2-20-2016

UNO Sightlines Return on Physical Assets Report 2016

Sightlines

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

sightlines | ROPA+

University of Nebraska - Omaha

Presenters: Gabby Rosas & Rebekah Tjostolvson

February 2016

A vocabulary for measurement

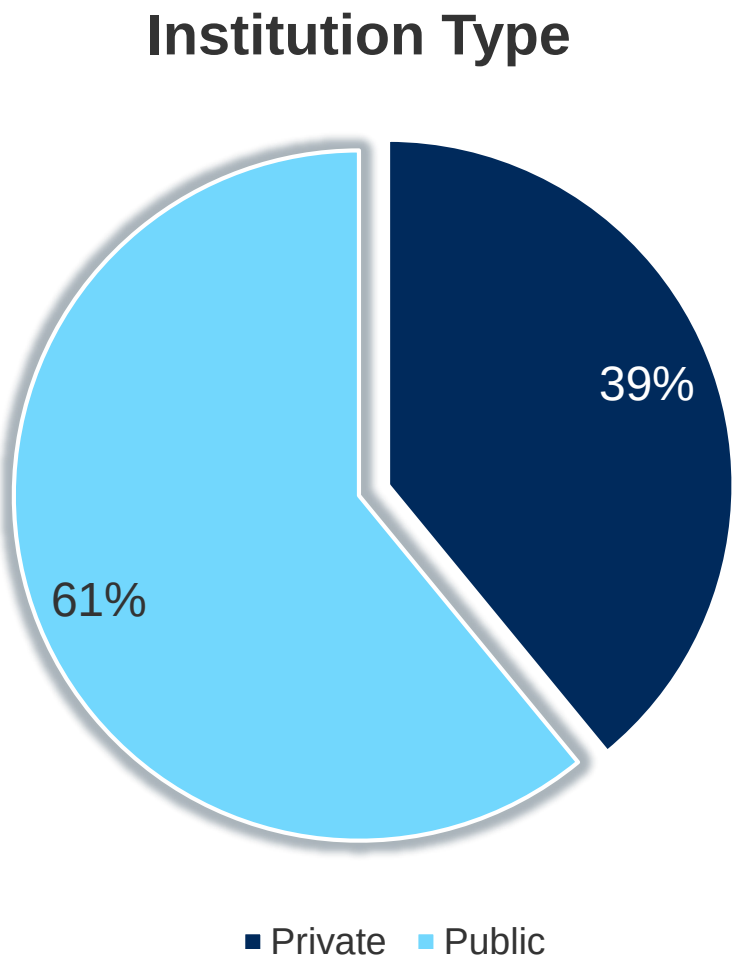
The Return on Physical Assets – ROPA℠

Annual Stewardship	Asset Reinvestment	Operational Effectiveness	Service
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

Asset Value Change

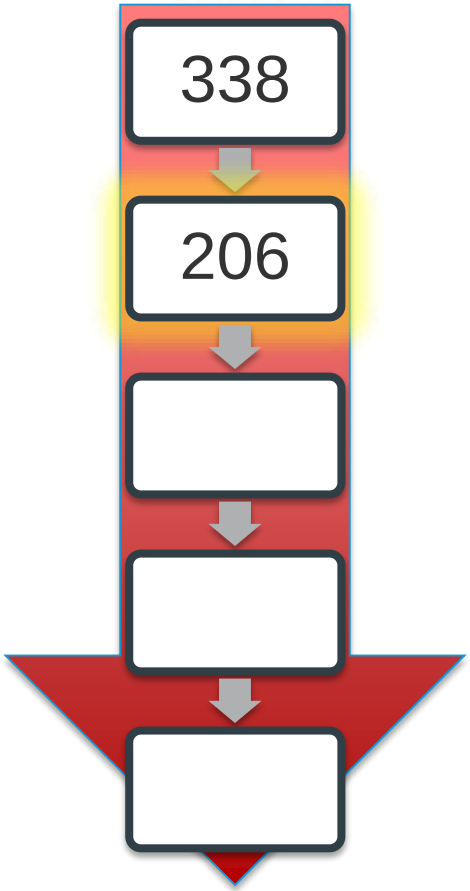
Operations Success

Mix Between Public & Private

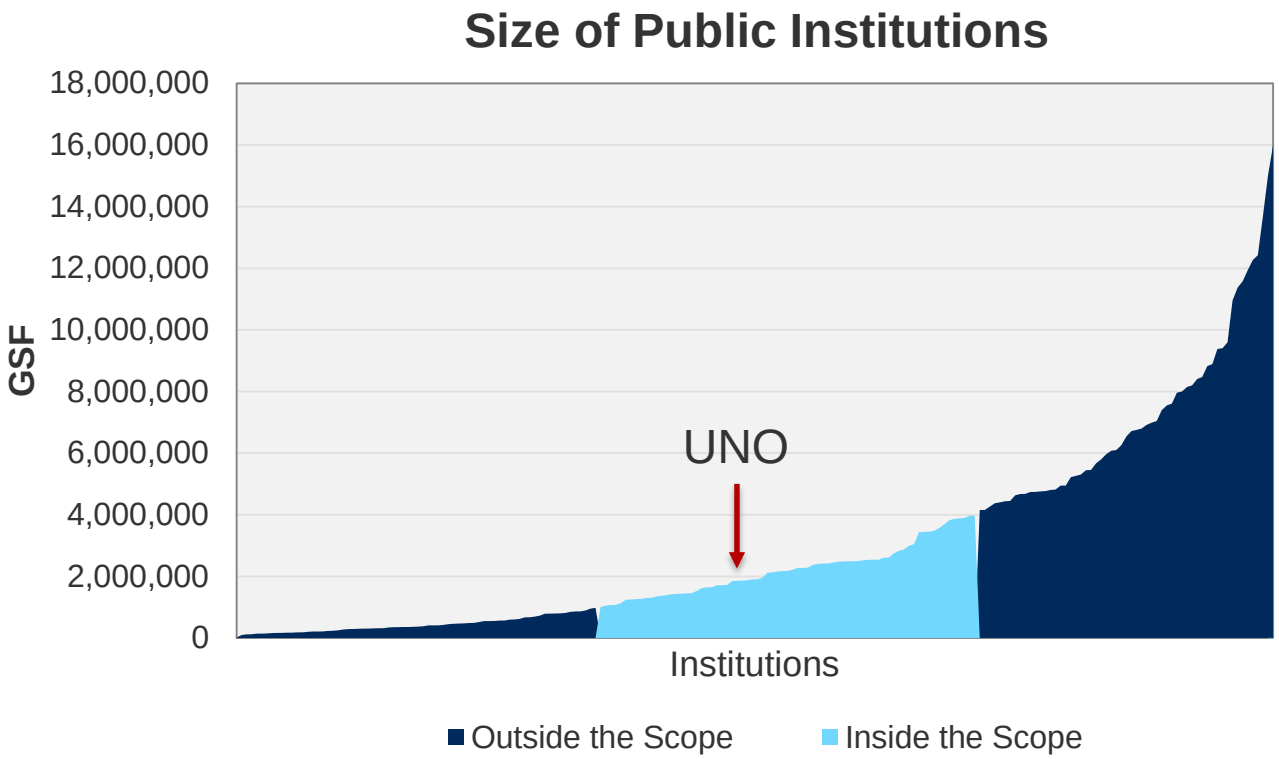


Narrowing Down the Peer Group

Scope: Public Institutions



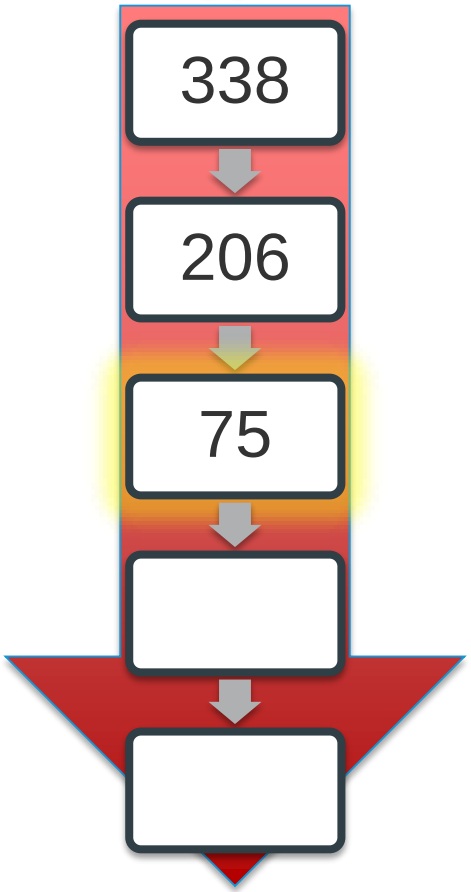
Narrowing Scope by Size



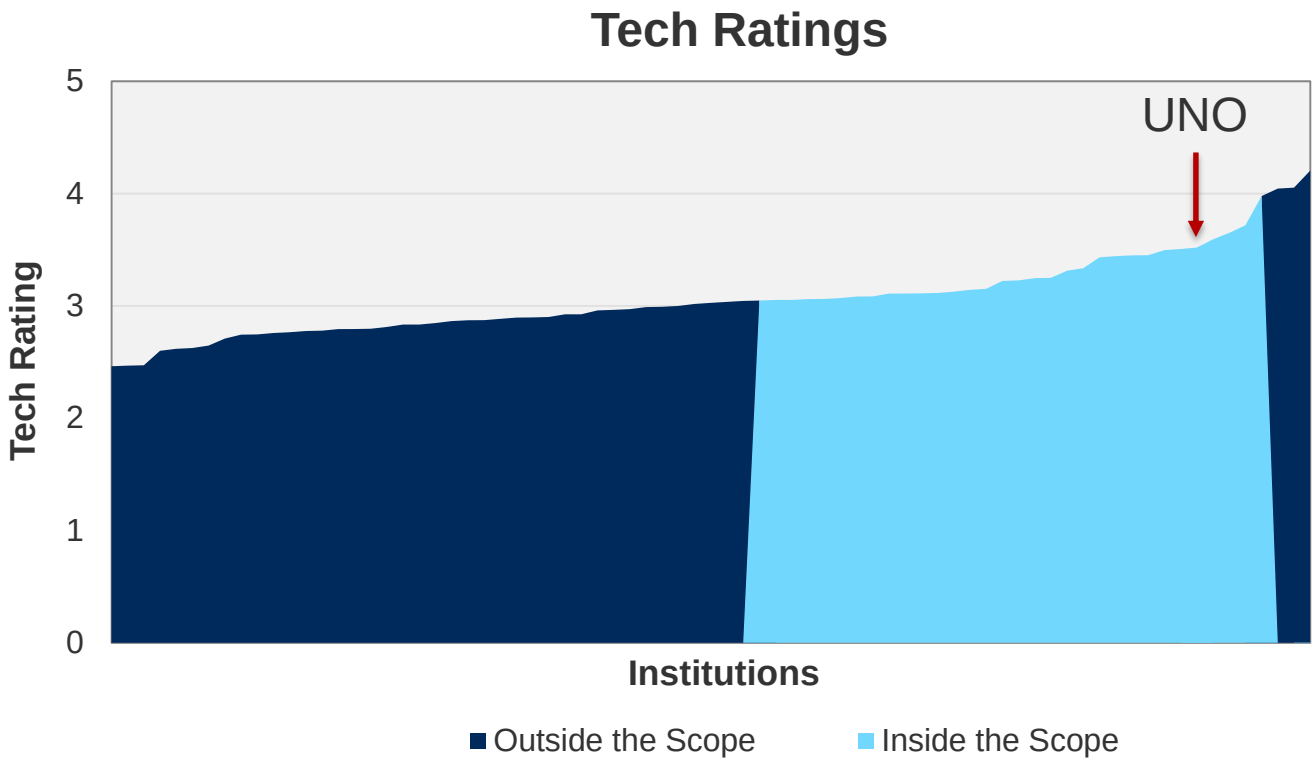
Areas Impacted by Size (GSF)			
Energy Consumption	Economy of Scale	Stewardship Targets	Building Intensity

Narrowing Down the Peer Group

Scope: 1M – 4M GSF

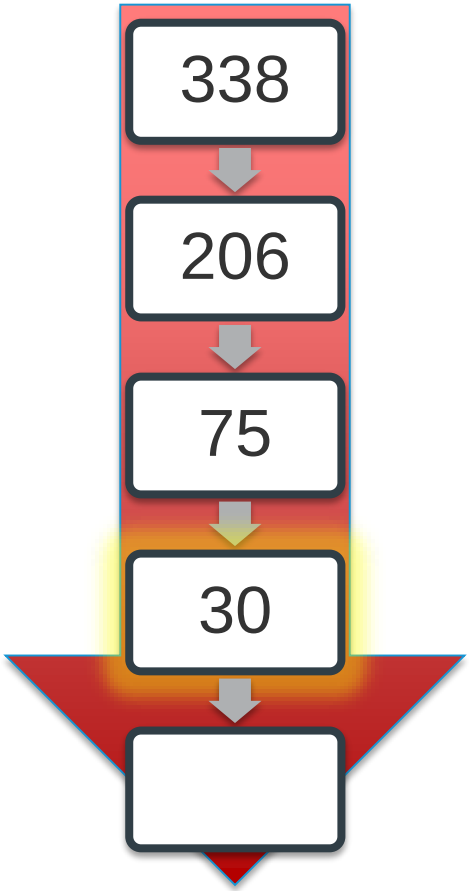


Technical Complexity of Campus



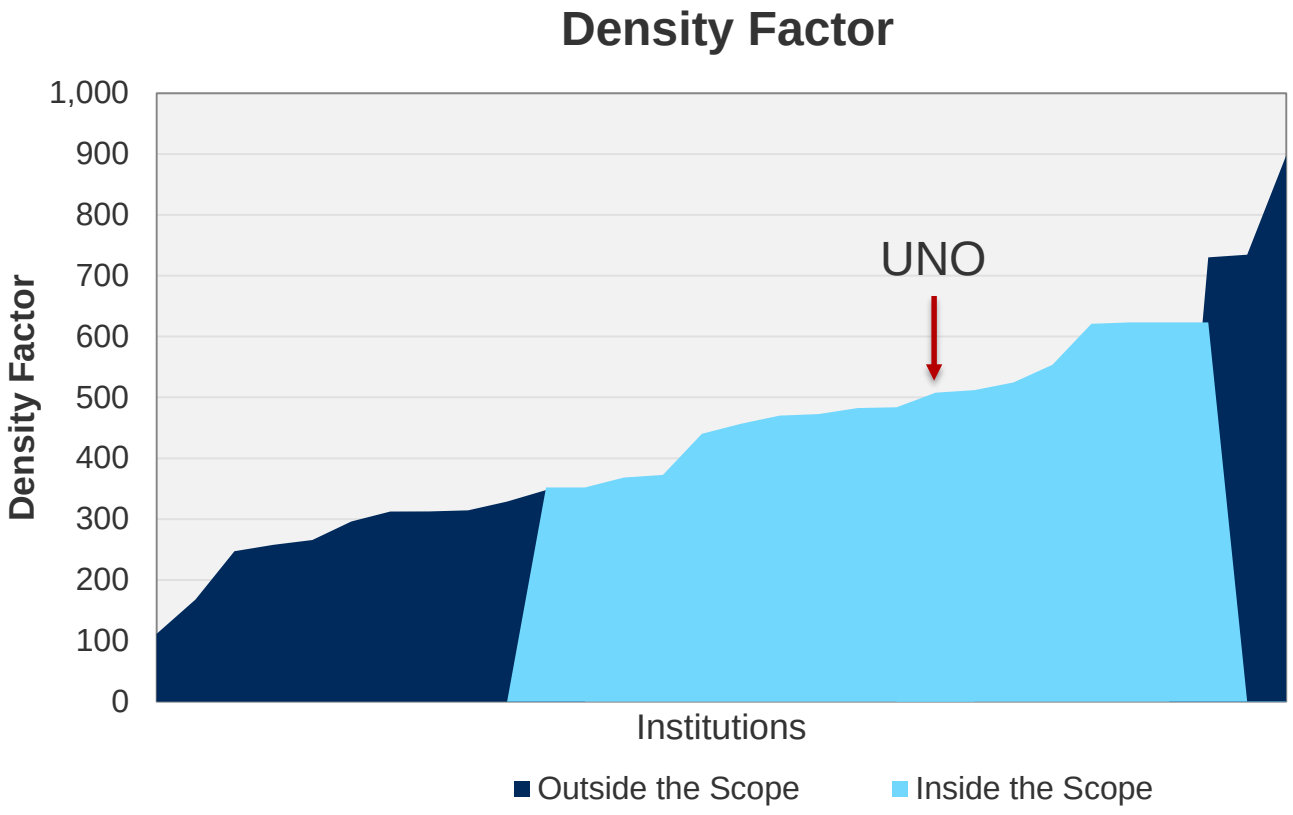
Narrowing Down the Peer Group

Scope: 3.0 – 3.7 Tech Rating



Areas Impacted by Tech Rating				
Energy Consumption	Maintenance Staffing	Replacement Values	Stewardship Targets	Operational Demand

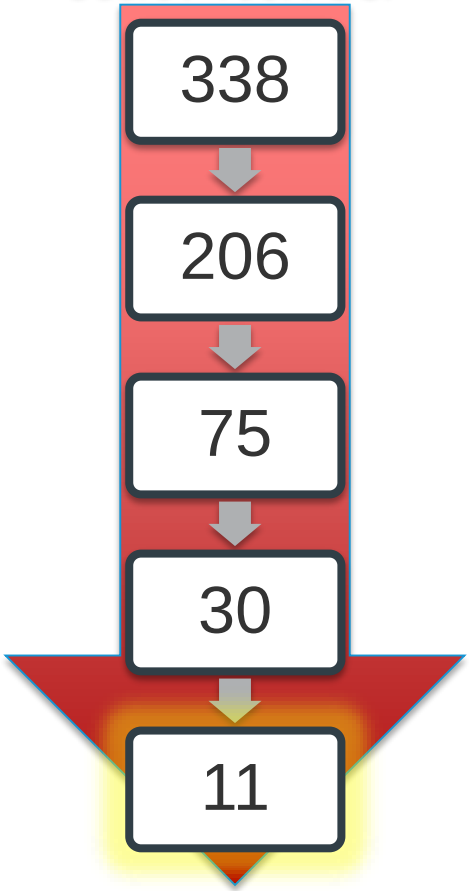
Comparing Busy Nature of Each Campus



Areas Impacted by Density Factor		
Wear and Tear on Space	Custodial Operations	Energy Demand

Narrowing Down the Peer Group

Scope: 400 – 625 Users / 100K GSF



New FY15 Peer Group

Selected based on Institution Type, Size, Tech Rating & Density Factor

FY14 Peers	FY15 Peers
Indiana University Purdue University – Indianapolis	**Carleton University**
Indiana University of PA	**Fairmont State University**
Kent State University	**Florida Atlantic University**
Portland State University	**Kent State University***
Shippensburg University of PA	**New Jersey Institute of Technology**
University of Arkansas	**Portland State University***
University of Memphis	**University of Alaska Anchorage (UAA)**
University of Missouri – Kansas City	**University of Michigan - Dearborn**
University of Missouri – St. Louis	**University of North Texas**
University of Nebraska – Kearney	**University of Texas Dallas**
University of Northern Iowa	**Washburn University**
University of Oregon	
Virginia Commonwealth University	

Today's Key Focus

Physical Profile

- Young campus has specific needs for operations and capital investments.

Asset Value Change

- Discuss the benefits of keeping up with needs vs catching up.
- Evaluate key drivers for project selection.

Operations Success

- Day to day advantages of a younger campus.
- Planned Maintenance investments can be targeted as the tracking improves.

