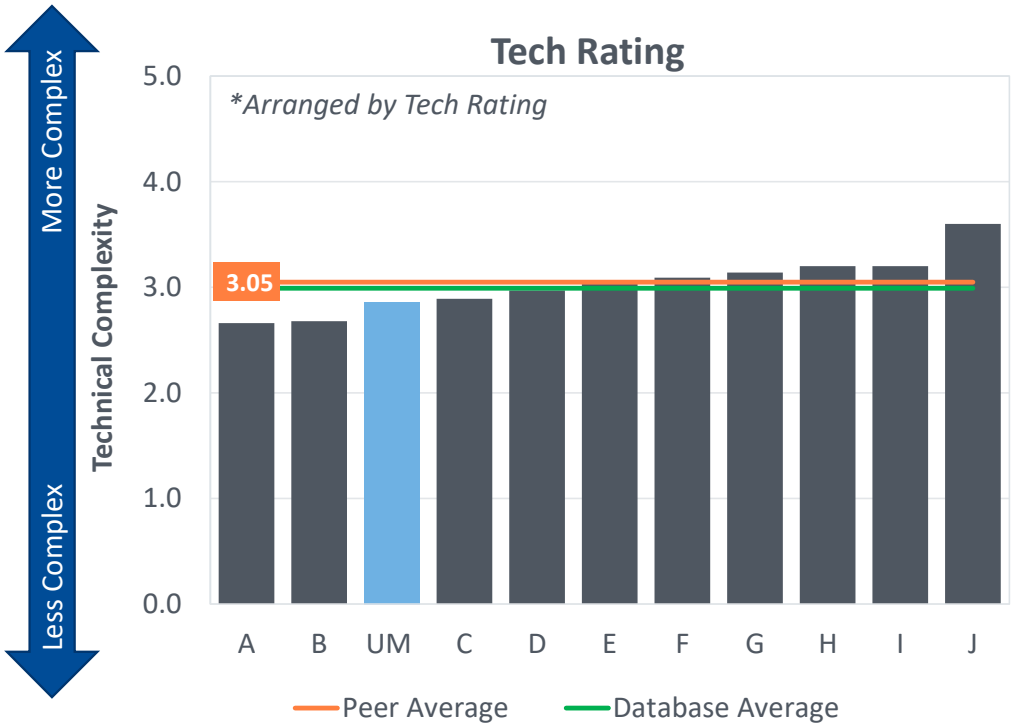


**Comparative Considerations**  
 Size, technical complexity, region, geographic location, and setting are all factors included in the selection of peer institutions

# Space Profile

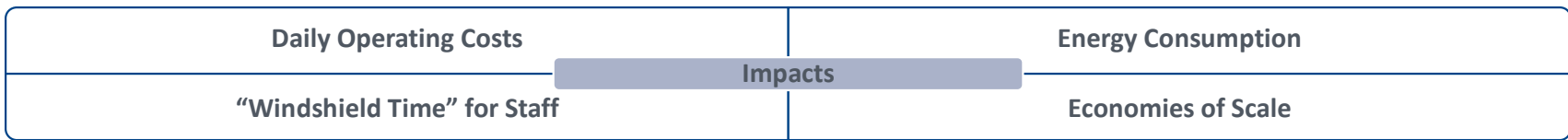
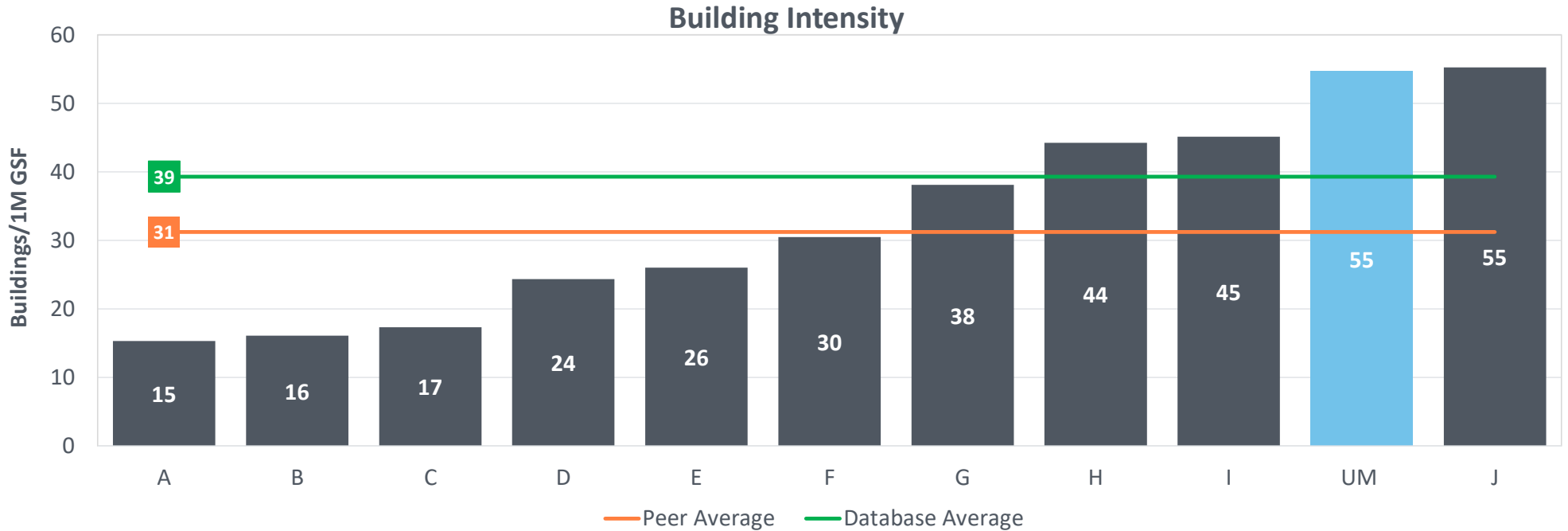


# Qualifying Metrics: Tech Rating and Density Factor



# Qualifying Metric: Building Intensity

UM is comprised of more, smaller buildings than peers and database

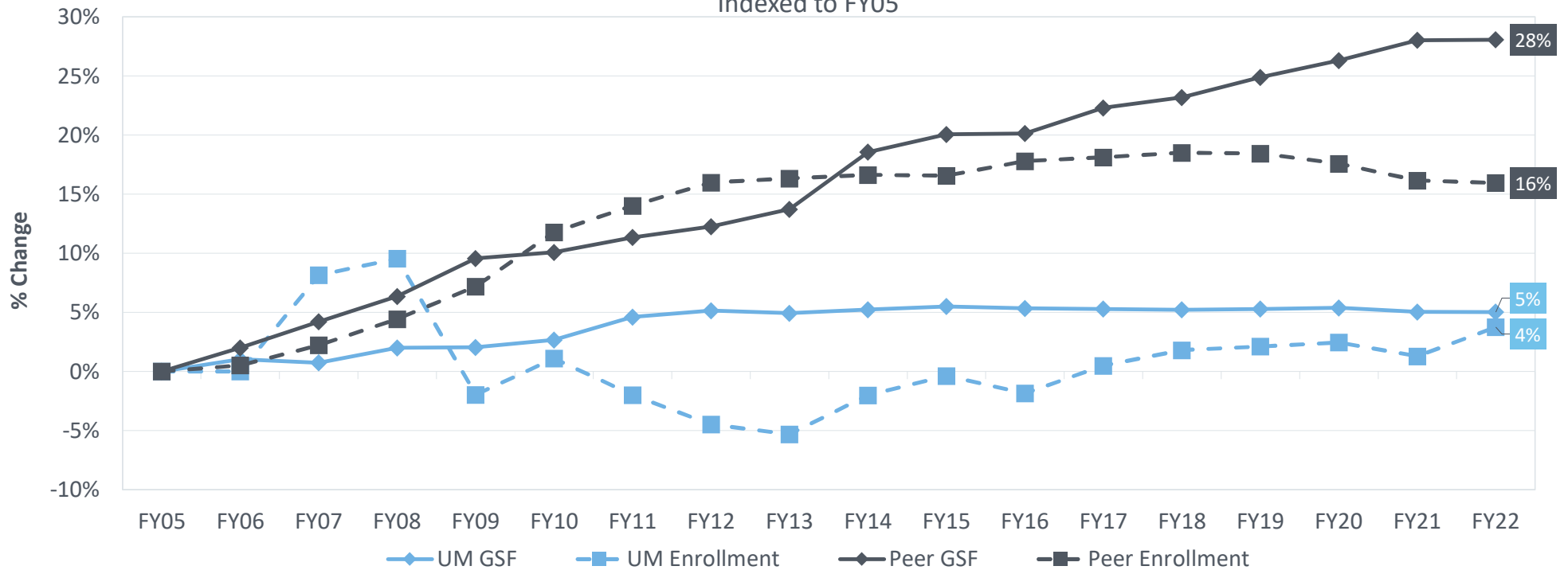




# % Change in GSF and Enrollment Since FY05

Space and enrollment growth at UM are below that of peers

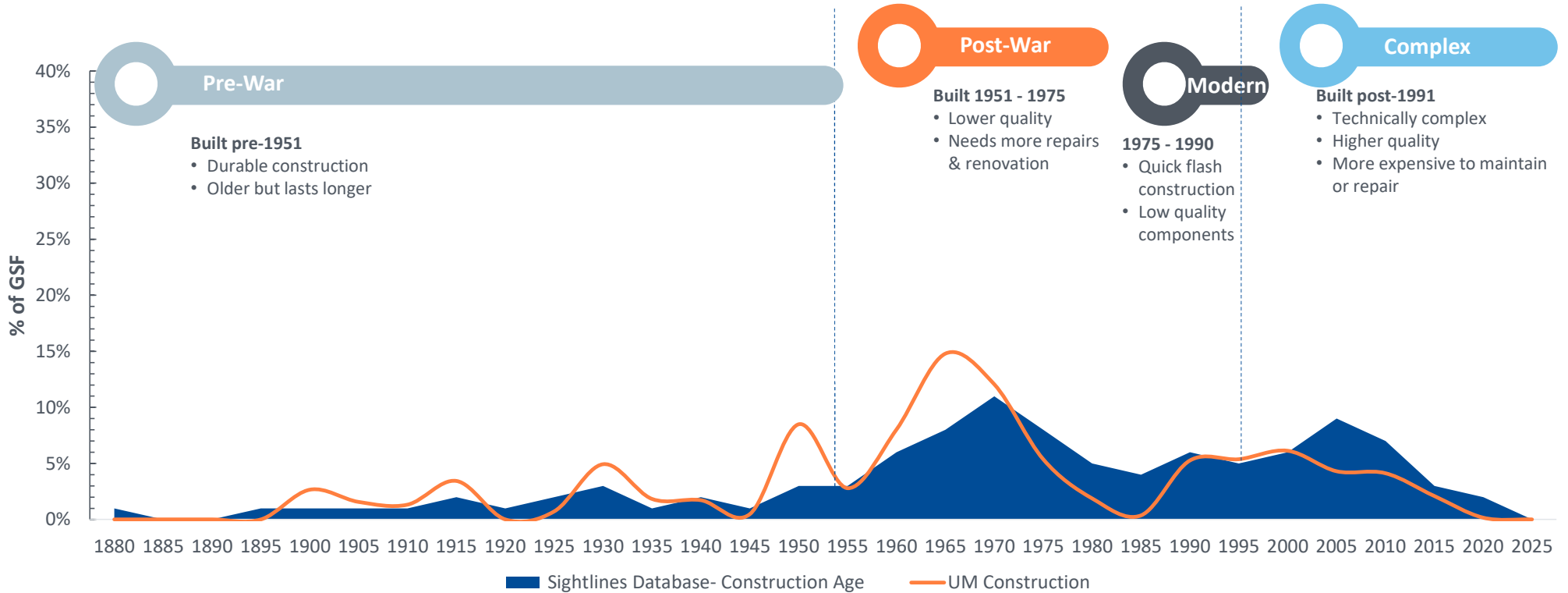
Change in GSF and Enrollment vs. Peers  
Indexed to FY05



