



sightlines

ROPA+

William Rainey Harper College

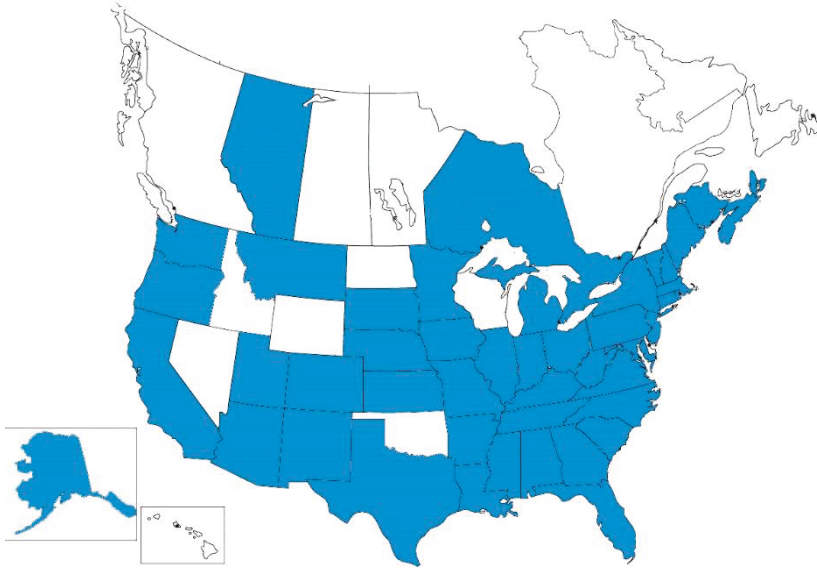
Presenter: Jonathan King

March 9th, 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
- William & Mary

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.
- 93% of ROPA members renewed in 2014
- We have clients in 42 states, the District of Columbia and four Canadian provinces
- More than 100 new institutions became Sightlines members since 2013

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

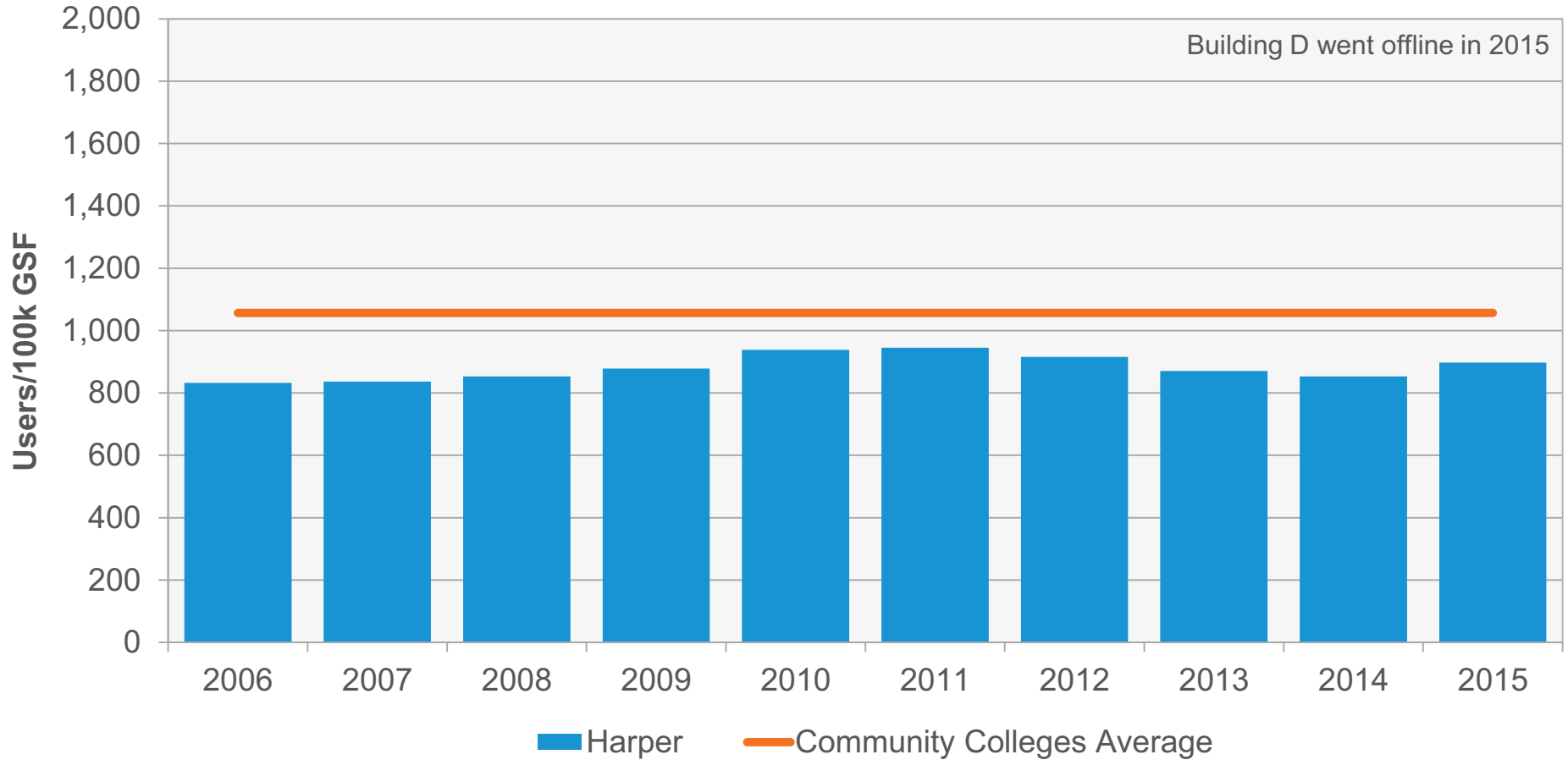
- **Renewing Building Inventory**- Harper's historical construction profile as well as the building renovation strategy has resulted in 60% of space less than 25 years old. This is forecasted to increase to 79% by FY2018.
- **Demanding Campus Profile**- The combination of highly technical buildings and an elevated population density contribute to additional capital and operational demands.
- **Increasing Impact of Capital Investments** – Harper's recent investment profile is above peer average and has surpassed annual funding targets since FY14. Additionally, funding has shifted to focused on replacing aging campus infrastructure.
- **Superior Service Levels Managing High Expectations** – Despite a challenging campus profile, Harper's Facilities Team achieves above average output levels to match high campus expectations.

Space Profile

Density Factor compared to Peers

Harper's density remains high and slightly below peers

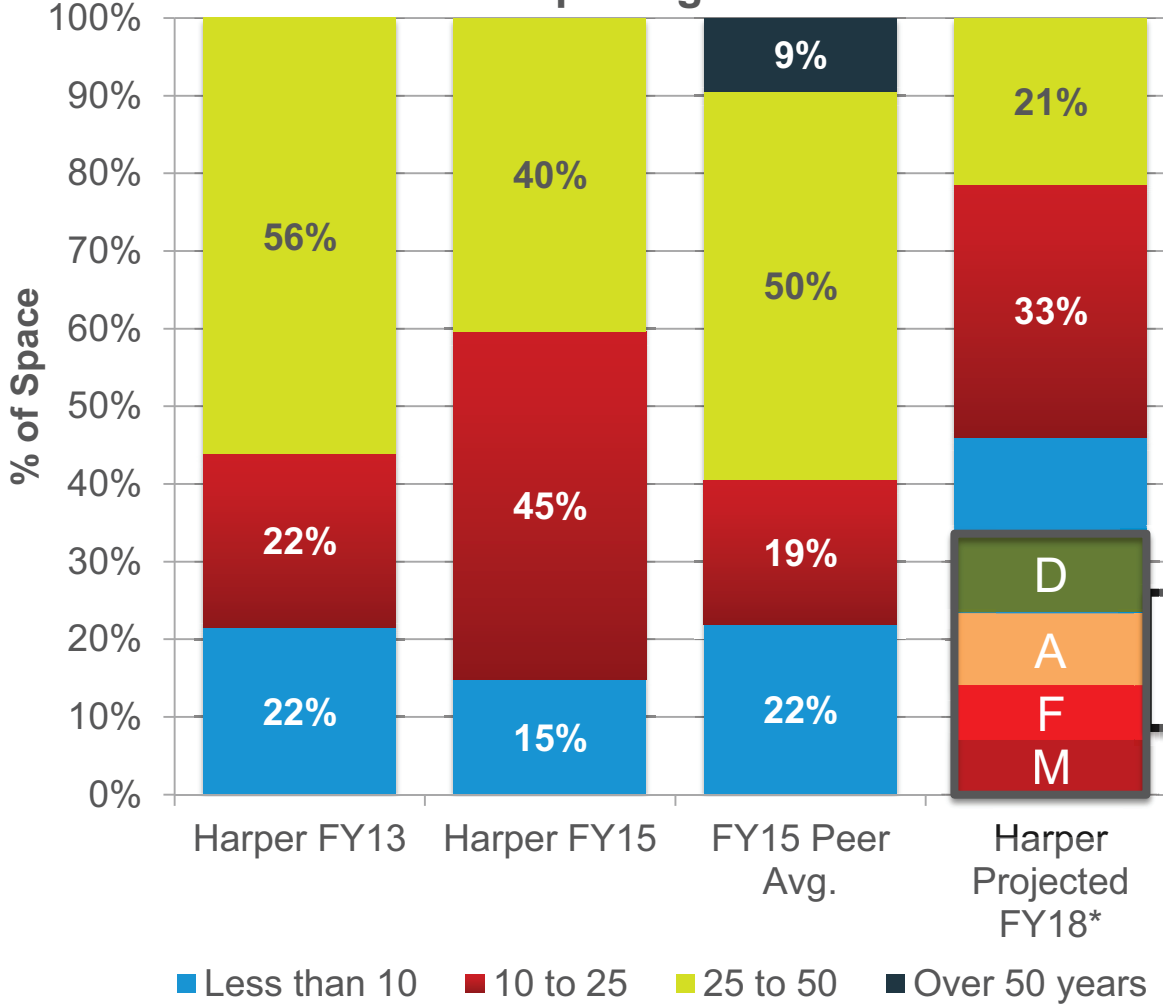
Density over time



Harper's Age Profile

Planned renovations will reset much of campus

Campus Age Profile



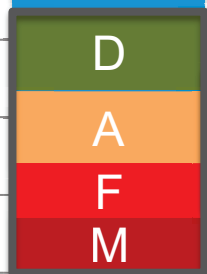
Buildings over 50
 Life cycles of major building components are past due. Failures are possible.
 Highest risk