Physical Profile

Putting Your Campus Building Age in Context

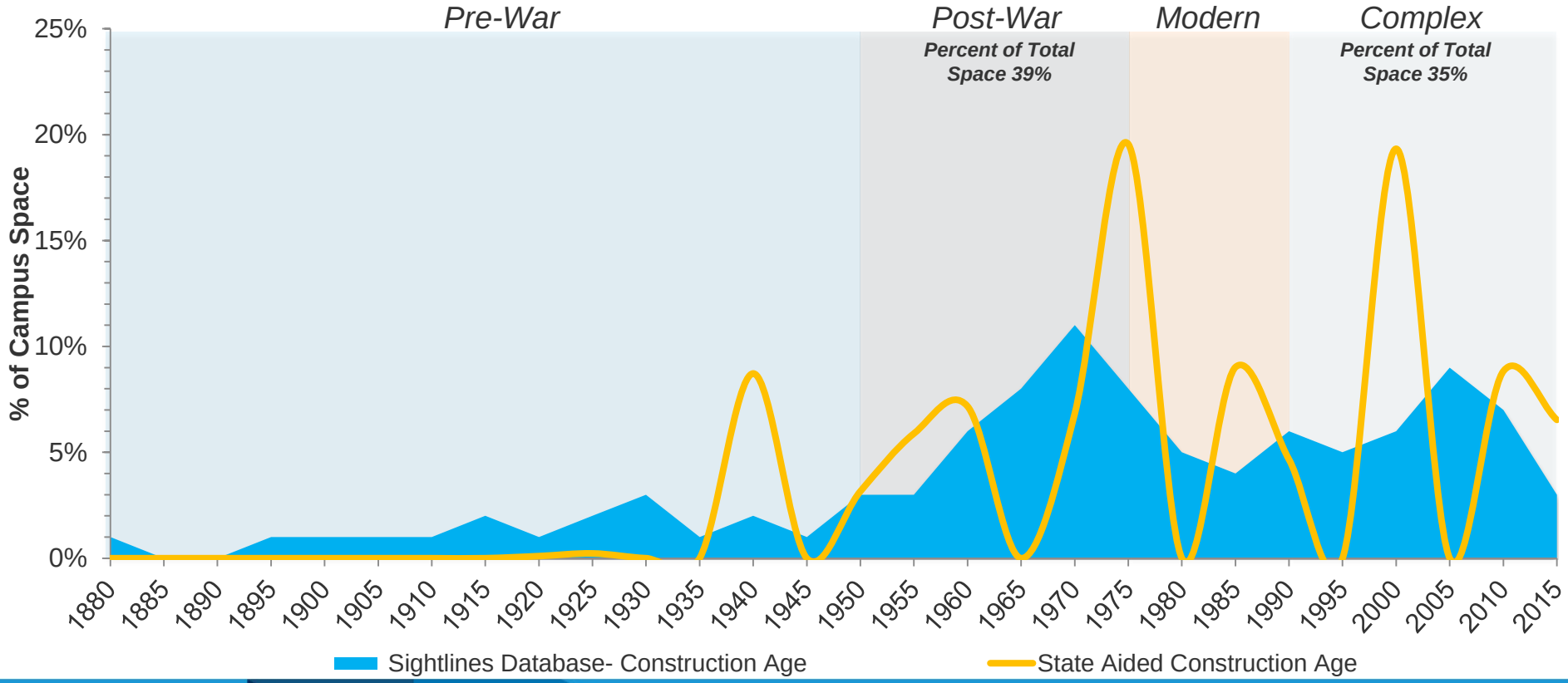
The campus age drives the overall risk profile

Pre-War
- Built before 1951
- Durable construction
- Older but typically lasts longer

Post-War
- Built from 1951 to 1975
- Lower-quality construction
- Already needing more repairs and renovations

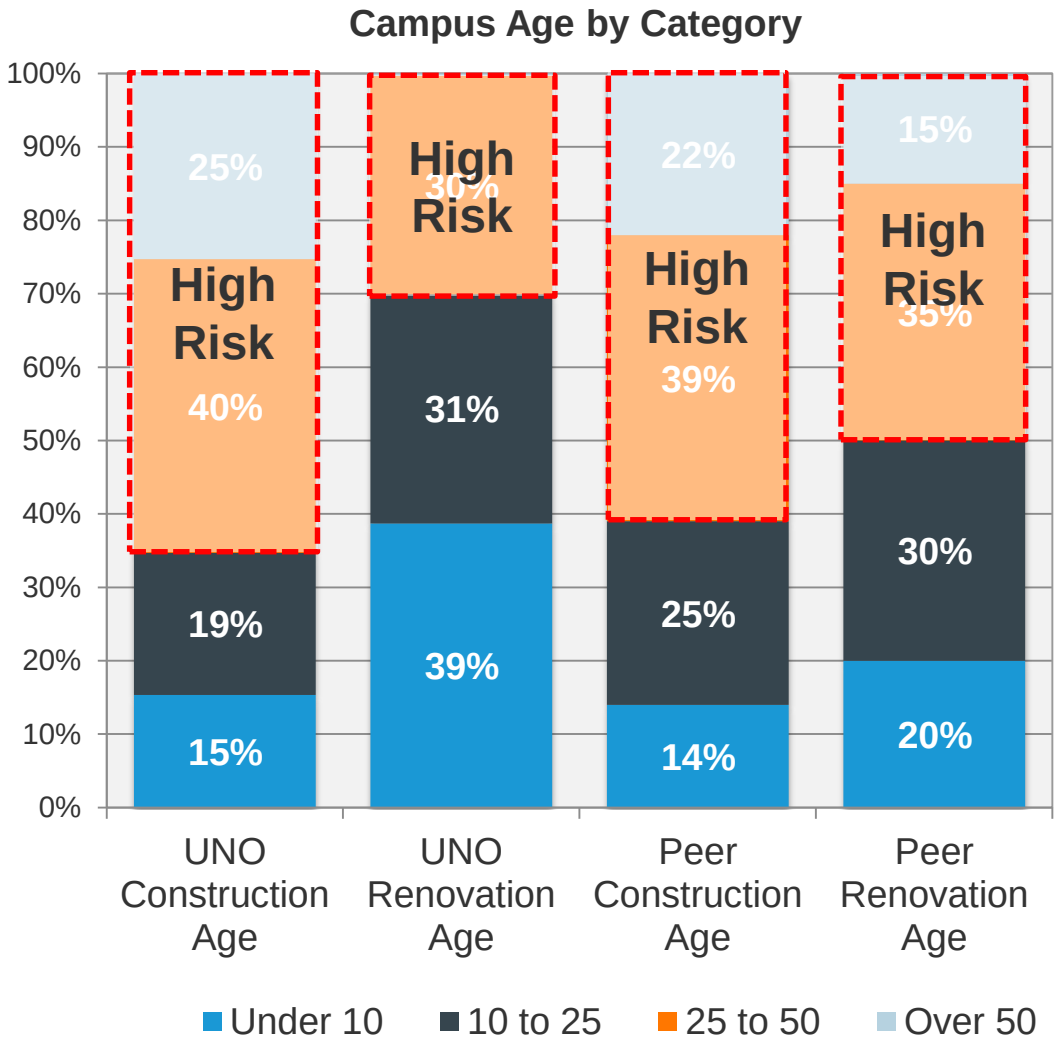
Modern
- Built from 1976 to 1990
- Quick-flash construction
- Low-quality building components

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



Campus Age Profile

Understanding the Impact of Age on Capital & Operations



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

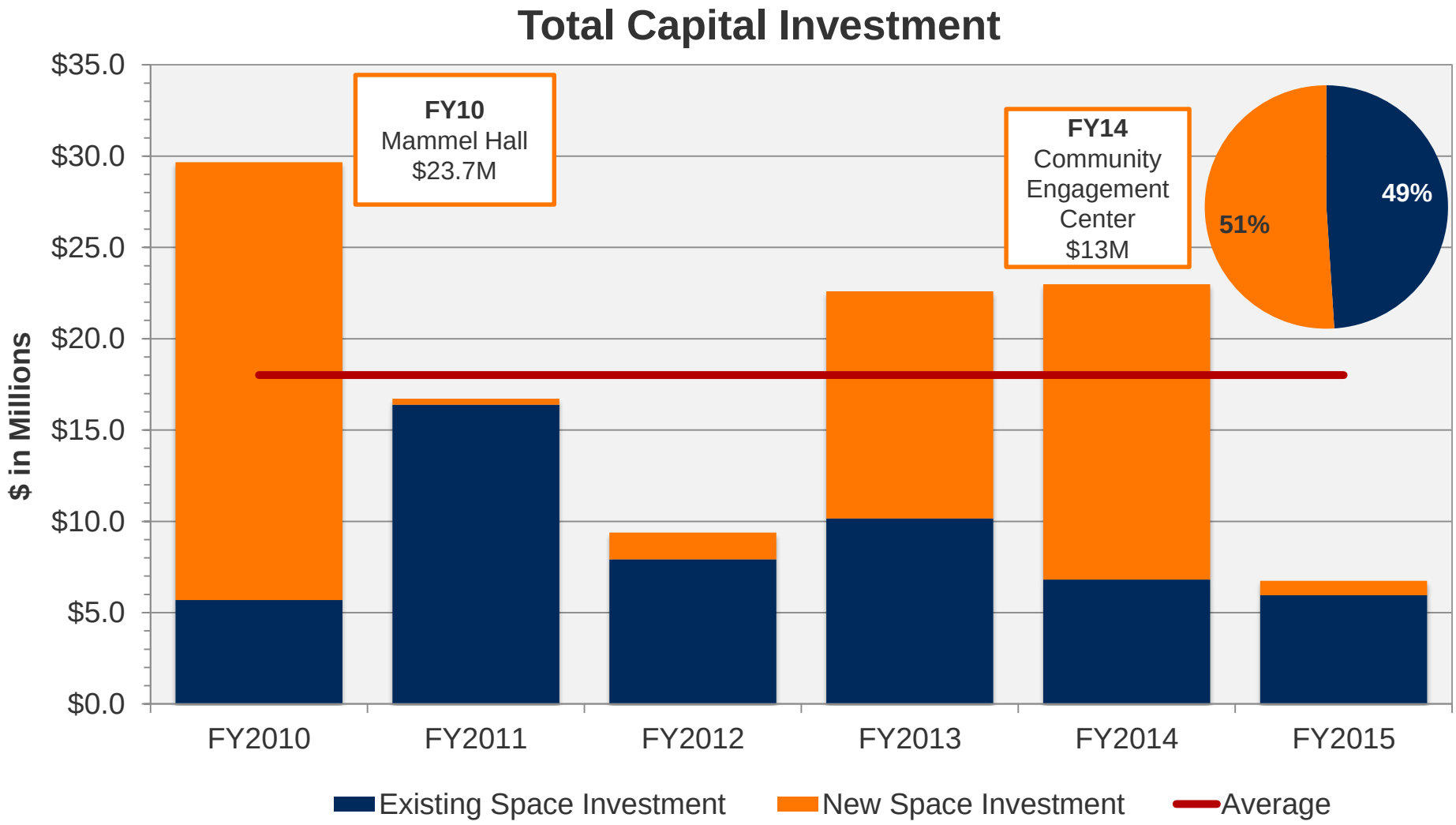
Little work. "Honeymoon" period.

Low Risk

Asset Value Change

6 Years of Project Spending

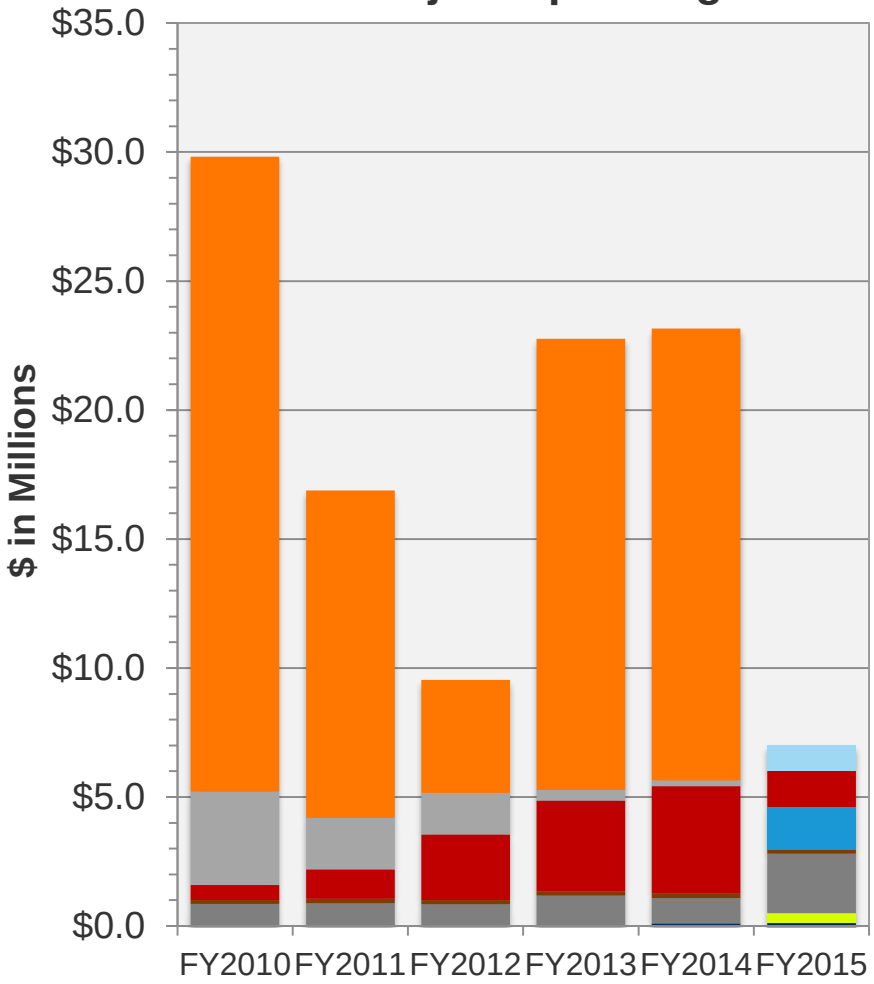
Equal spending between new and existing space



Capital Spending into Existing Space

Asset Reinvestment sources dominate funding

Project Spending

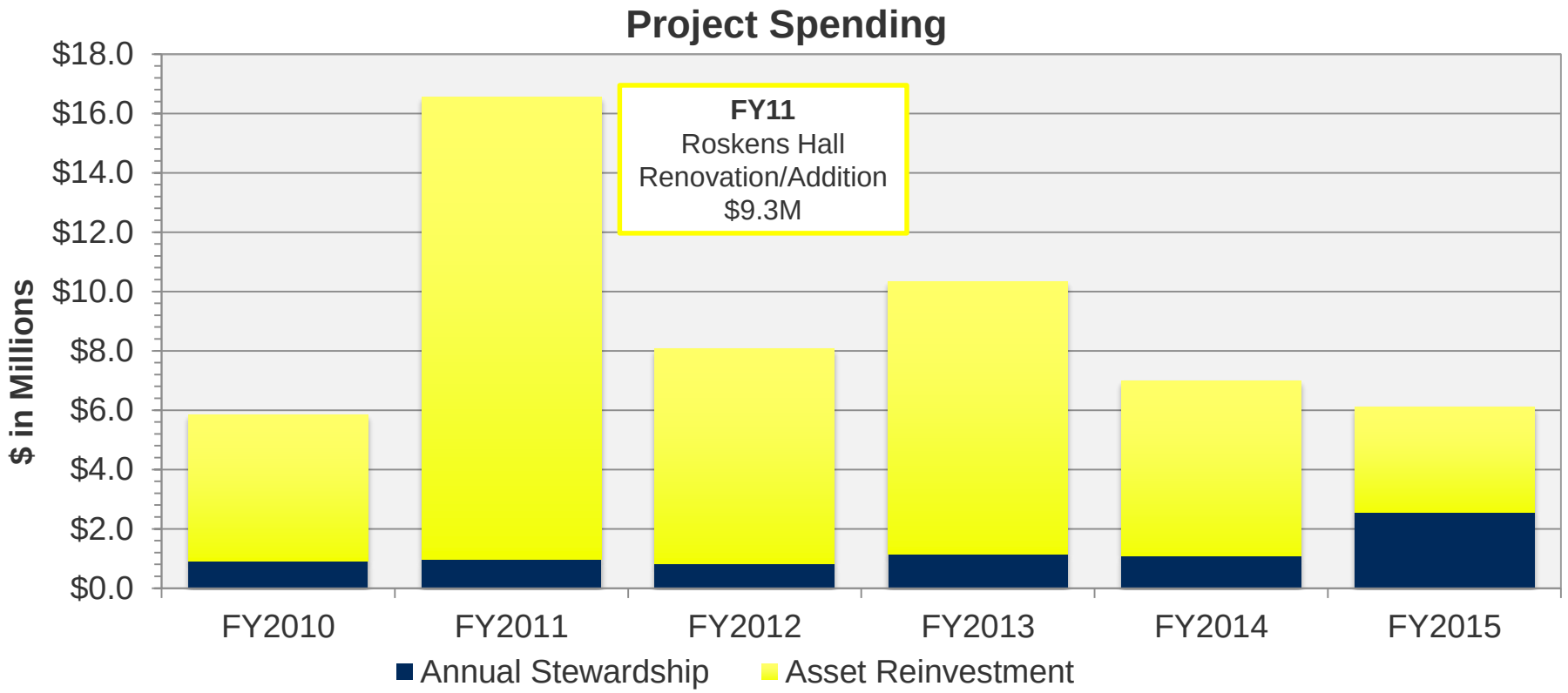


Total Spending by Funding Source

Unidentified	$76,657,042	Asset Reinvestment
Legislative Bills	$7,775,093	
Insurance	$ 982,730	
Department Funds	$13,366,397	
Capital Construction Project	$1,650,270	
PM	$962,504	Annual Stewardship
Utility Savings	$7,072,795	
Parking Surplus	$388,138	
Bond Surplus	$203,035	

Capital Spending Declining

Average spending of $9.0M per year



Annual Stewardship Funds

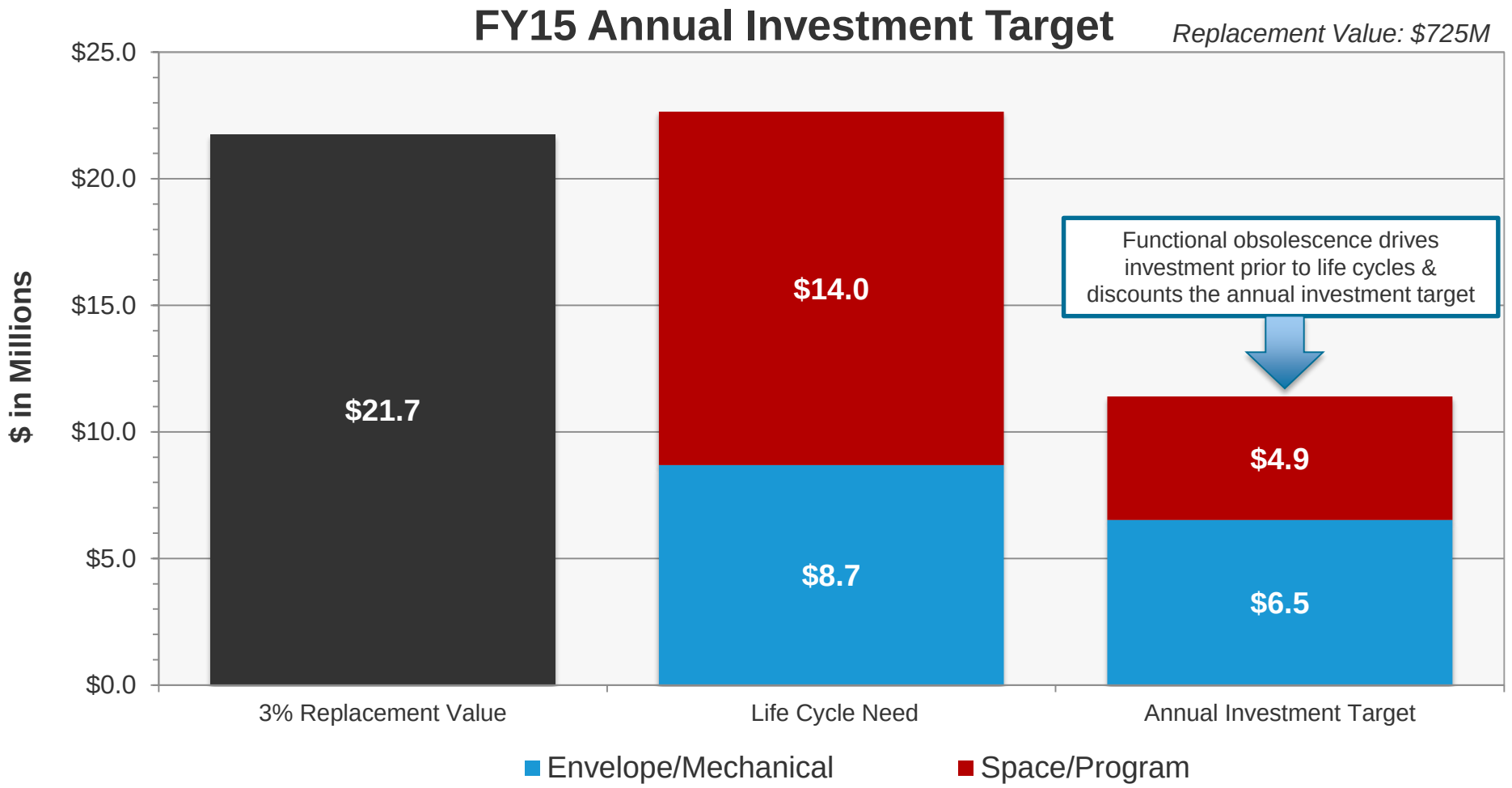
Planned Maintenance, Bond Surplus, Parking Surplus, Utility Savings