# Putting Your Campus Building Age in Context

*The campus age drives the overall risk profile*

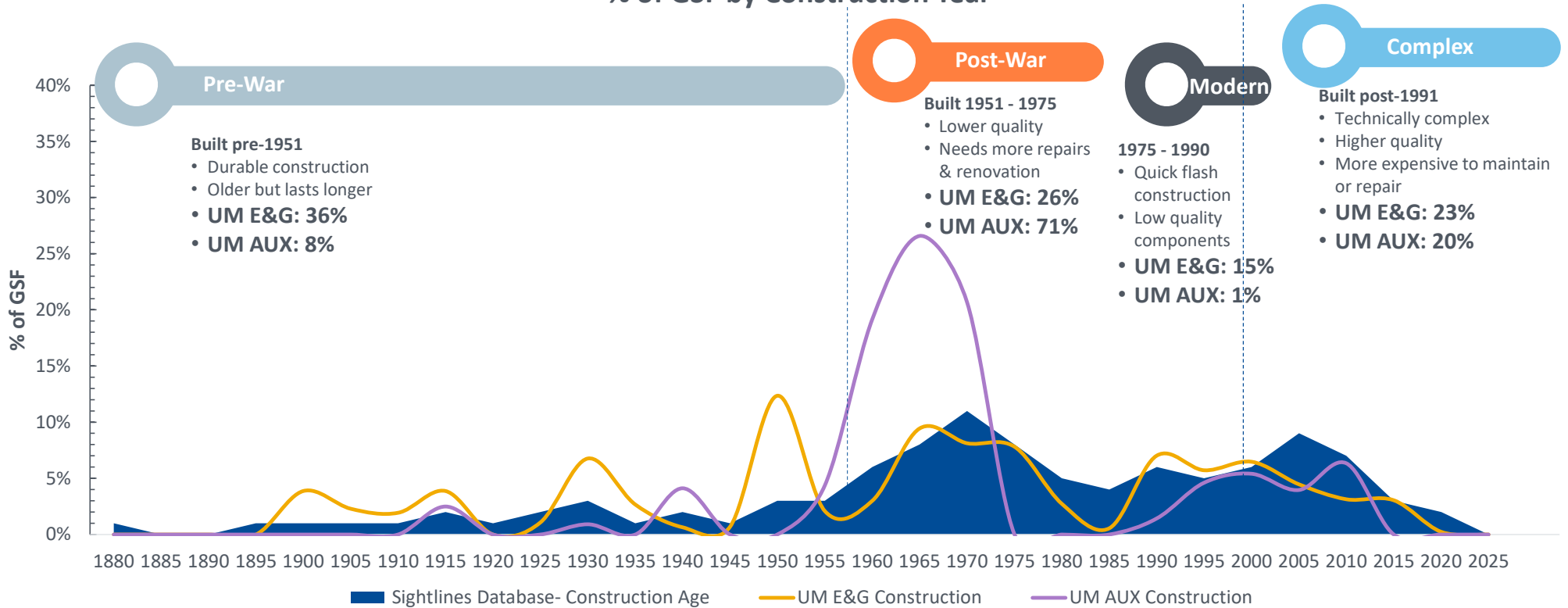
% of GSF by Construction Year



# Putting Your Campus Building Age in Context

*The campus age drives the overall risk profile*

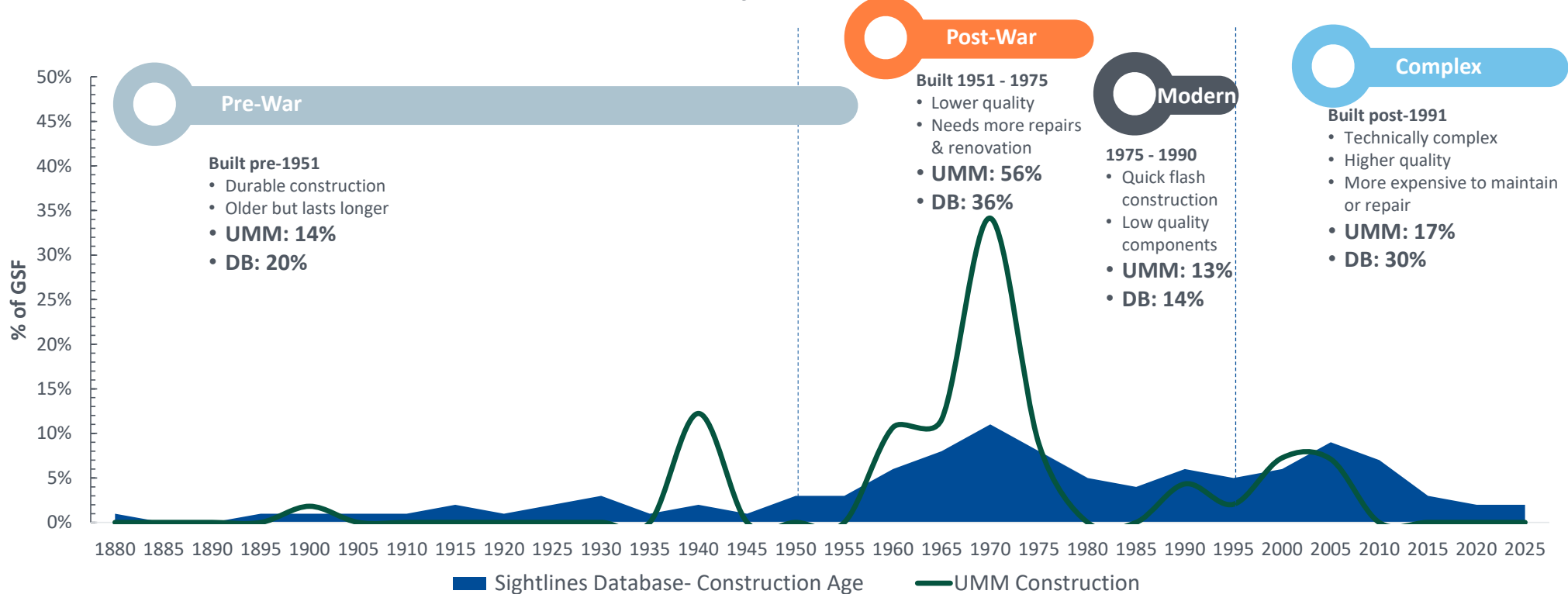
% of GSF by Construction Year



# Putting Your Campus Building Age in Context

The campus age drives the overall risk profile

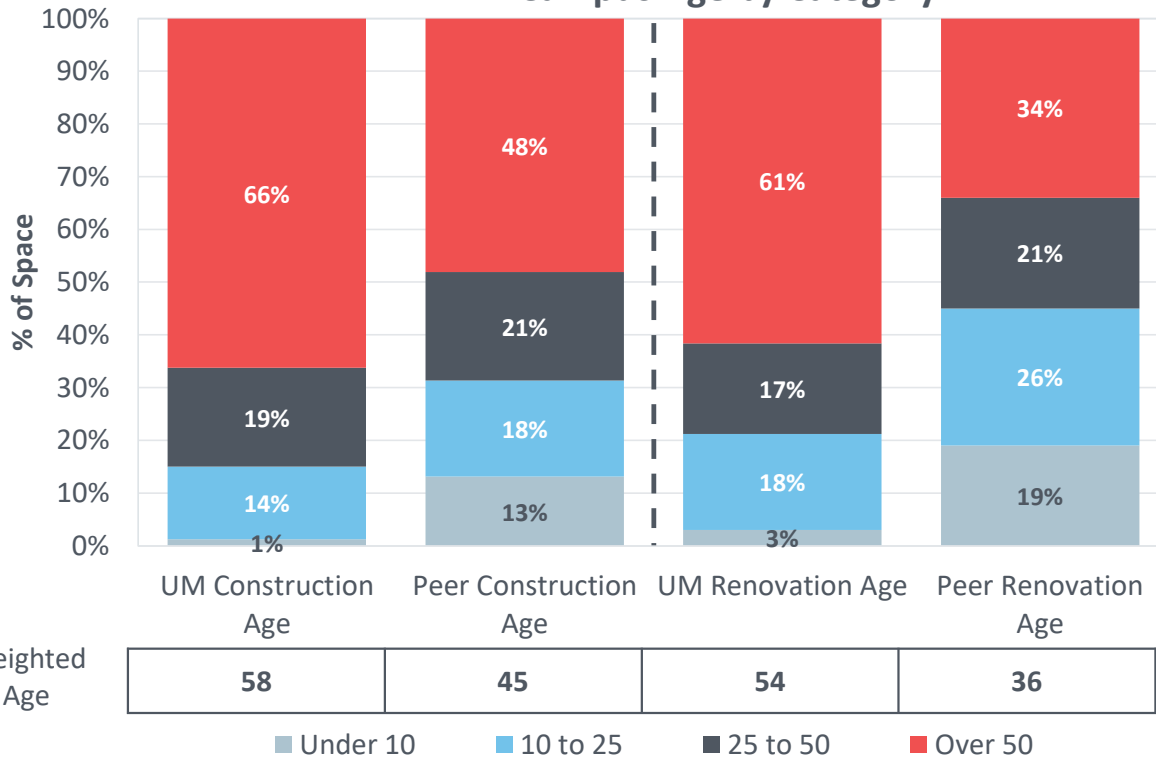
% of GSF by Construction Year



# UM Renovation Age Distribution

78% of space at UM is in the high-risk (over 25 years old) category, with 61% of space over 50 years old

FY22 Campus Age by Category



## Capital Risk:

- Highest Risk:** Life cycles of major components past due – end of building life cycle approaching.
- Higher Risk:** Life Cycles coming due in core building components.
- Medium Risk:** Lower cost space renewal updates needed.
- Low Risk:** “Honeymoon” period – little need for capital reinvestment.

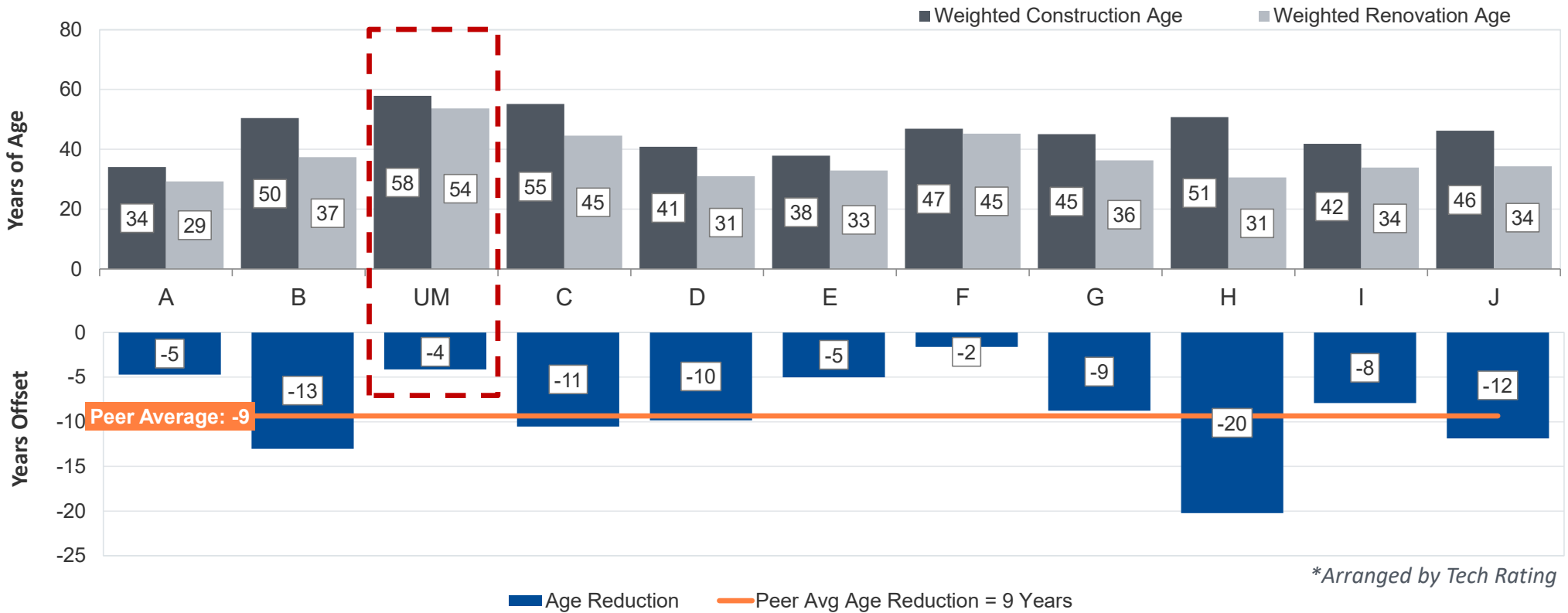
## Operational Demands:

- React as Needed:** Issues in components past the end of their lifecycles will demand reactive maintenance.
- Balance PM and Reactive Maintenance:** Younger components still require PM.
- Aging components require reactive maintenance.**
- Focus on PM:** Significant need for PM in young systems.

