GORDIAN®

Wesleyan University

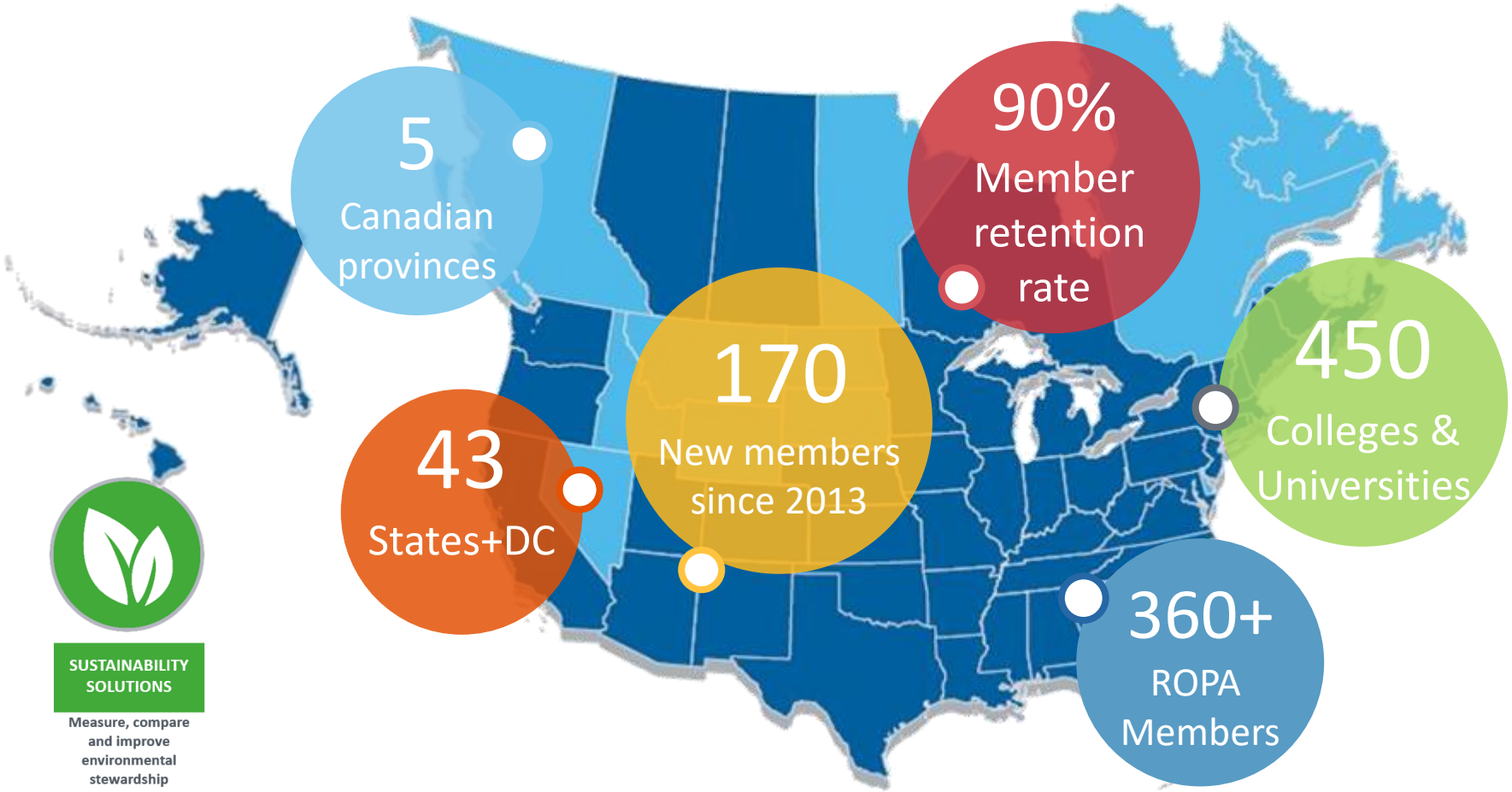
FY19 ROPA+ Presentation

February 2020

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
Xavier University

Sightlines by the Numbers

Robust membership includes colleges, universities, consortiums, and state systems



FACILITIES BENCHMARKING & ANALYSIS
Take control of your facilities and make the case for change without the guesswork

FACILITIES ASSESSMENT & PLANNING
Plan and execute capital investment plans that are inclusive, credible, flexible, affordable and sustainable

SPACE UTILIZATION
Ensure your space is working up to its full potential

SUSTAINABILITY SOLUTIONS
Measure, compare and improve environmental stewardship

GORDIAN®

Vocabulary for Facilities Measurement, Benchmarking & Analysis

Annual Stewardship

The annual investment needed to ensure buildings will properly perform and reach their useful life ***"Keep-Up Costs".***

Asset Reinvestment

The accumulation of repair and modernization needs and the definition of resource capacity to correct them ***"Catch-Up Costs"***

Operational Effectiveness

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

Service

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

Asset Value Change

Operations Success

Wesleyan Peer Institutions

SLAC Institutions

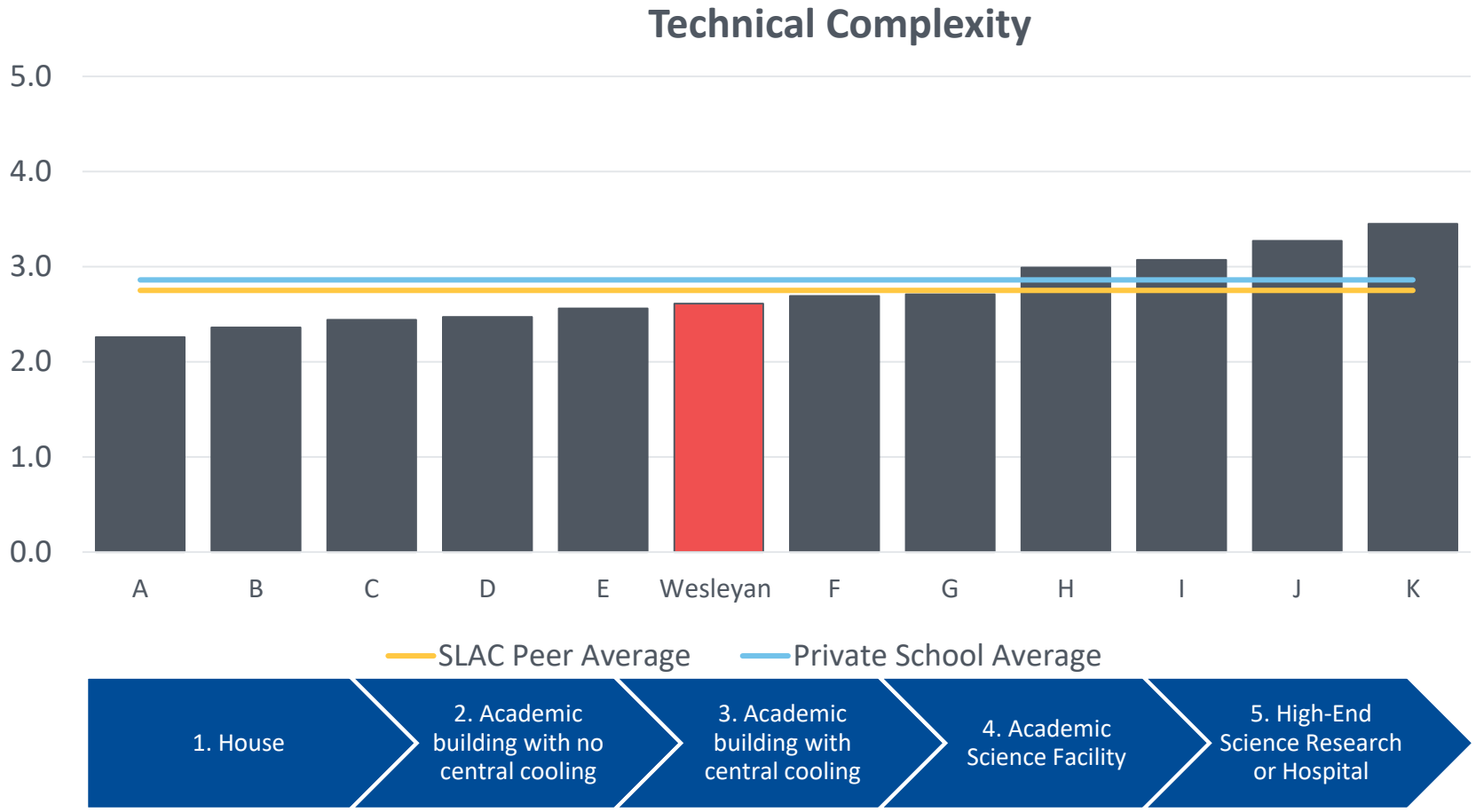
Institution	Location
Amherst College	Amherst, MA
Bowdoin College	Brunswick, ME
Bryn Mawr College	Bryn Mawr, PA
Carleton College	Northfield, MN
Davidson College	Davidson, NC
Hamilton College	Clinton, NY
Haverford College	Haverford, PA
Mount Holyoke College	South Hadley, MA
Pomona College	Pomona, CA
Swarthmore College	Swarthmore, PA
Williams College	Williamstown, MA

Comparative Considerations

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

Complexity of Building Systems Similar to Peer Average

A higher tech complexity will typically drive operational and capital costs higher

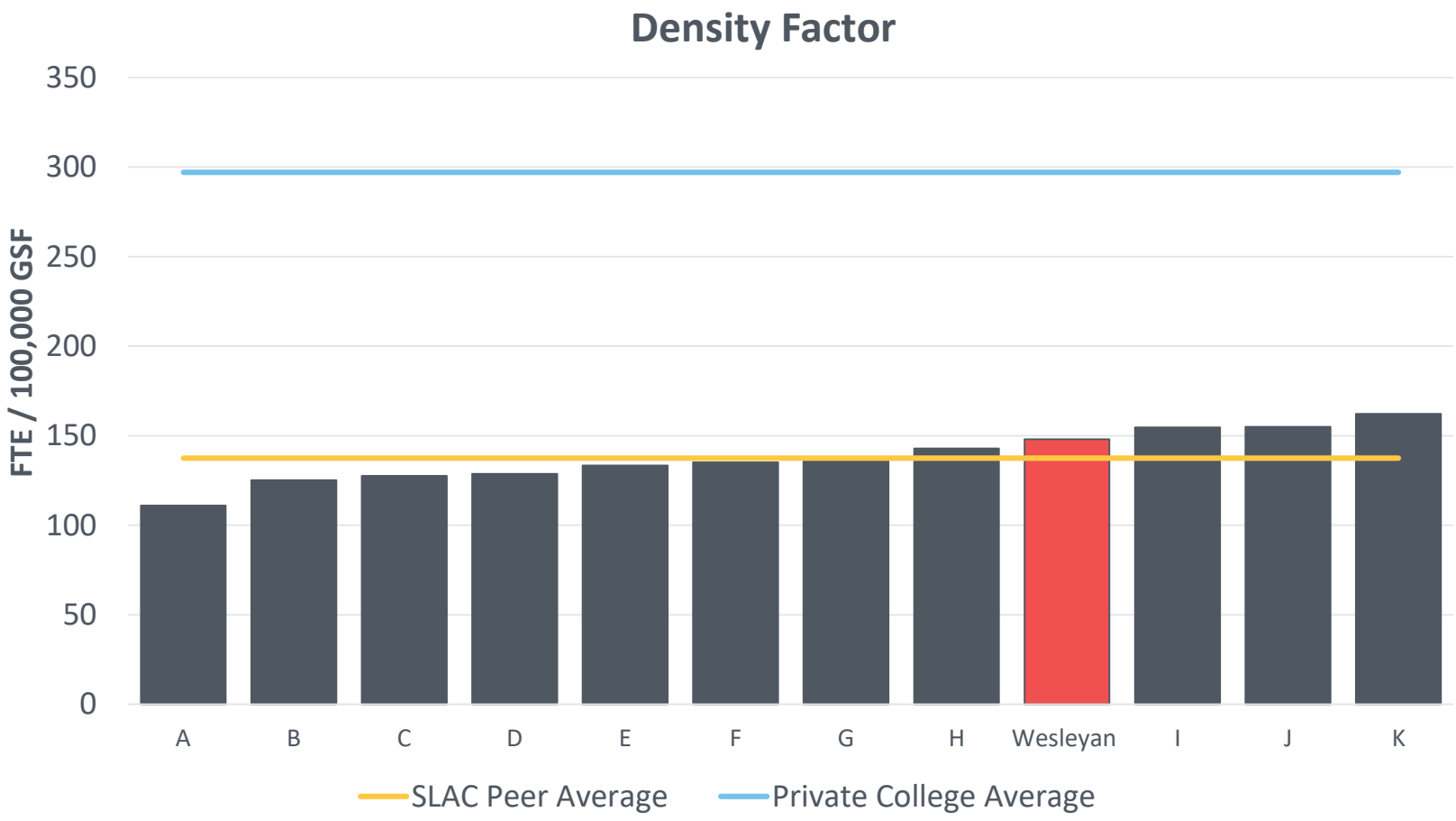


Tech Rating Affects:

- Repair and Replacement Cost
- Energy Consumption
- Operational Demands

Wesleyan Fourth Highest Density Amongst Peers

More people moving through the space creates more wear and tear on facilities



Density: Measures number of users per 100,000 GSF

- Users include all student, faculty, and staff FTEs
- Measures campus building usage on a daily basis

Density Affects:

- Capital Investment Need
- Staffing Levels
- Materials and Supplies
- Wear and Tear on Facilities

Integrated Campus Stewardship

Space: Understanding your largest asset

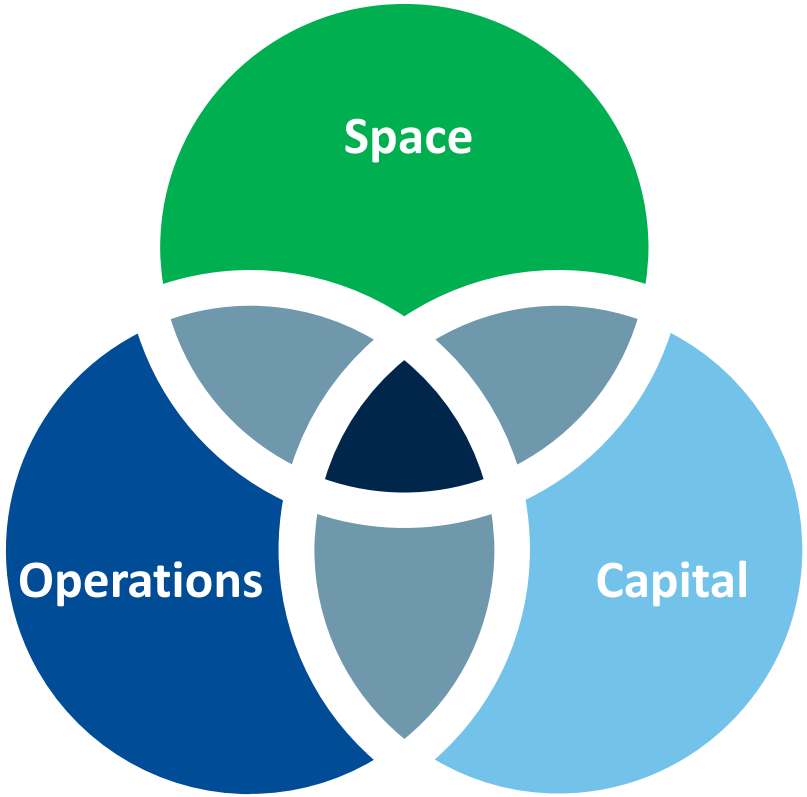
- Wesleyan's Main Campus growth is commensurate with peers. Rental properties' GSF decreased by 37% since FY02
- The majority of space is over 50 years old.