Asset Reinvestment Funds

Capital Construction Project, LB309, LB605, Department Funds, Gifts, Grants, Bonds, Insurance

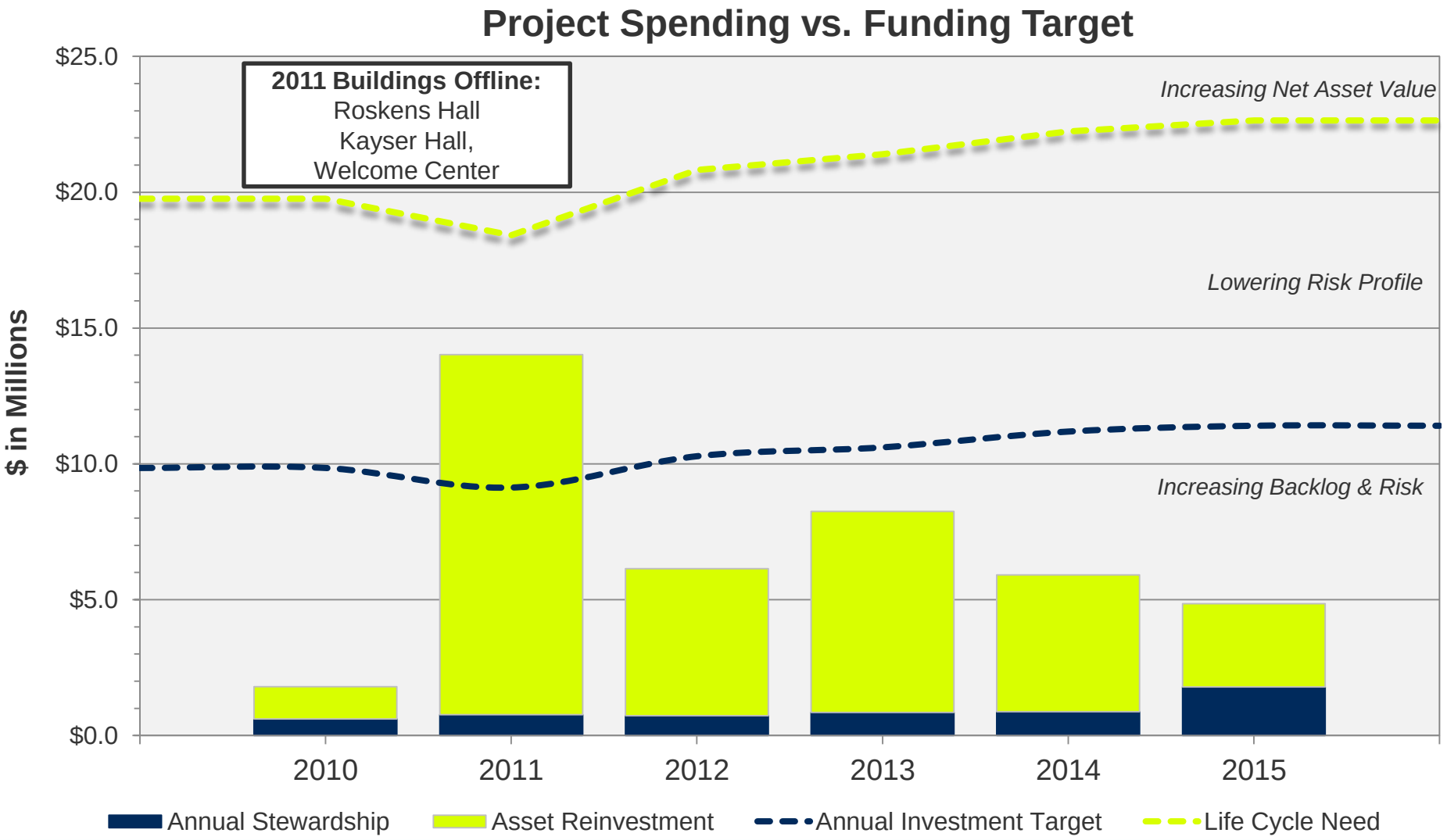
Defining an Annual Investment Target

Annual Funding Target: $11.4M



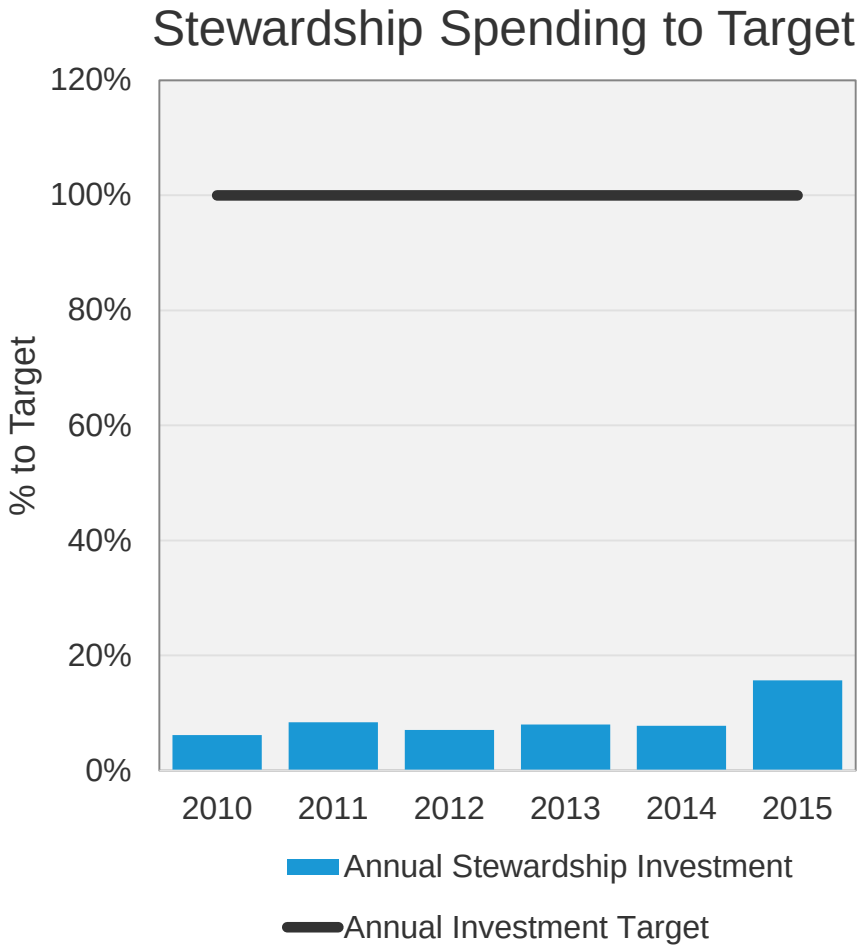
Chasing a Moving Target

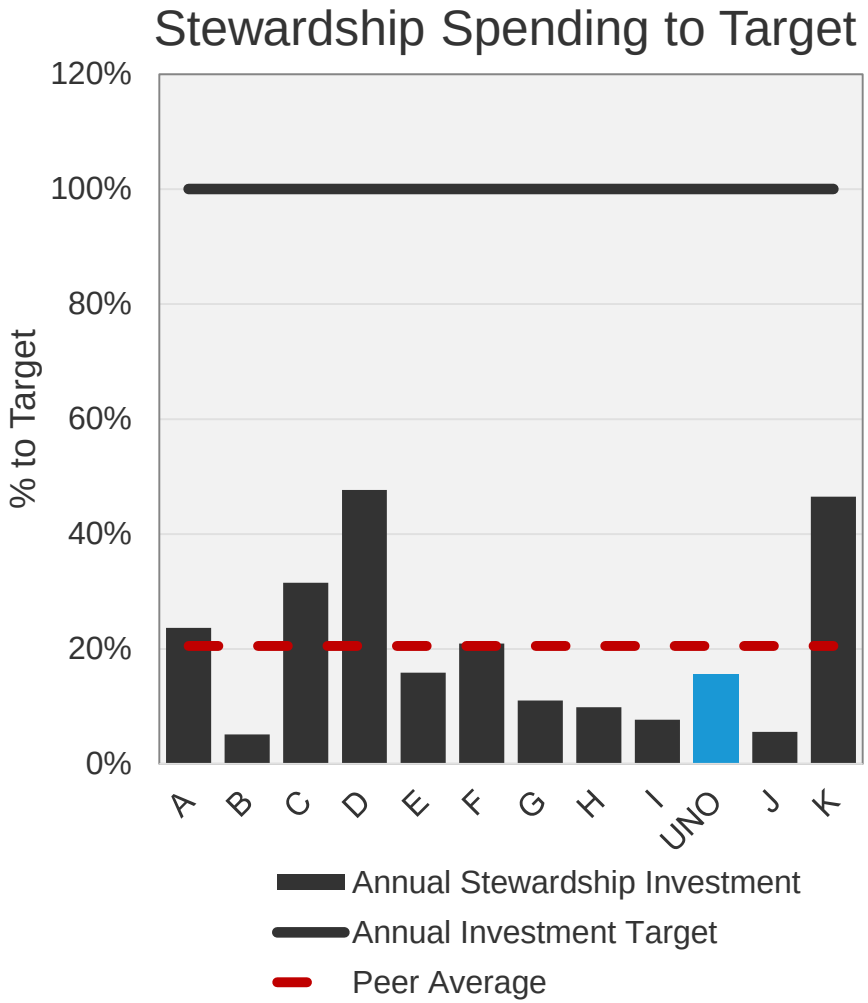
Investment falls short of Target almost every year



Minimal Annual Stewardship Resources

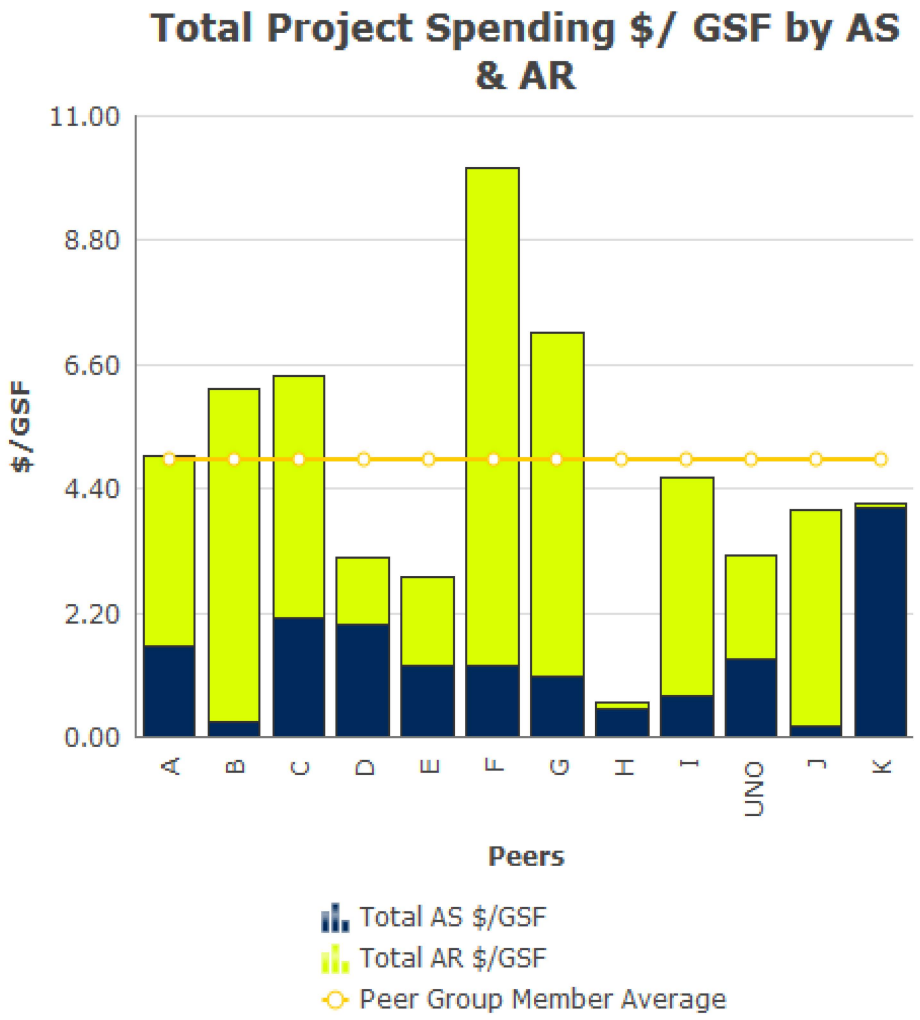
Peers have more recurring resources

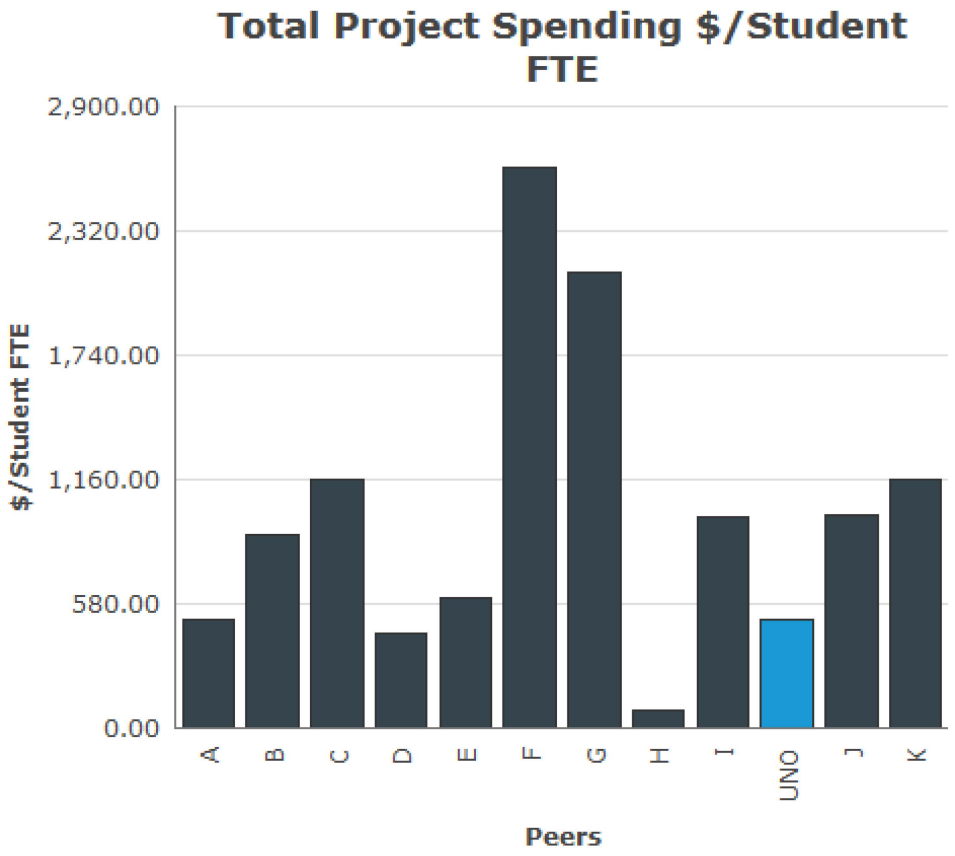




Total Project Spending Below Peers

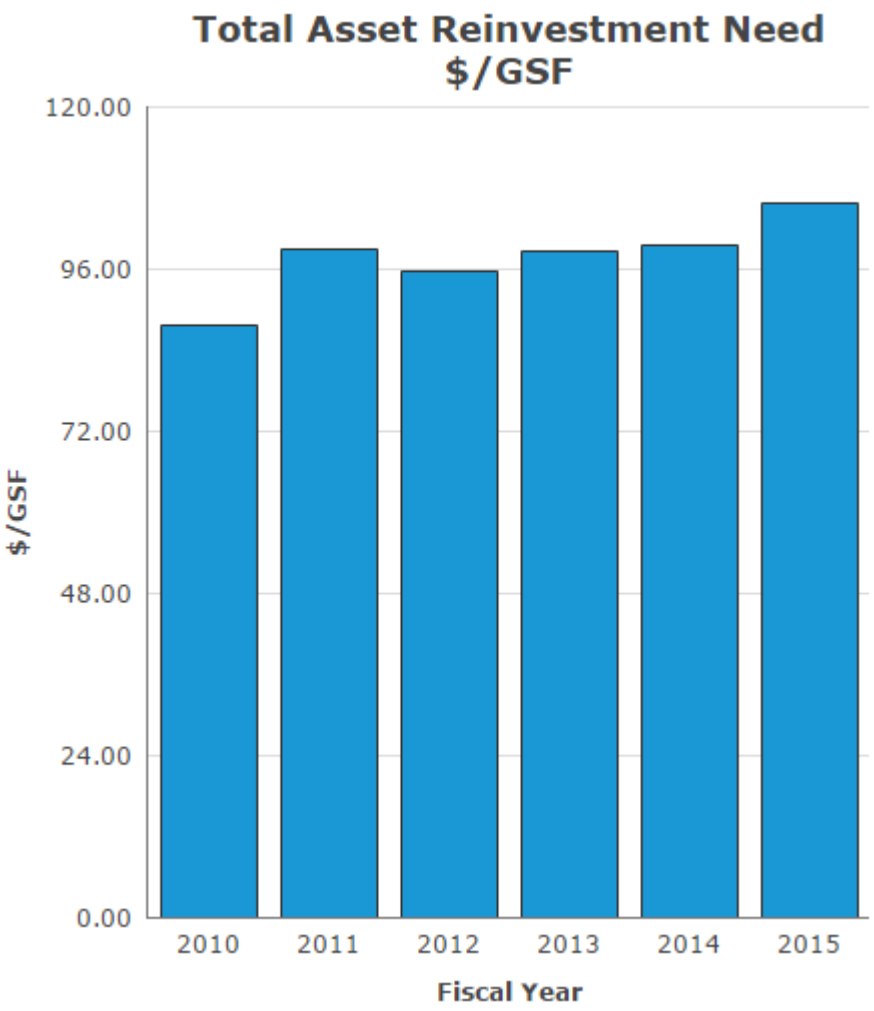
Peers investing more given space and student population