# UM Has Performed Less Gut Renovations than Peers

On average, peers have offset campus age by five more years than UM

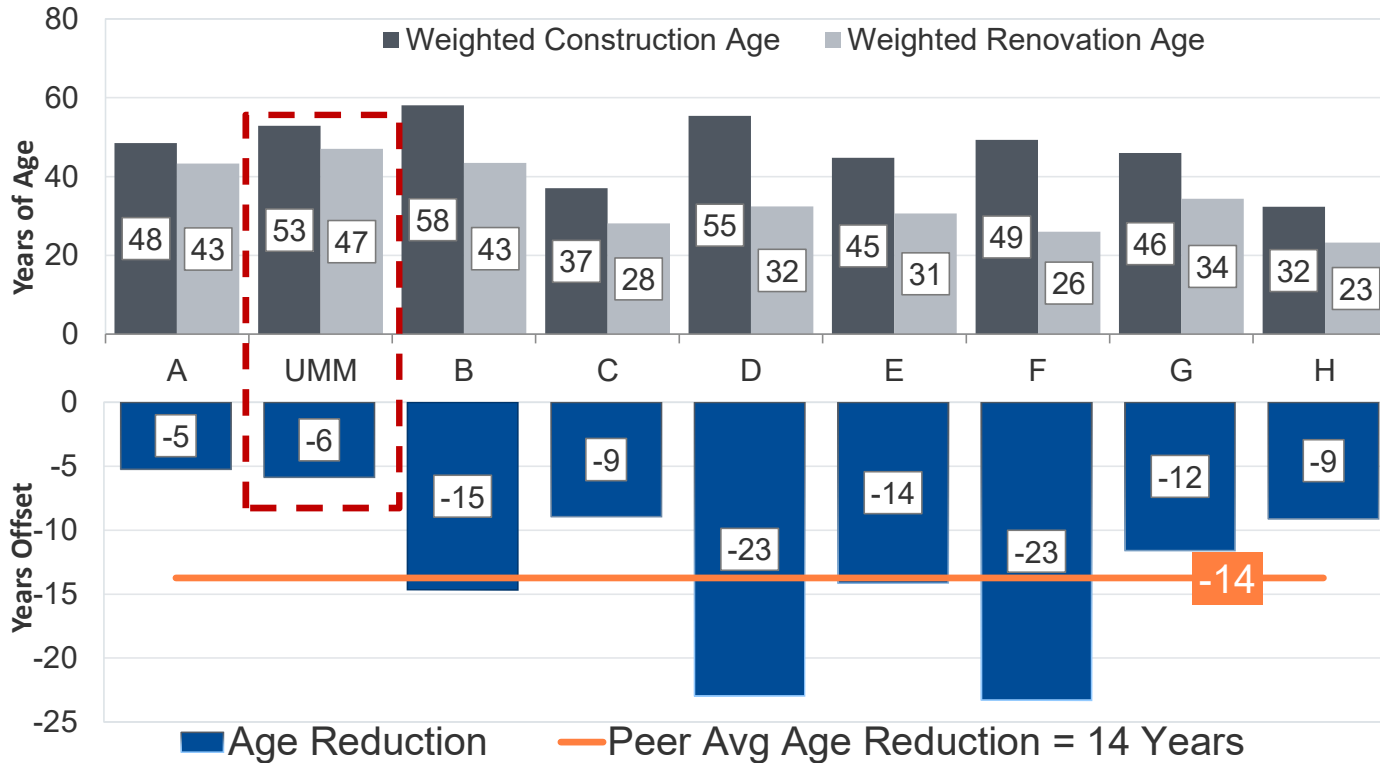
### Construction Age vs Renovation Age



# Construction Age vs. Renovation Age

On average, peers have offset 8 more years than UMM

Construction Age vs Renovation Age



Institution	Location
Fitchburg State University	Fitchburg, MA
Keene State College	Keene, NH
Lack Haven University of PA	Lock Haven, PA
Mansfield University of PA	Mansfield, PA
University of Alaska - Juneau	Juneau, AK
University of Maine at Fort Kent	Fort Kent, ME
University of Maine at Presque Isle	Presque Isle, ME
Worcester State University	Worcester, MA

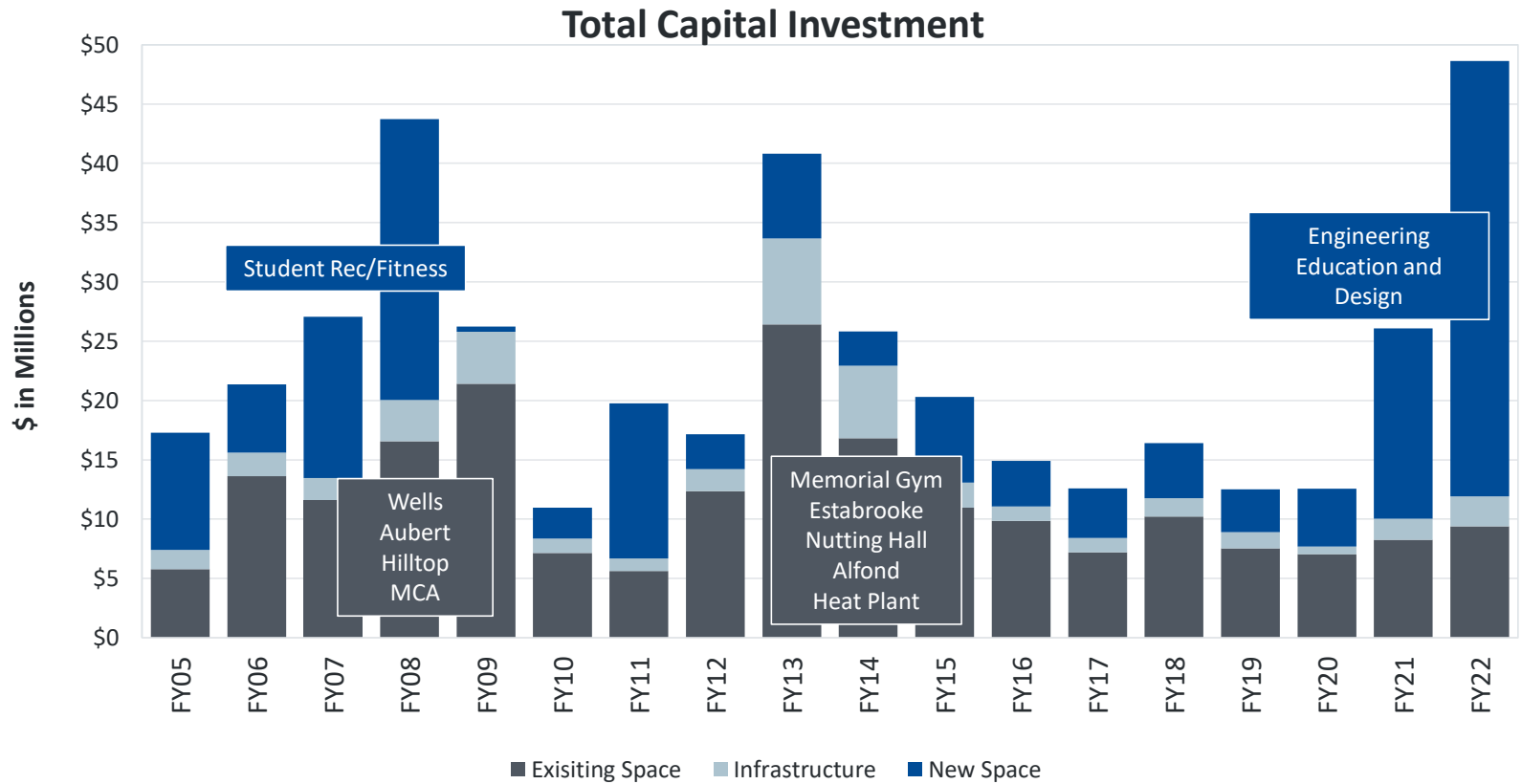
# Capital Profile



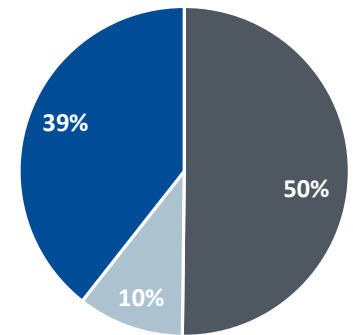


# Total Capital Investment

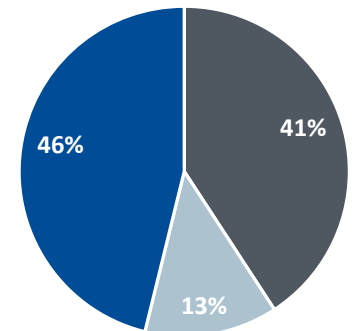
Average total capital investment \$23.0M/year from FY05-FY22



UM Total Investment  
FY05-FY22

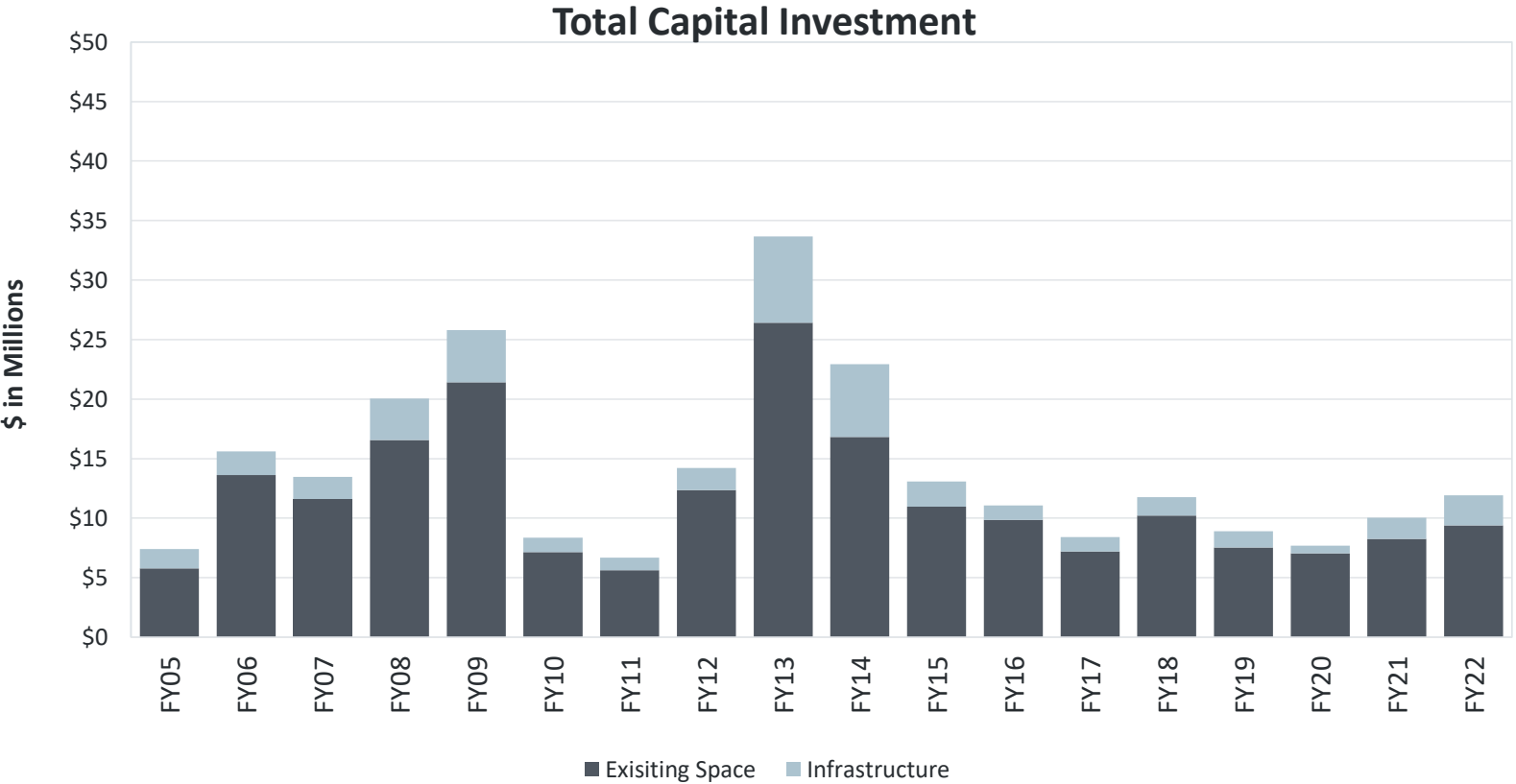


Peers Total Investment  
FY05-FY22

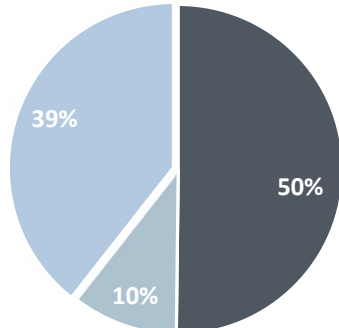


# Total Capital Investment

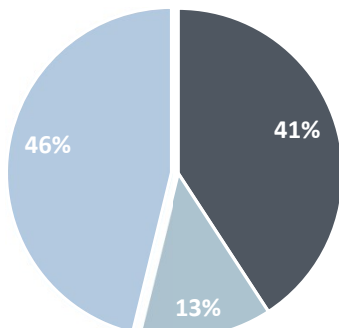
Average total existing space and infrastructure capital investment \$13.9 M/year from FY05-FY22