Capital: Investment planning to align mission and risk

- Capital investments into existing space are consistent over the last two years at approximately $18.0M in FY19
- Major Maintenance funds are growing, helping Wesleyan to achieve the FY19 Sightlines recommended Annual Investment Target
- Backlog of need is higher than peers and growing over time.

Operations: Improve effectiveness and lower overhead

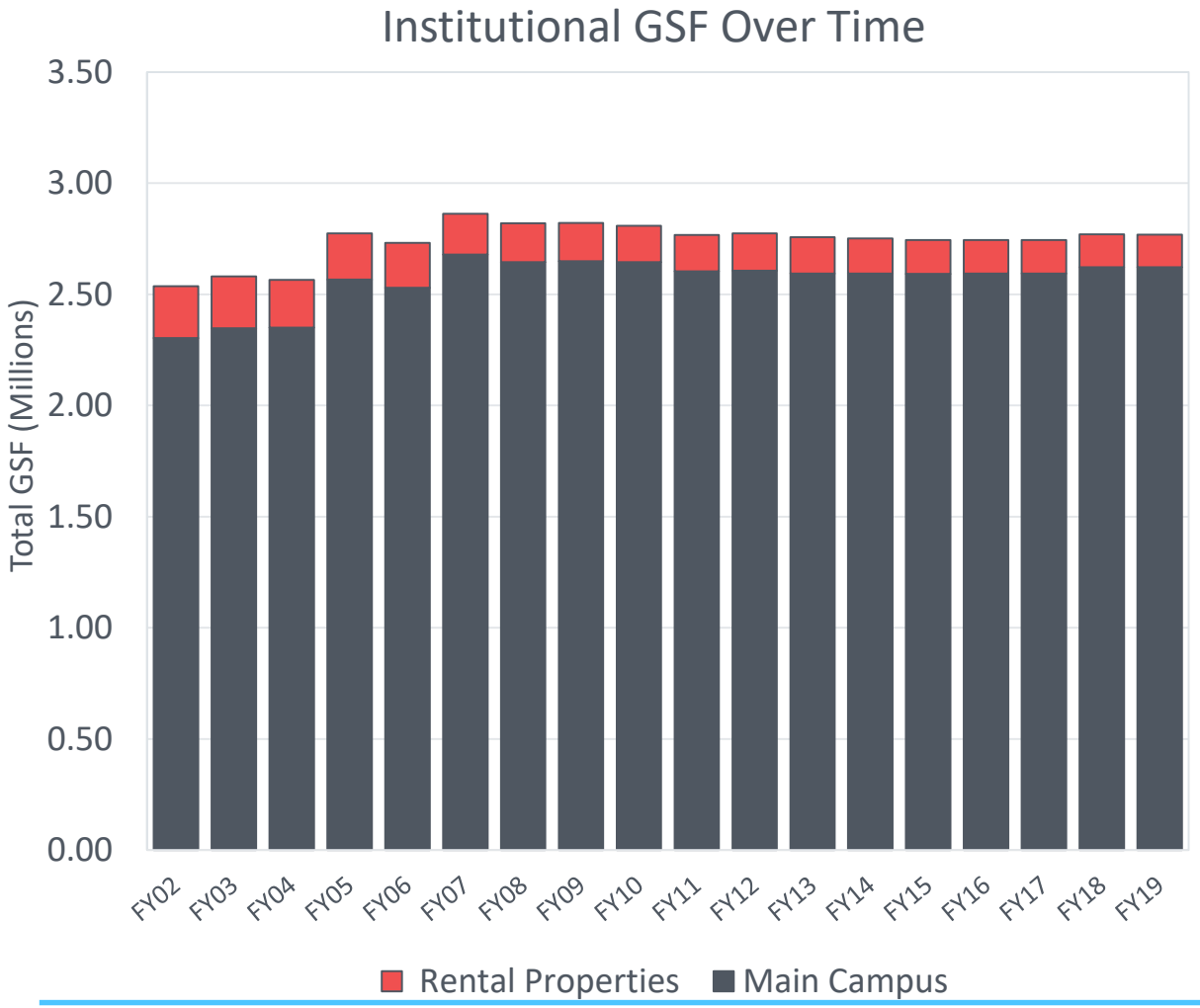
- Daily service resources are lower than peers
- Wesleyan's energy consumption lower than peers with higher costs