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

32% of Space



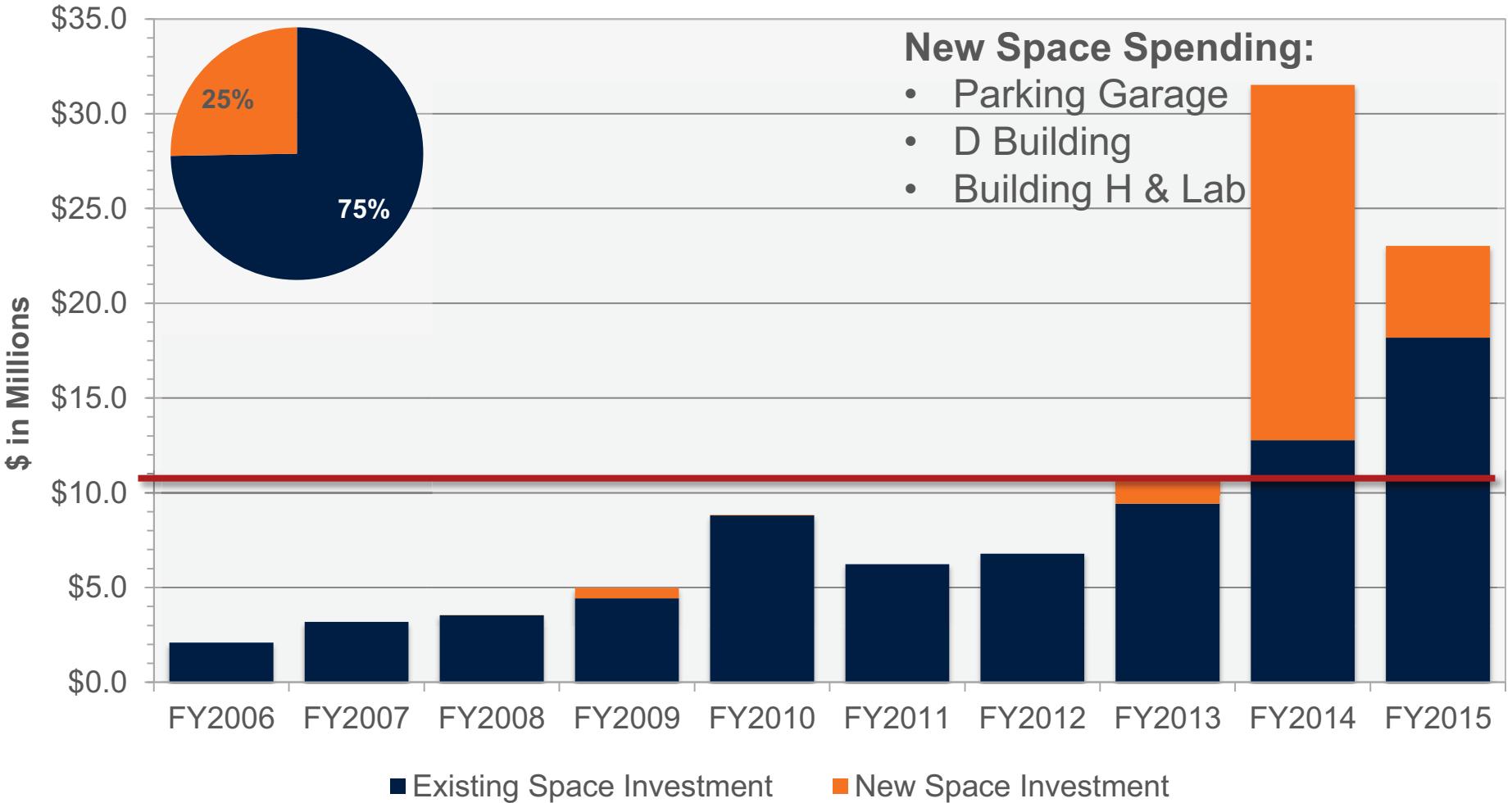
*Assumes completed renovations to D, A, F, M