UM Total Investment FY05-FY22



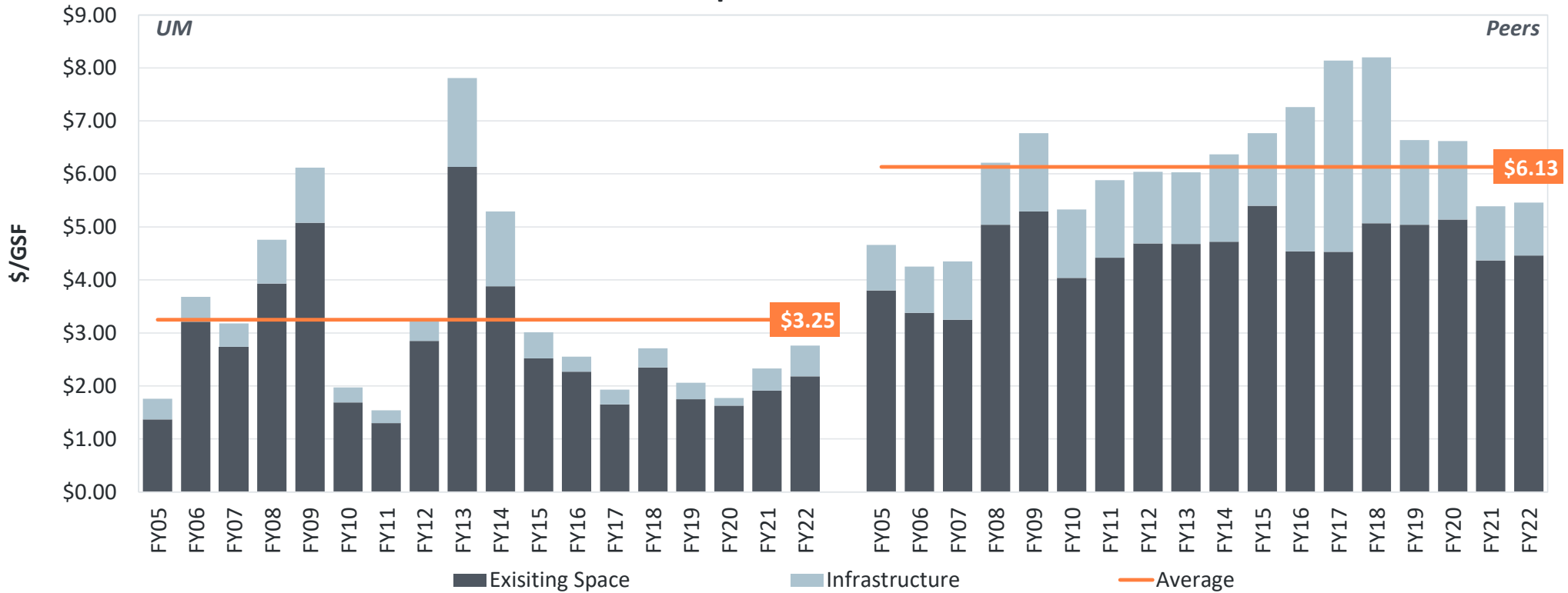
Peers Total Investment FY05-FY22



# Total Capital Investment vs Peers

Peers investing \$2.88/GSF more than UM from FY05-FY22

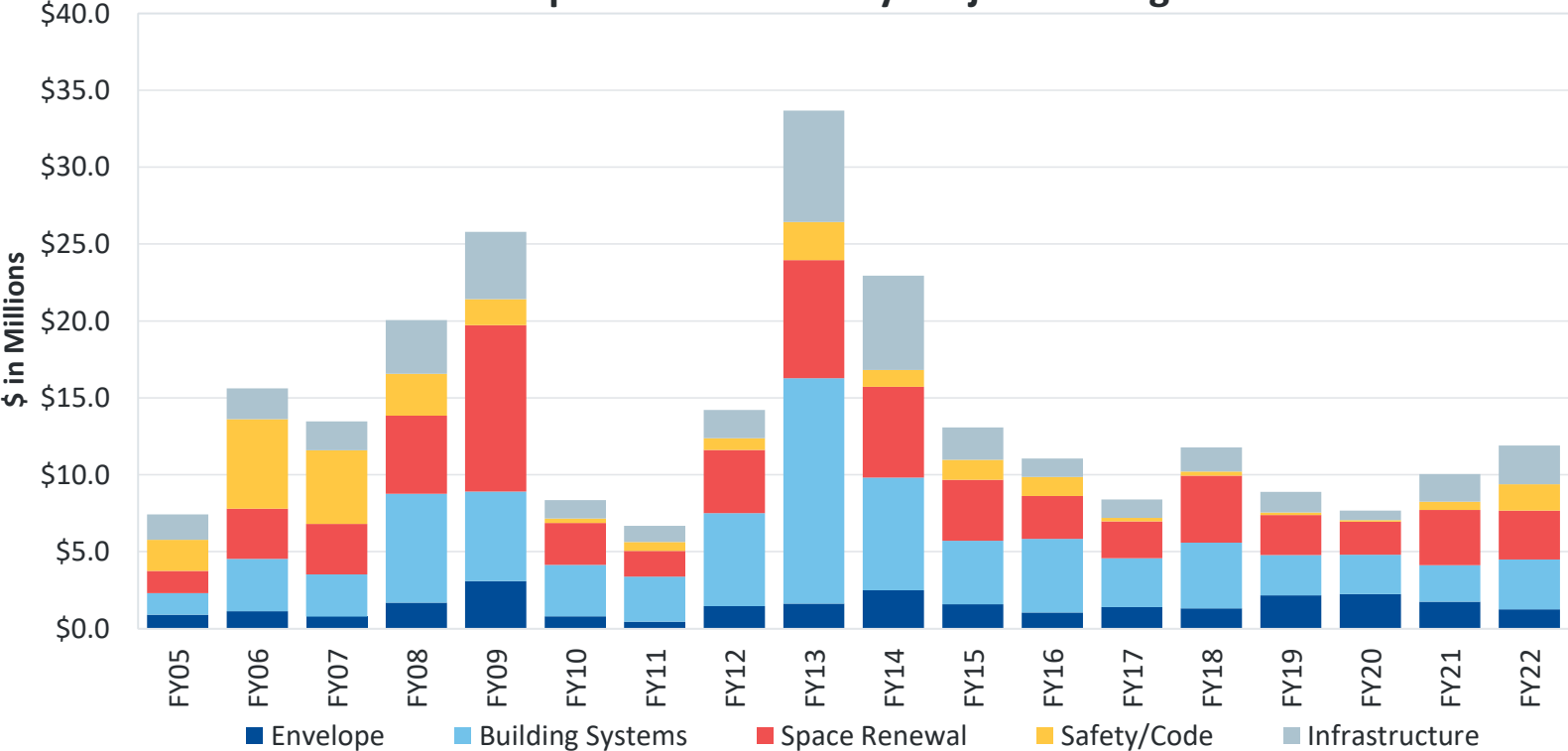
## Total Capital Investment vs Peers



# Total Project Spending by Package

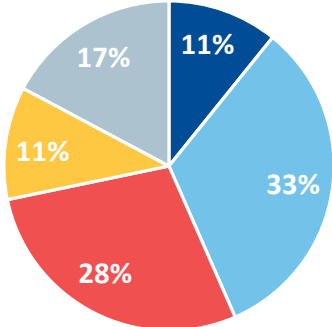
44% of UM's historical spending is into high ROI projects such as Envelope and Building Systems