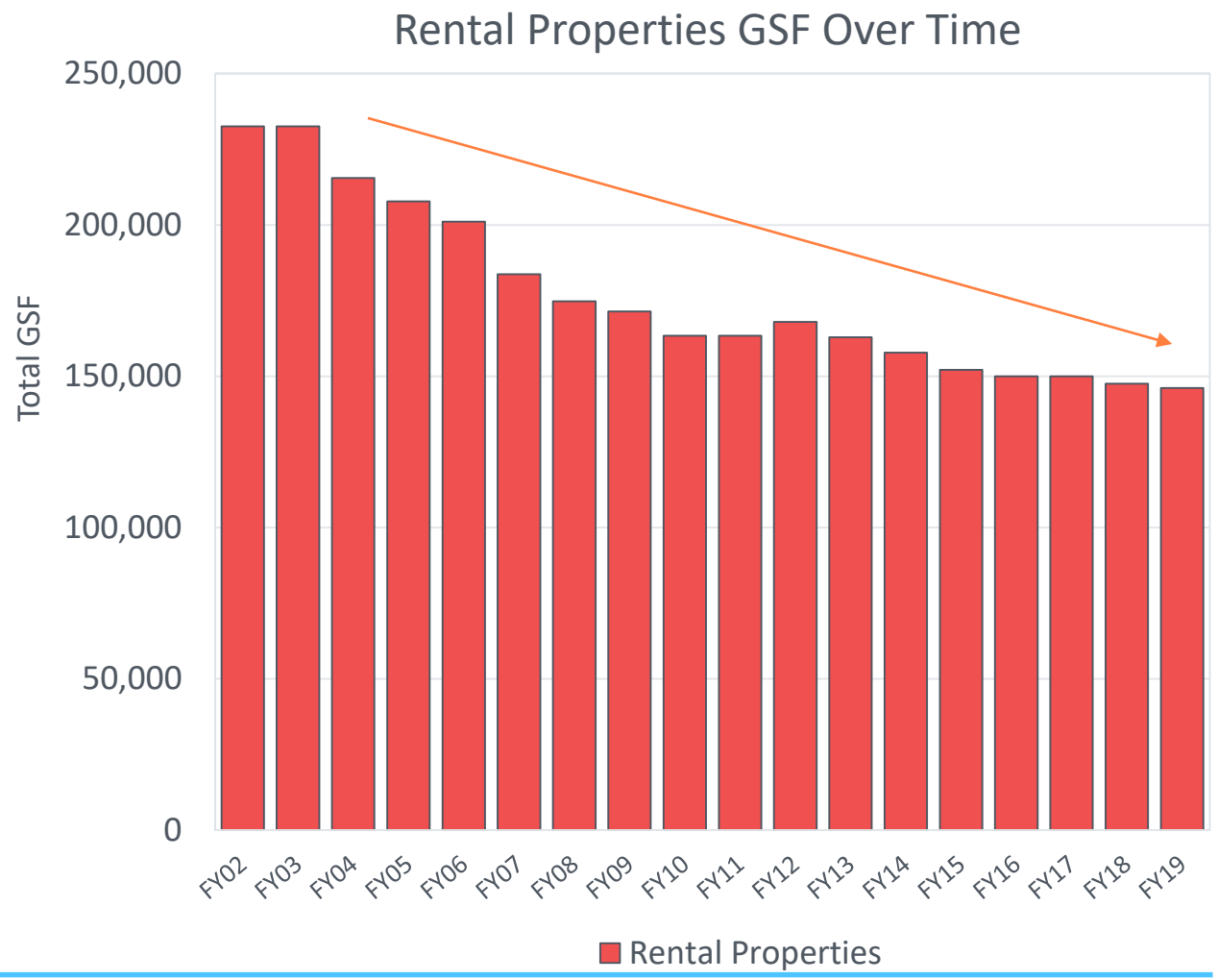


Space Profile

Rental Properties GSF Declining, Main Campus is More Consistent

Rental properties GSF have decreased by 37% since FY02

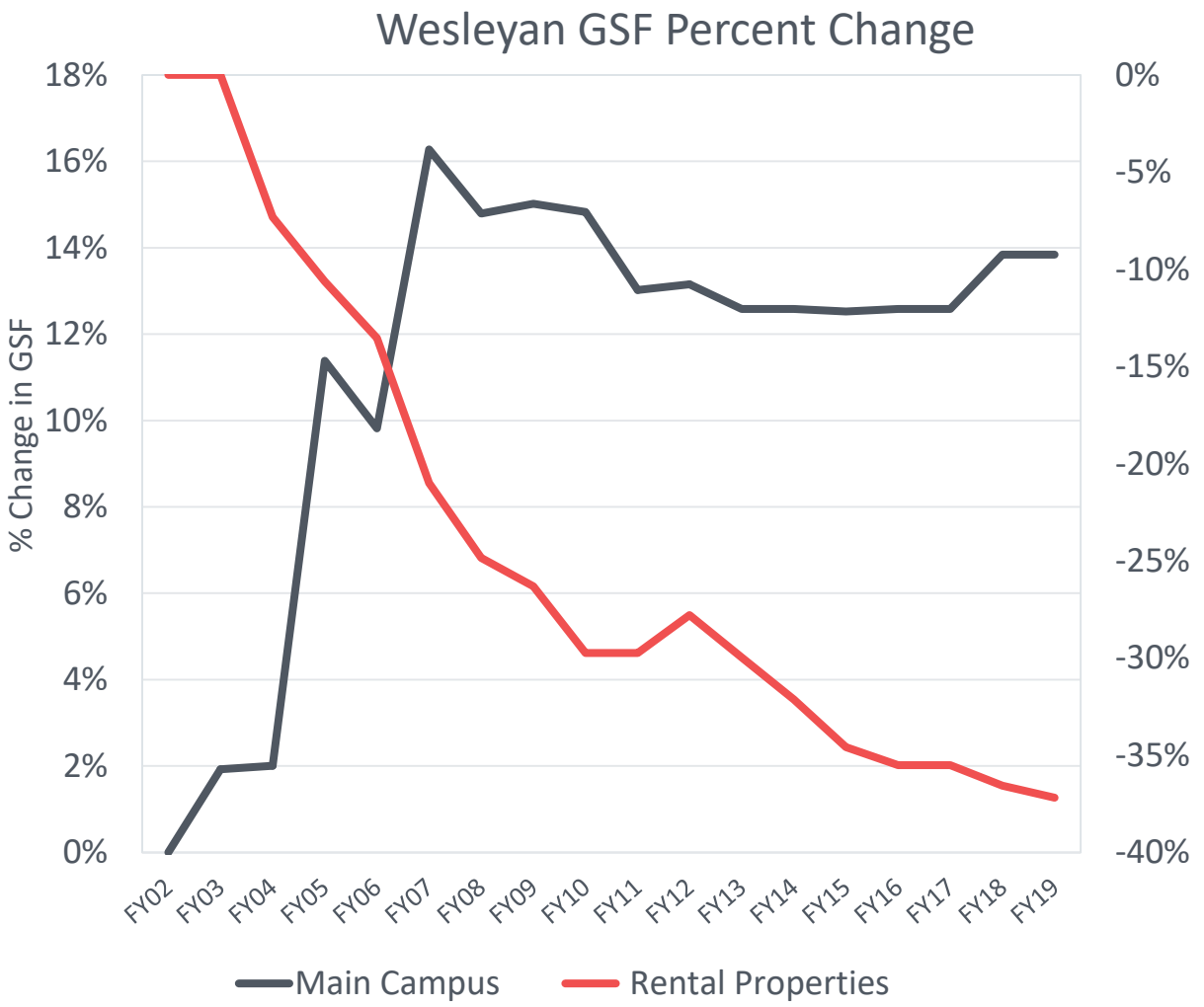


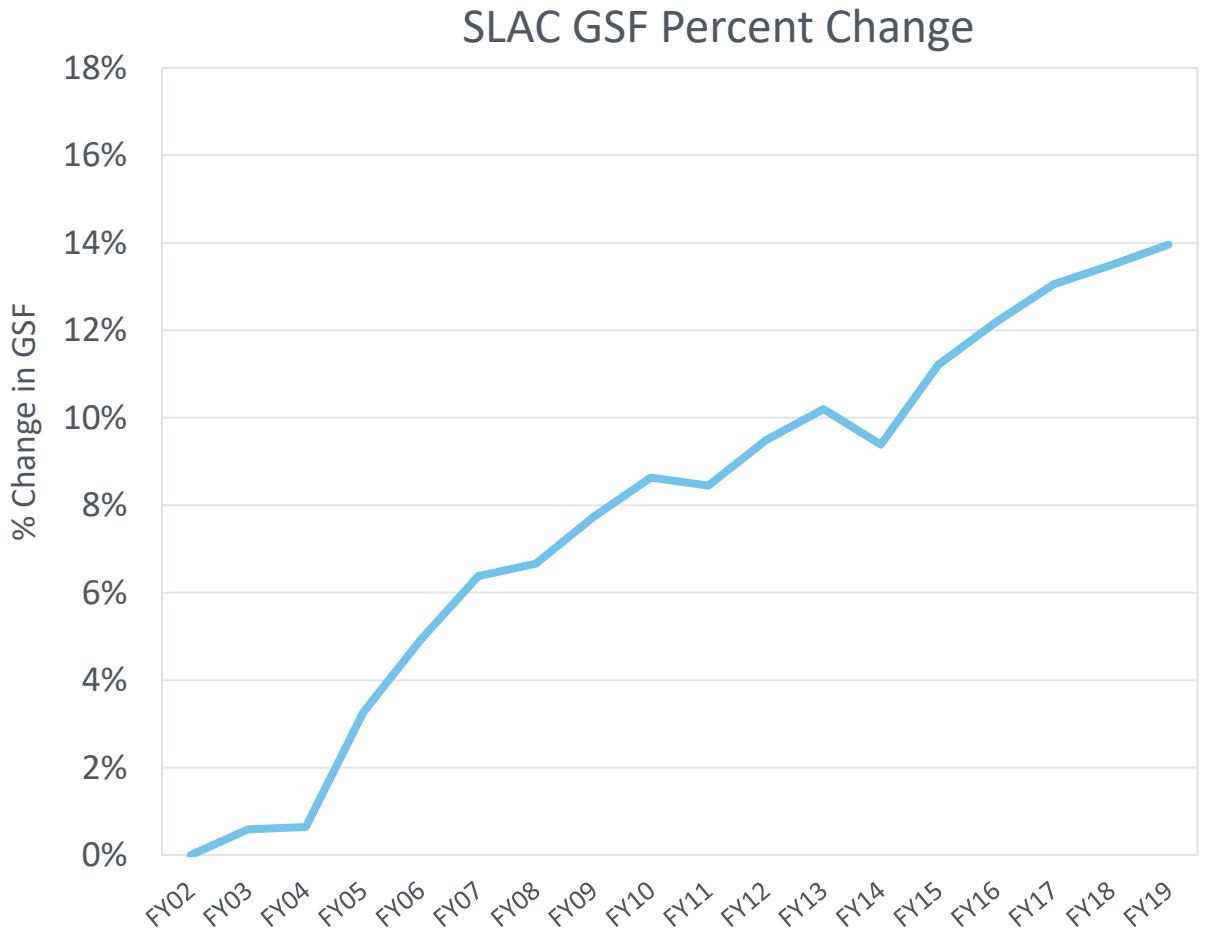


GORDIAN®

Main Campus GSF Has Changed 14% Since FY02

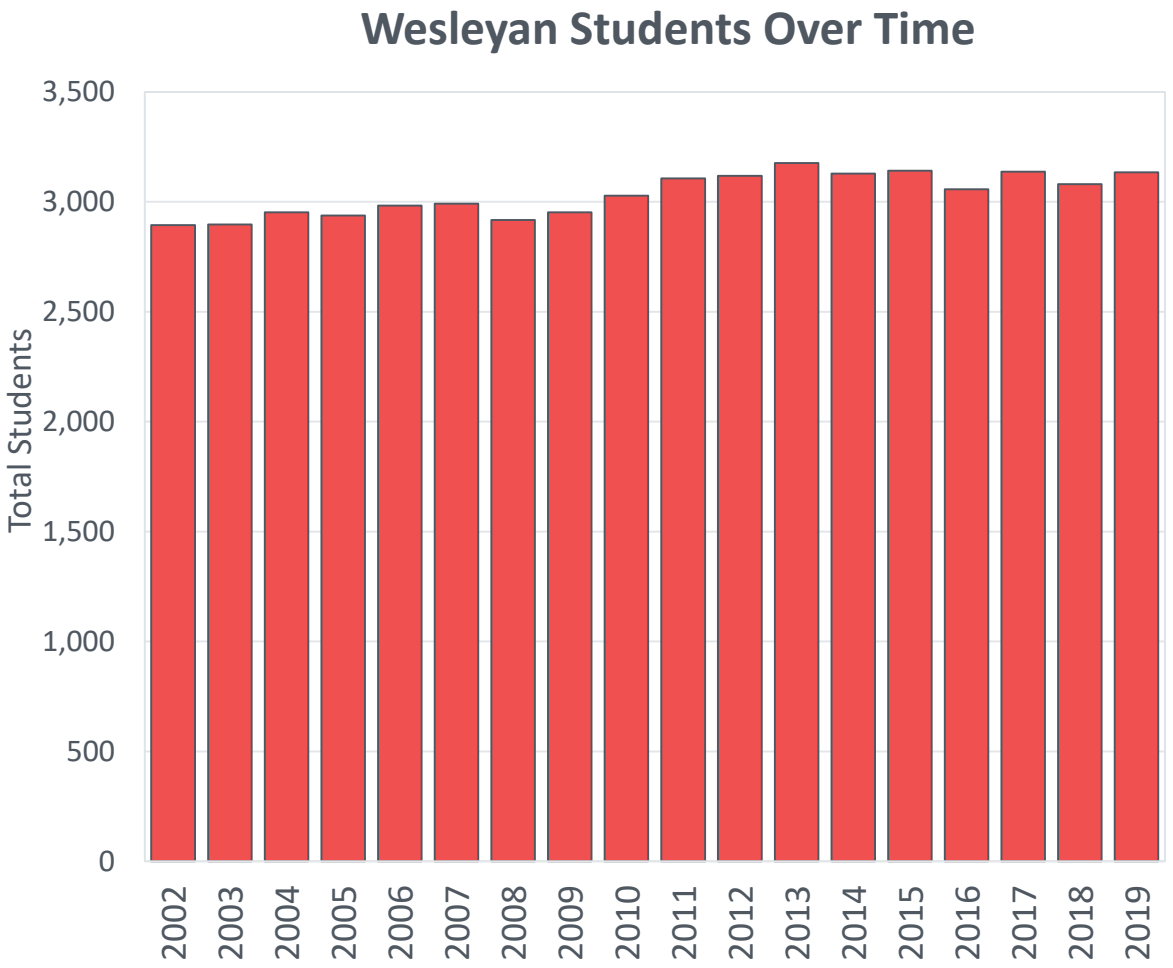
Peers' GSF experienced a steady incline, where Wesleyan had more fluctuations over time

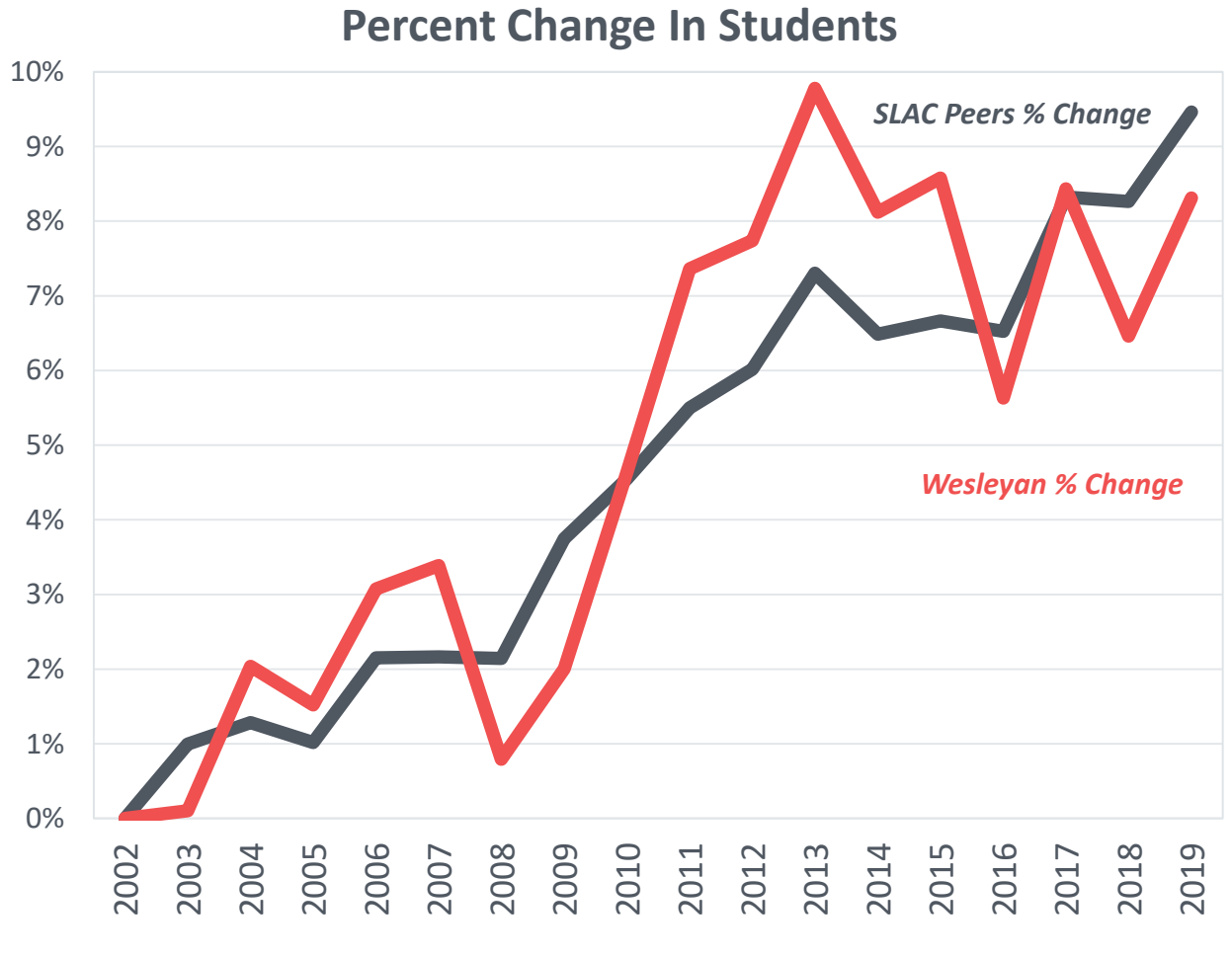




Wesleyan Student Growth Trends Similar to Peers

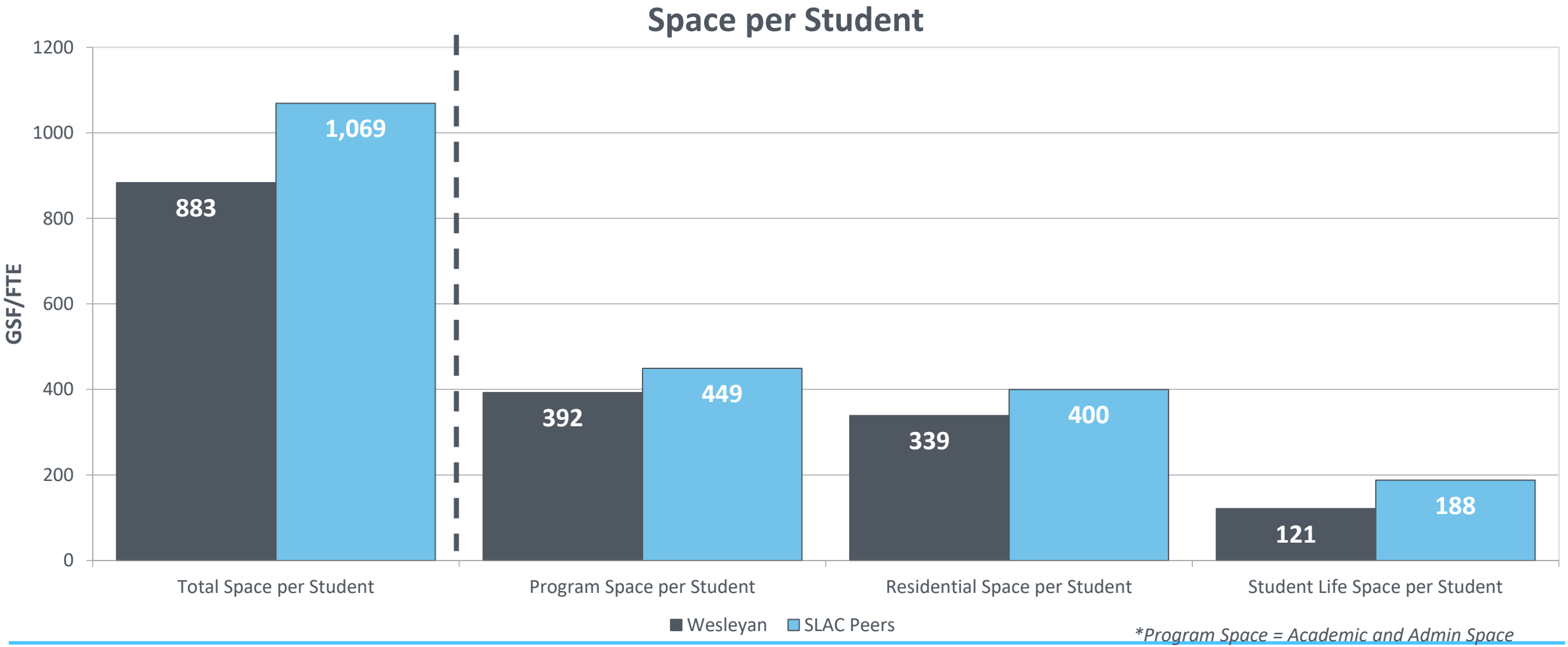
Wesleyan enrollment grows by 8%, while SLAC grows by 9% since FY02