Capital Profile

Total Capital Investment

Harper's investment level increases in FY14 & FY15

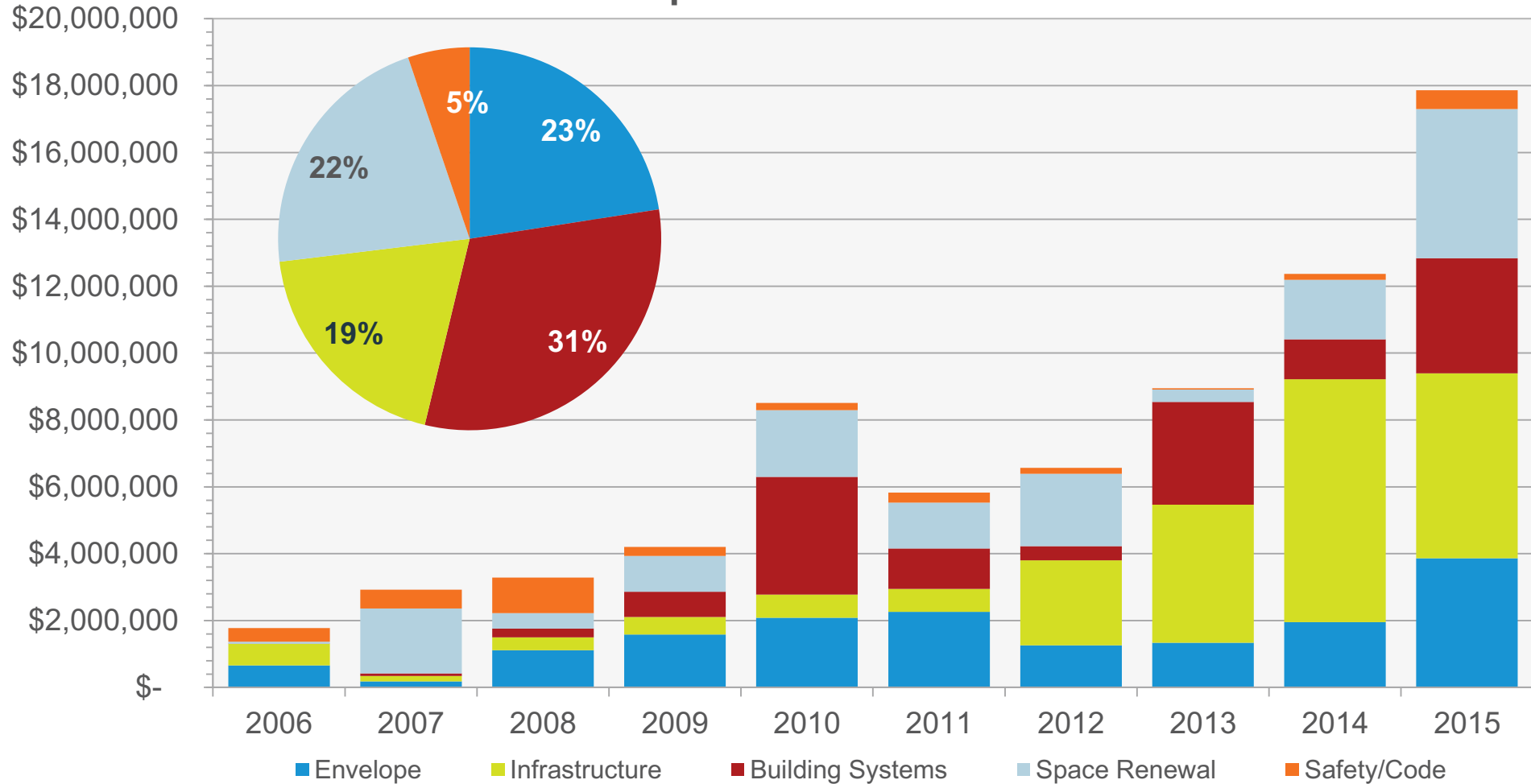
Total Capital Investment



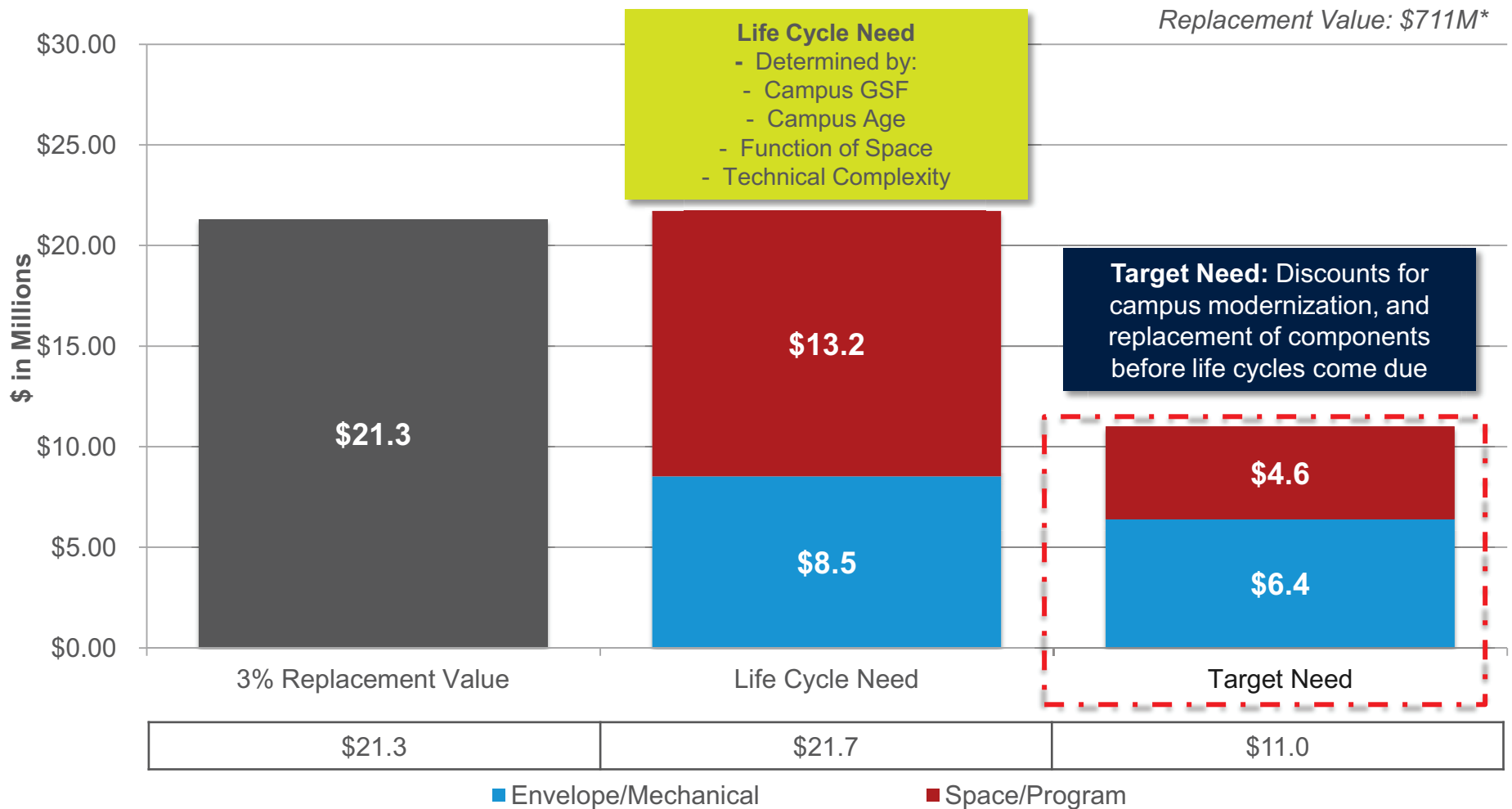
Harper's Project Package Breakout

Harper has a strong and growing commitment in durable investments

Capital Investment Mix



Defining Annual Stewardship Investment Target

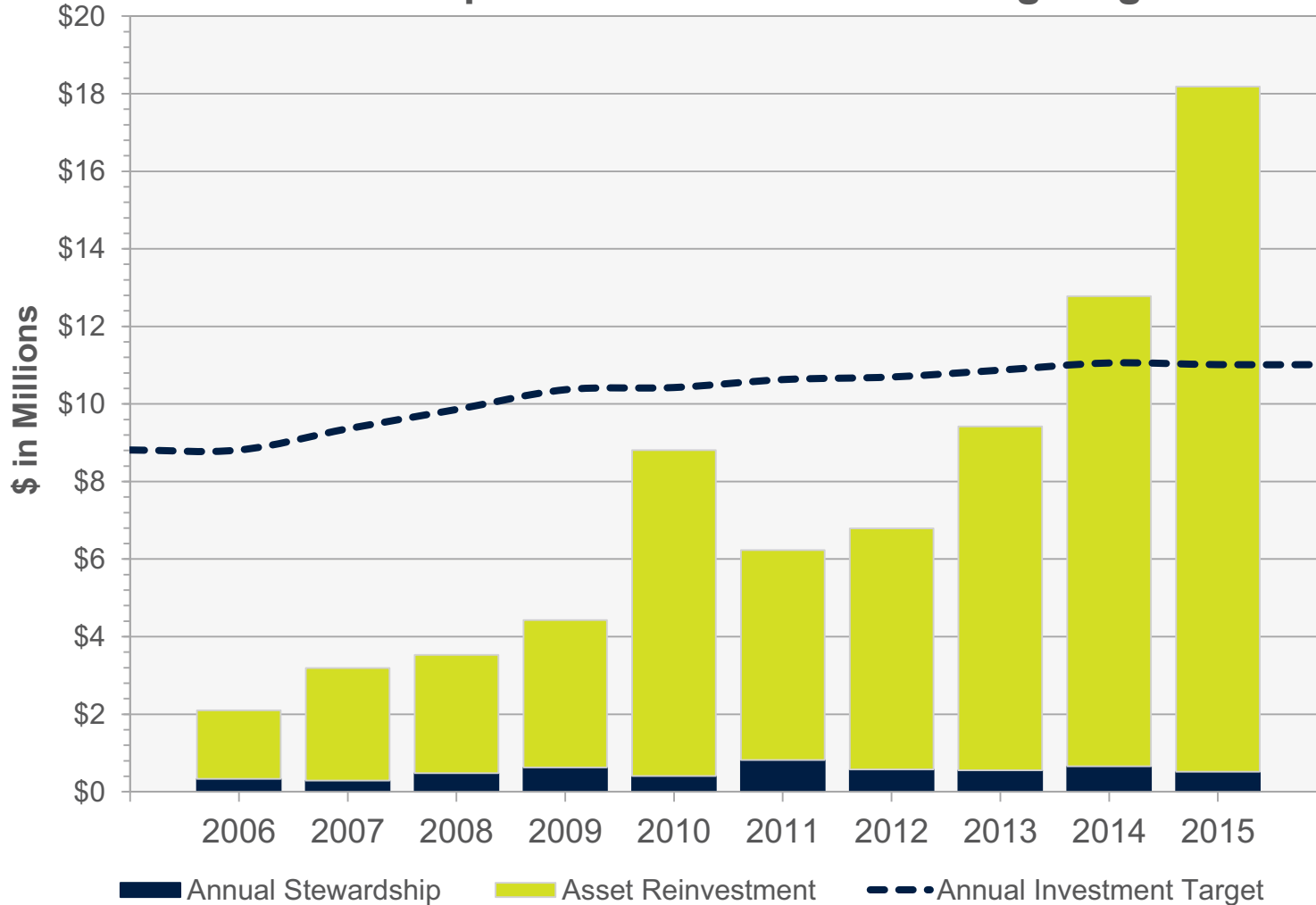


*Replacement Value is unique from the institutional insurance value; it is calculated using the Sightlines model, based off the age, complexity and function of space. Does not include building content values or campus infrastructure.

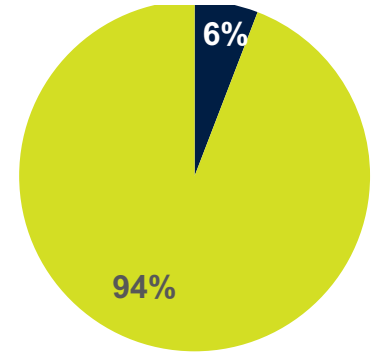
Harper's Investment vs. Investment Target

Exceeding targets through one-time funding while stewardship funding remains low

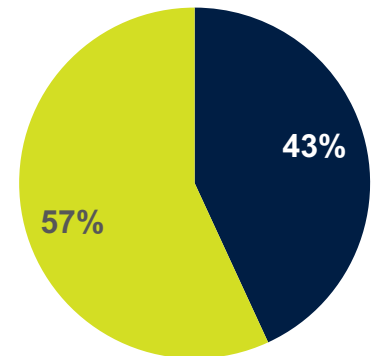
Total Capital Investment vs. Funding Target