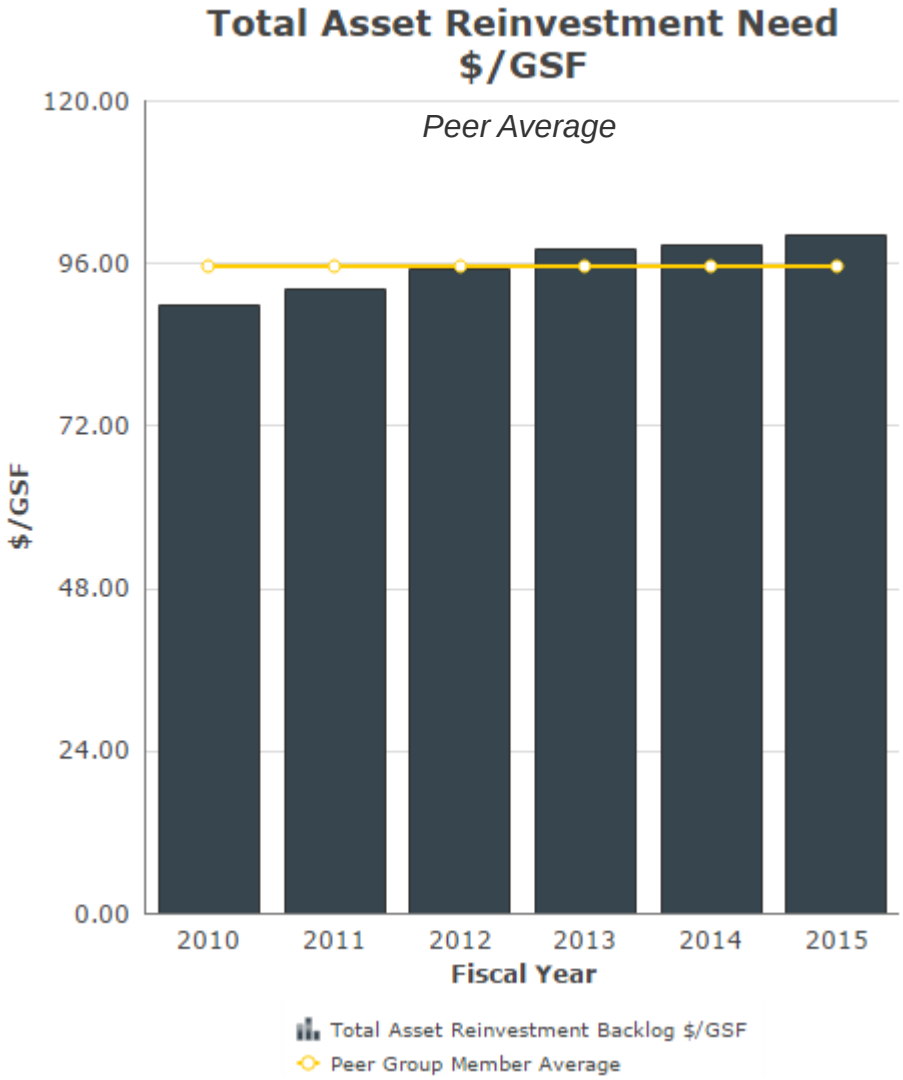




Annual Growth in the AR Need

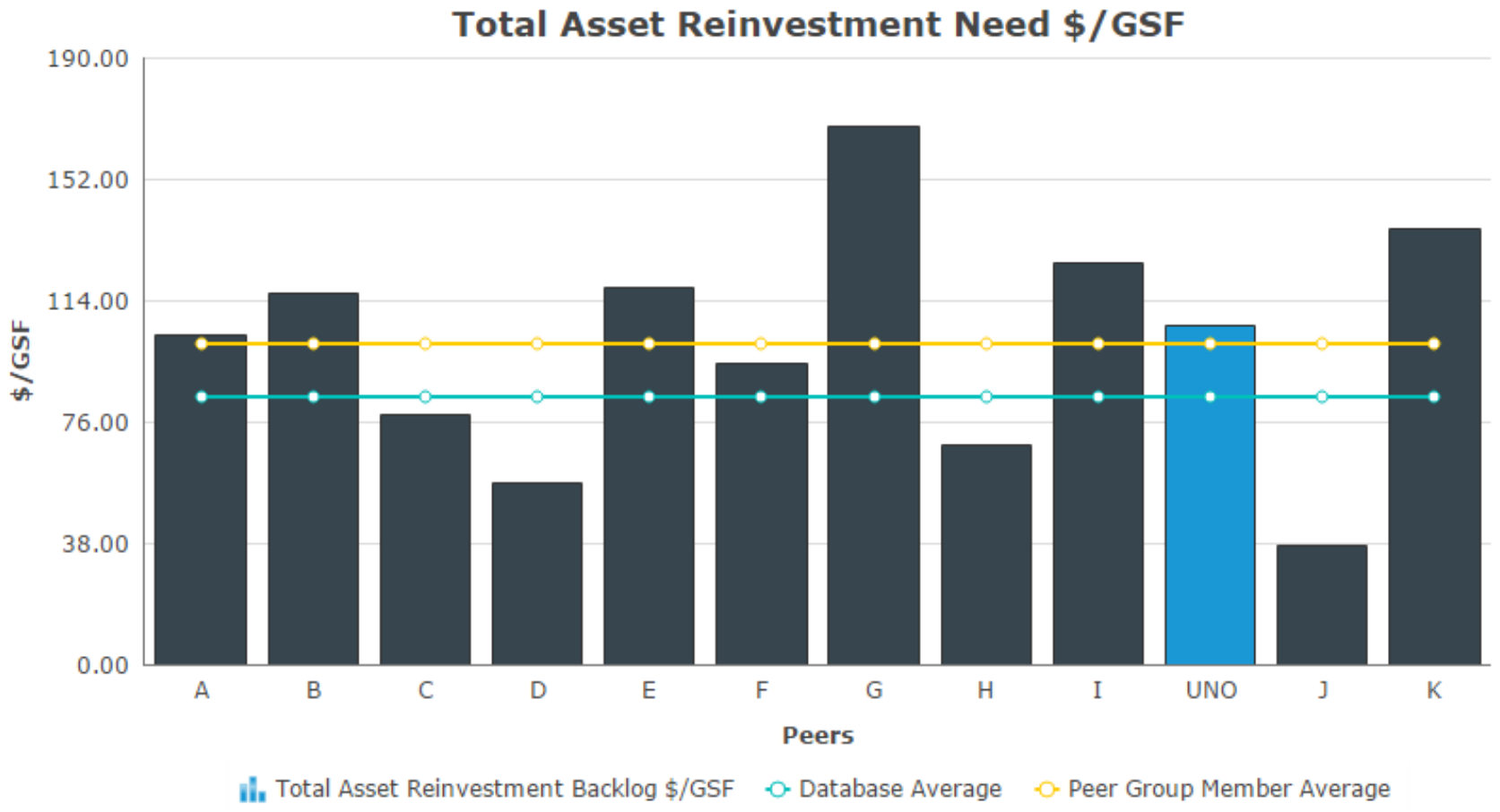
UNO's Total AR Need surpassed peers in FY15





Lower Total Needs Compared to Peers

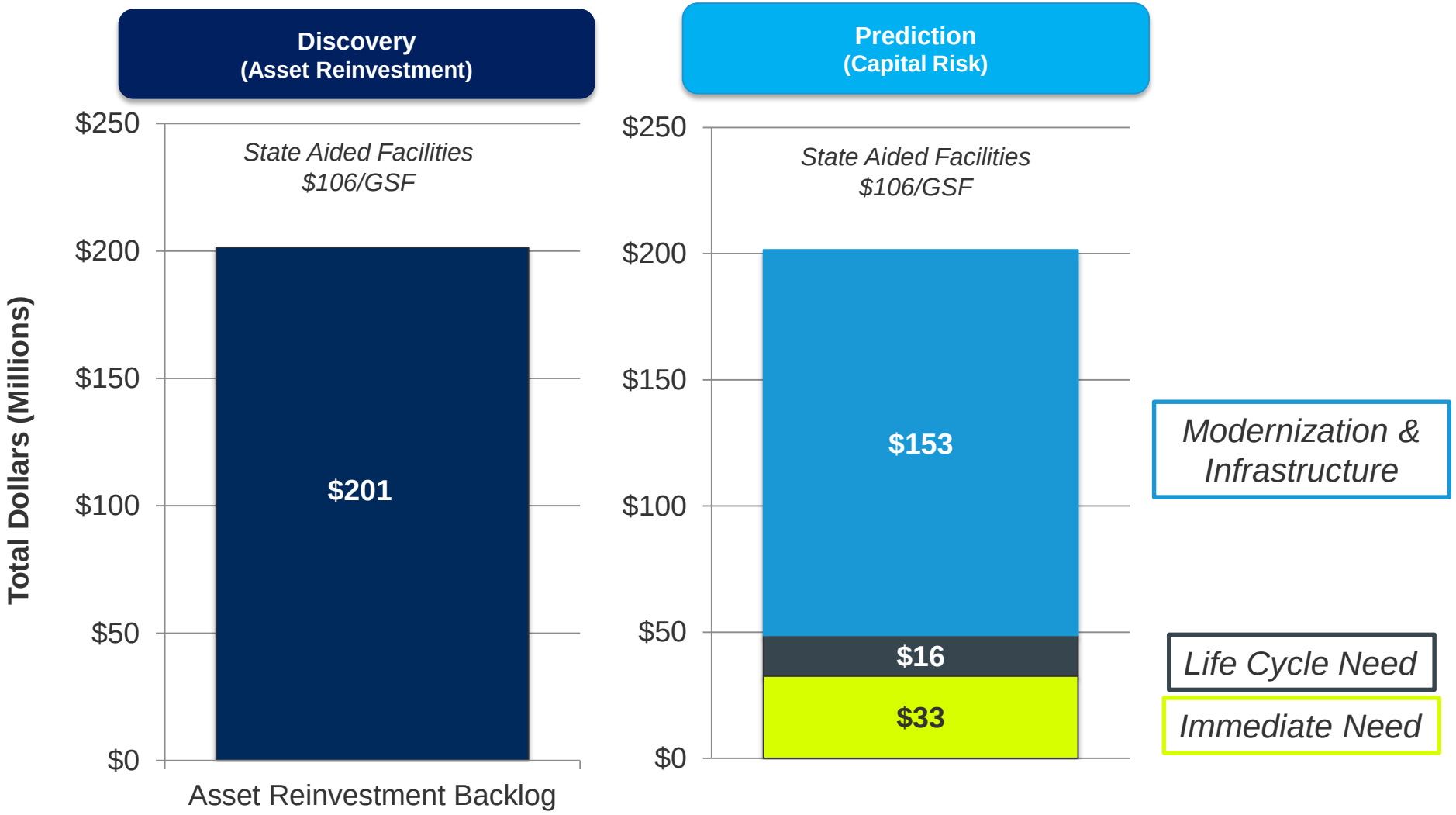
UNO had a total Asset Reinvestment Need of $106/GSF in FY15



FY15 Database Average: $83/GSF

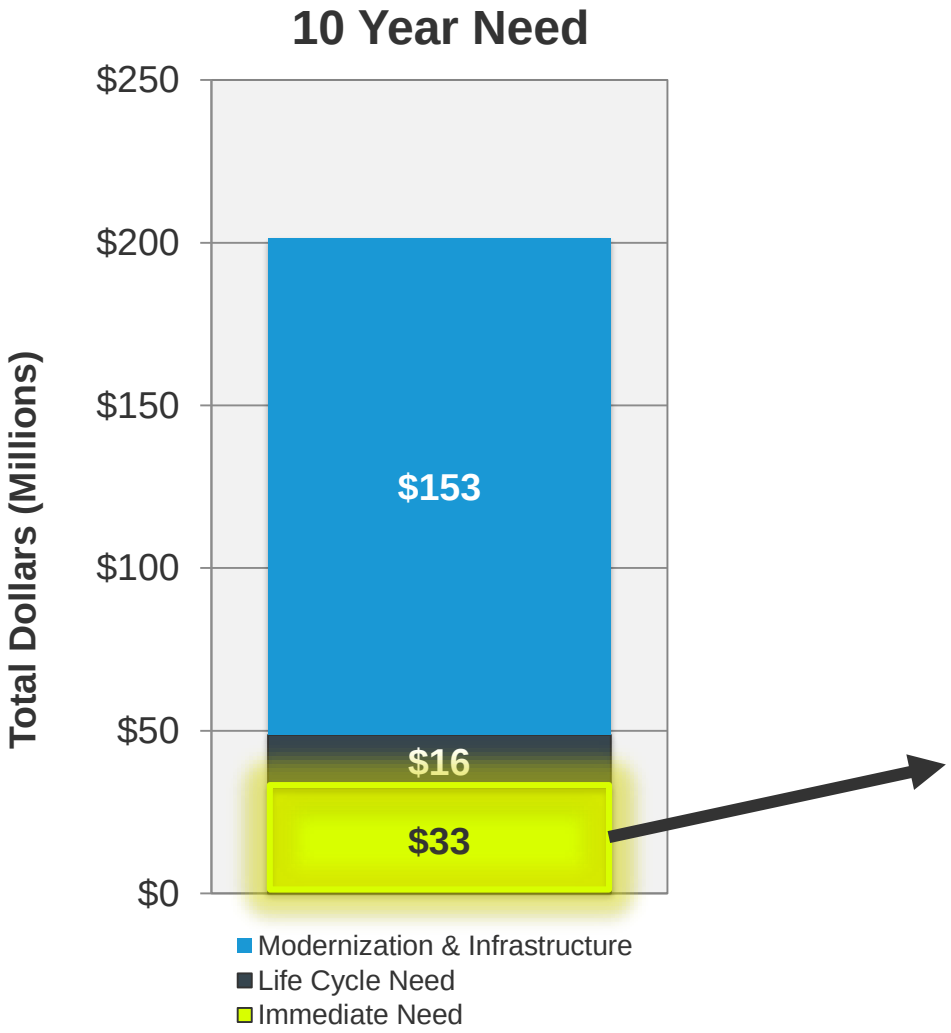
FY15 Peer Average: $100/GSF

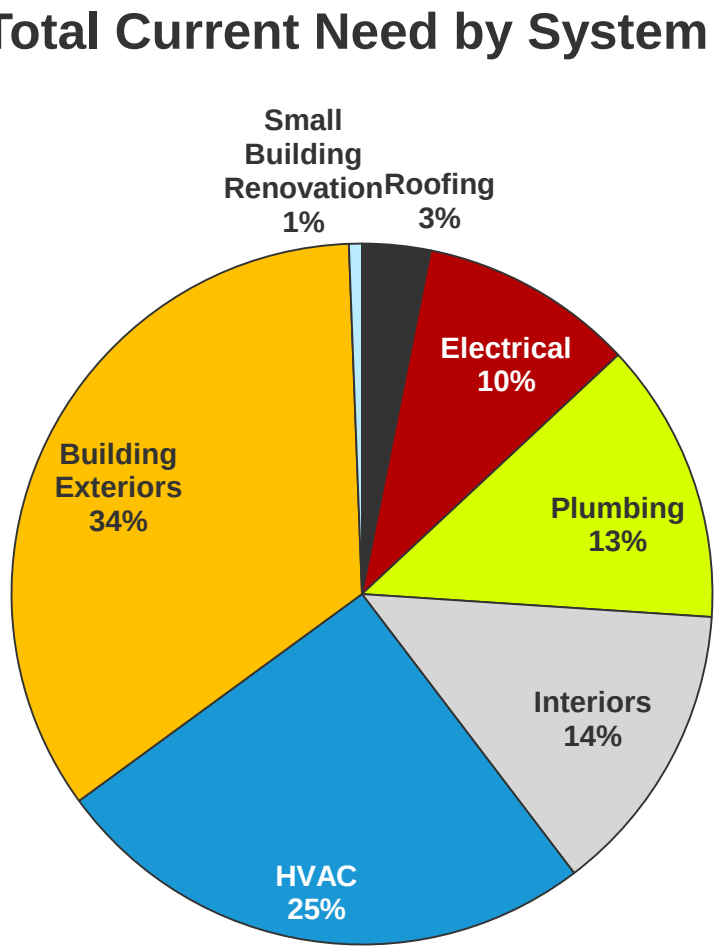
ROPA+ Prediction: Developing Strategy



Total Current Need by System

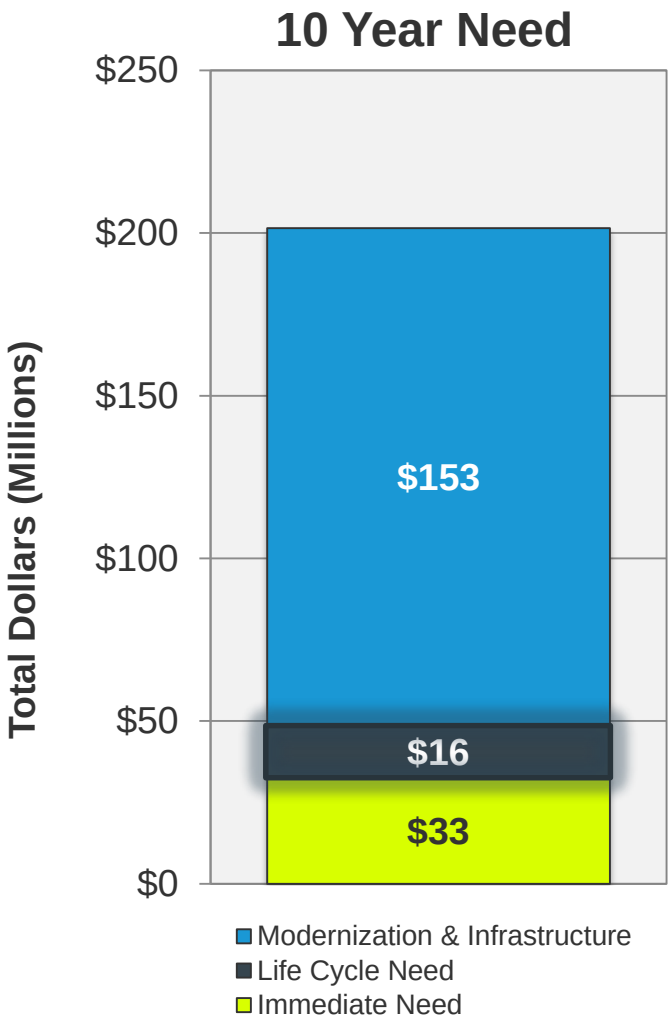
$33M in current need (items currently in backlog)