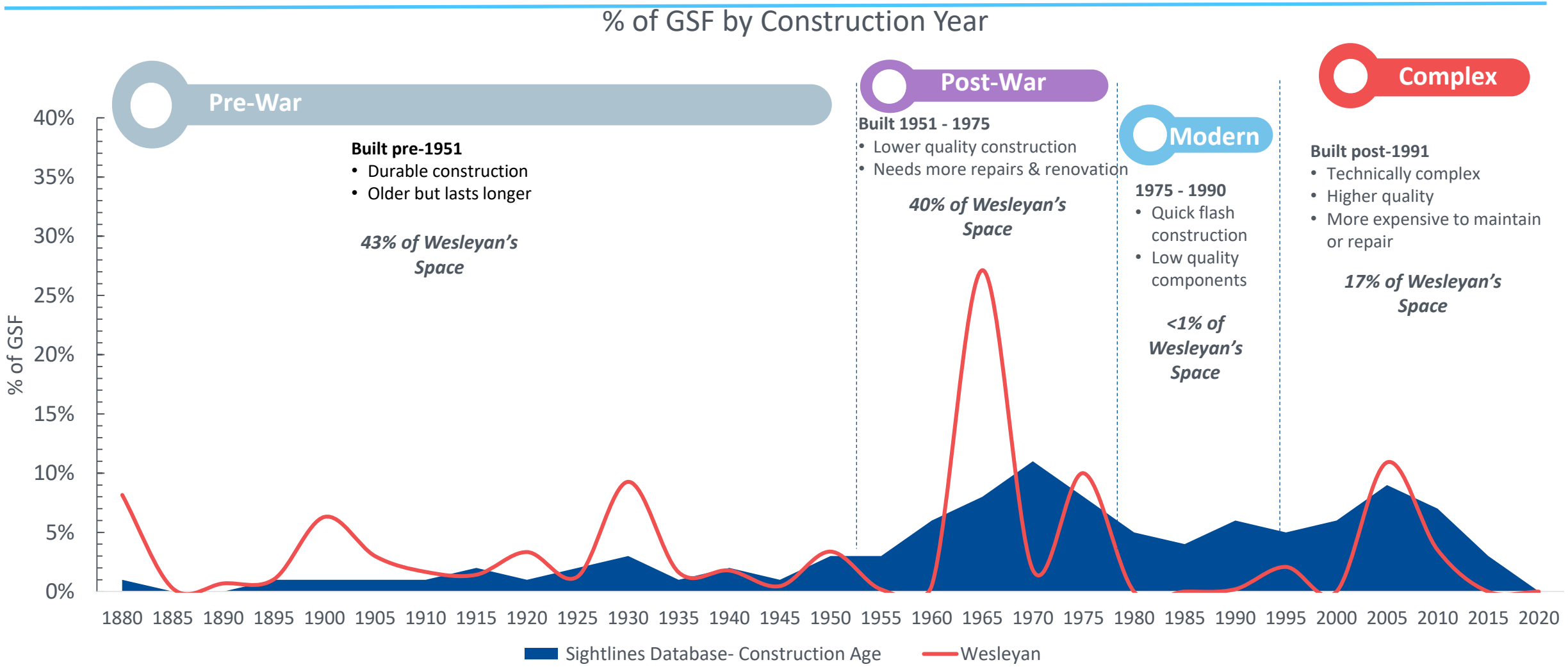
SLAC Peers Have More Space per Student Than Wesleyan

Student life space is the most dense



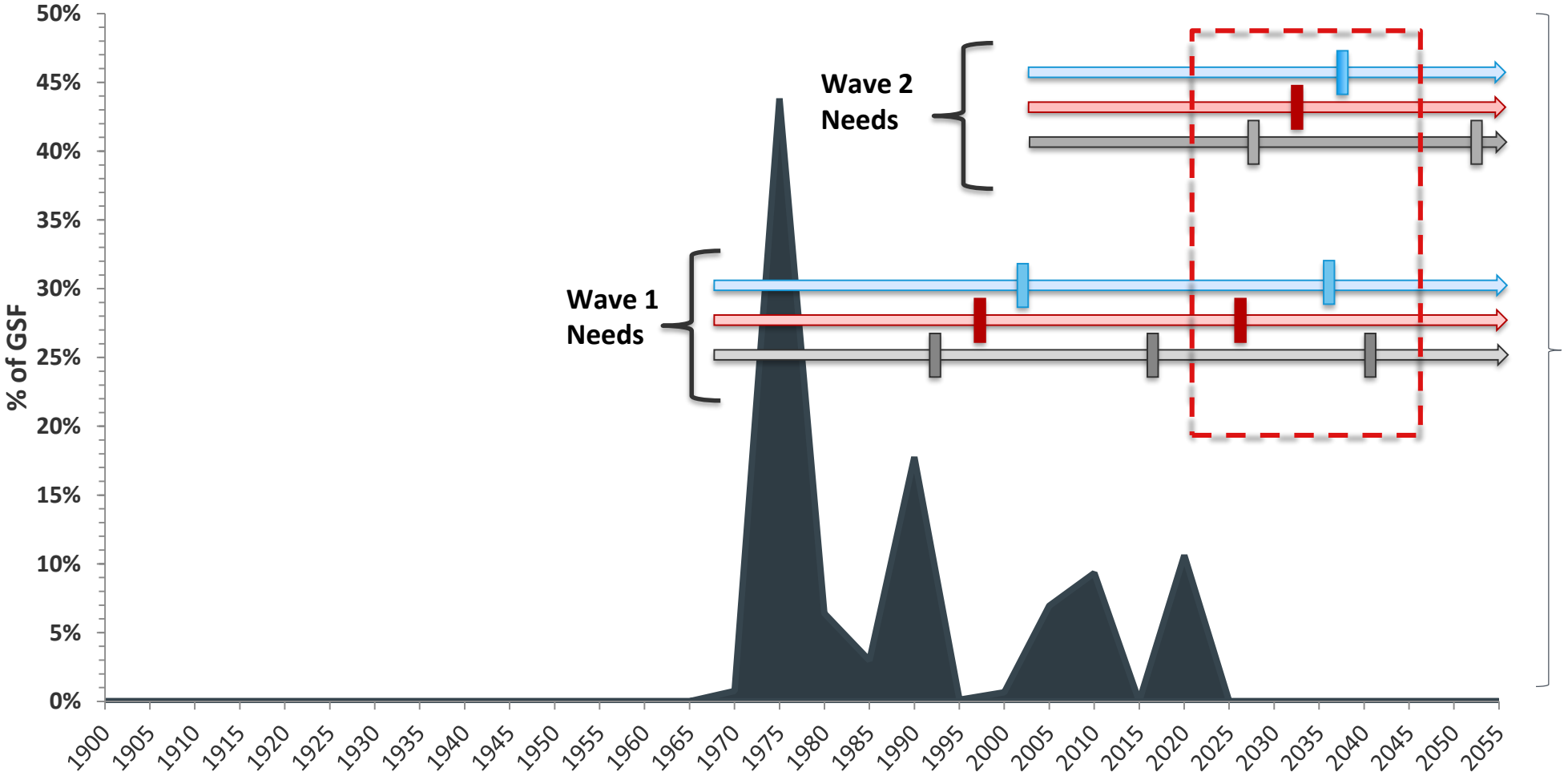
**Program Space = Academic and Admin Space*

Putting Wesleyan's Building Age in Context



Future Forecast Determined by Life Cycle Models

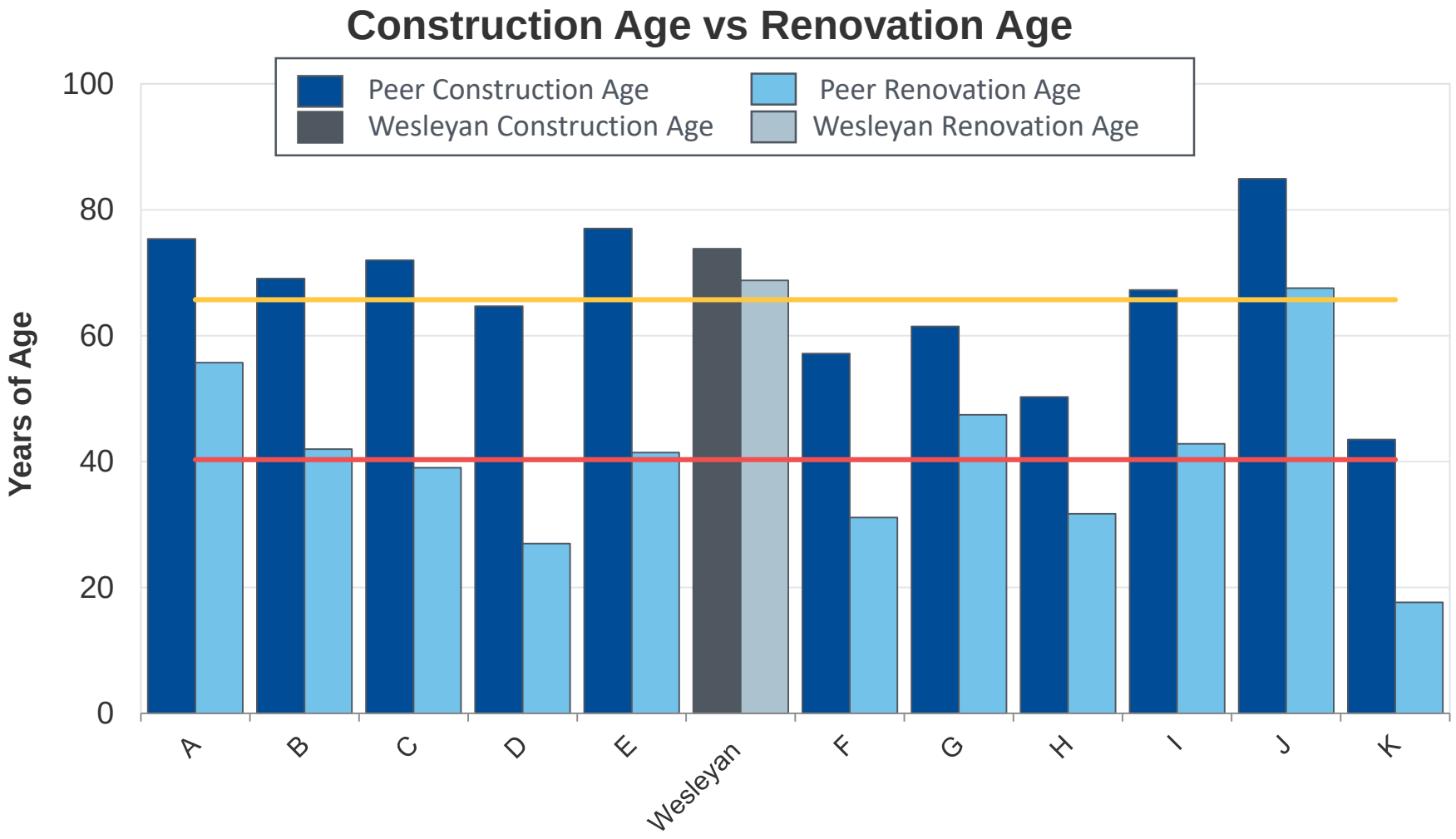
Two waves of needs will come due at once

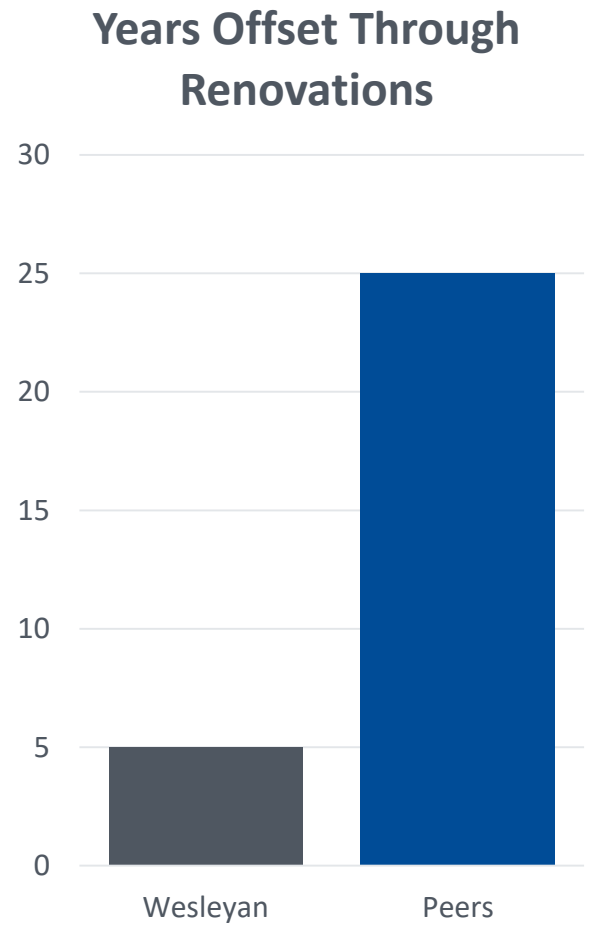


System	SL Standard Life Cycle
Roofing	25 years
Electrical	25 years
Exteriors	30 years
HVAC	30 years
Plumbing	35 years