FY11-FY15 Funding Distribution: **Harper**



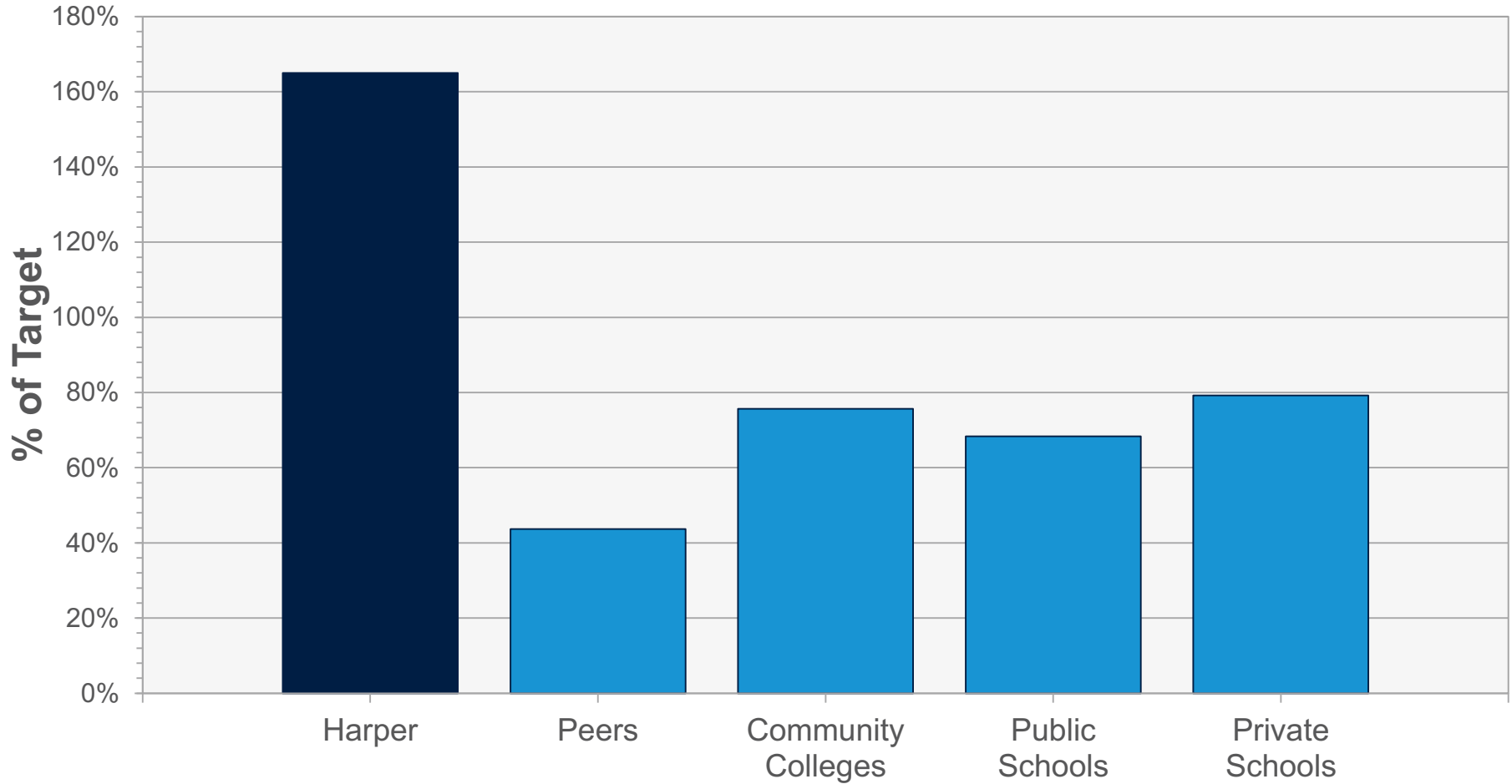
FY11-FY15 Funding Distribution: **Peers**



Harper's Investment vs. Peers

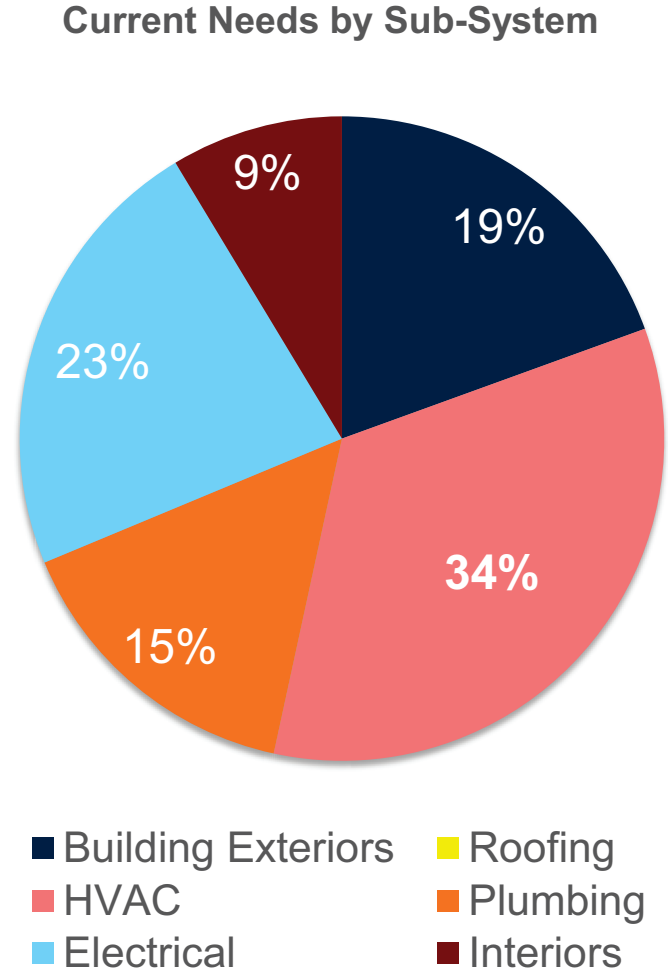
Harper exceeds target in FY15 compared to peers and database averages

Total Capital Investment vs. Funding Targets



Defining Harper's 10-Year Needs after Renovations

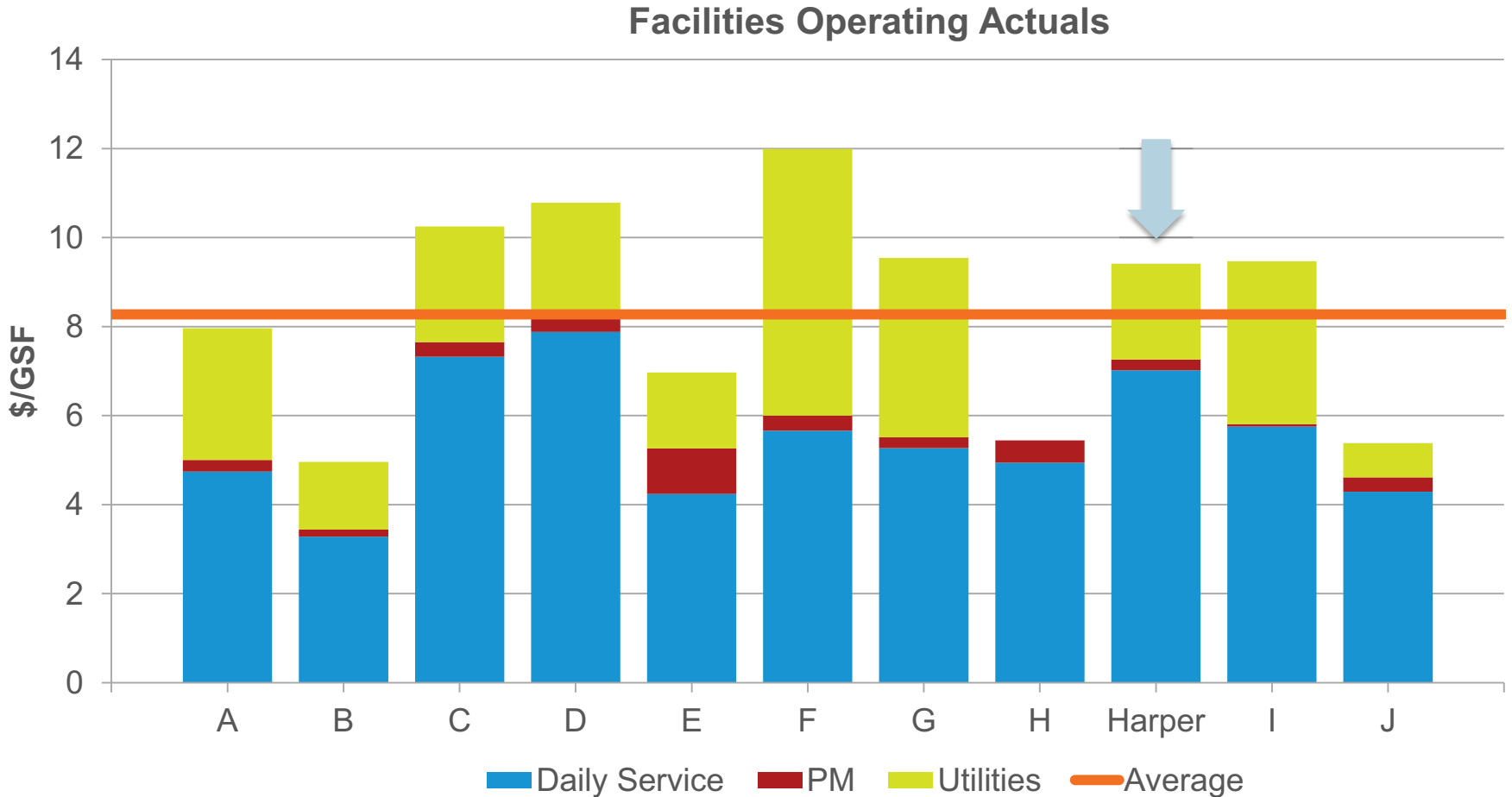
Current need is comprised of core building MEP systems