### Capital Investment by Project Package



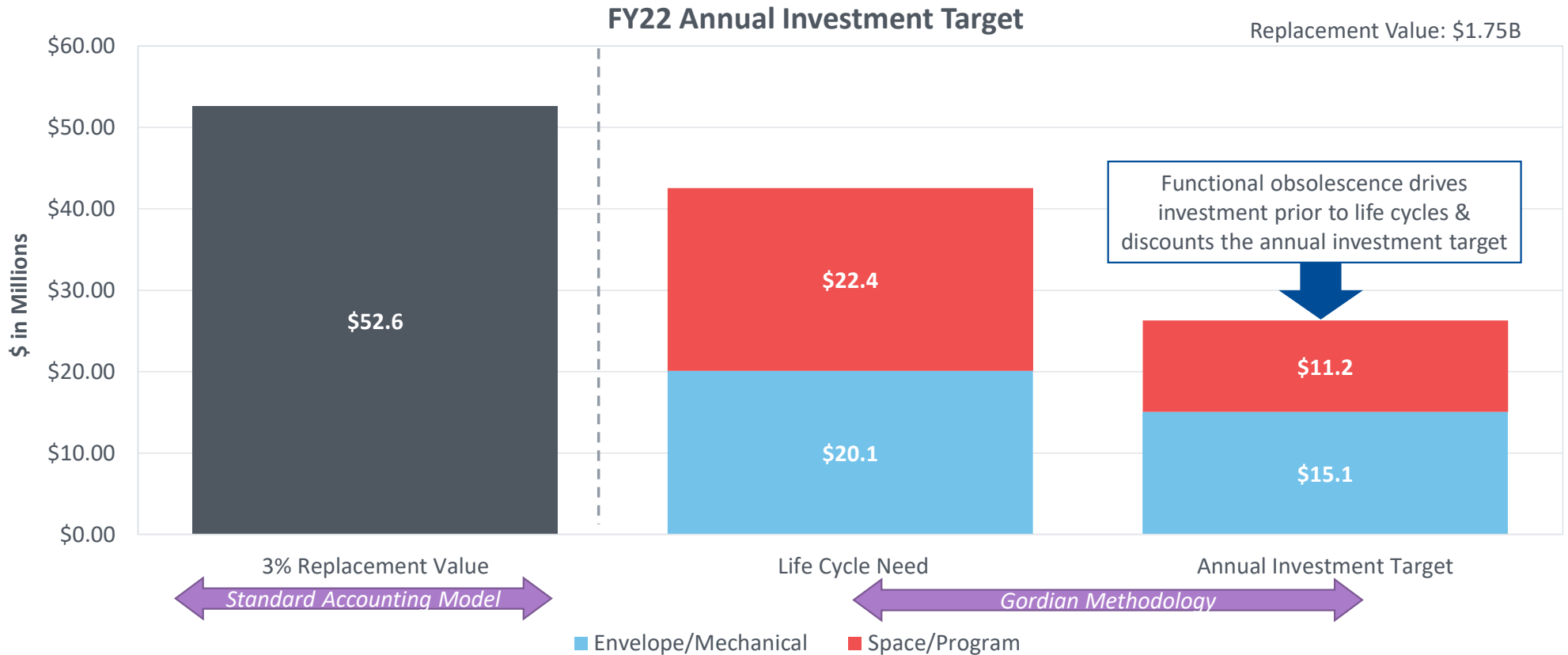
### UM Investment Mix

FY05-FY22



# Defining an Annual Investment Target

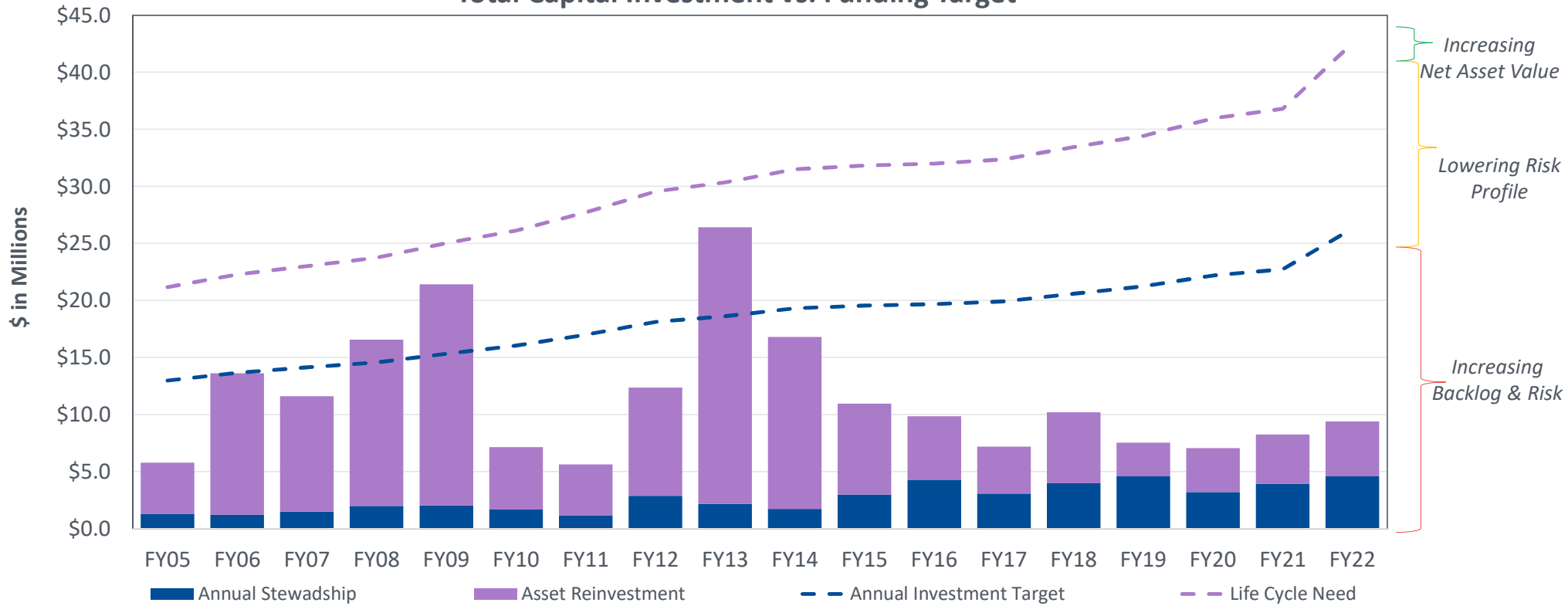
Gordian recommends an Annual Funding Target of \$26.3M into existing space



# Capital Performance vs. Investment Targets

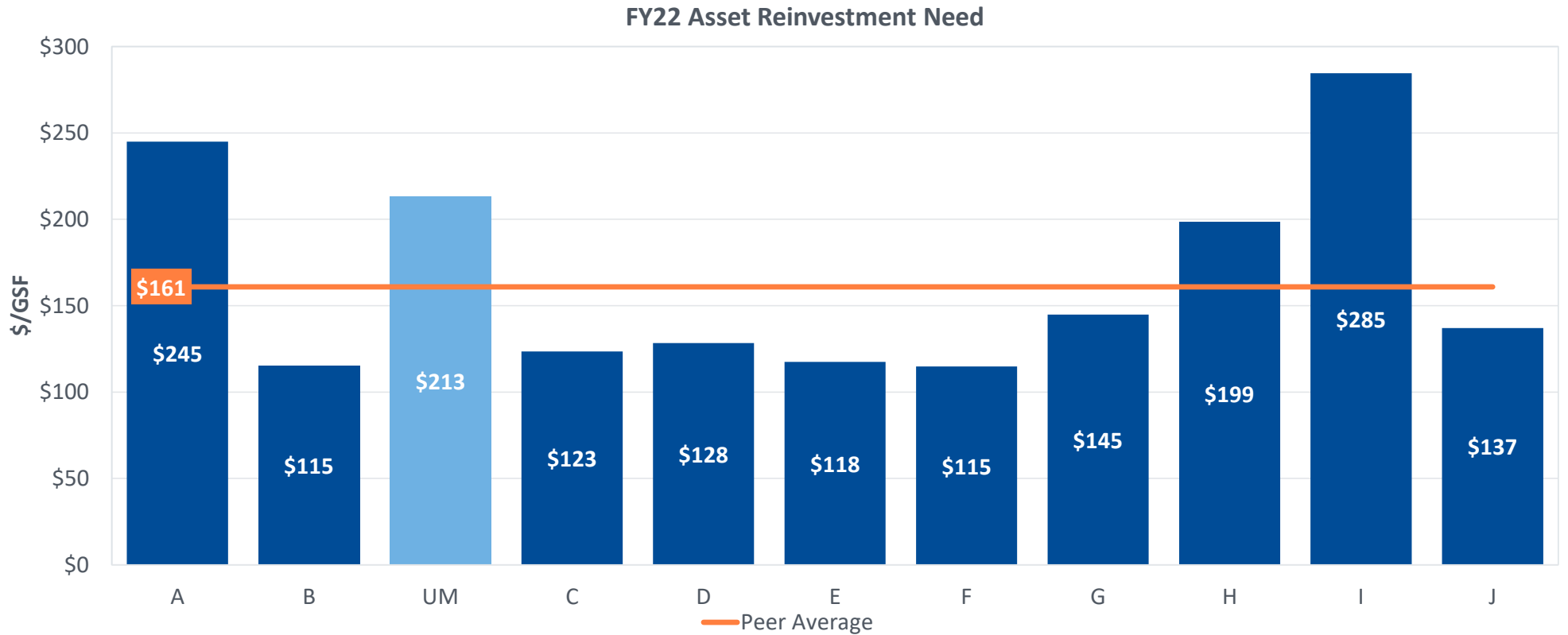
UM combined investment in FY22 was \$16.9M below Gordian's Annual Investment Target

### Total Capital Investment vs. Funding Target



# Asset Reinvestment Need \$/GSF vs. Peers

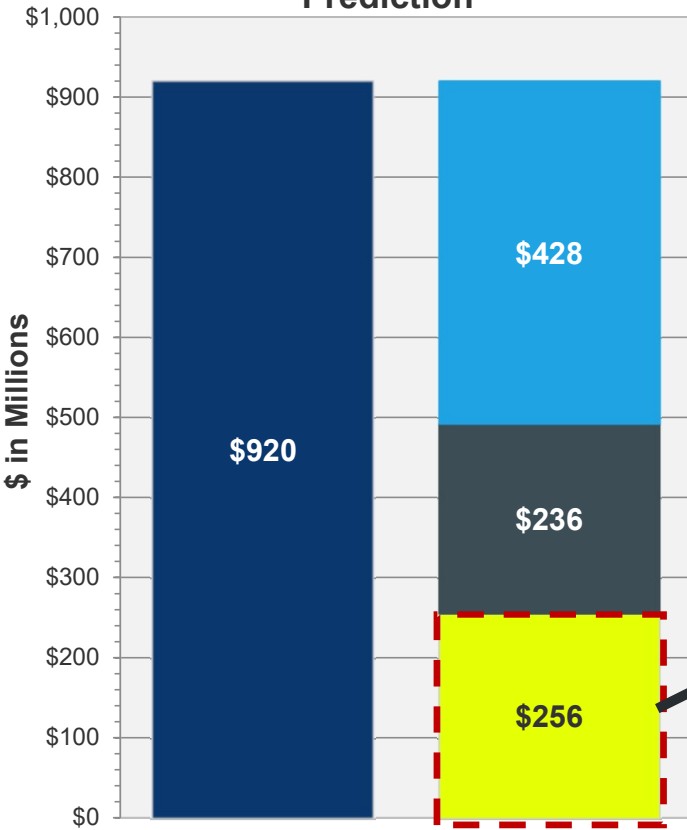
When AR Need is normalized on a \$/GSF basis, UM is among the highest and well above the \$100/GSF threshold



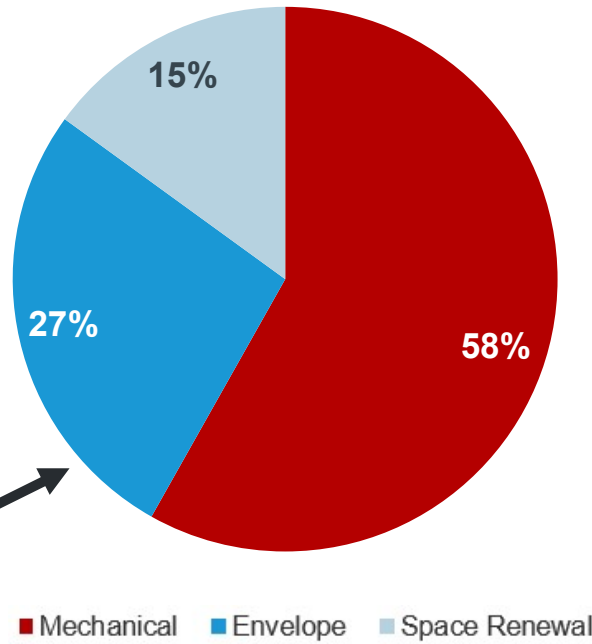
\*Arranged by Tech Rating

# Prediction: UM's Current Needs

Asset Reinvestment Need & Prediction



Distribution of Current Needs



Major Current Building Needs

Building	System
AUBERT HALL	HVAC
YORK HALL	HVAC
FOGLER LIBRARY-ORIG	Exteriors
KNOX HALL	HVAC
OXFORD HALL	HVAC
SOMERSET HALL	HVAC
HANCOCK HALL	HVAC
FOGLER LIBRARY-ORIG	Electrical
HART HALL	HVAC
ANDROSCOGGIN HALL	HVAC

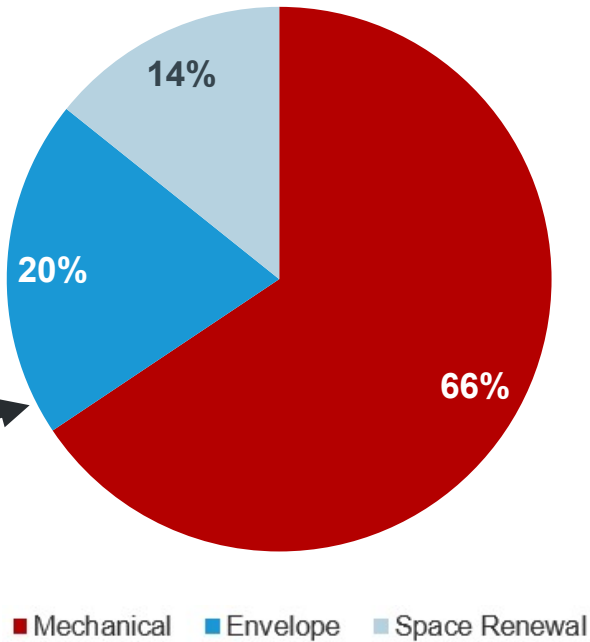


# Prediction: UM's Upcoming Renewal Needs

Asset Reinvestment Need & Prediction



Distribution of Renewal Needs (FY23-FY32)