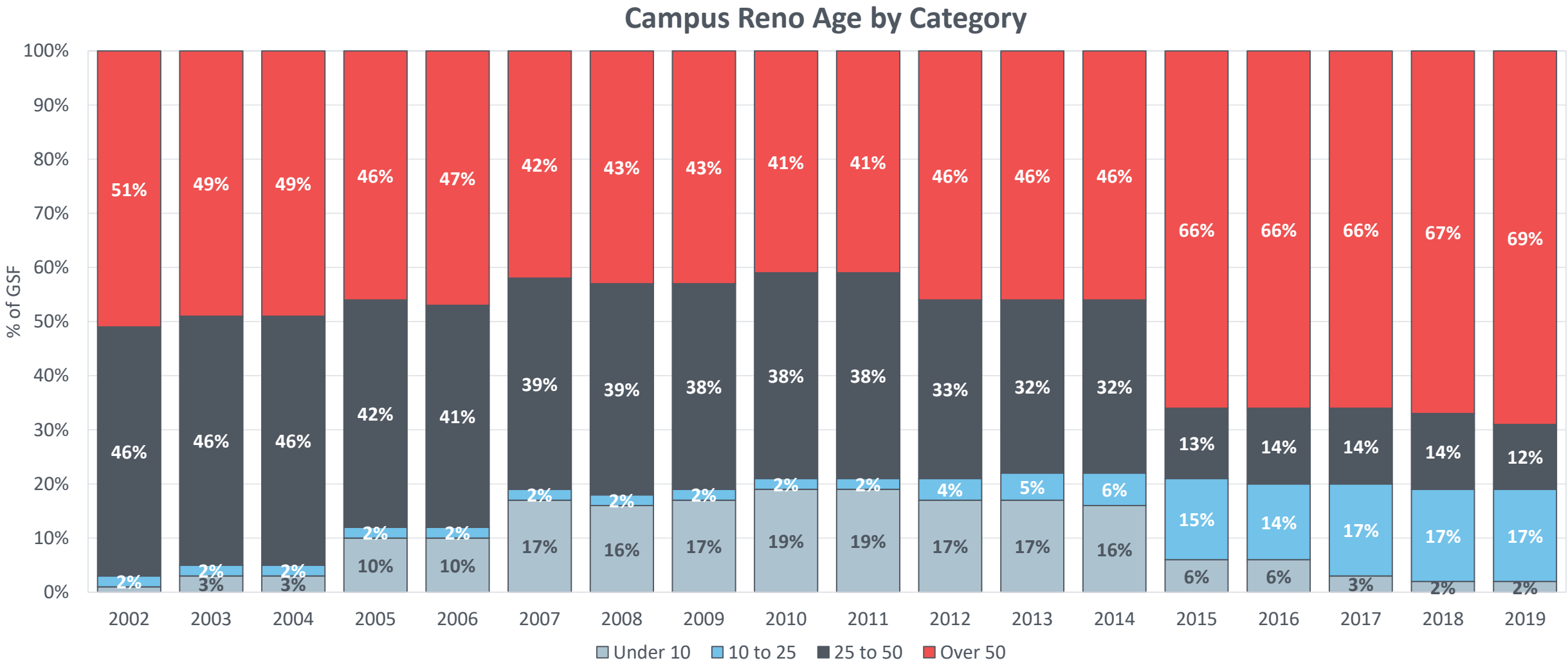
Wesleyan Offset 5 Years Through Renovations; Lowest Amongst Peers

On average, peers' offset campus age five times more than Wesleyan

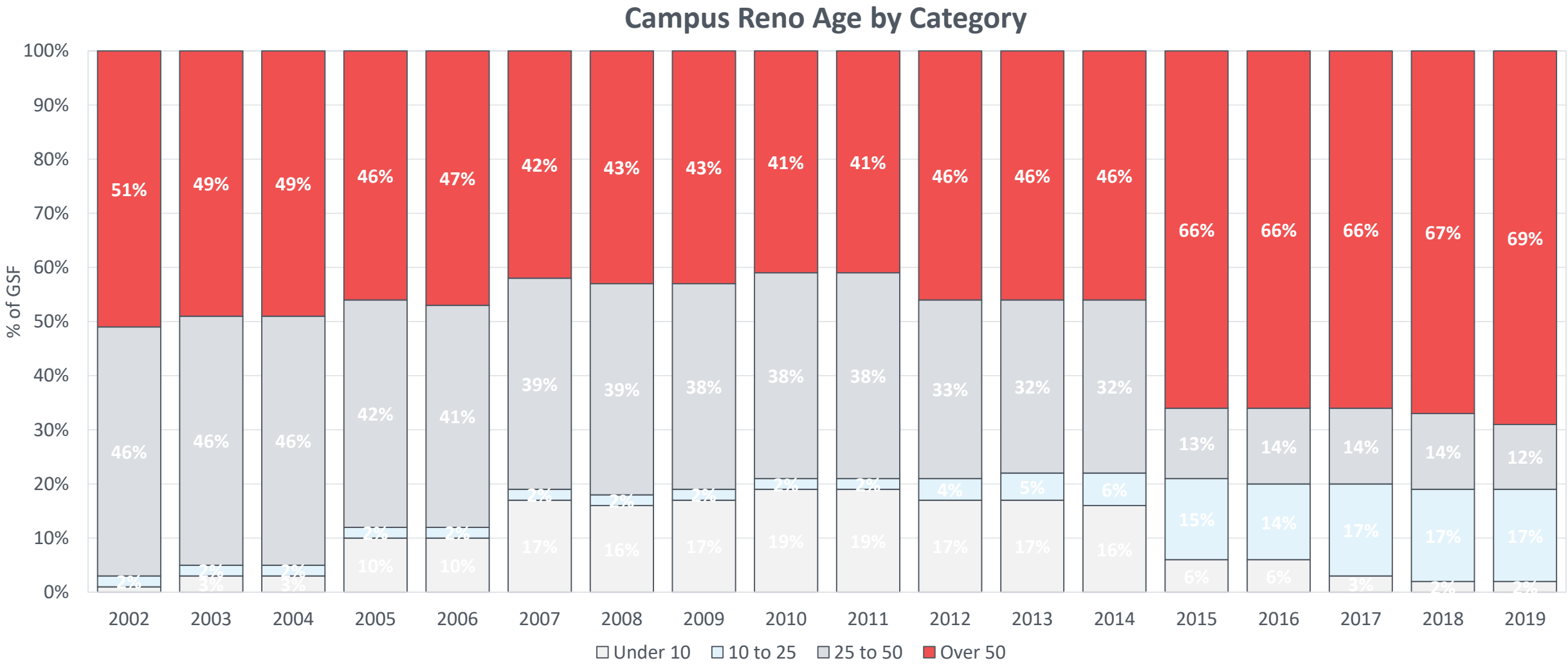




Wesleyan's Building Profile Aging Over Time



Oldest Buildings on Campus Are Getting Older



Majority of Space is Over 50 Years Old

Peers' renovation age profile is more evenly distributed

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

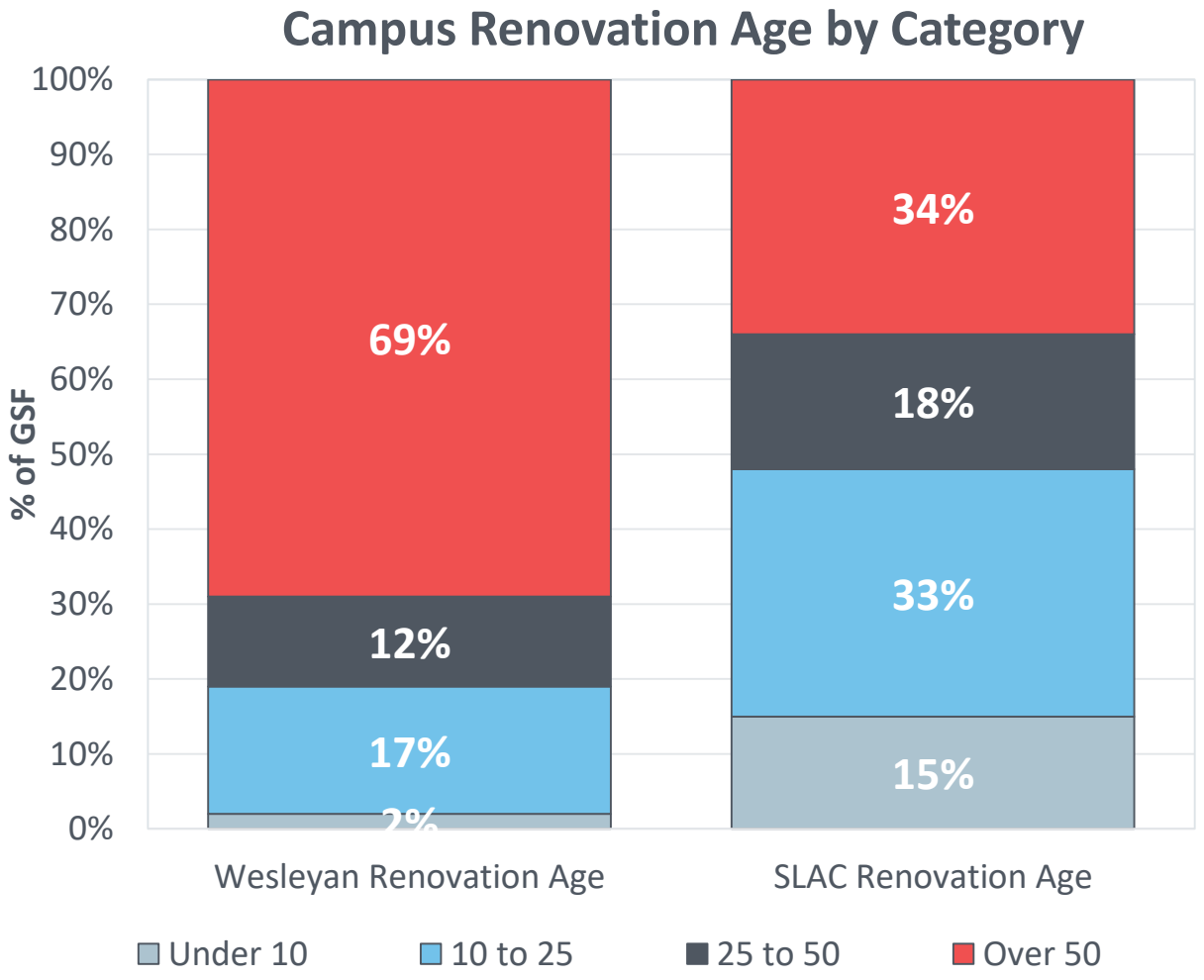
Short life-cycle needs; primarily space renewal.

Medium Risk

Buildings Under 10

Little work. "Honeymoon" period.