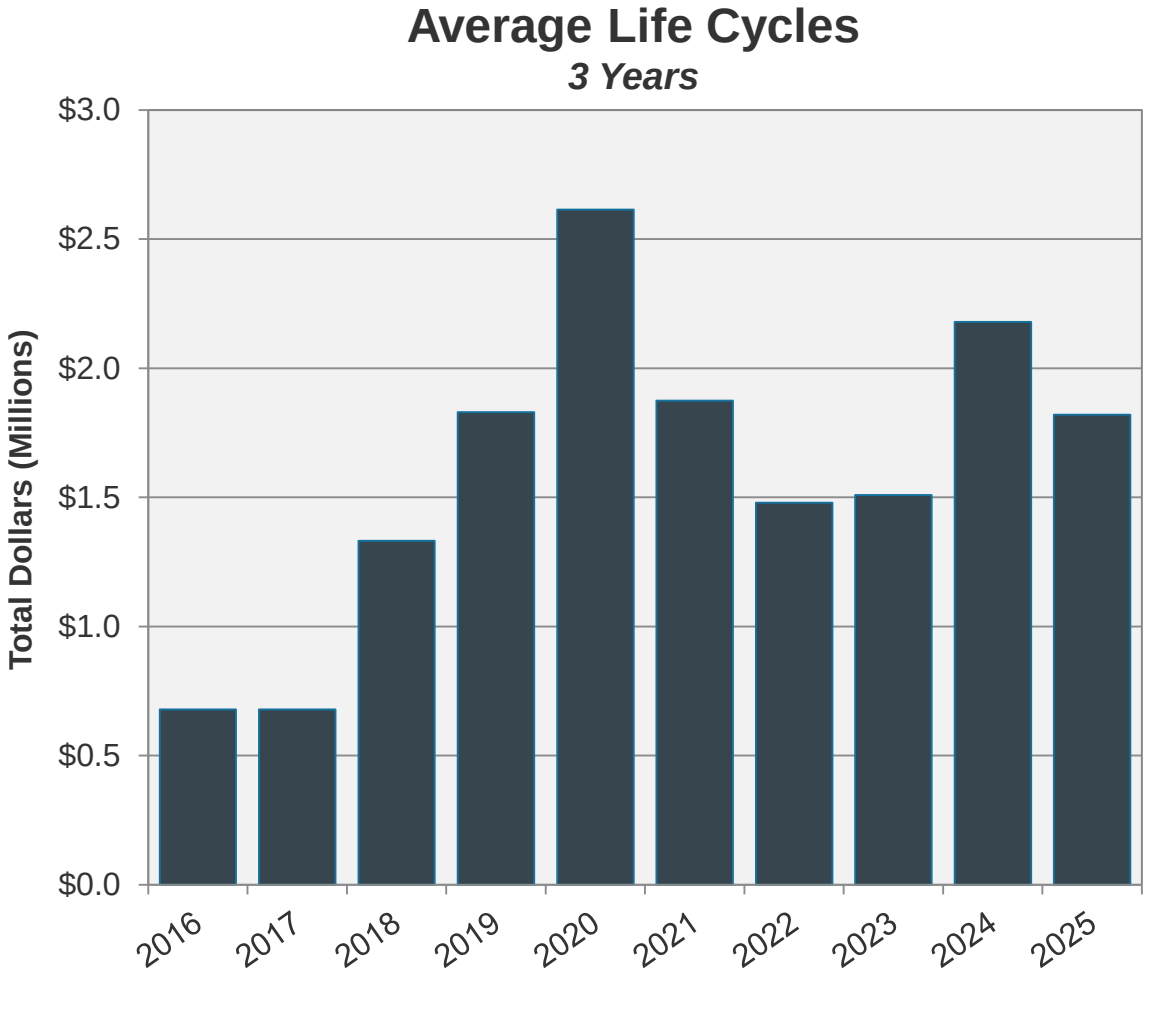




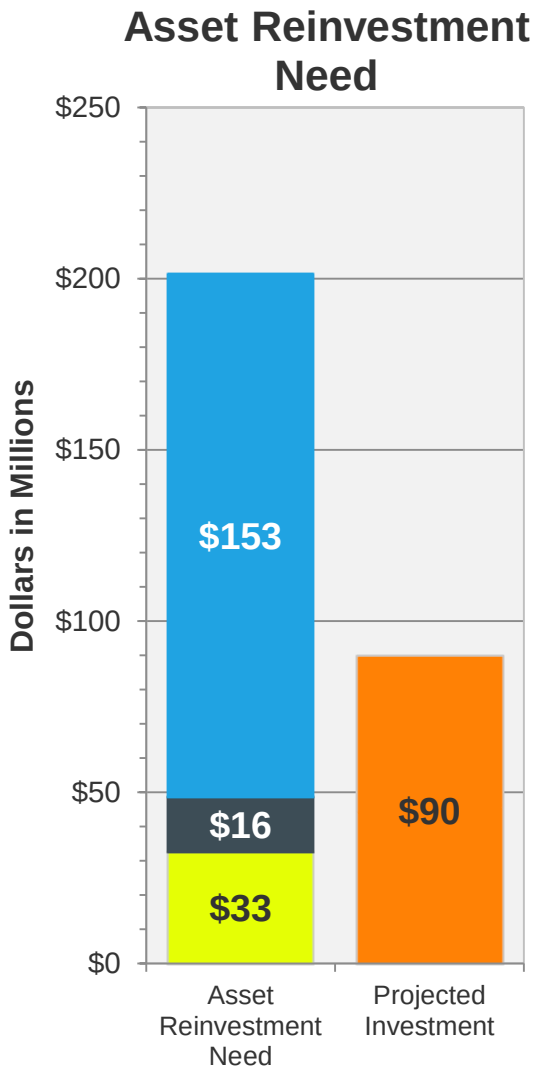
Upcoming Life Cycle Need

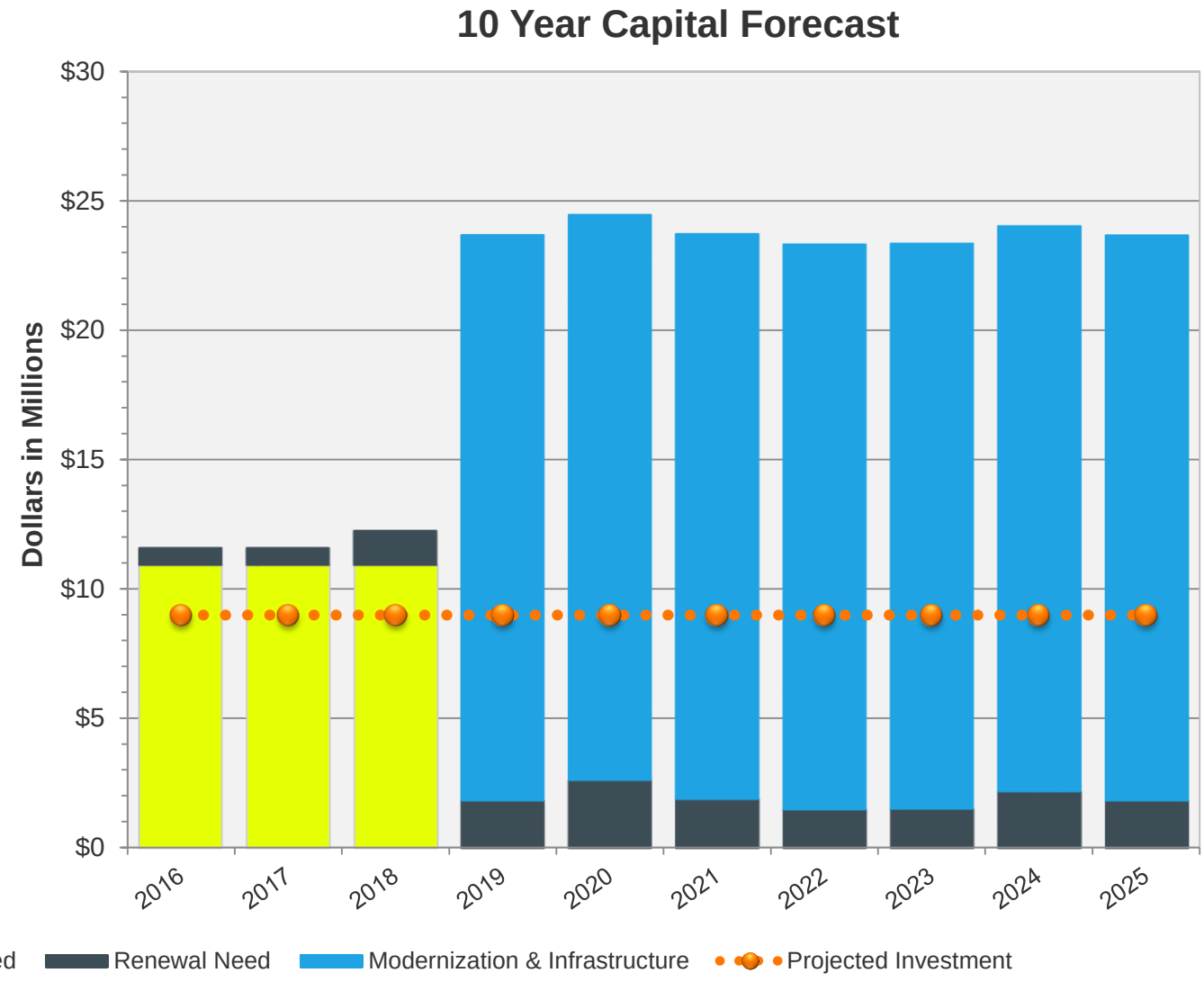
$16M of renewal need coming due over the next 10 years





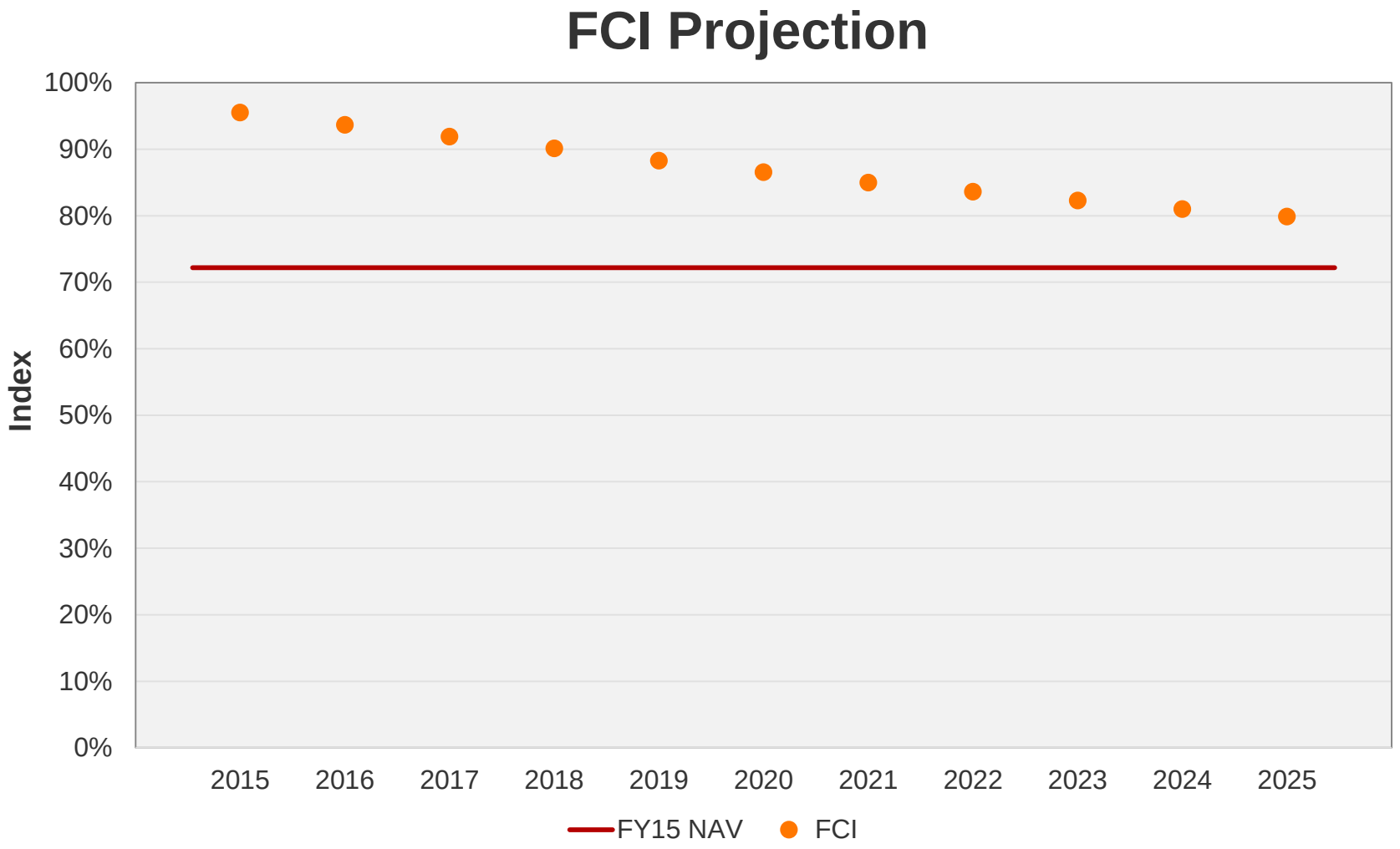
Projected Investment vs. 10 Year Needs





Position of Campus in 10 Years

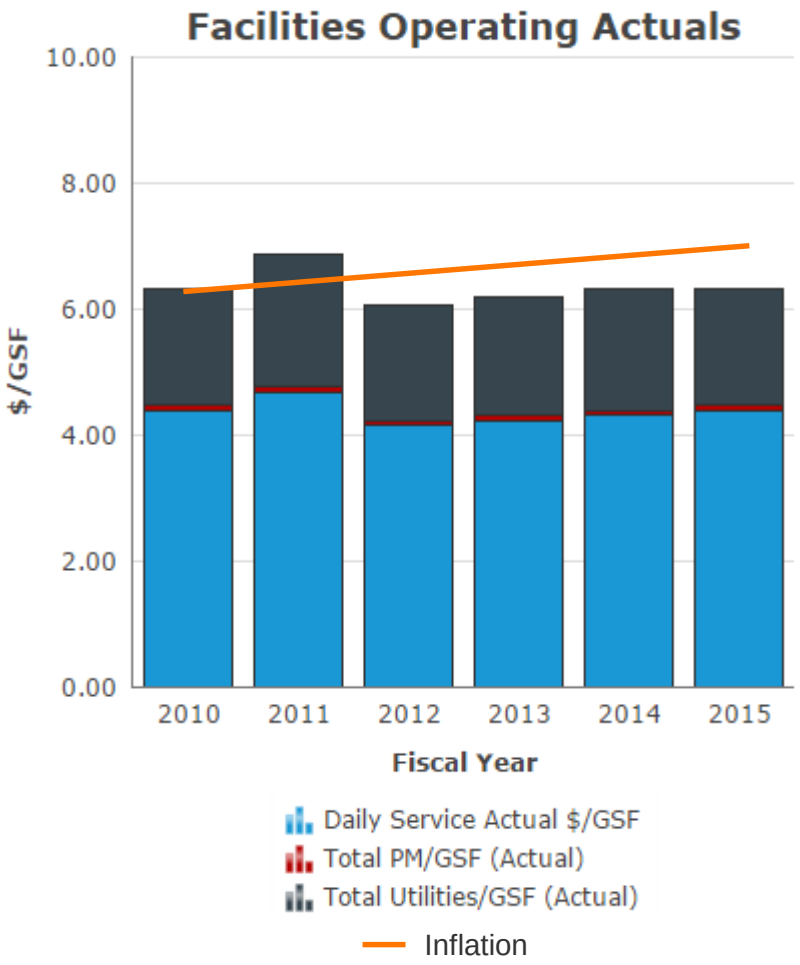
15% drop in Facilities Condition Index if don't invest any Capital

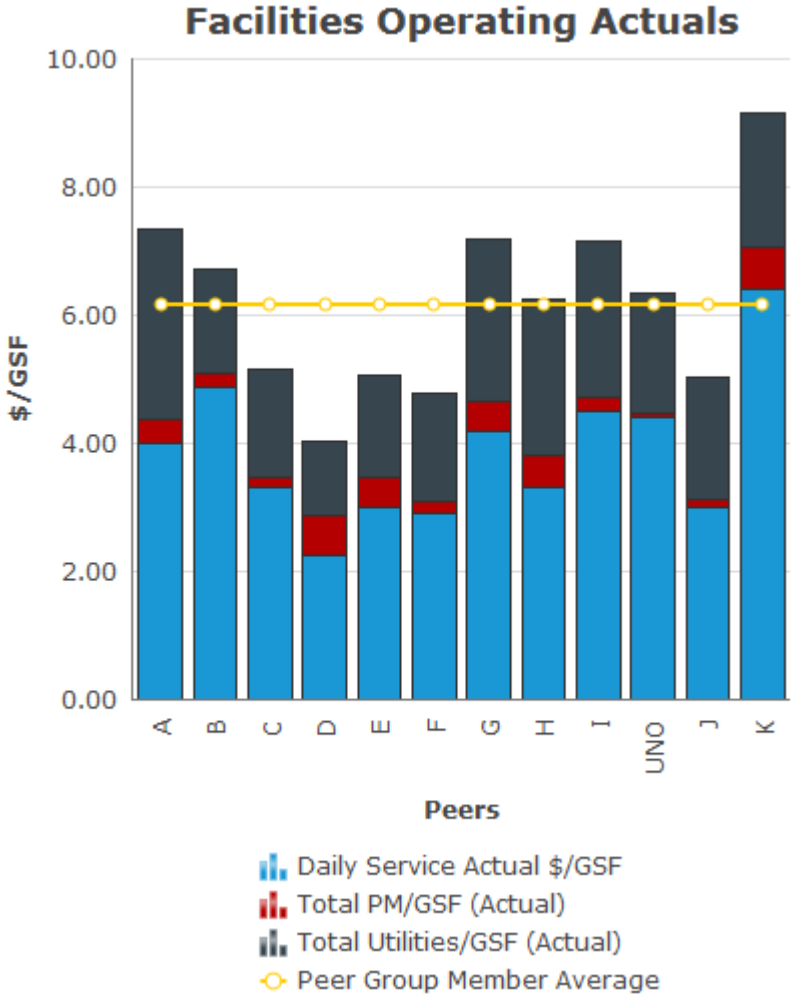


Operations Success

Consistent Increases in Operating Resources

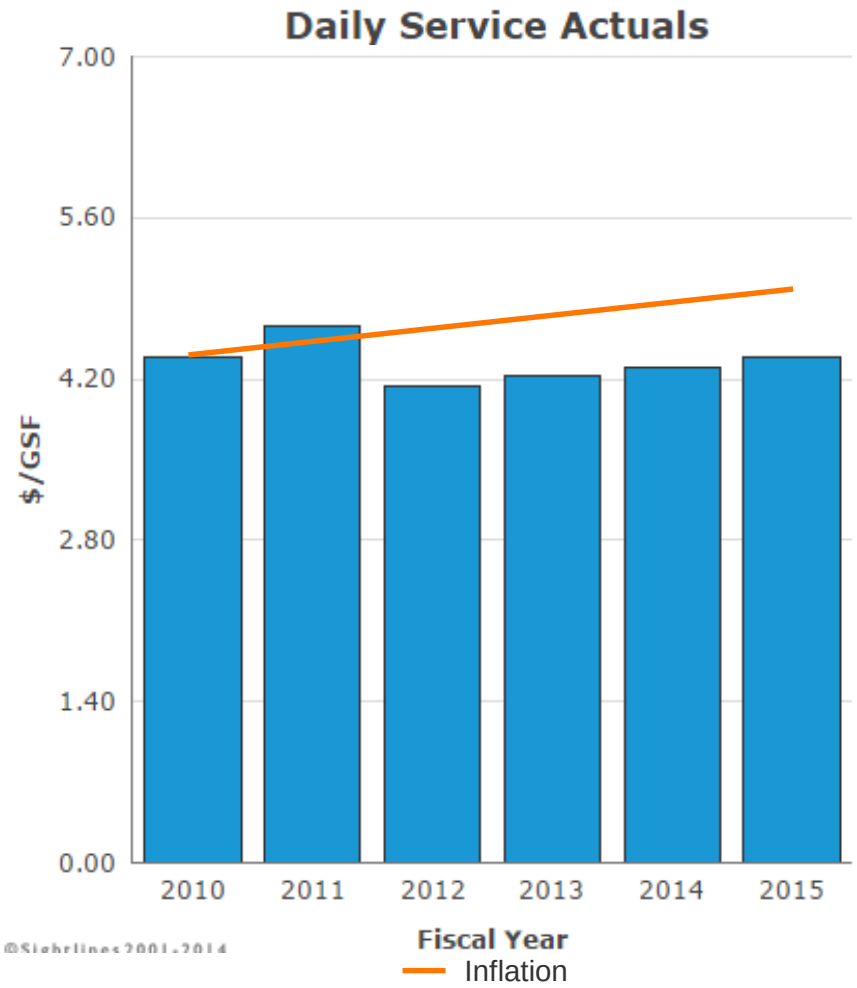
Look for the $/GSF to keep pace with inflation