Operations

Operating Actuals Above Peers on a \$/GSF Basis

Greater operating costs driven by daily service levels

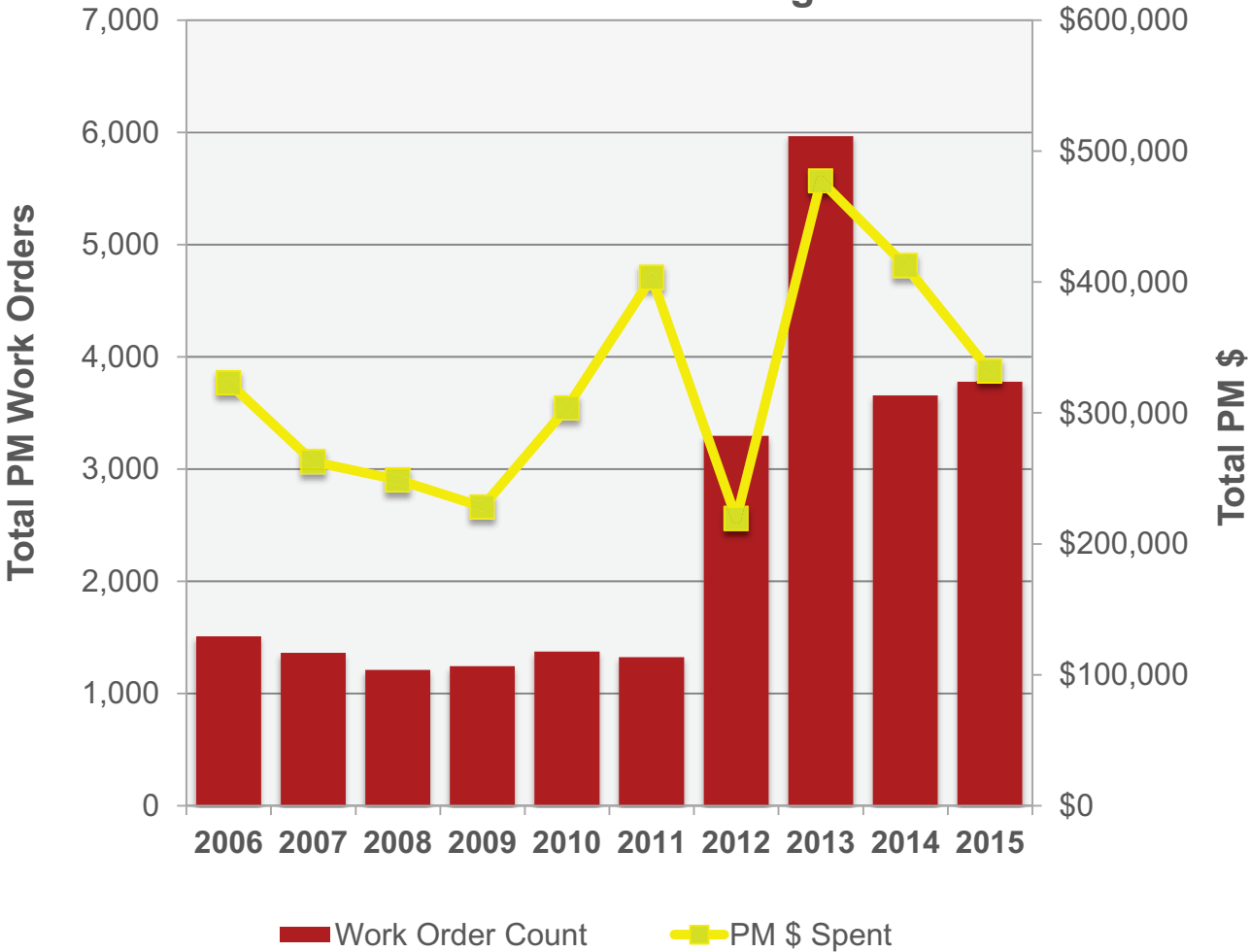


Institutions Arrayed by Tech Rating

Planned Maintenance Commitment

Harper Prioritizes Planned Maintenance Spending since FY11

PM Work Order Trending



Benefits of Planned Maintenance

Extends Life Cycles

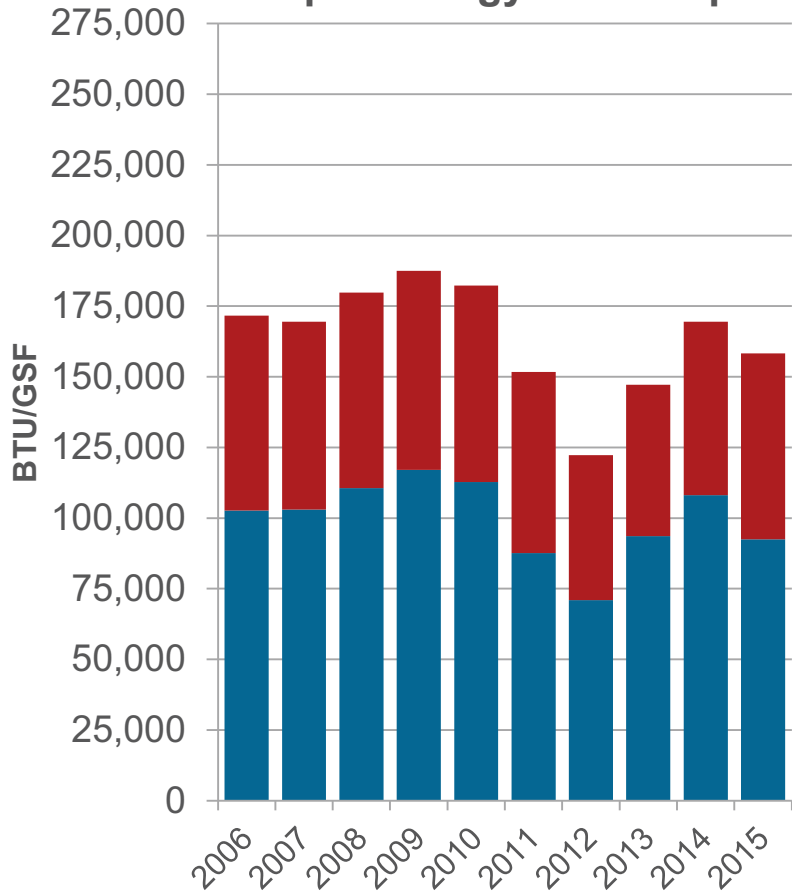
Improved Anticipation of Component Replacement