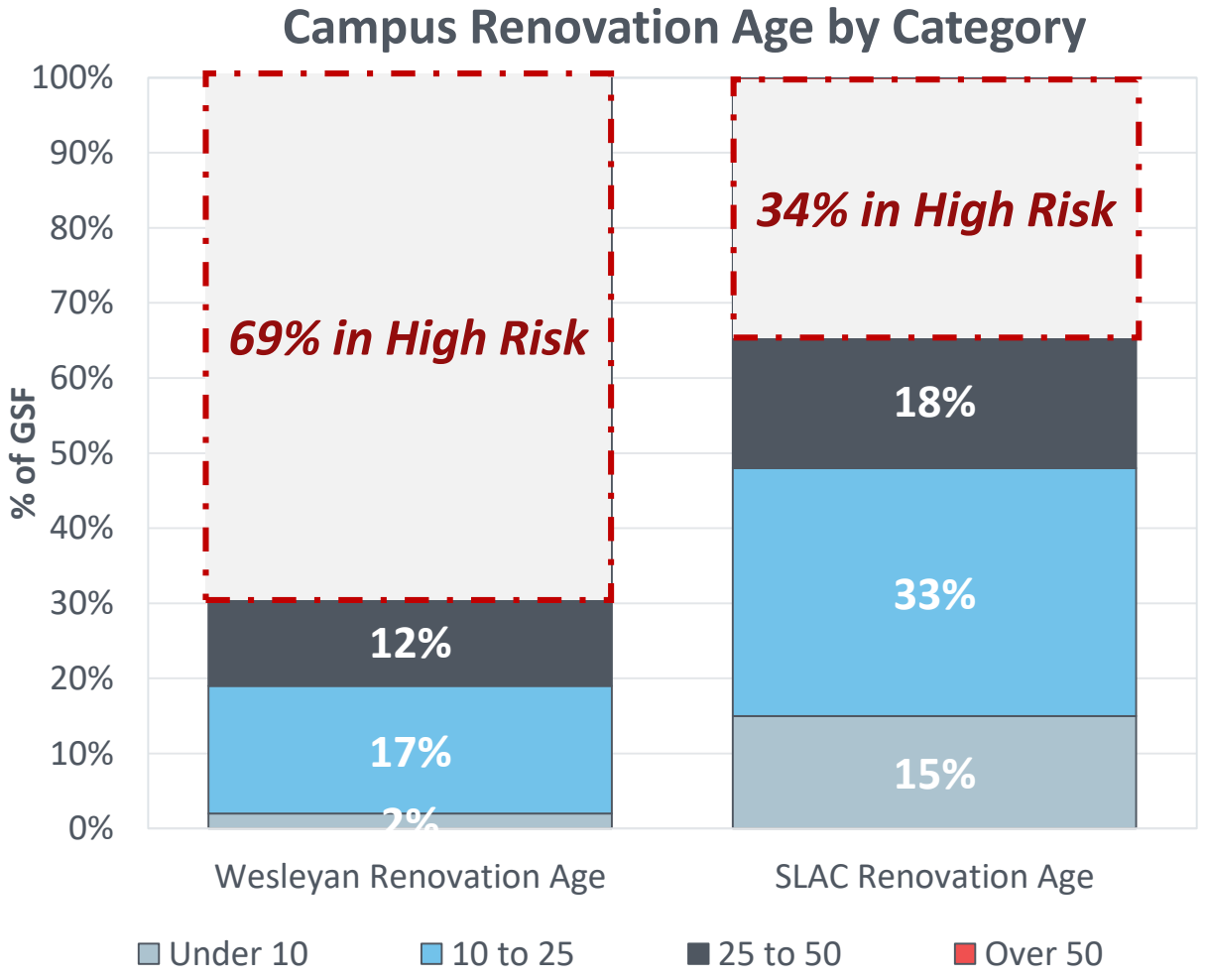
Low Risk



Wesleyan's Age Distribution Falls Mostly in Over 50

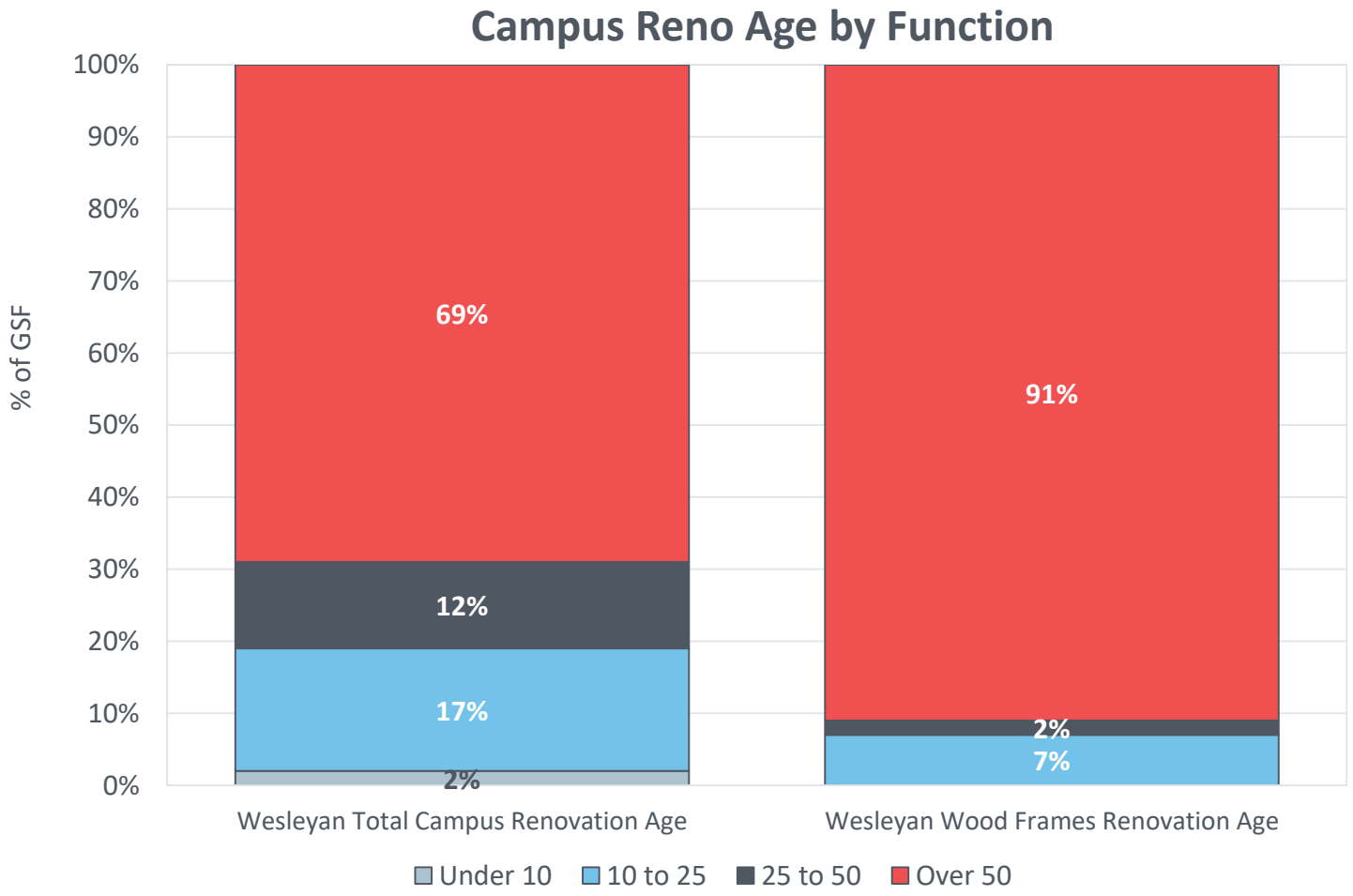
Wesleyan has a higher risk profile with 35% more space in the over 50 category than peers

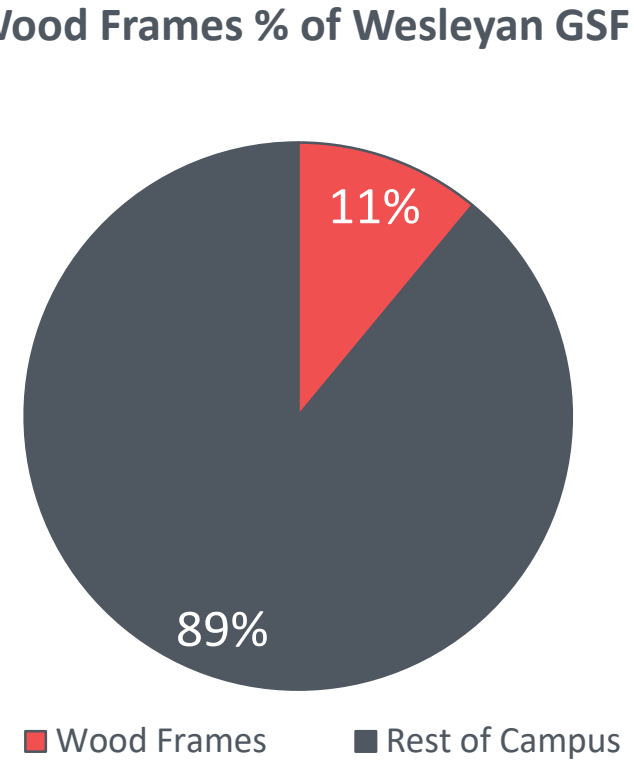
	Operational Demands:	Capital Risk:
Over 50	**React as Needed:** Issues in components past the end of their lifecycles will demand reactive maintenance.	**Highest Risk:** Life cycles of major components past due – end of building life cycle approaching.
25 to 50	**Balance PM and Reactive Maintenance:** Younger components still require PM. Aging components require reactive maintenance.	**Higher Risk:** Life Cycles coming due in core building components.
10 to 25		**Medium Risk:** Lower cost space renewal updates needed.
Under 10	**Focus on PM:** Significant need for PM in young systems.	**Low Risk:** "Honeymoon" period – little need for capital reinvestment.



Wood Frames Are Older Compared to Total Campus

Wood frames make up 11% of campus GSF

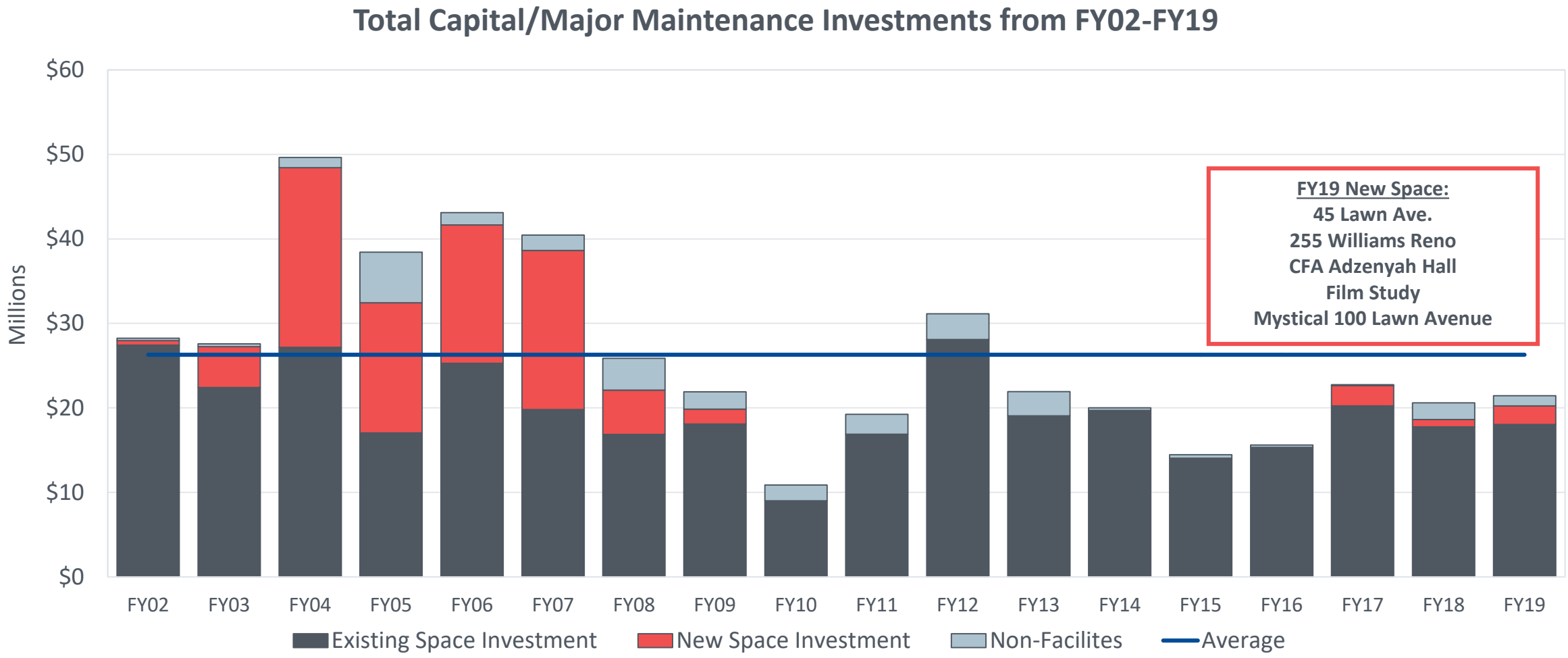




Asset Value Change

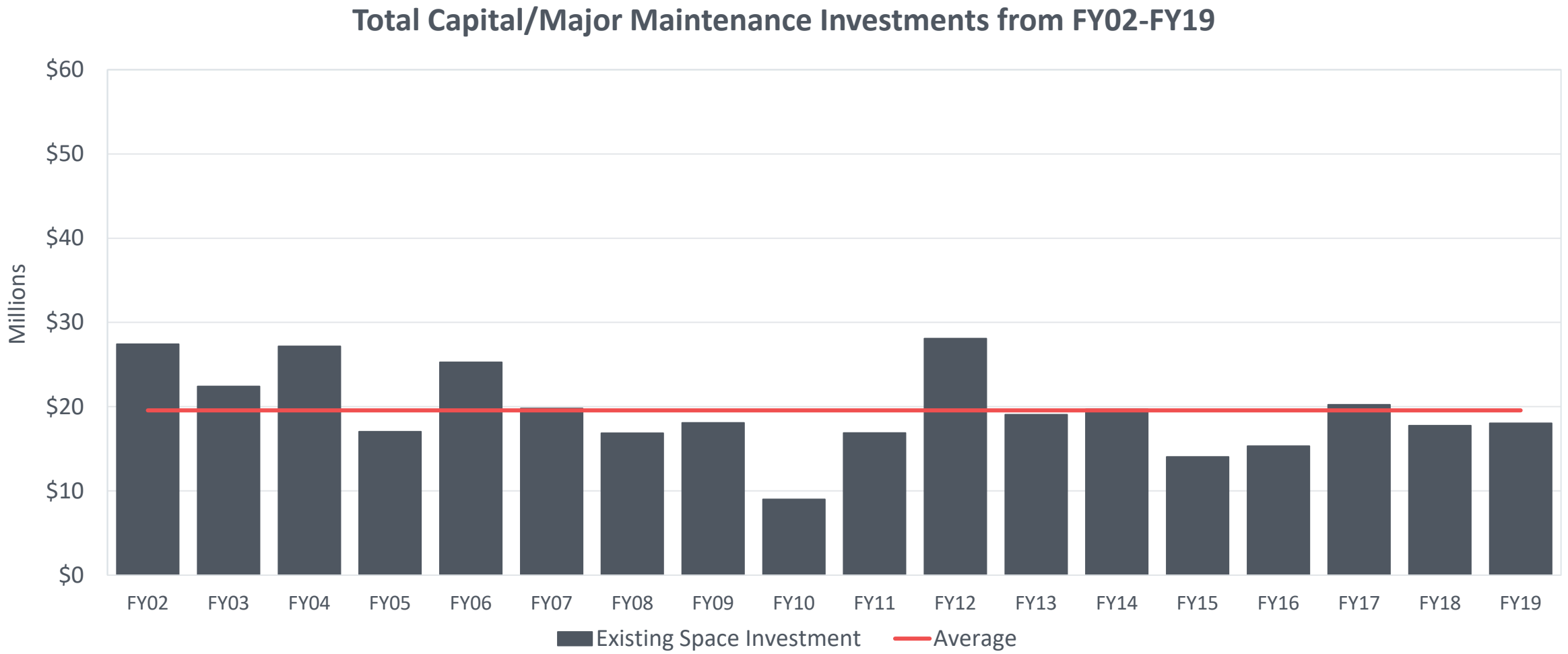
Total Investment FY02-FY19: $473.1 M

FY19 investment $21.4M



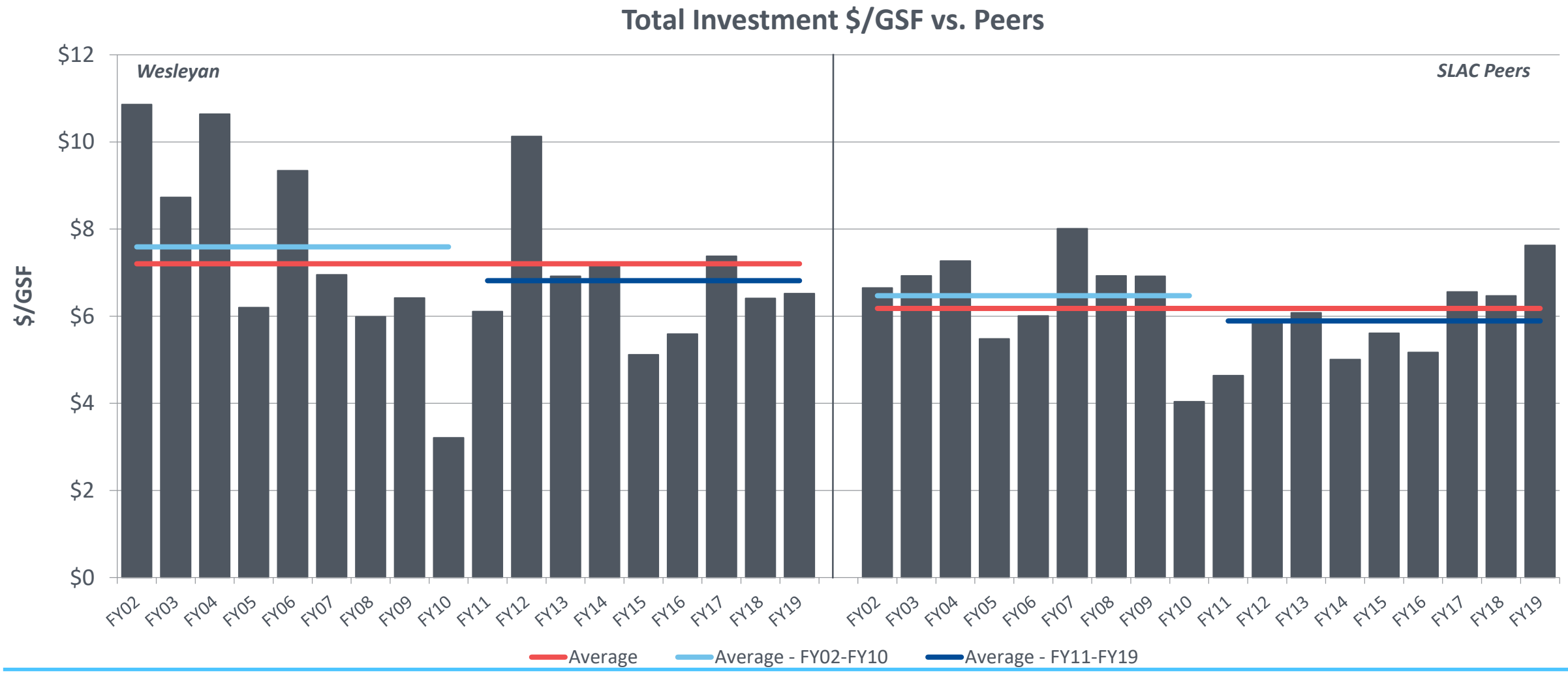
Investment into Existing Space Remains Consistent In FY19