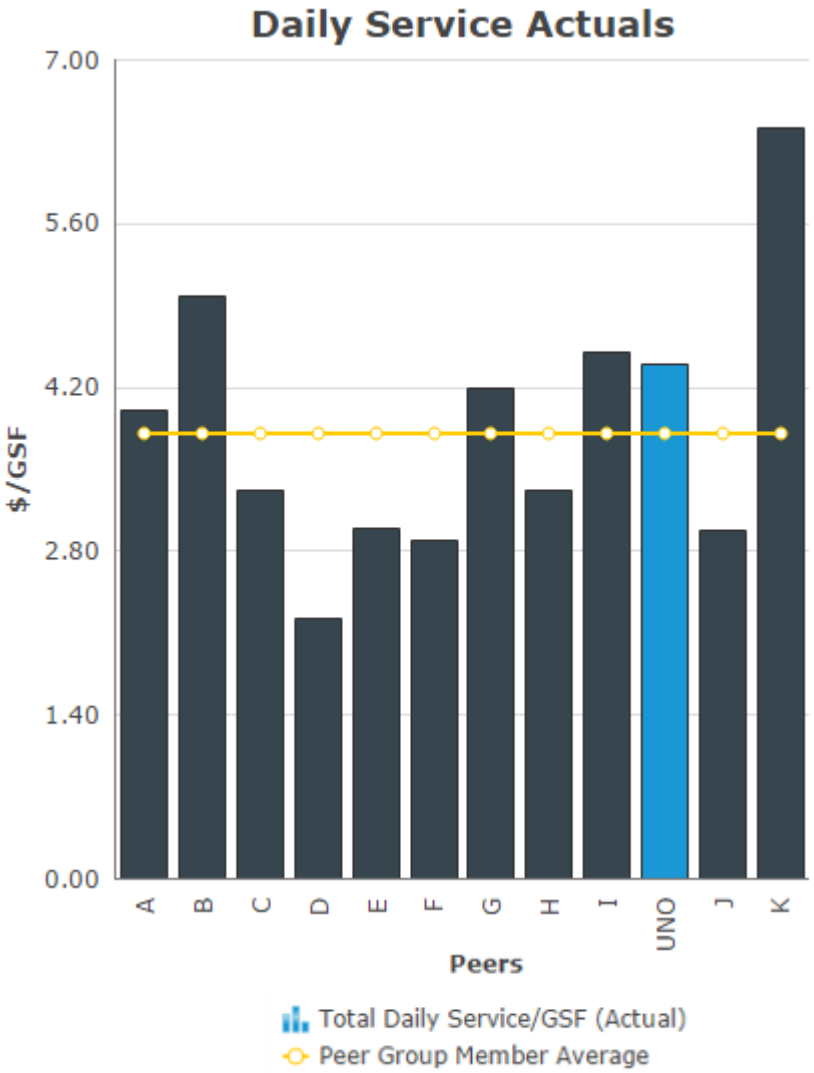




Day-to-Day Spending Keeping Pace with Growth

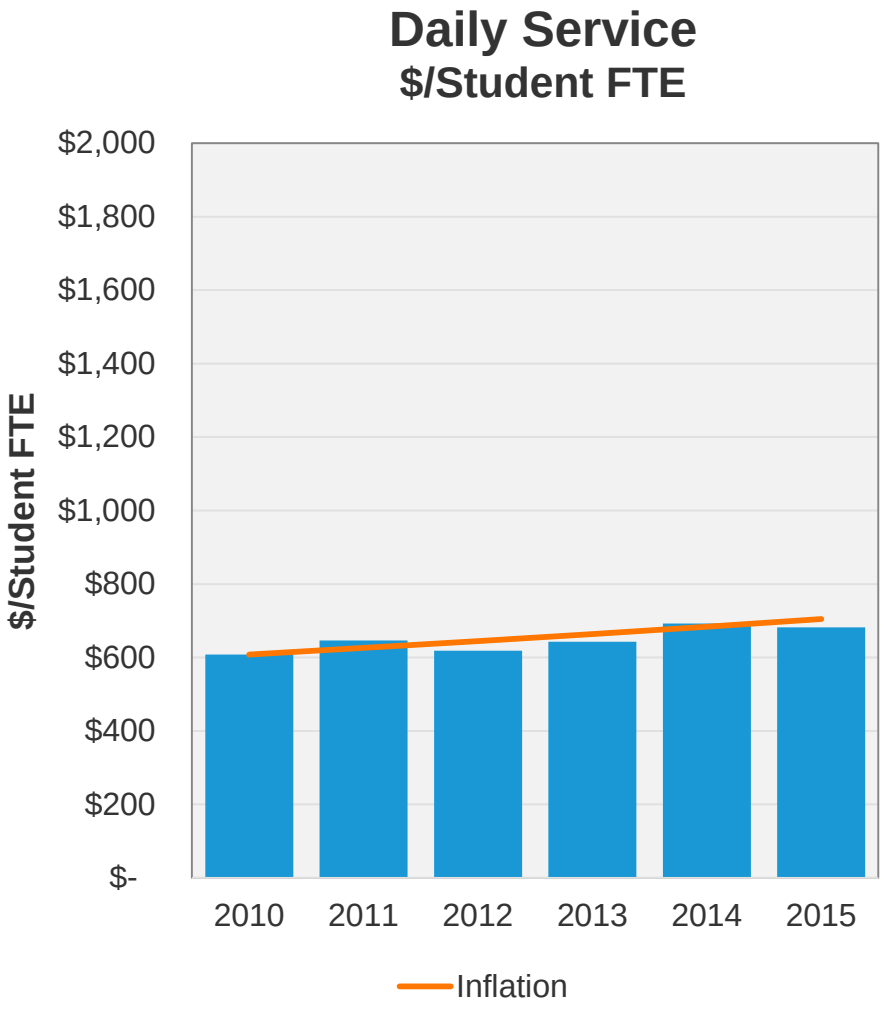
6% increase in spending since 2012

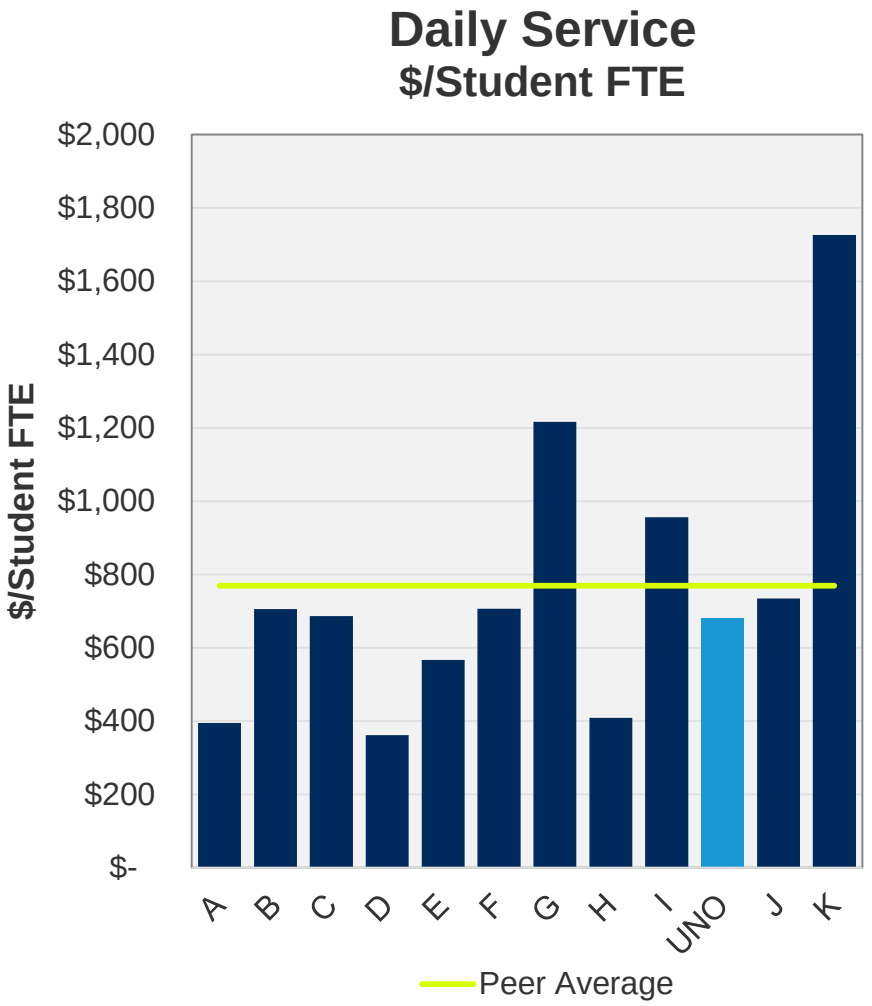




Enrollment Not Keeping Pace with Space

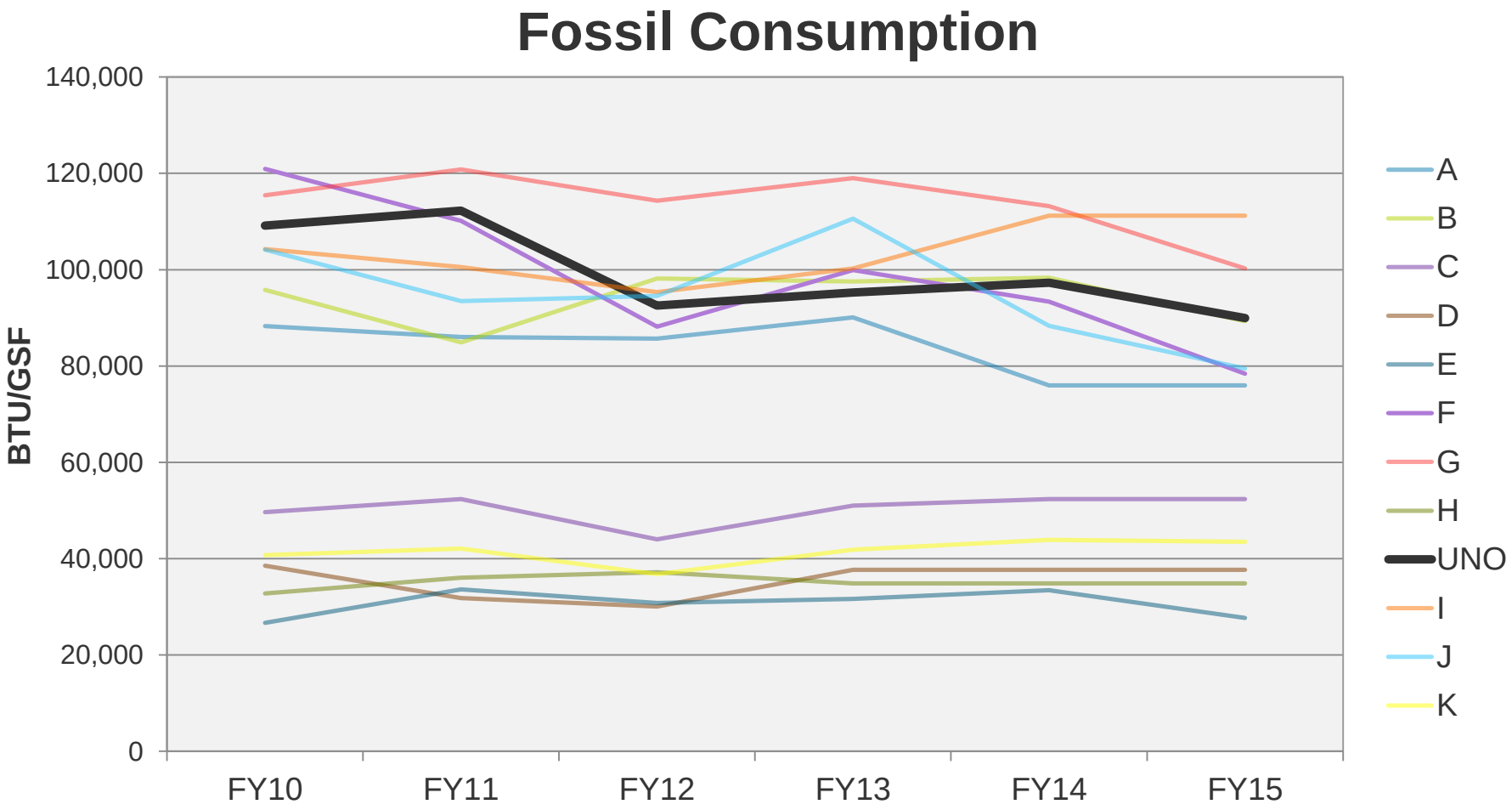
Evaluate opportunities to increase space utilization





Fossil Fuel Consumption Decreasing

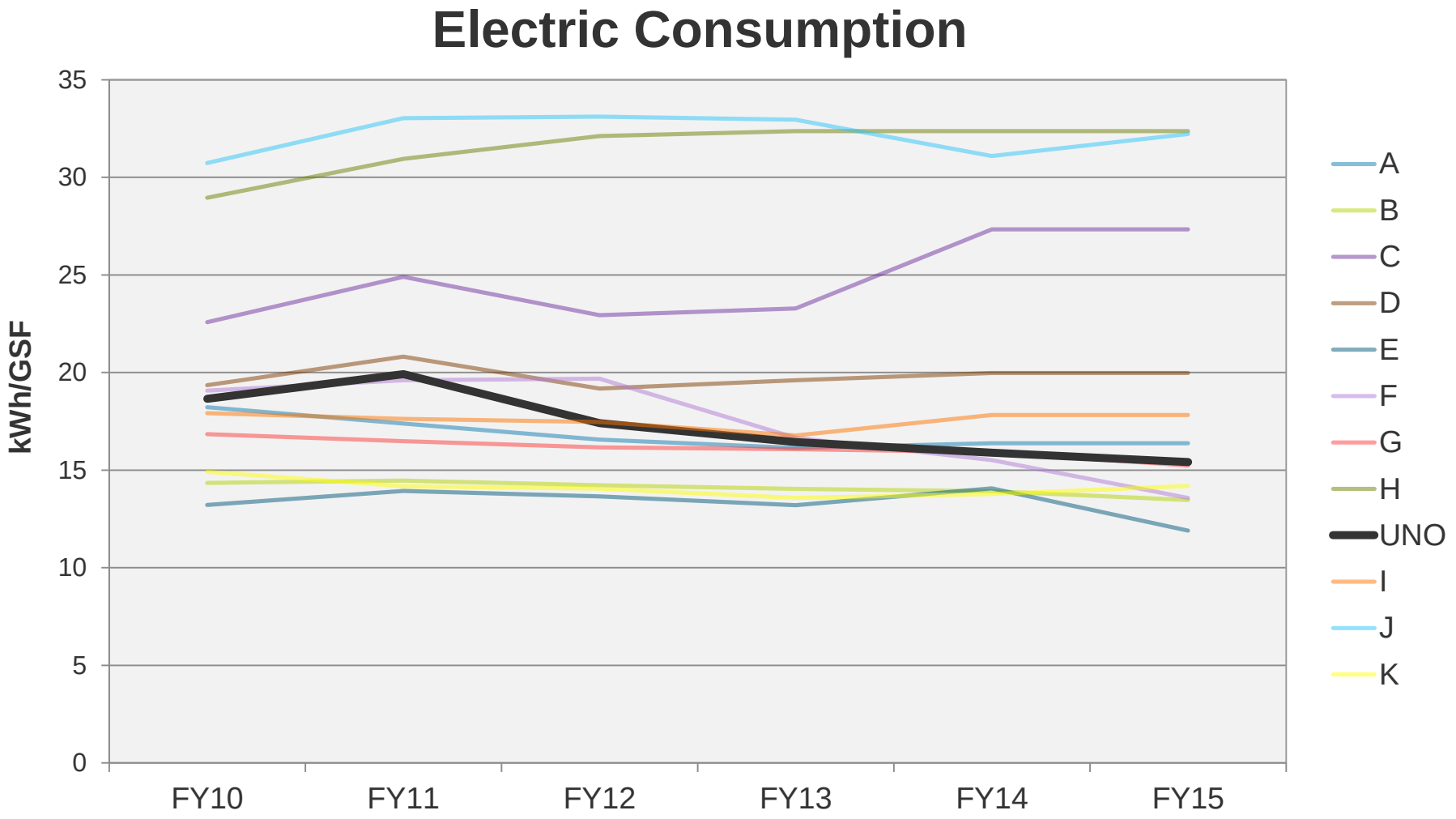
Consumption above most peers



Includes Natural Gas & Fuel Oil #2

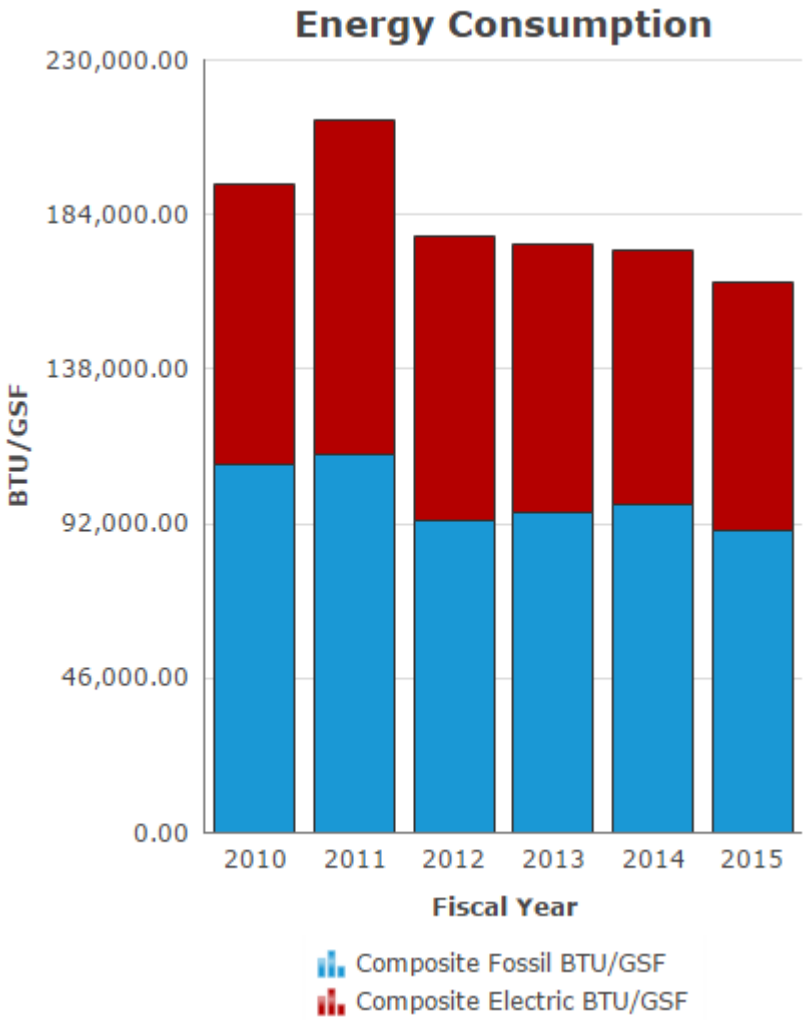
12% Decrease in Electric Consumption

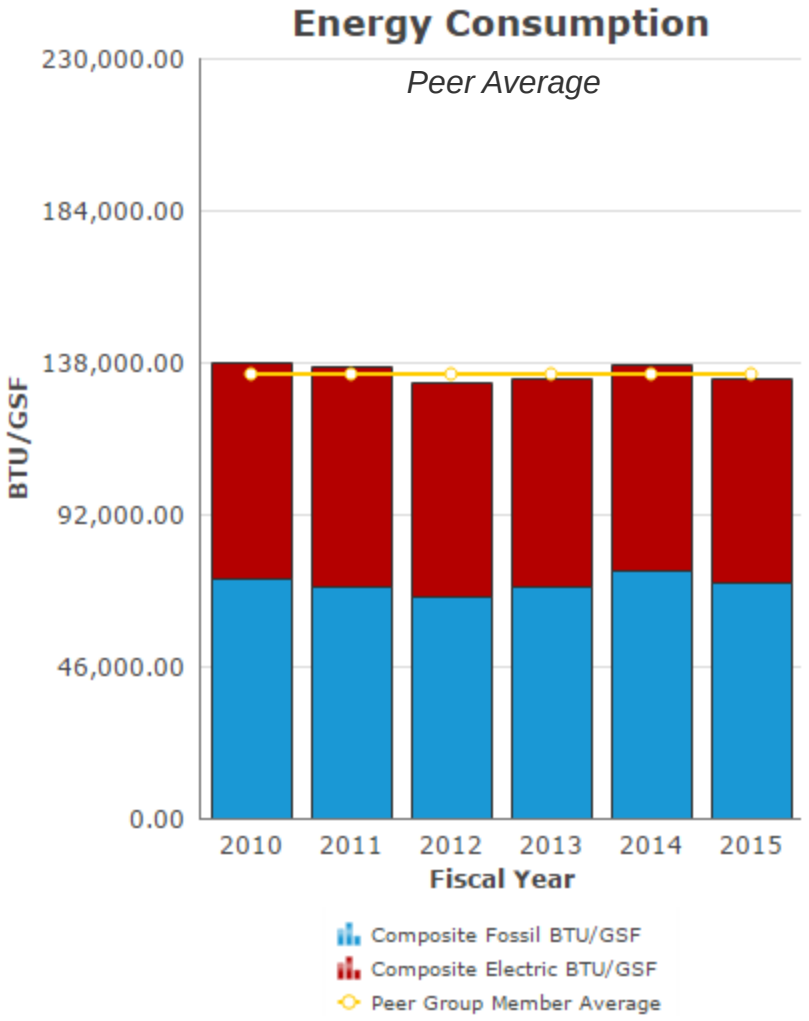
Continued reduction in consumption could lead to Best Practice