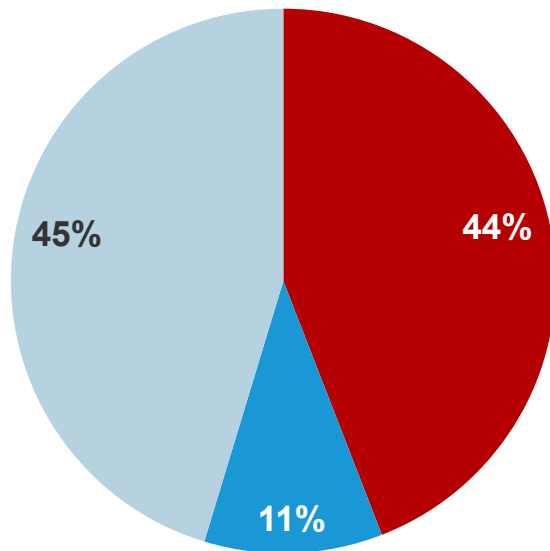
Major Upcoming Building Needs

Building	System
FOGLER LIBRARY-ORIG	HVAC
CLASS OF 1944 HALL	HVAC
MEMORIAL UNION-AD2	HVAC
BRYAND GLOBAL SCIENCES CENTER	HVAC
DONALD P CORBETT HALL	HVAC
AUBURT HALL	Electrical
AUBERT HALL	Exteriors
HITCHNER HALL, BIOLOGY WING-AD4	HVAC
AUBURT HALL	Plumbing
MEMORIAL UNION-ORIG	HVAC

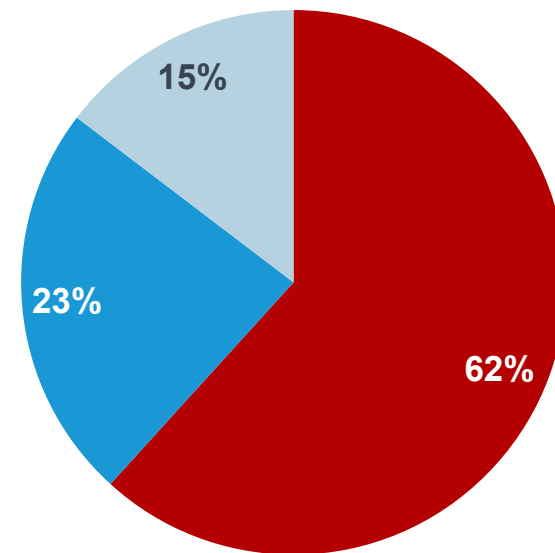
# Historic Funding vs Current and Renewal Needs

Shift in investment allocation needed towards mechanical systems and building envelope

Historical Investment  
(FY05-FY22)



Distribution of All Needs  
(FY23-FY32)

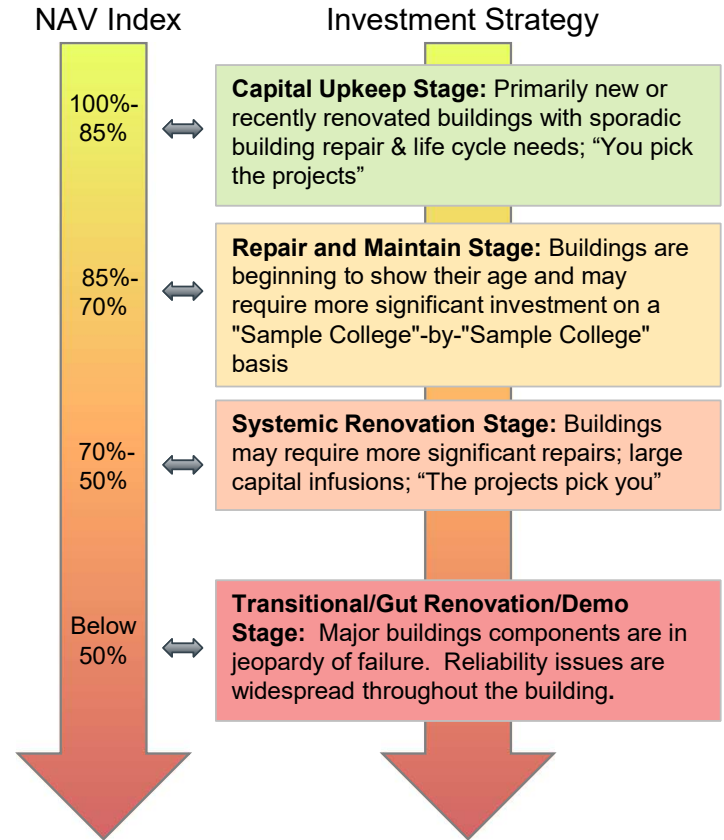
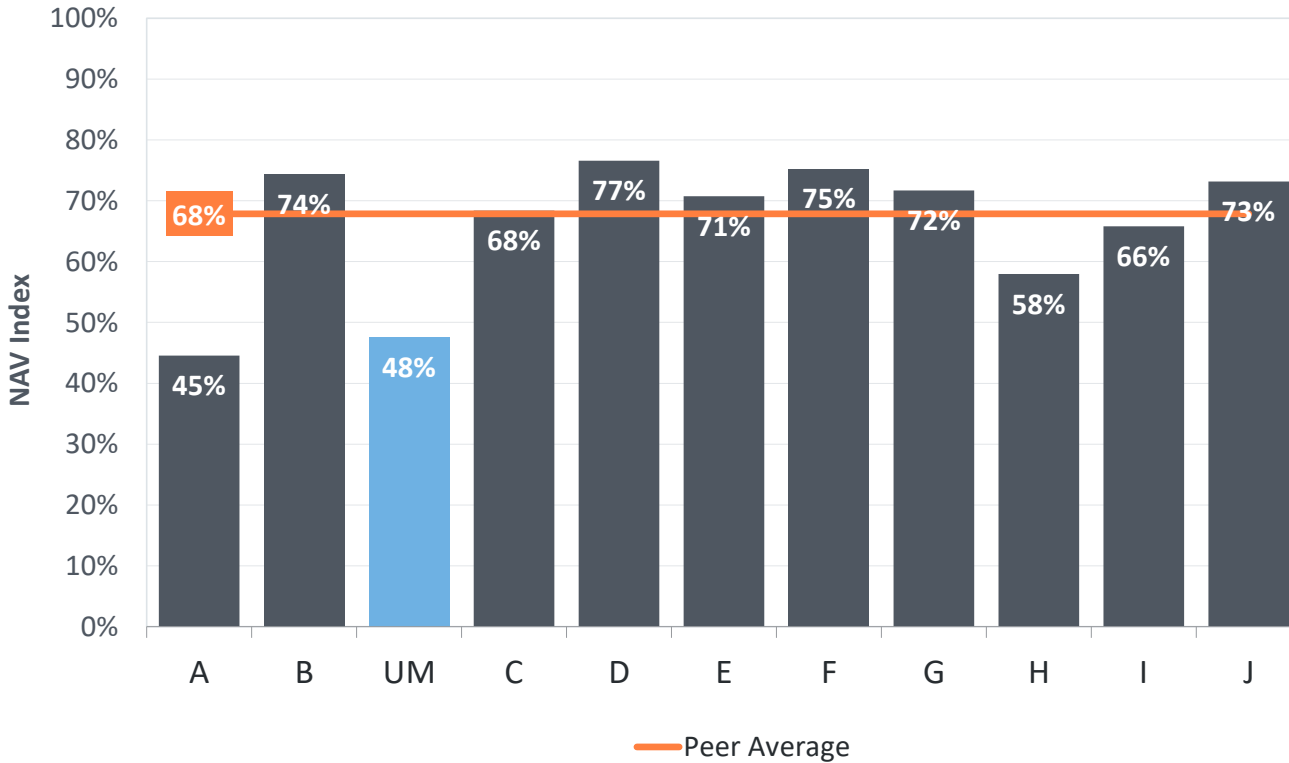