Average annual investment: $19.5M



Investments into Existing Space Below Peers in FY19

On average, Wesleyan invests $1.02/GSF or $2.8M more than peers

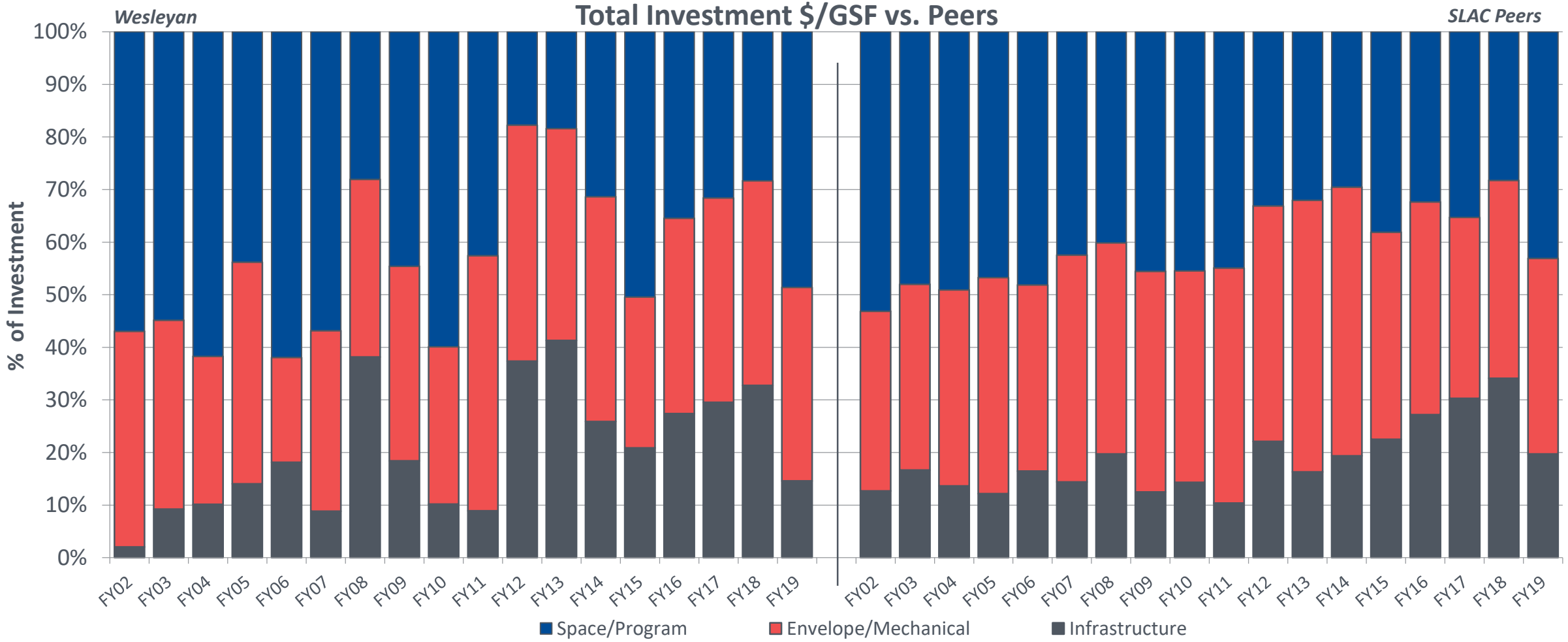


**Investment into existing space*

GORDIAN®

Investments Focused Towards Space/Program in FY19

On average, Wesleyan invests 57% towards Envelope/Mechanical needs, Peers 59%

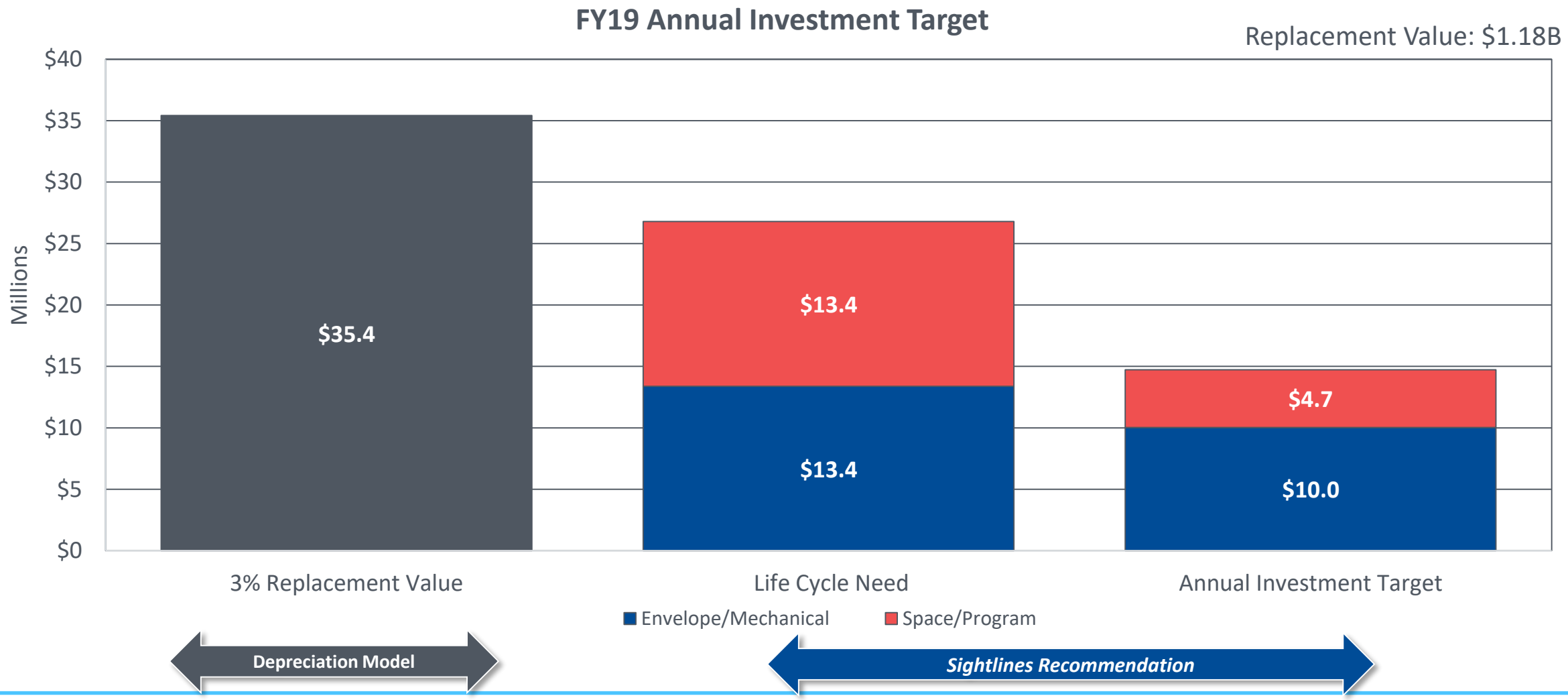


*Investment into existing space

GORDIAN®

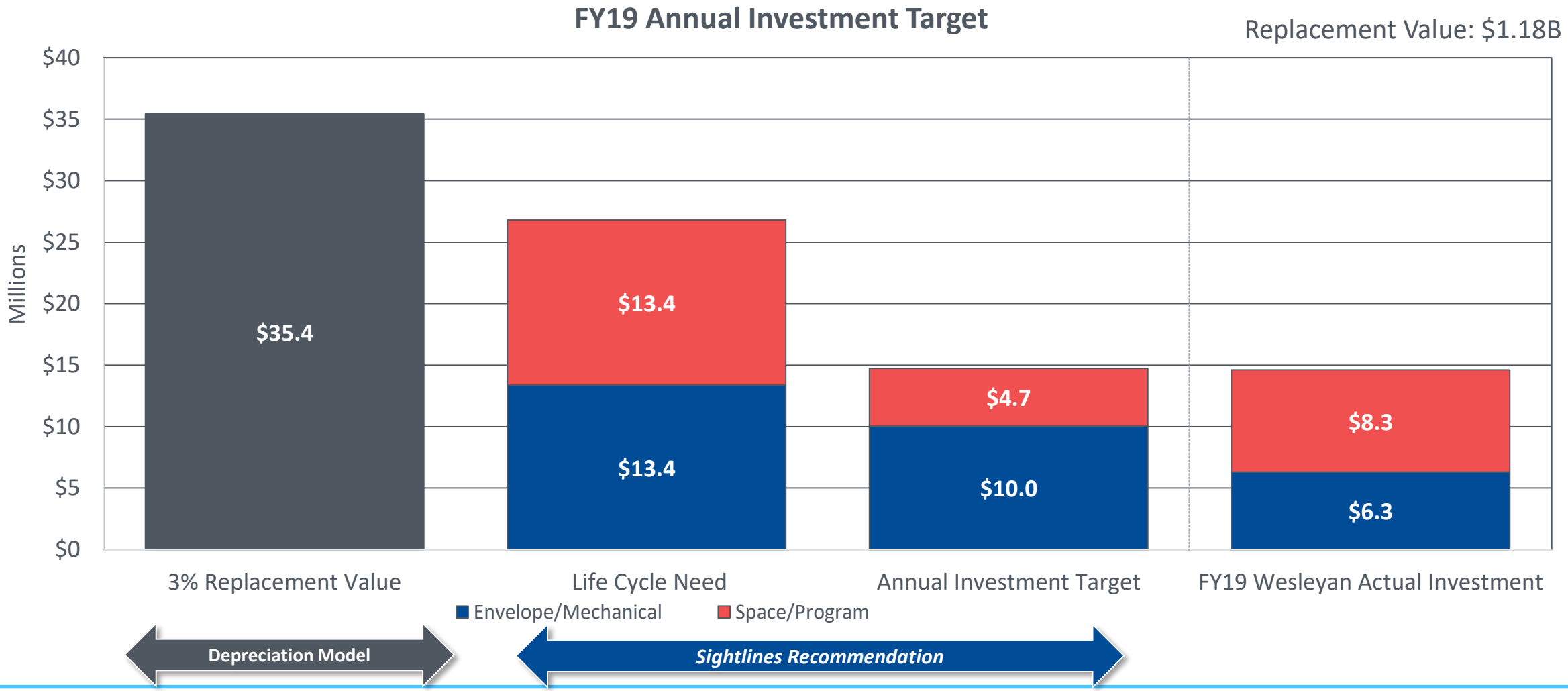
Defining an Annual Investment Target for Wesleyan

Annual Funding Target: $14.7M



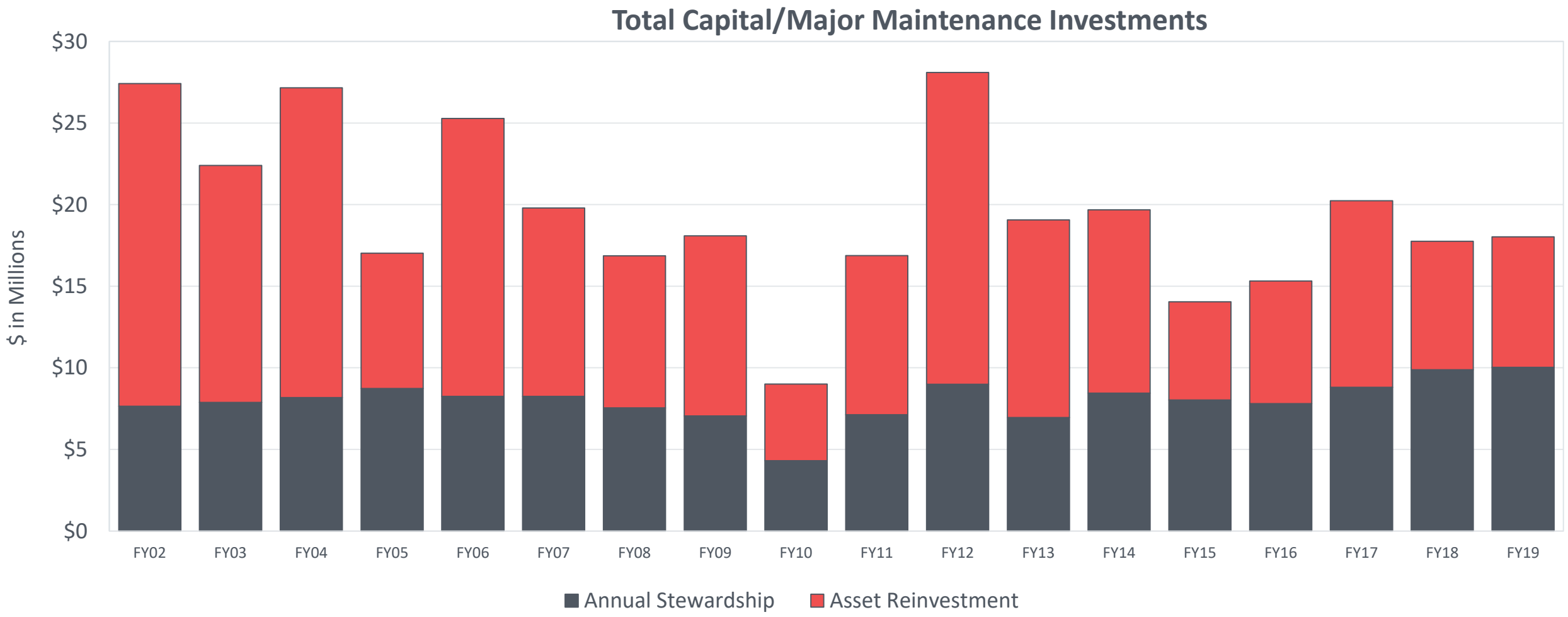
Investment Meets Annual Investment Target