Overall, 15% Reduction in Consumption

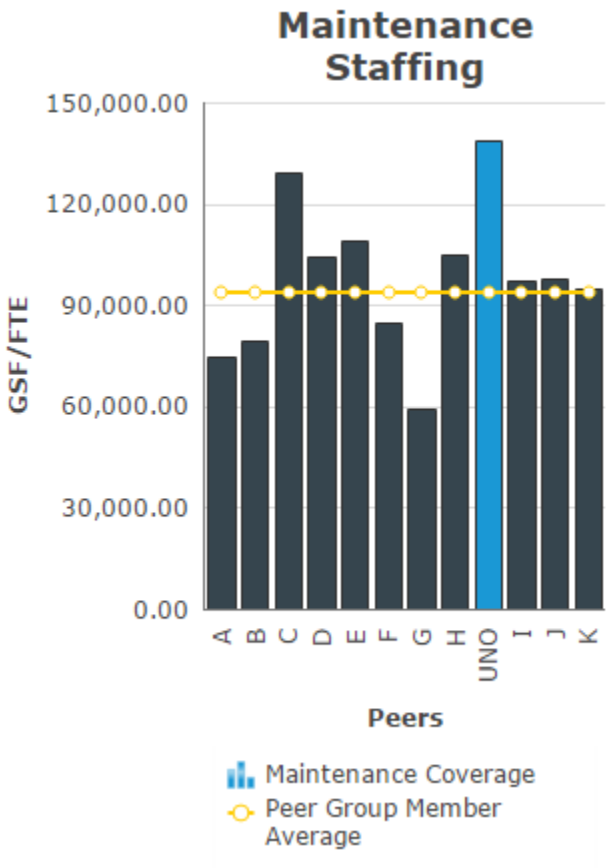
Continue to invest in energy savings projects

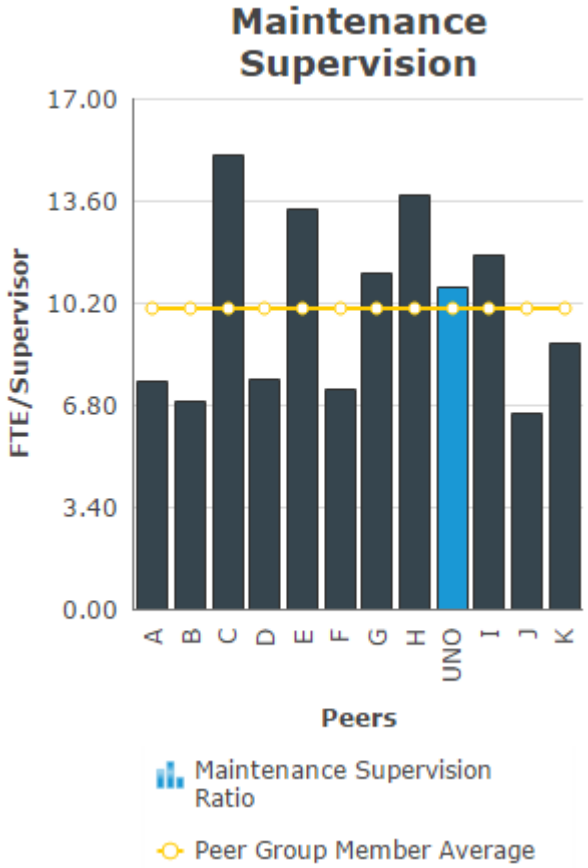


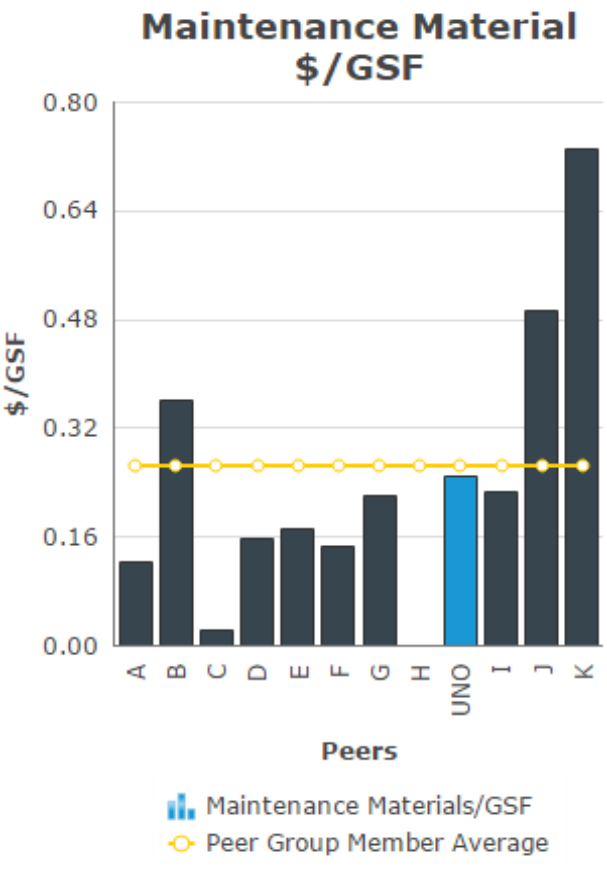


Maintenance Success

Operations benefiting from a younger campus





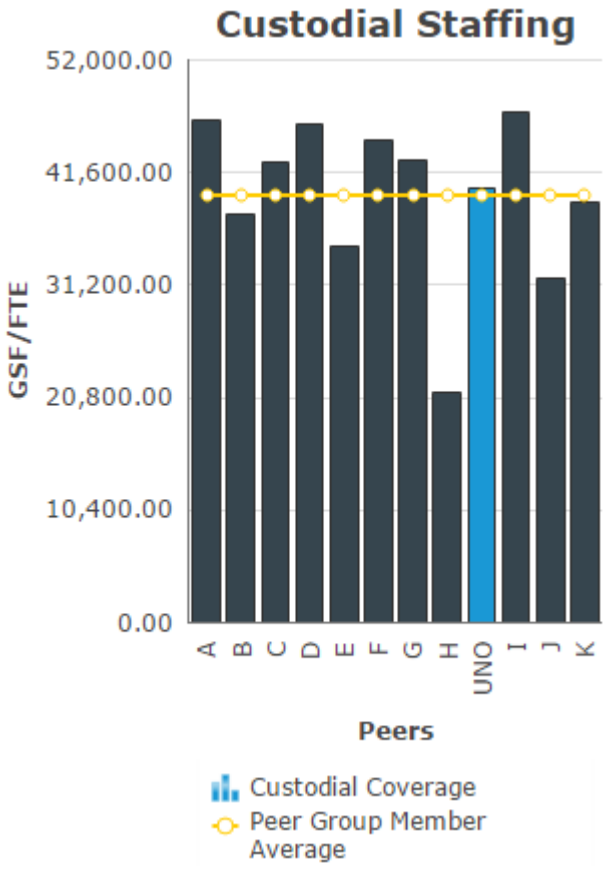


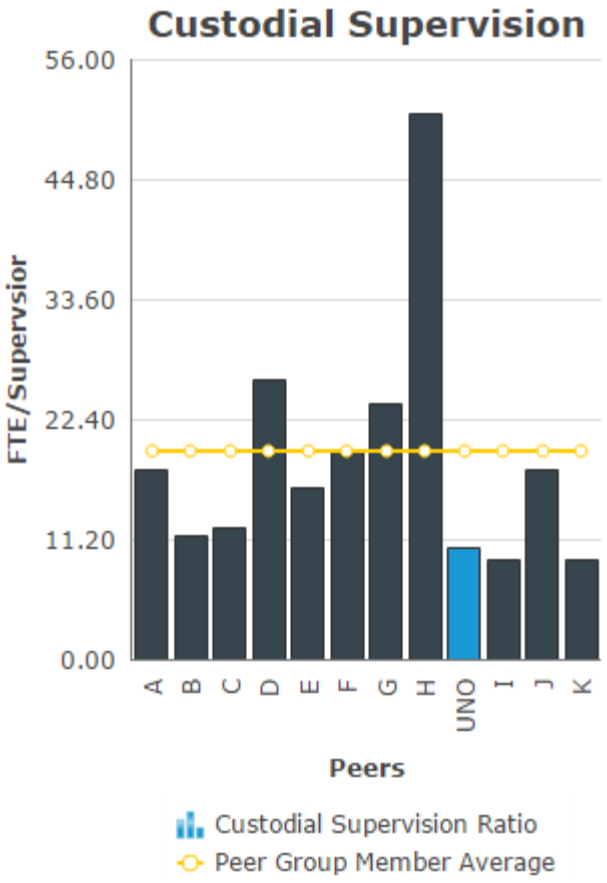
	Campus Inspection General Repair Score
Omaha	4.03
Peers	3.79

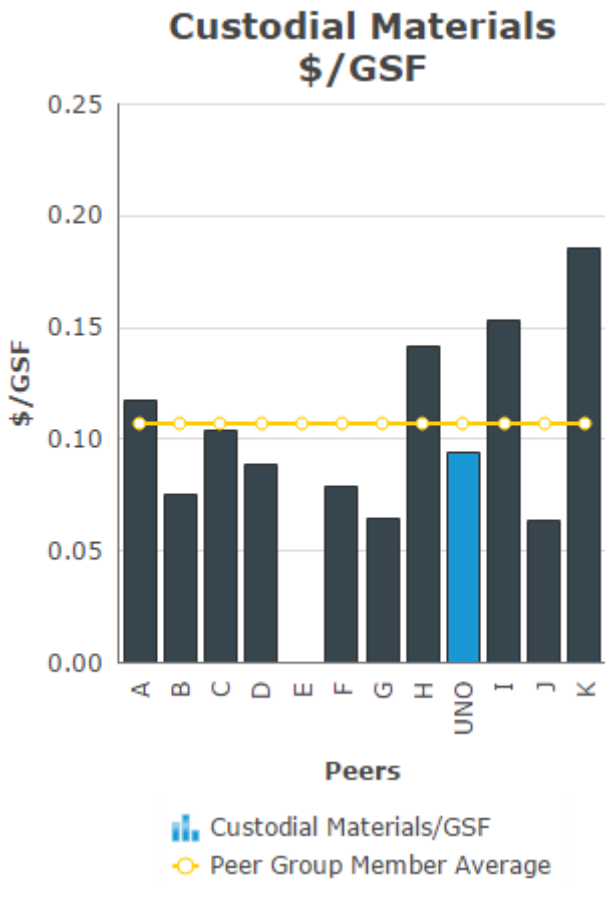
**FY15 data unavailable for Institution H*

Custodial Success

High results achieved through strong and balanced profile





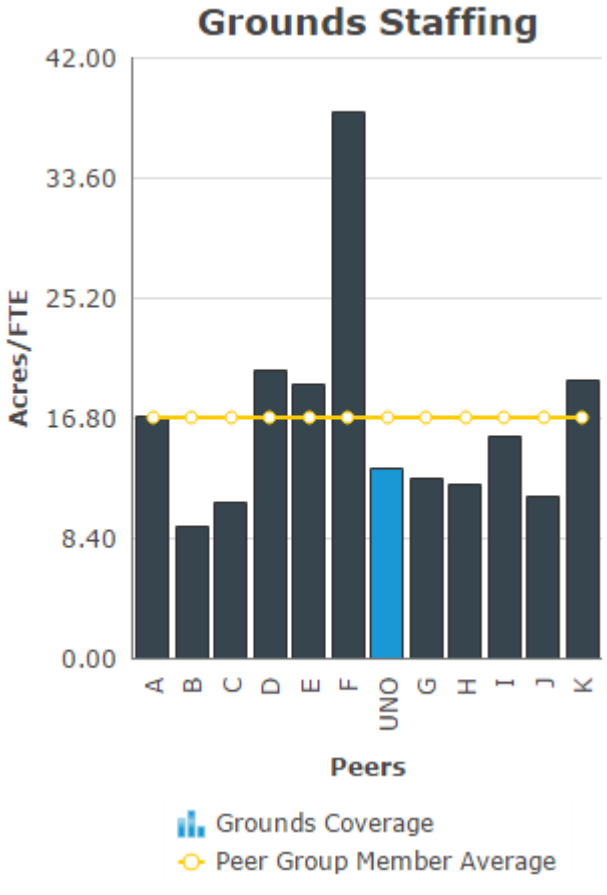


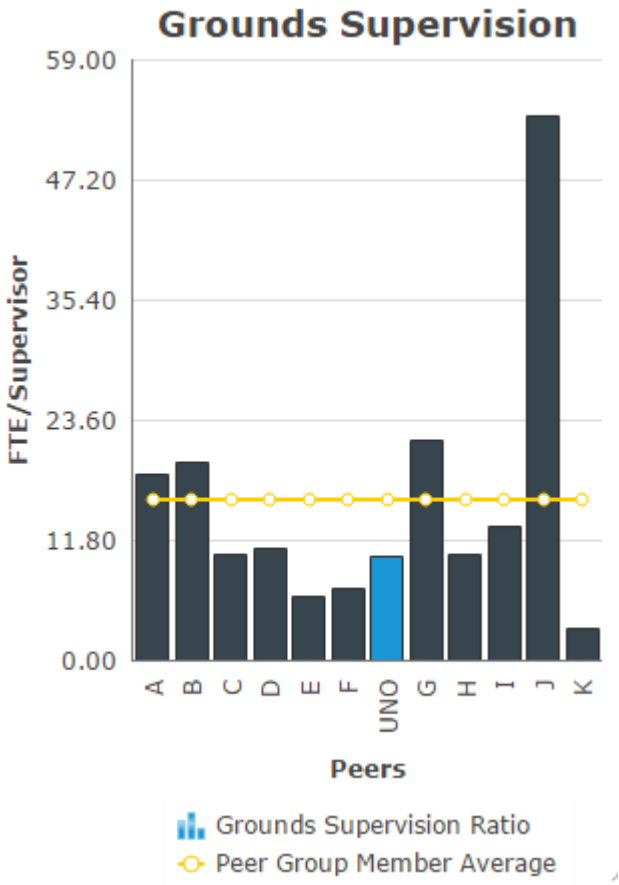
	Campus Inspection Cleanliness Score
Omaha	4.20
Peers	4.00

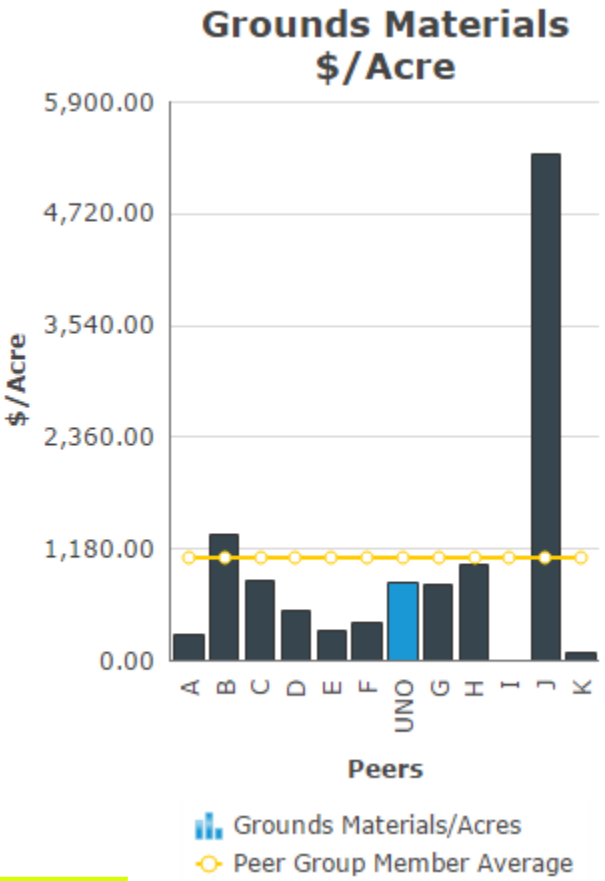
**FY15 data unavailable for Institution E*

Grounds Success

Low coverage and supervision have produced high inspection scores





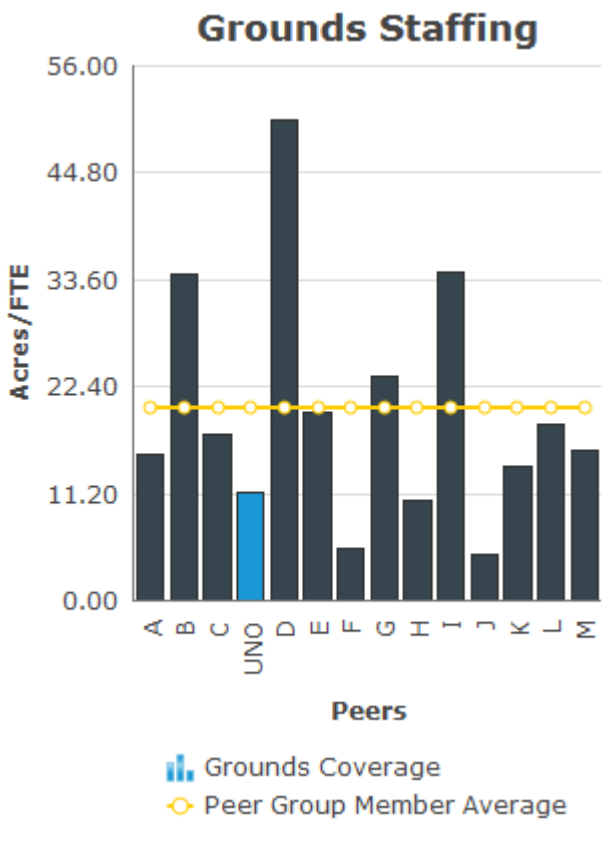


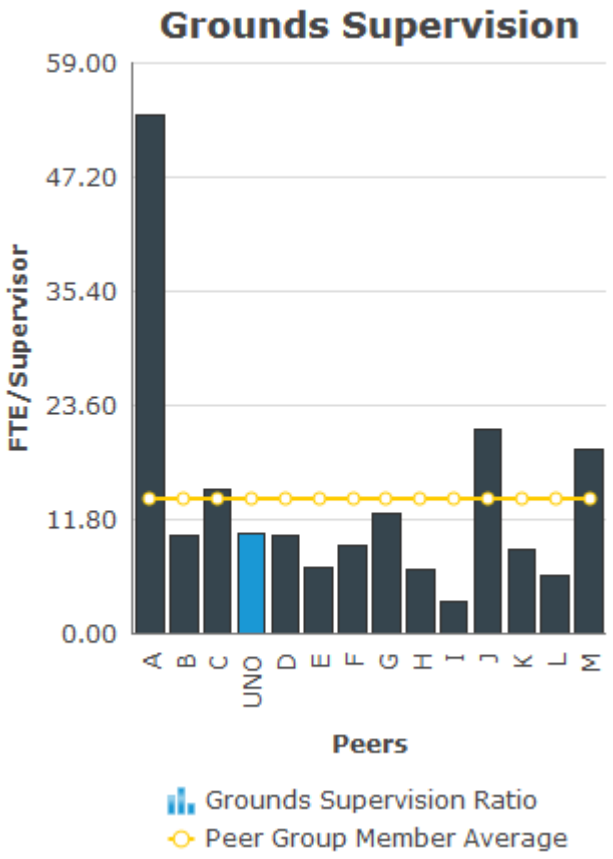
	Campus Inspection Grounds Score
Omaha	4.17
Peers	4.03

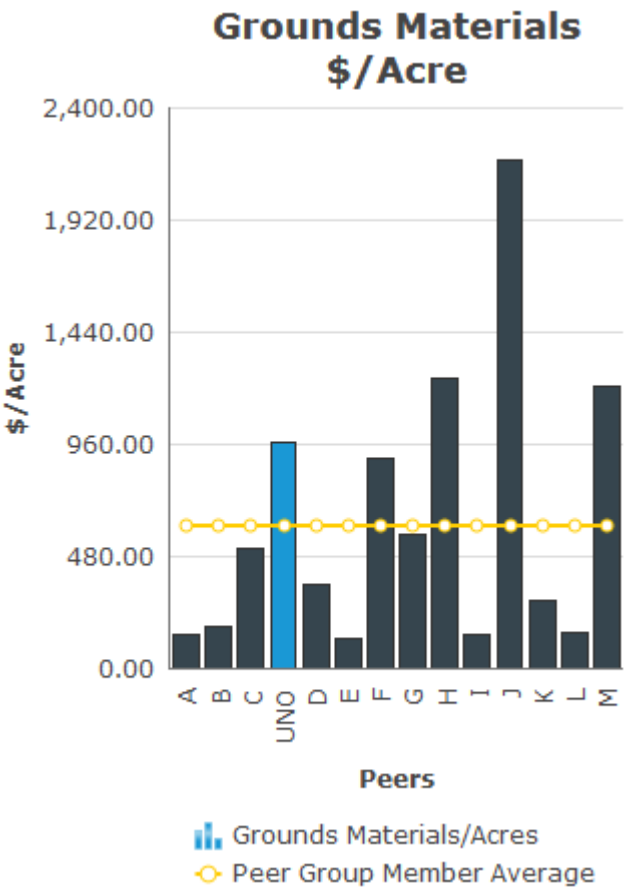
**FY15 data unavailable for Institution I*