Decreased Operating Costs Over Time

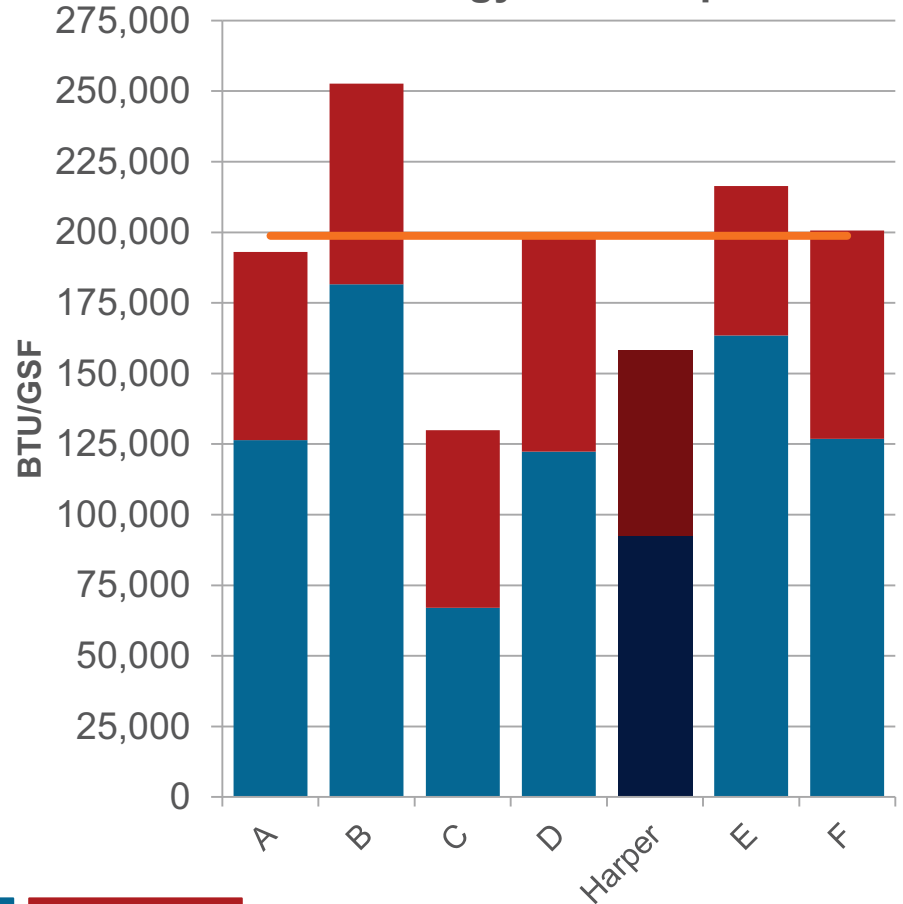
Energy Consumption vs Peers

Harper's energy profile is below regional peer average

Harper Energy Consumption



Energy Consumption

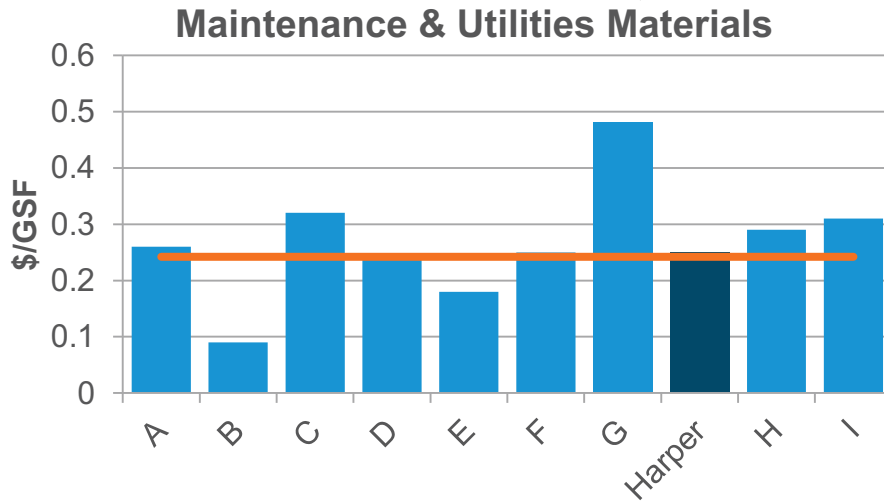
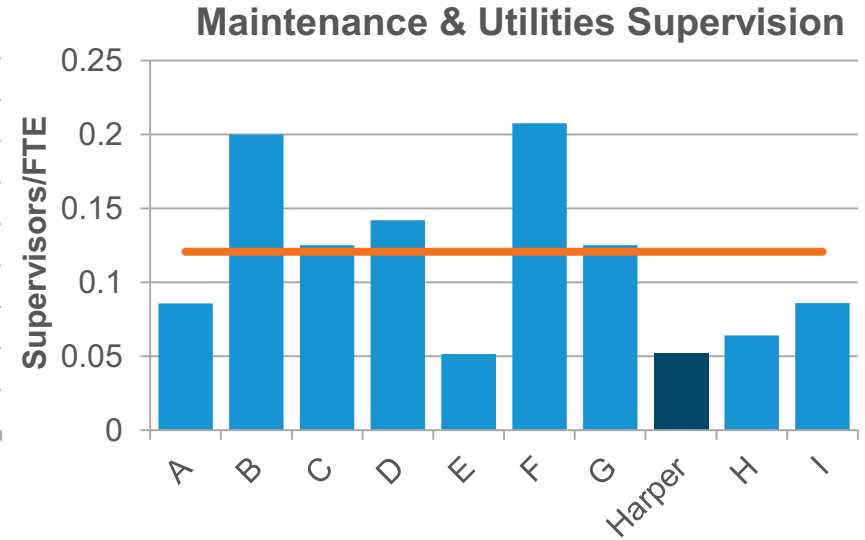
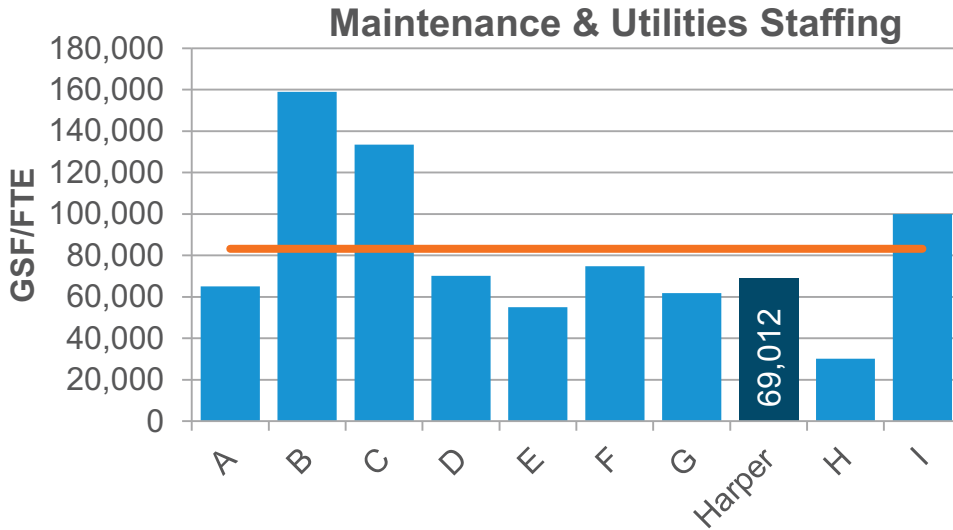


Fossil Electric

Inst. Ordered by tech rating

Maintenance Metrics vs. Peers

High campus expectations driving superior inspection results compared to peers



General Repair Score (1-5)

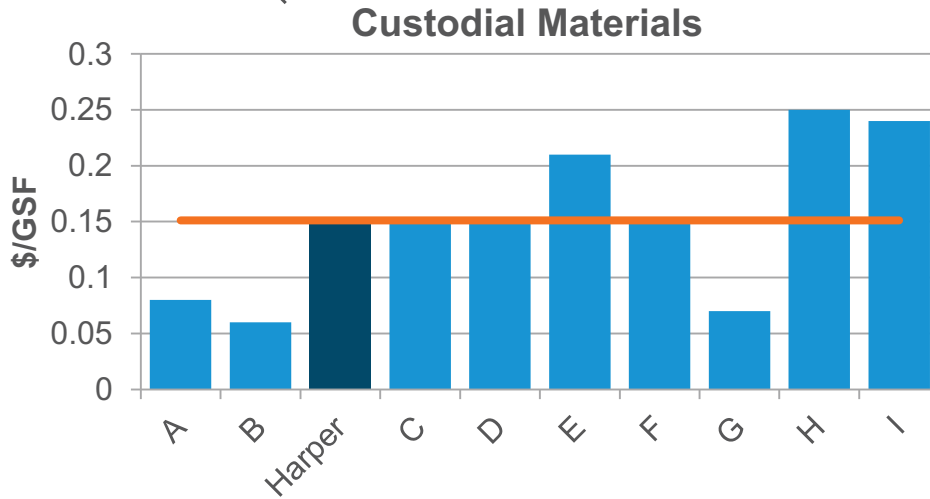
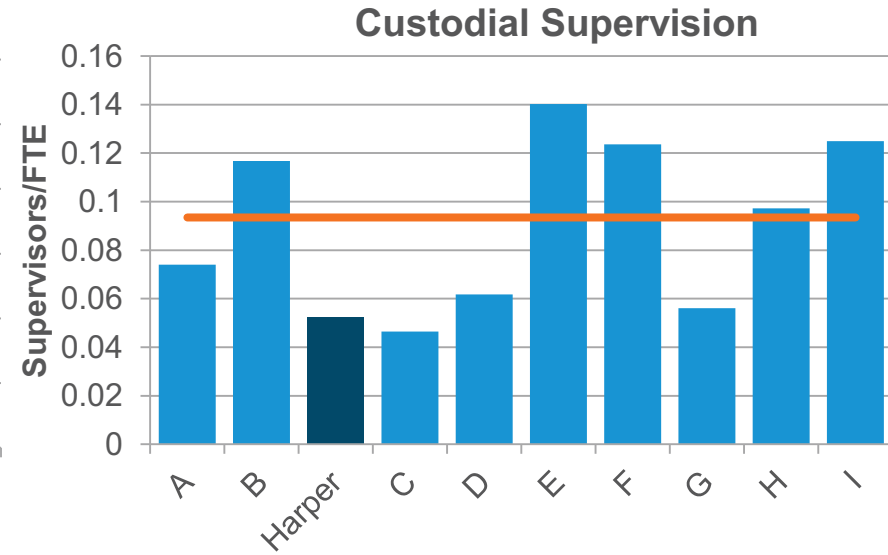
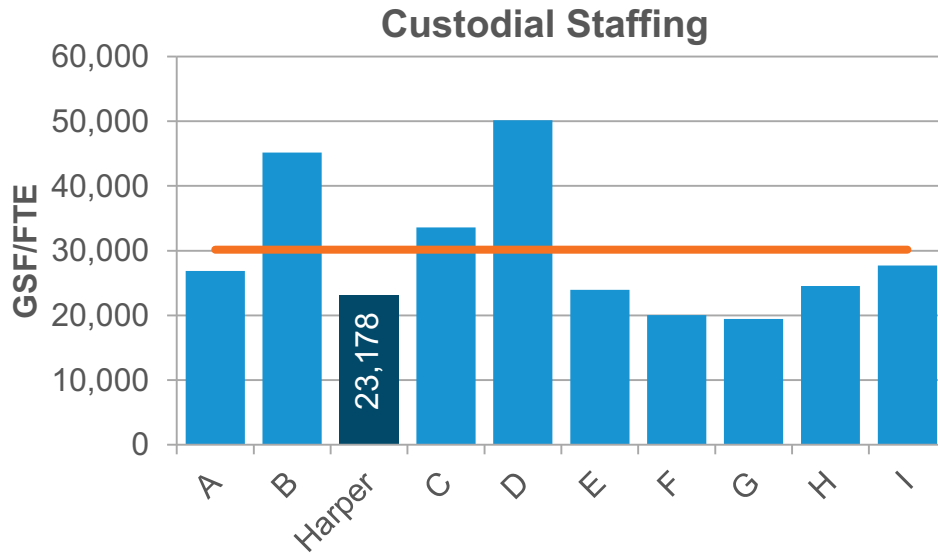
Harper: 4.41