■ Mechanical ■ Envelope ■ Space Renewal

# Net Asset Value Compared to Peers

UM has a NAV of 48% representing the Transitional Stage

FY22 Net Asset Value



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

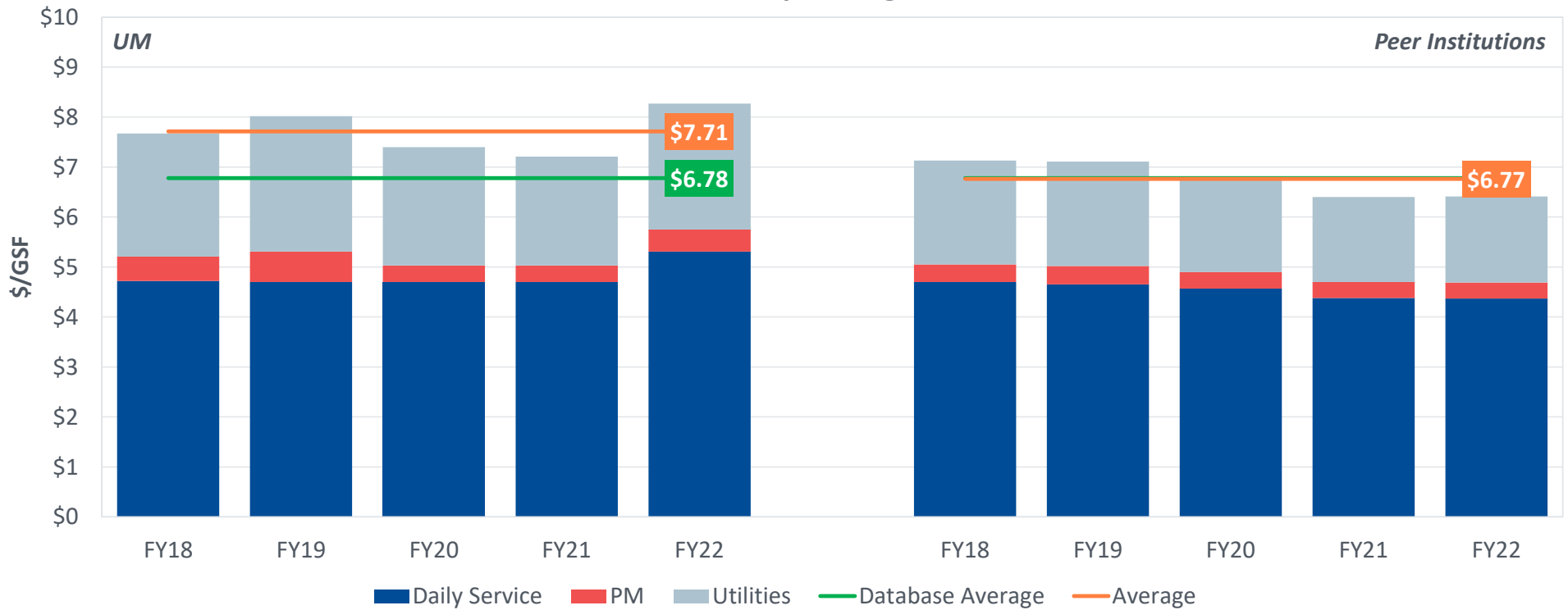
# Operations Profile



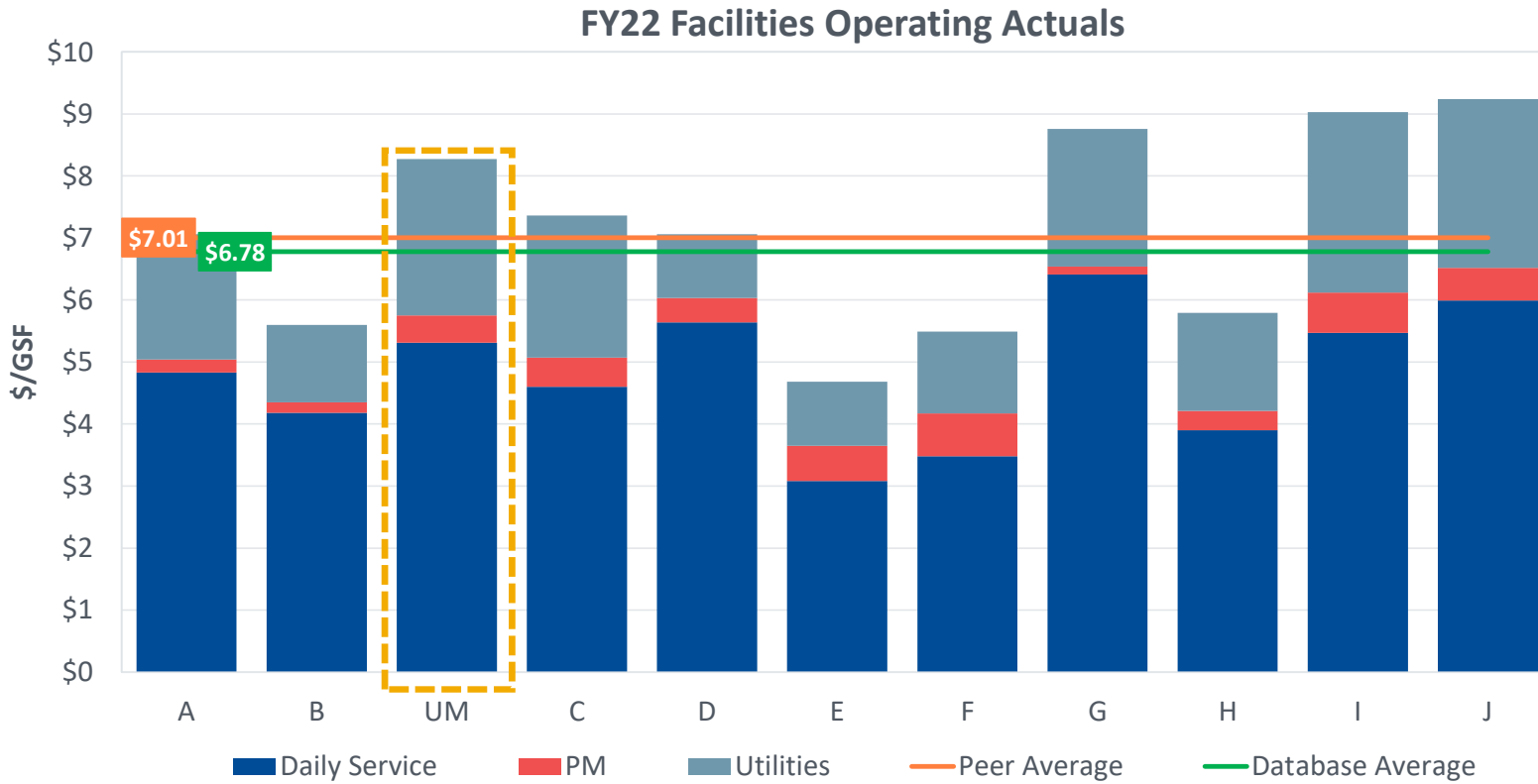
# Facilities Operating Actuals

UM has operated at \$0.94/GSF more than peers from FY18-FY22

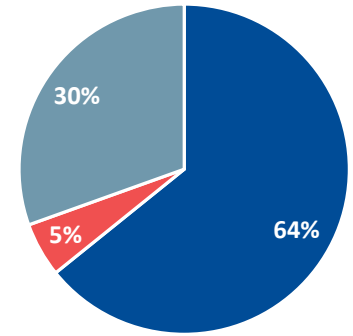
Facilities Operating Actuals



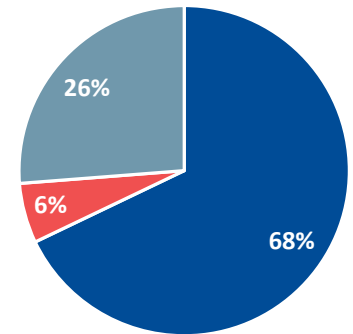
# FY22 Facilities Operating Actuals vs. Peers



### UM FY22 Operating Costs Distribution



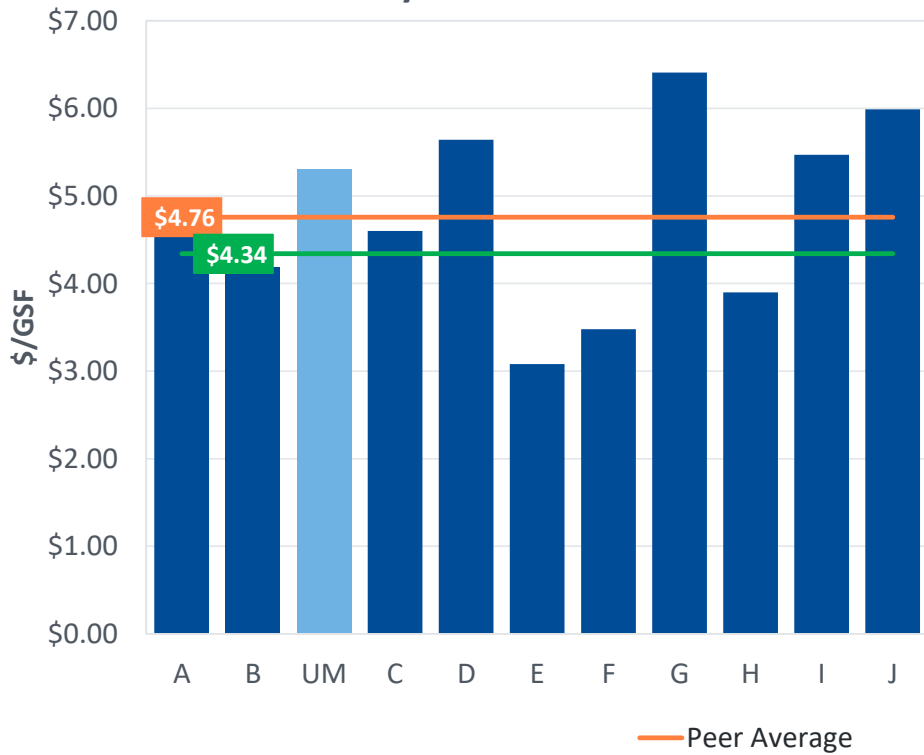
### Peers FY22 Operating Costs Distribution



Arranged by Tech Rating

# FY22 Daily Service vs. Planned Maintenance

### Daily Service vs Peers

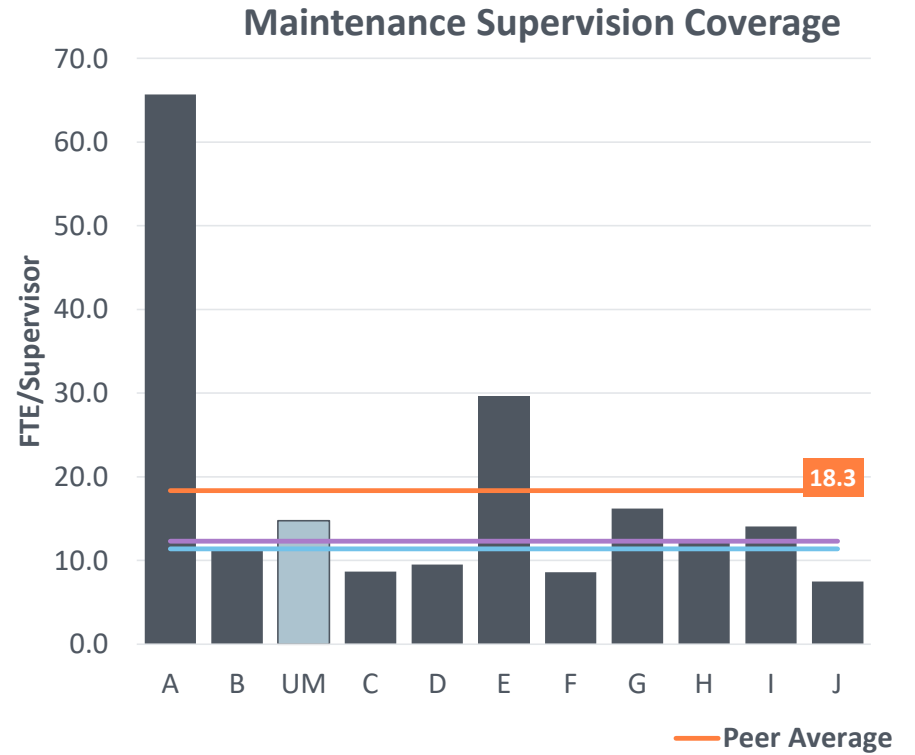
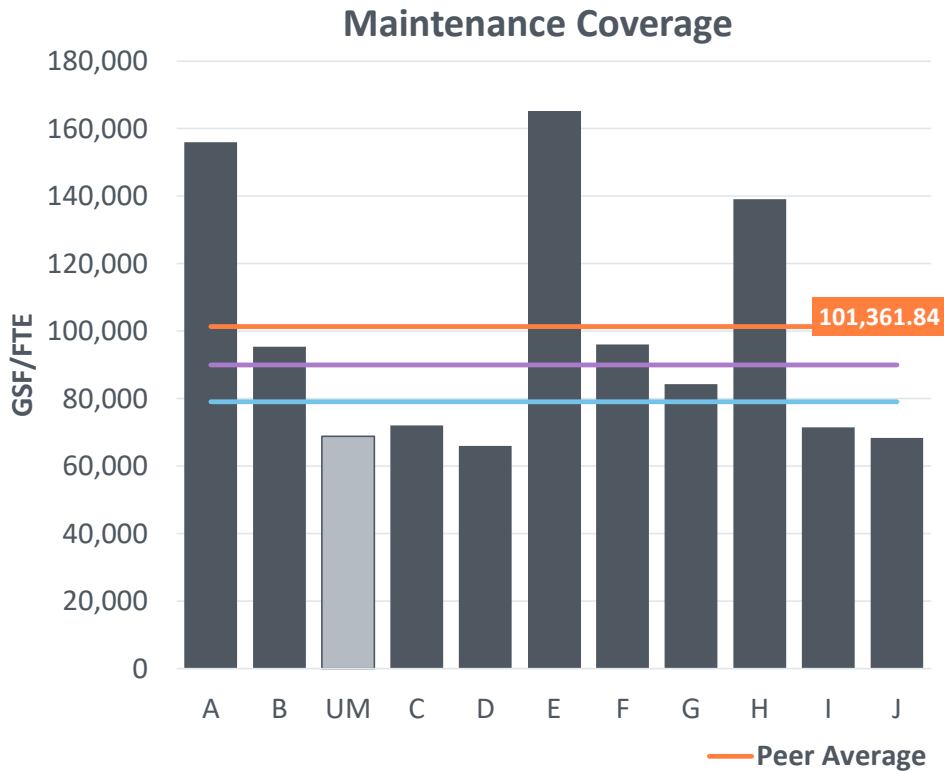