Grounds Success Compared to Urban Campuses

UNO Inspection scores reflect impact of additional staff





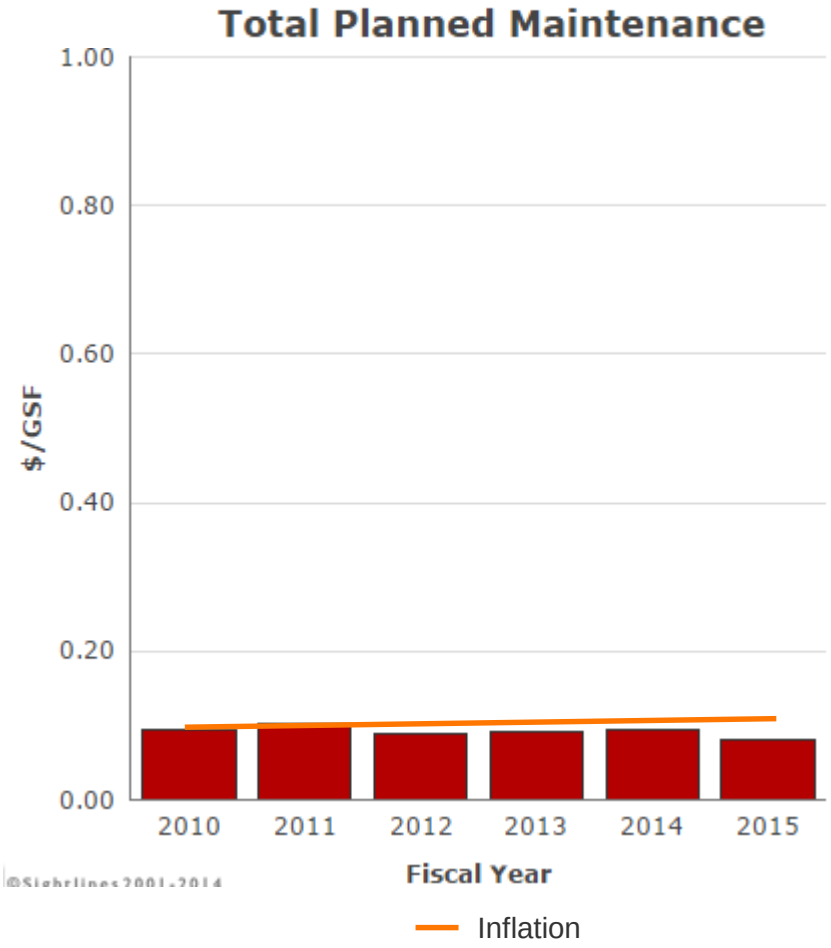


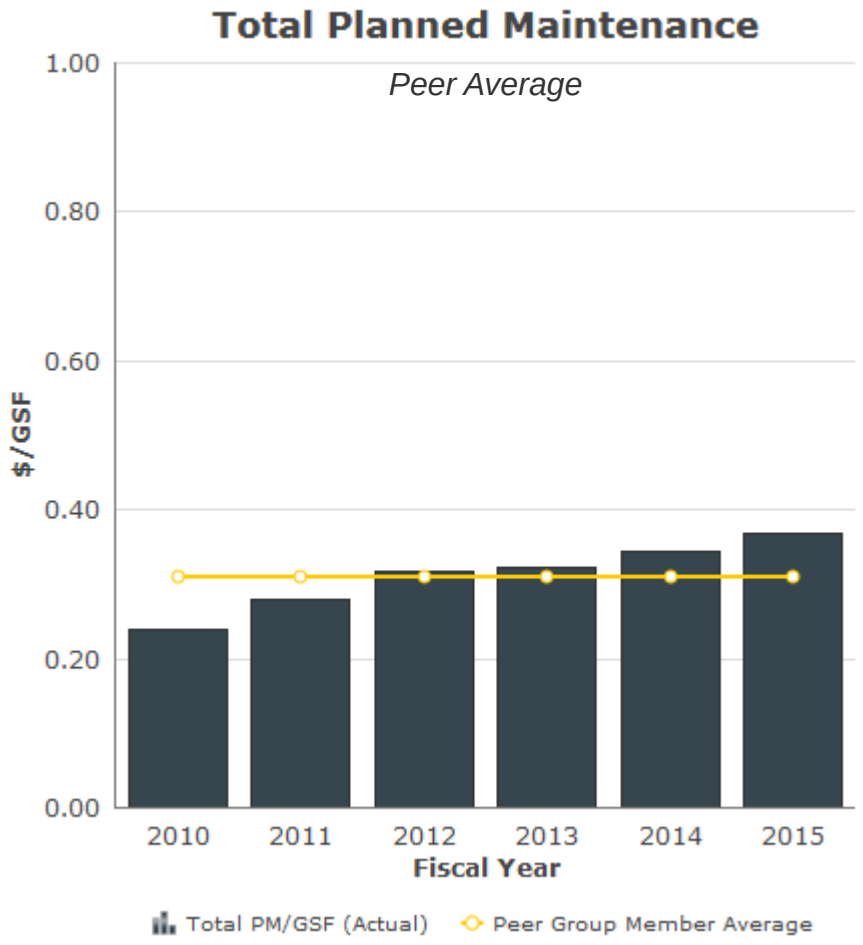
Campus Inspection Grounds Score	
Omaha	4.17
Peers	4.04

Indiana University, Purdue University (Indianapolis) • Rutgers University • Temple University • The Ohio State University
The University of Chicago • University of Central Florida • Virginia Commonwealth University
University of Cincinnati • University of Massachusetts (Boston) • University of Memphis
University of Minnesota (Twin Cities) • University of Missouri (Kansas City) • University of Missouri (St. Louis)

PM Investment Dropped in FY15

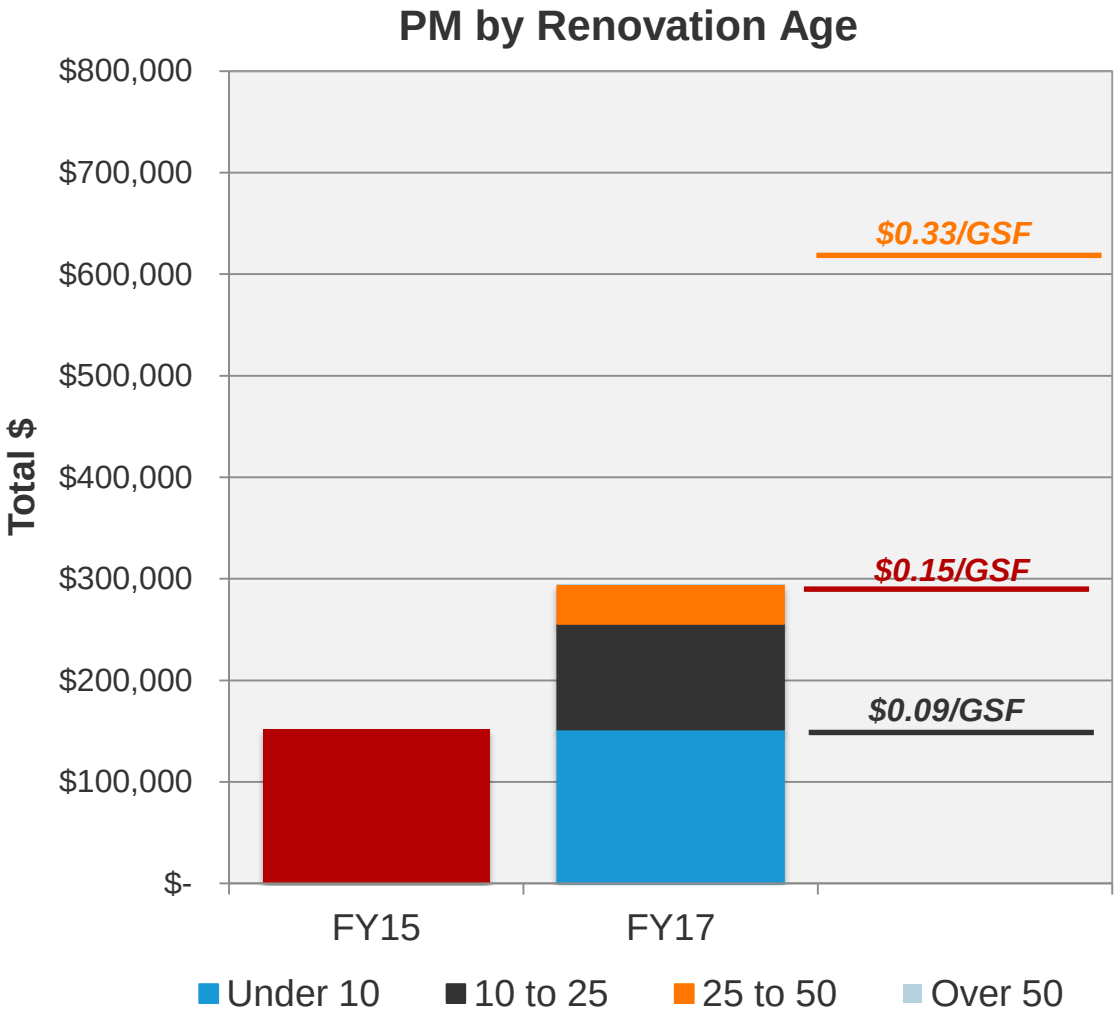
Monitor new tracking closely to ensure correct reporting

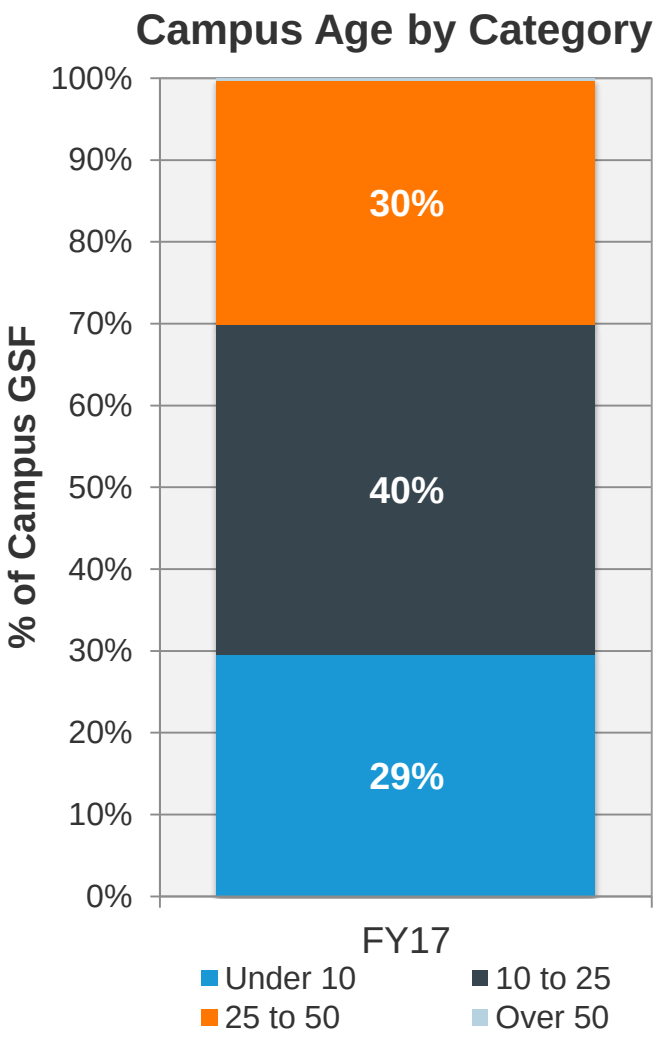




Target PM Spending Toward New Space

Even when fully funding PM in younger space, what opportunities are there for UNO?





Preventive/Planned Maintenance

- **PM:** Materials, labor costs, service contracts, etc. that enhance or extend the useful life of campus buildings and components. Some examples include changing belts and filters on HVAC equipment, elevator service contracts, sprinkler and fire alarm system testing/maintenance contracts, etc.
- Typical Examples

Mechanical	Electrical	Plumbing	Elevator	Fire Prevention
Clean or replace filters	Temperature checks (Thermographic inspection)	Inspect pipes and repair leaks	Perform safety checks on all components according to codes	Perform appropriate checks to meet fire codes
Examine and change belts	Open & close circuit breakers and disconnect switches	Examine and adjust pressures and temperatures	Clean, lubricate, and adjust motors, bearings, brakes and other components	Test alarms and controls
Lubricate motor bearings	Calibrate & Test circuit breaker and relay trip devices	Operate and adjust faucets and flush valves	Check and lubricate guide rails	Check and adjust pump operations
Clean condenser coils	Oil screen test oil-filled-transformers, circuit breakers and disconnect switches	Clean ore replace water filters	Examine and replace wire ropes	Test water flow alarms and perform main drain test on sprinkler/water spray systems
Clean and adjust blower components	Perform dissolved gas analysis on transformer oil	Check waste systems	Check, adjust, repair, and replace all cabin and hoist away doors	Check valves and lock in open position
Examine duct work for leaks	Leak test equipment insulated with SF6 gas	Ensure oil and water separator systems meet standards	Test and repair communication devices	Inspect and recharge fire extinguishers
Monitor starting capabilities	Clean & tighten all electrical connections and equipment enclosures	Check accuracy of flow meters	Test and repair control and emergency systems	Inspect and replace fire hoses
Check and adjust heating and cooling systems pressures and temperatures	Inspect equipment for deterioration			Check emergency lighting
Test and adjust central control system				Test heat and smoke sensors and fire doors

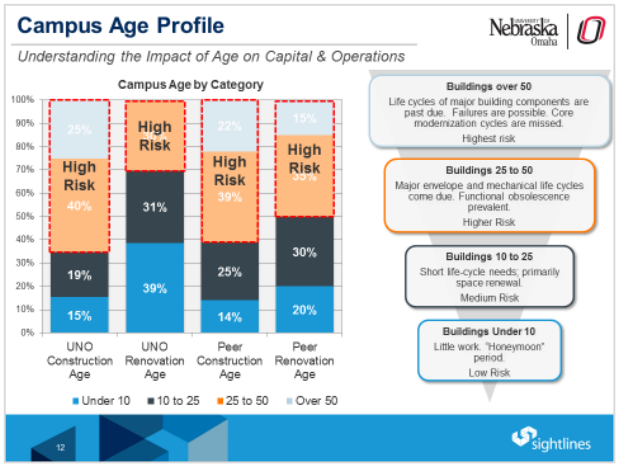
Concluding Comments

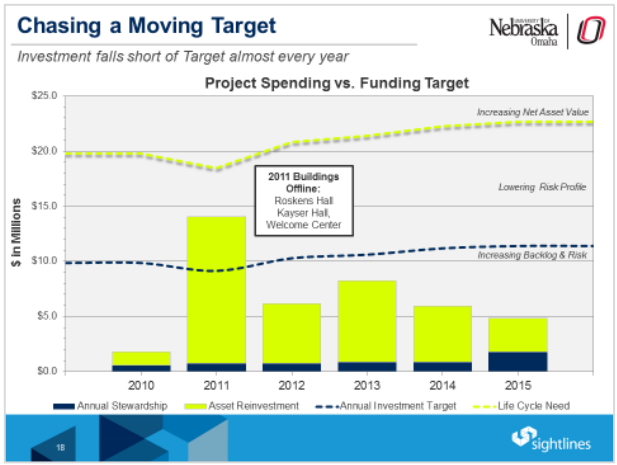
FY2015 Concluding Comments

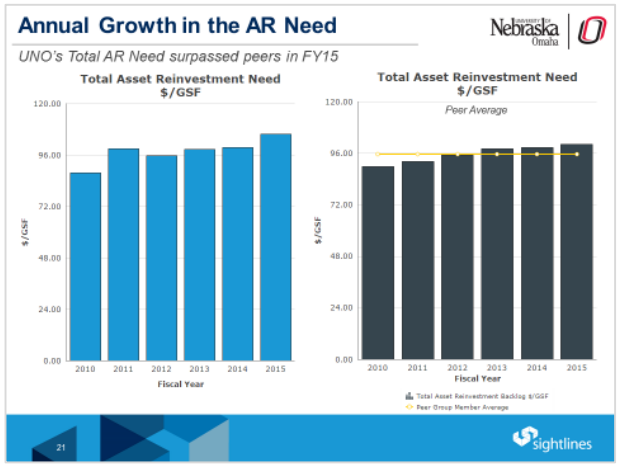
Historic investments have created a younger age profile for UNO than at peer institutions.

The Functional Obsolescence Target has been increasing annually, as new space and renovations come online, creating more future needs for campus.

Without funding to the Target Levels, the Asset Reinvestment Need for the next 10 years has grown.





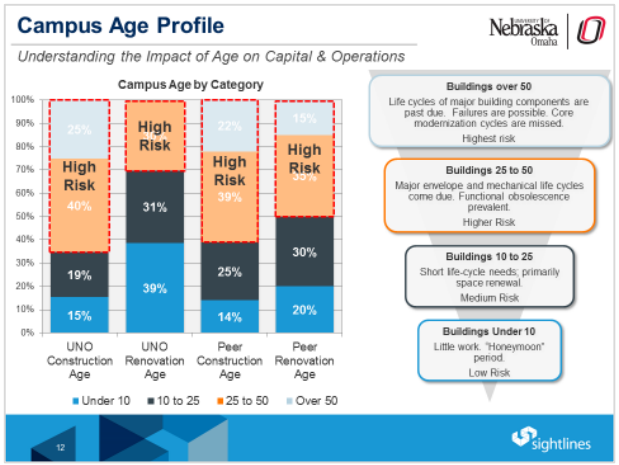


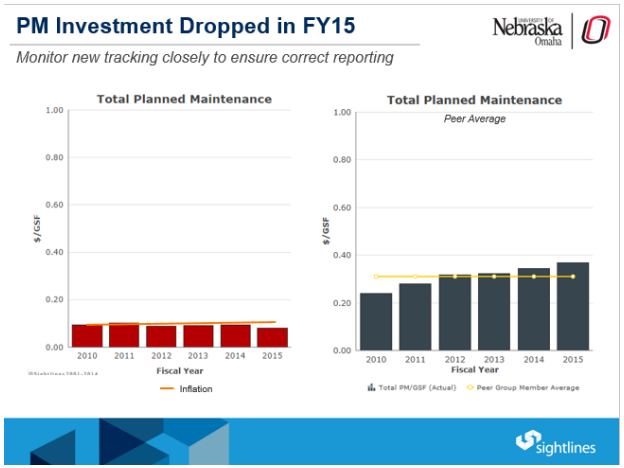
FY2015 Concluding Comments

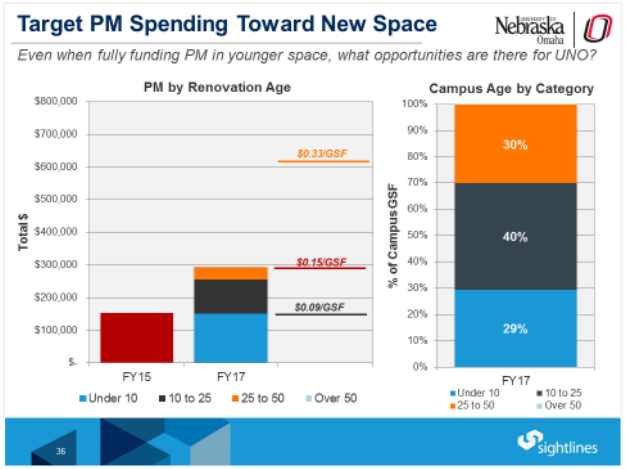
Historic investments have created a younger age profile for UNO than at peer institutions

The younger facilities have increased mechanical and program demands, which require additional Planned Maintenance resources.

As tracking increases for Planned Maintenance, target support toward facilities with the highest need.







sightlines

Questions & Comments