Peers: 3.51

Database: 3.84

Custodial Metrics vs Peers

Demanding campus profile and customer expectations drive higher staffing levels



Cleanliness Score (1-5)

Harper: 4.72

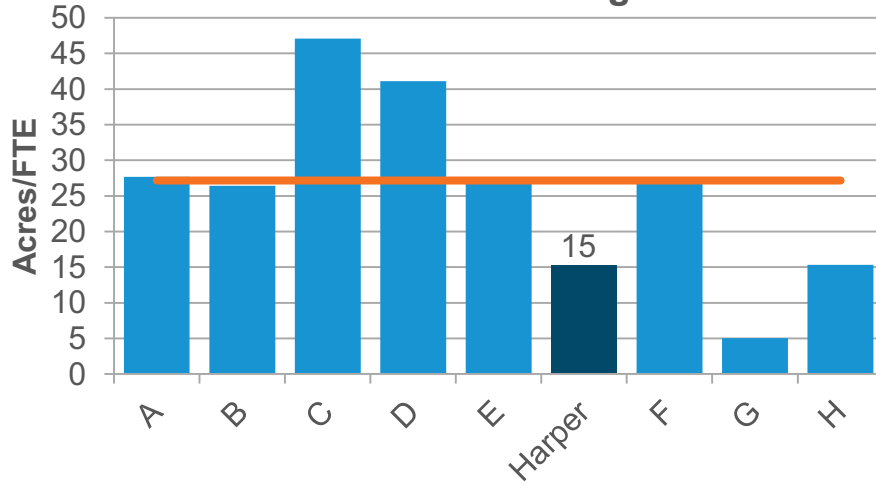
Peers: 3.86

Database: 4.08

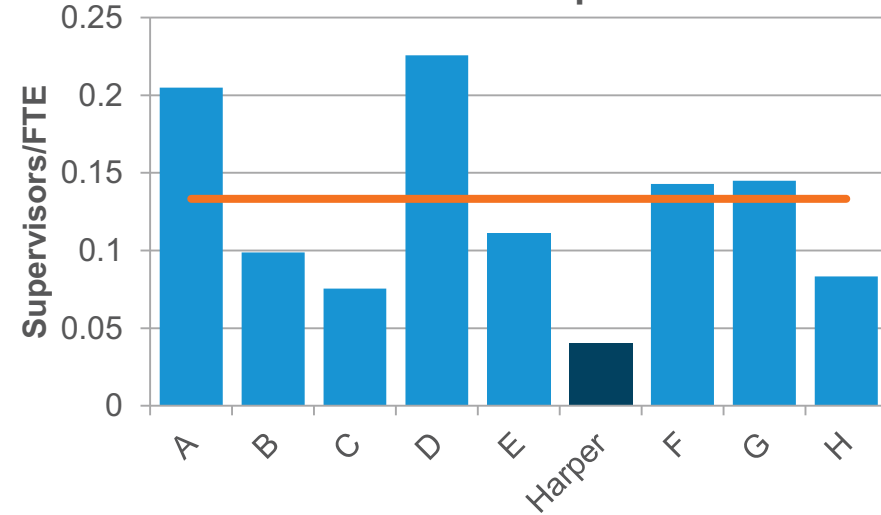
Grounds Metrics vs Peers

Grounds scoring remaining high despite heavy infrastructure construction

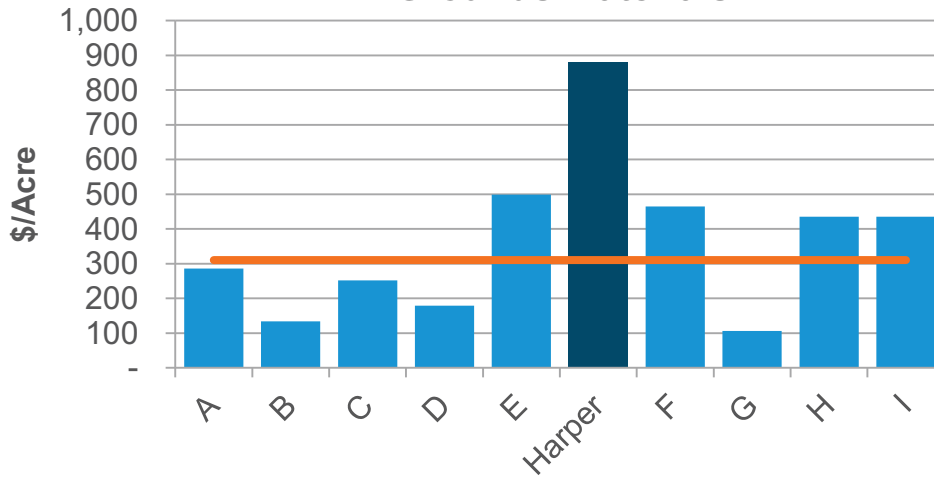
Grounds Staffing



Grounds Supervision



Grounds Materials



Grounds Score (1-5)

Harper: 3.95

Peers: 3.75

Database: 3.89

- **Increase Funding to Keep-Up** – The ROPA+ model suggests Harper should fund a minimum of \$11 Million per year to maintain a steady-state campus condition. This is a critical funding strategy to preserve the value and condition of buildings as renovations wind down.

Bottom Line: Harper should secure an annual funding allocation to “keep-up”

- **Rebalance Project Selection-** The Asset Reinvestment catch-up need identified through the ROPA+ Prediction process identified significant needs in building systems and building envelope components. To mitigate future asset reliability issues, funding should continue to prioritize these types of projects.

Bottom Line: Project selection should prioritize building systems and envelope needs

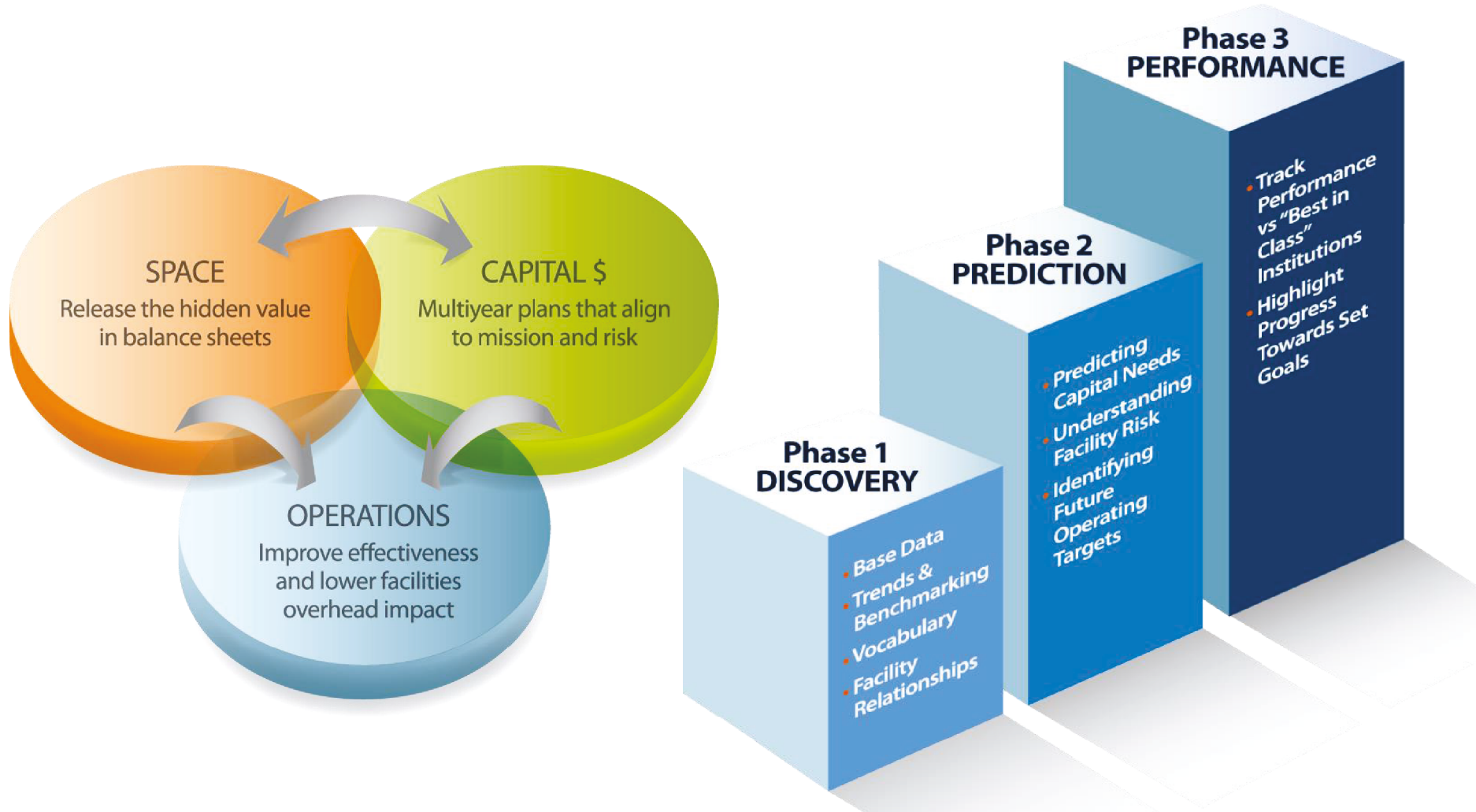
- **Recycle Savings into Operations** – A balanced project selection will shift the composition of backlog from higher-risk current needs to lower-risk renewal needs. As this happens, Harper should recycle savings attained through a reduction in reactive operations and/or energy consumption to bolster activities that promote campus stewardship.