### Planned Maintenance vs Peers



# Covering less space per FTE than peers, similar supervision

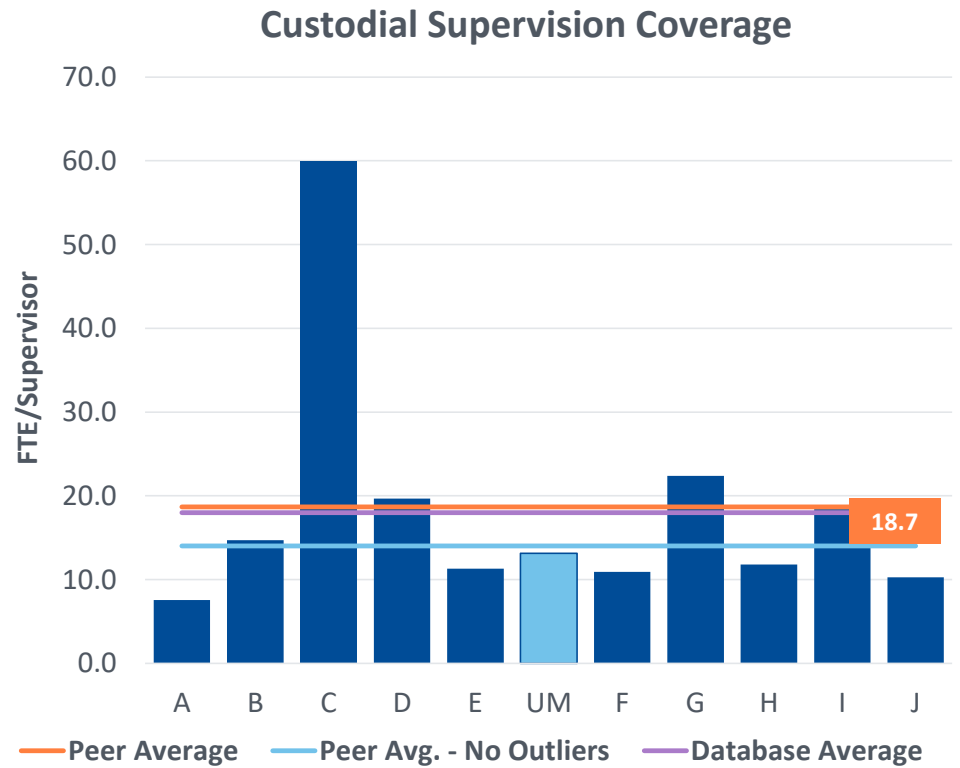
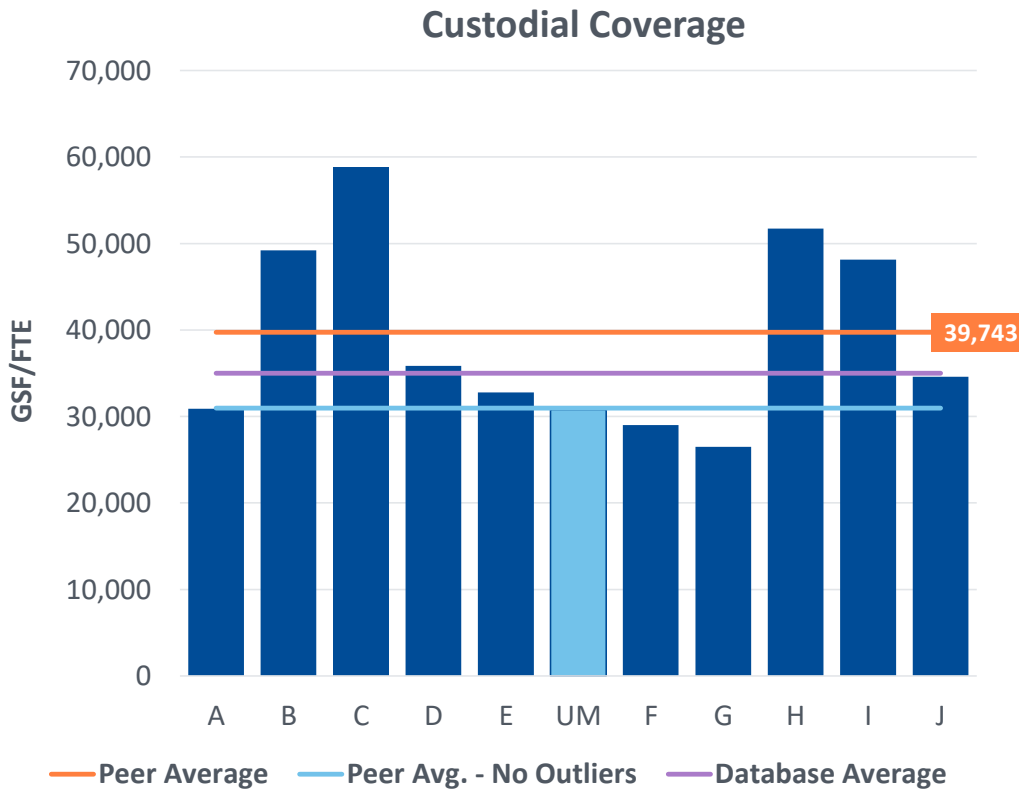
Older campus and higher \$/GSF repair needs drive lower coverage ratio





# Campus conditions drive coverage ratios

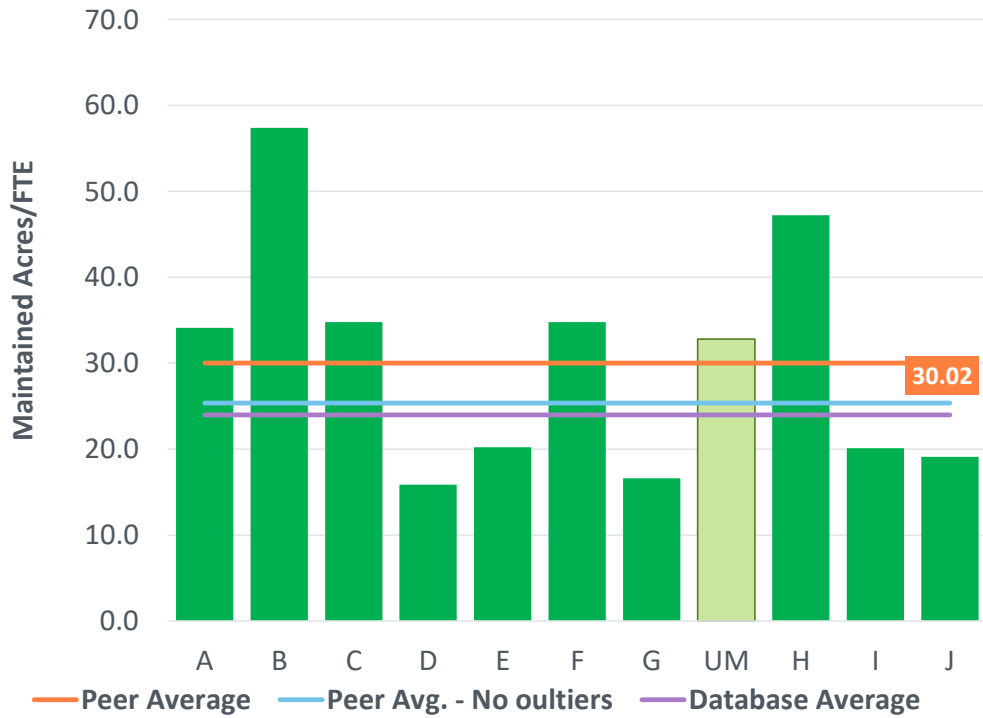
Custodial coverage similar to peers with outliers removed, coverage below database average



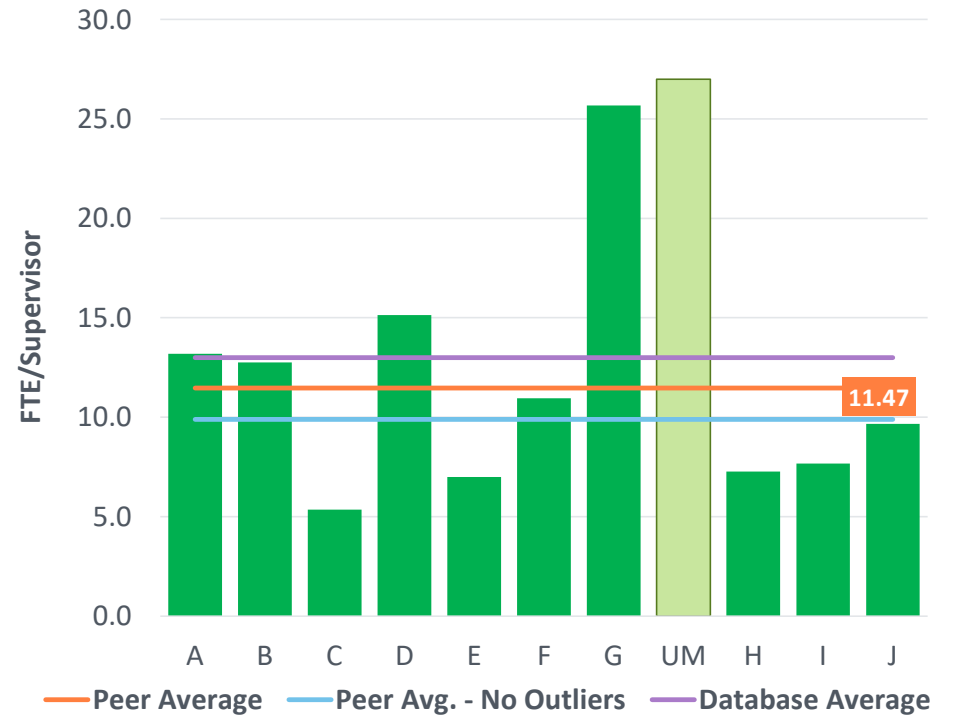
# Grounds covering more acreage with less supervision

Challenges in filling grounds positions lead to increased coverage ratio compared to peers

### Grounds Coverage



### Grounds Supervision Coverage



# FY2022 Summary

## Space

- The University of Maine has avoided growth in campus footprint while seeing a decrease in student enrollment.
- 61% of space is over 50 years old and requires significant investments in both renewal and modernization.

## Capital

- Total capital investment has fallen short of target FY14 - FY22.
- Since FY05 peers have invested an average of \$2.88/GSF more per year into existing facilities than The University of Maine.
- Approximately \$256 Million “Current Need” across campus.

## Operations

- Operating costs increased in FY22 for people, expenses, and utilities.
- Operating costs are \$0.94 per GSF more than peers FY18-22
- High backlog of needs and older campus are forcing tighter maintenance coverage ratios than peers.



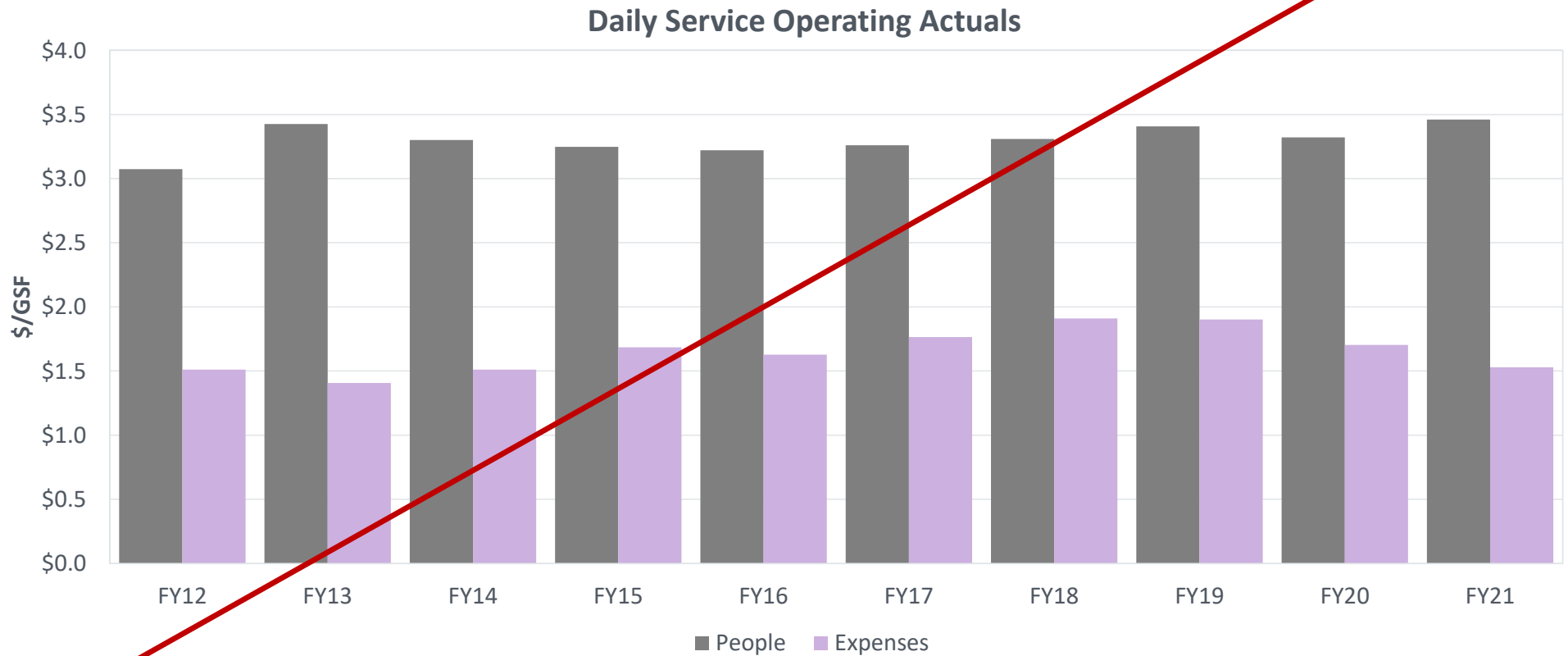


# Questions & Discussion



# Daily Service Operating Actuals FY12-FY21

*While People costs stay relatively the same, expenses have more fluctuation*



# Planned Maintenance Internal vs. External

Planned Maintenance Internal vs. External