Bottom Line: Operational savings attained should stay within the Facilities budget

Questions & Discussion

Appendix

ROPA+ “Beyond Benchmarking” to Solutions



This Approach Develops Solutions that Optimize Resources, Increase Investments & Lower Costs

Peer Institutions for Benchmarking*

Institution	Location
Bloomsburg University of PA*	Bloomsburg, PA
Cuyahoga Community College*	Cleveland, OH
Gateway Community College	New Haven, CT
Manchester Community College	Manchester, CT
MassBay Community College	Wellesley, MA
Mount Wachusett Community College	Gardner, MA
Naugatuck Valley Community College	Waterbury, CT
Tunxis Community College	Farmington, CT
University of Cincinnati – Blue Ash	Blue Ash, OH
University of Cincinnati - Clermont	Batavia, OH



Comparative Considerations

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

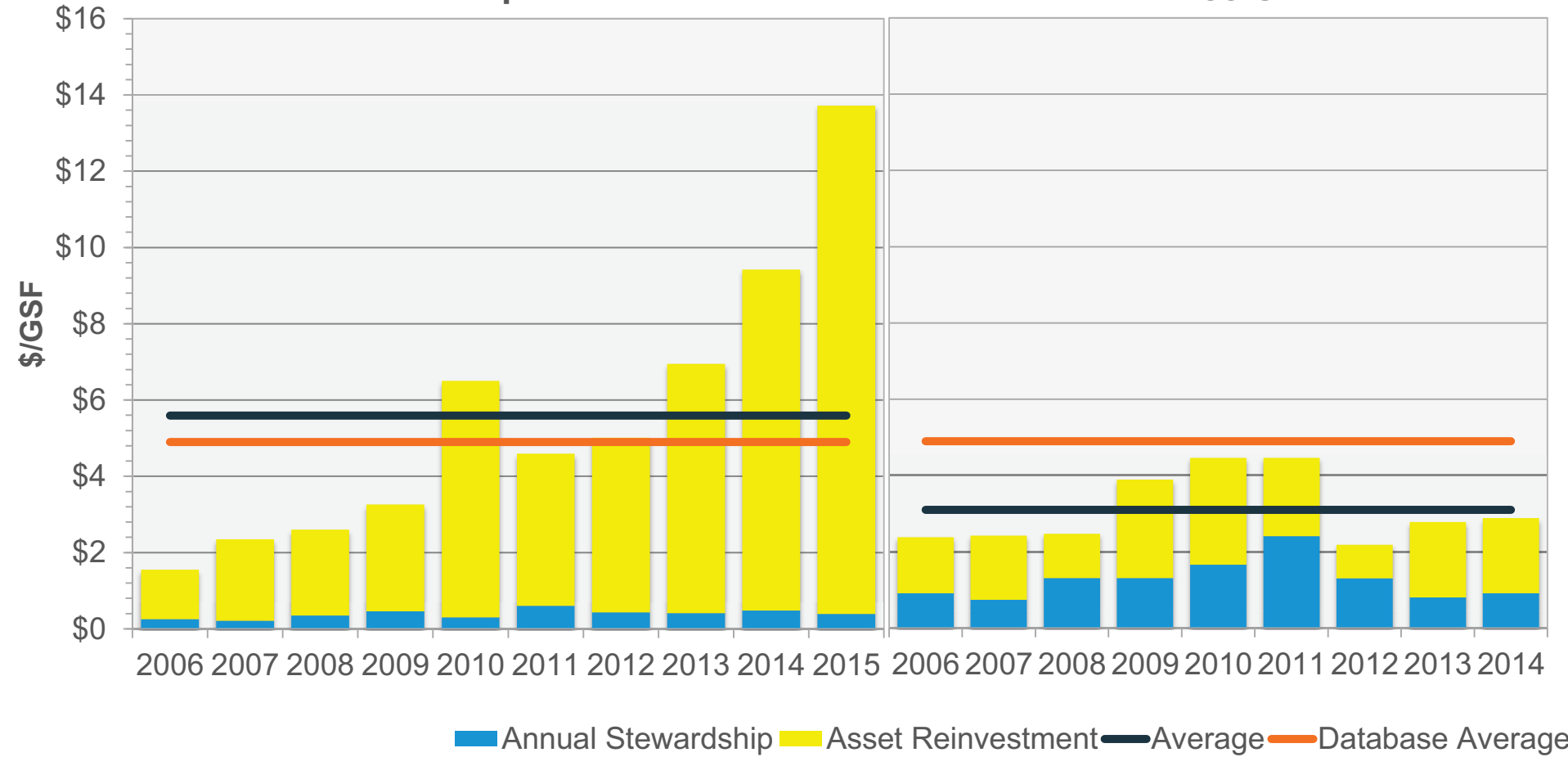
*New for FY15

Investment into Existing Space vs Peers

Harper outspends peers; relies more heavily on one-time capital

Harper

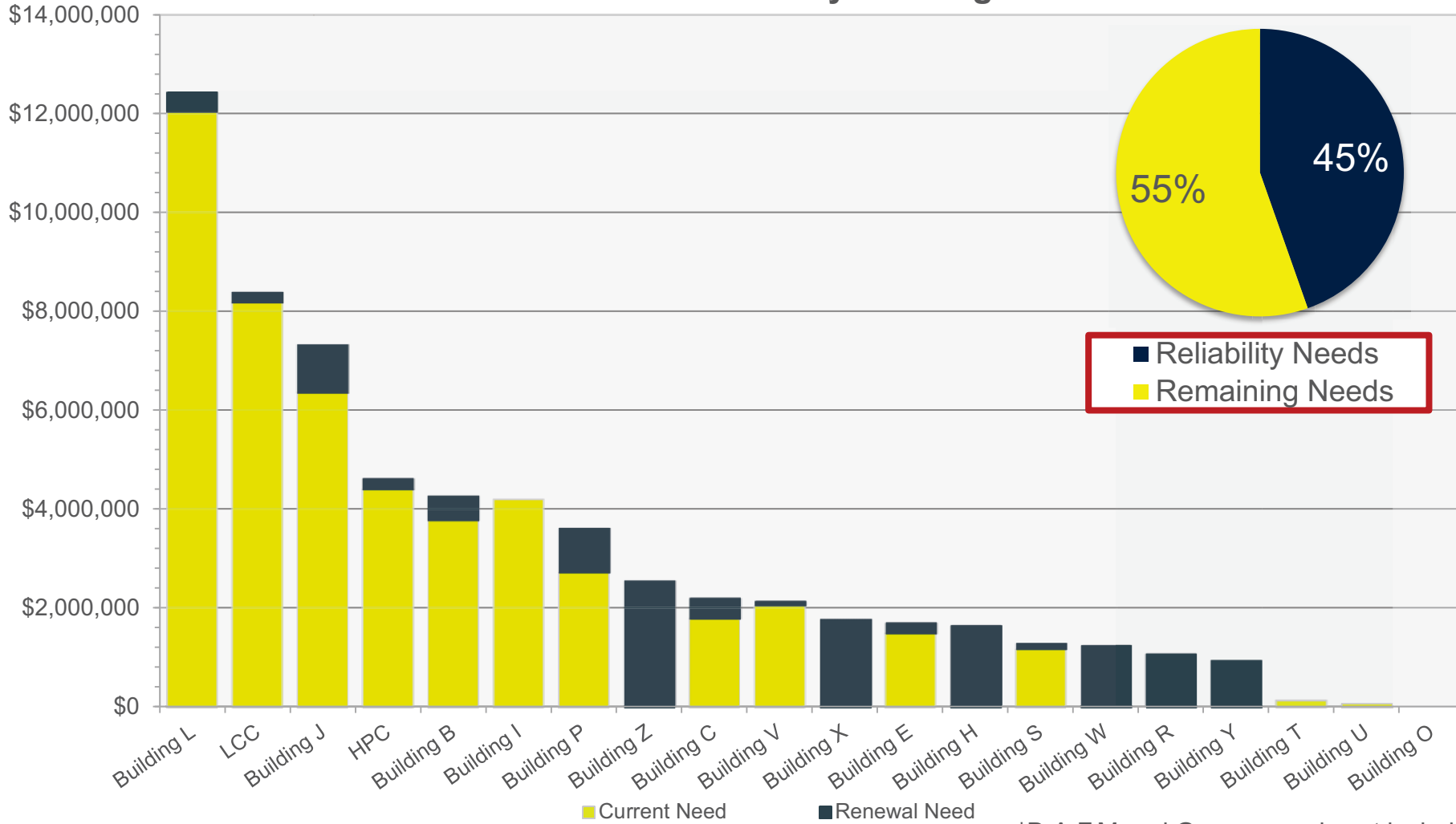
Peers



10-Year Needs in Remaining Buildings

Current reliability needs – HVAC and Electrical Systems

Needs by Building



*D,A,F,M and Garage needs not included