Higher investment towards space/programming projects than target recommends



Growing Major Maintenance Funds

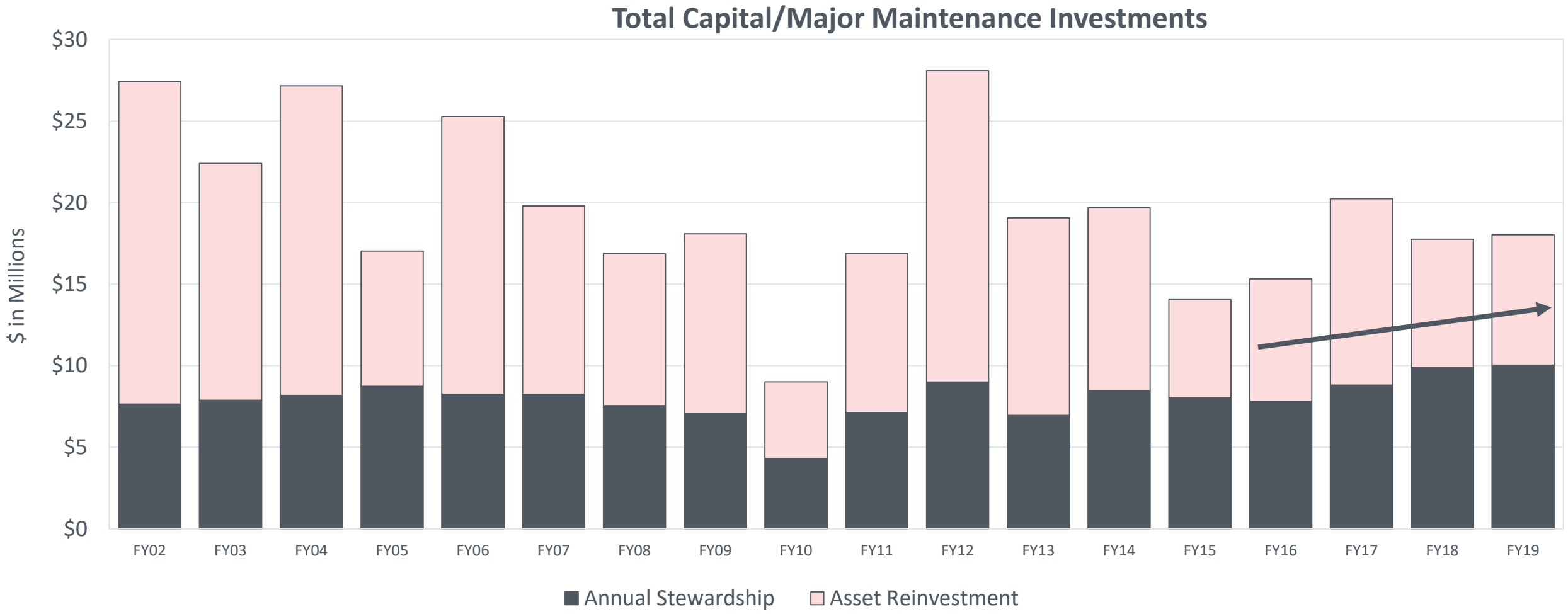
Major Maintenance funds have been on the rise since FY15



GORDIAN®

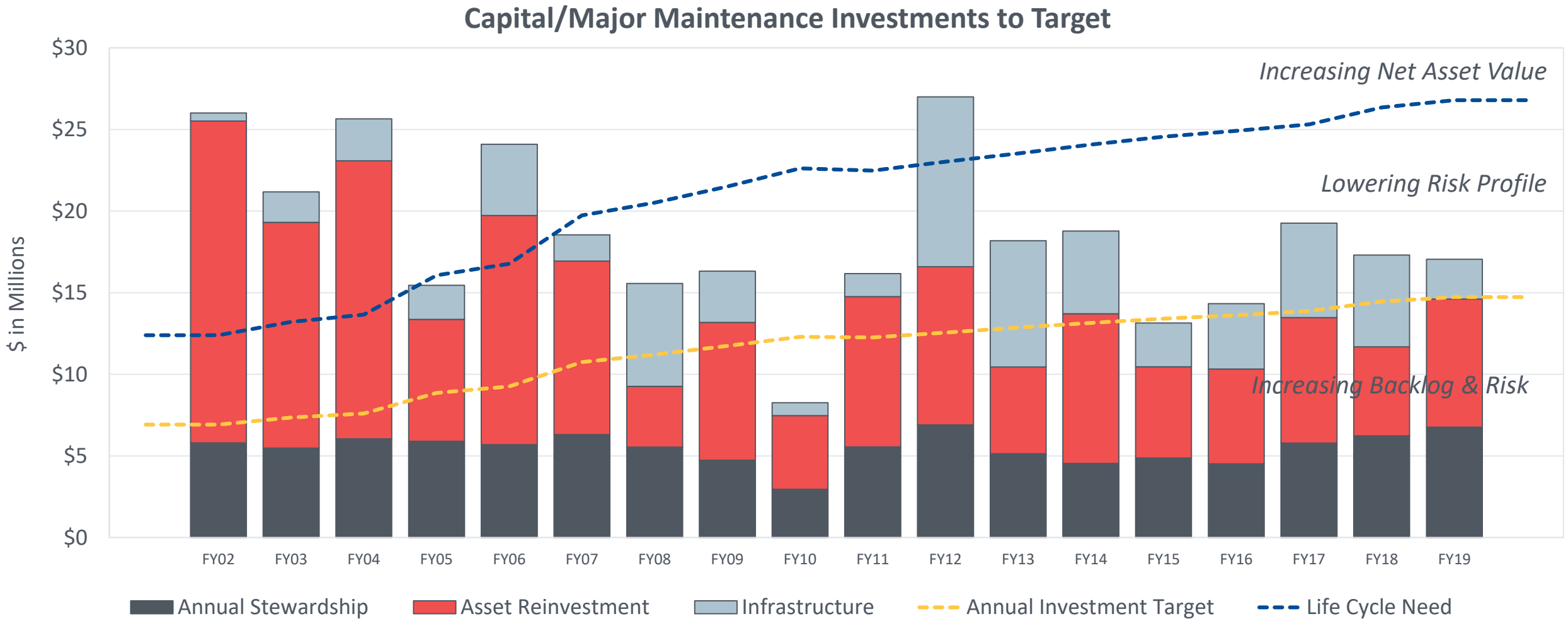
Growing Major Maintenance Funds

Major Maintenance funds have been on the rise since FY16



Chasing A Growing Target

Wesleyan meets target in FY19



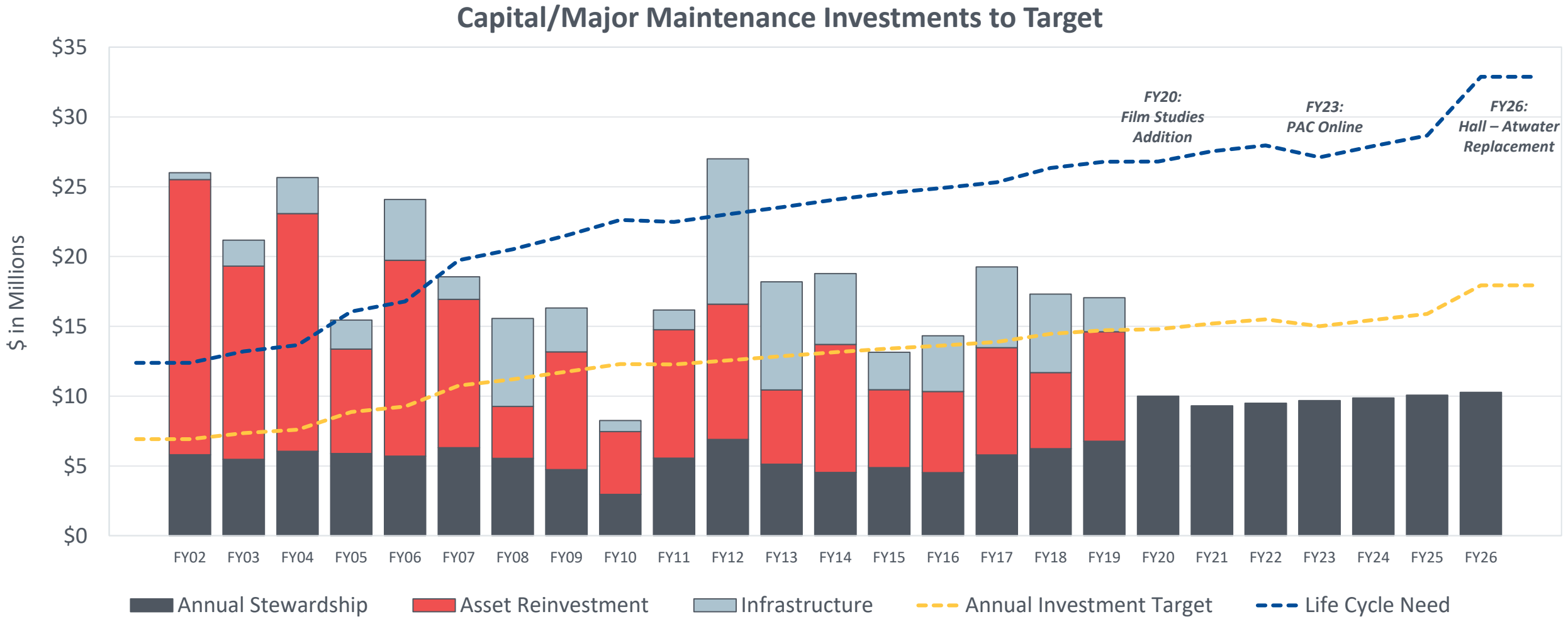
**Investment into existing space*

***Sightlines Annual Investment target does not include infrastructure need. Wesleyan estimates approximately $2M of infrastructure need each year.*

GORDIAN®

Planned Renovations Provide Insight into Future Target

Stewardship target increases $17.8M by 2026 due to renovations



*Investment into existing space

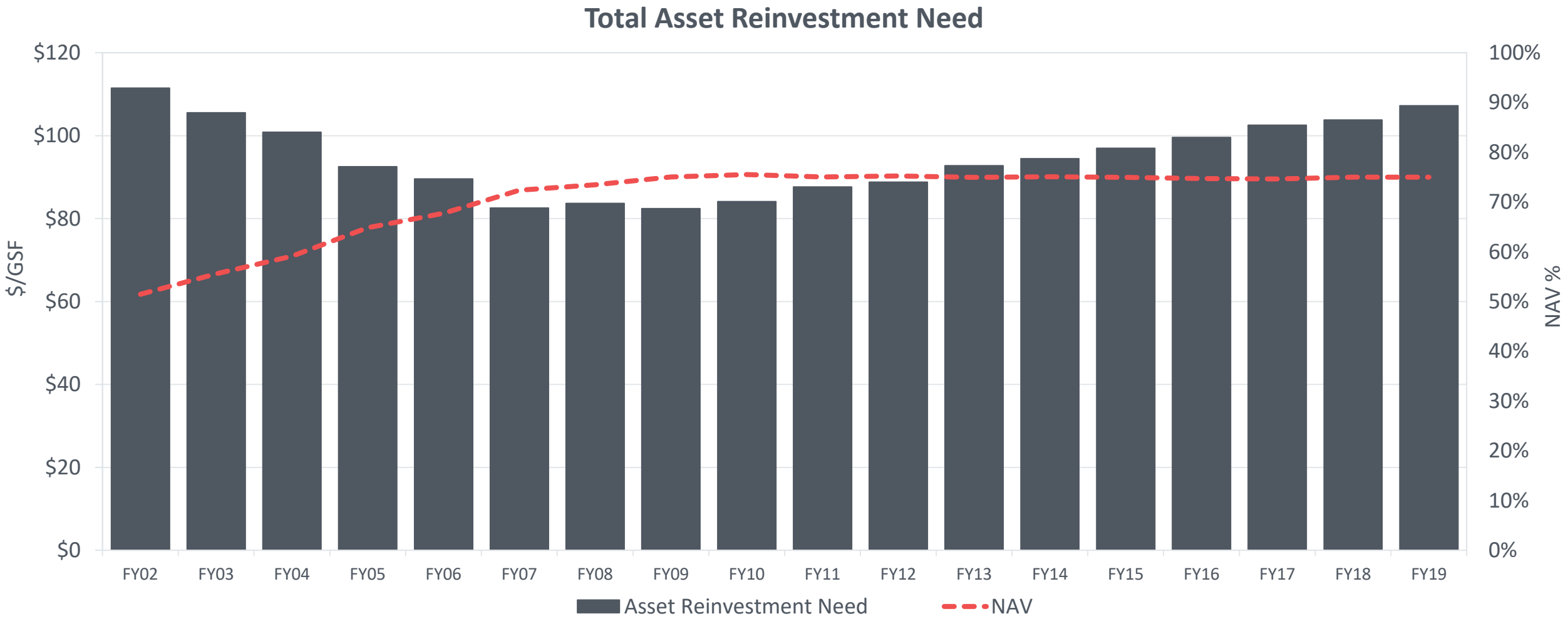
**Sightlines Annual Investment target does not include infrastructure need. Wesleyan estimates approximately $2M of infrastructure need each year.

*Projections reflect Film Studies addition and renovations of PAC in 2023 and Hall Atwater in 2026

GORDIAN®

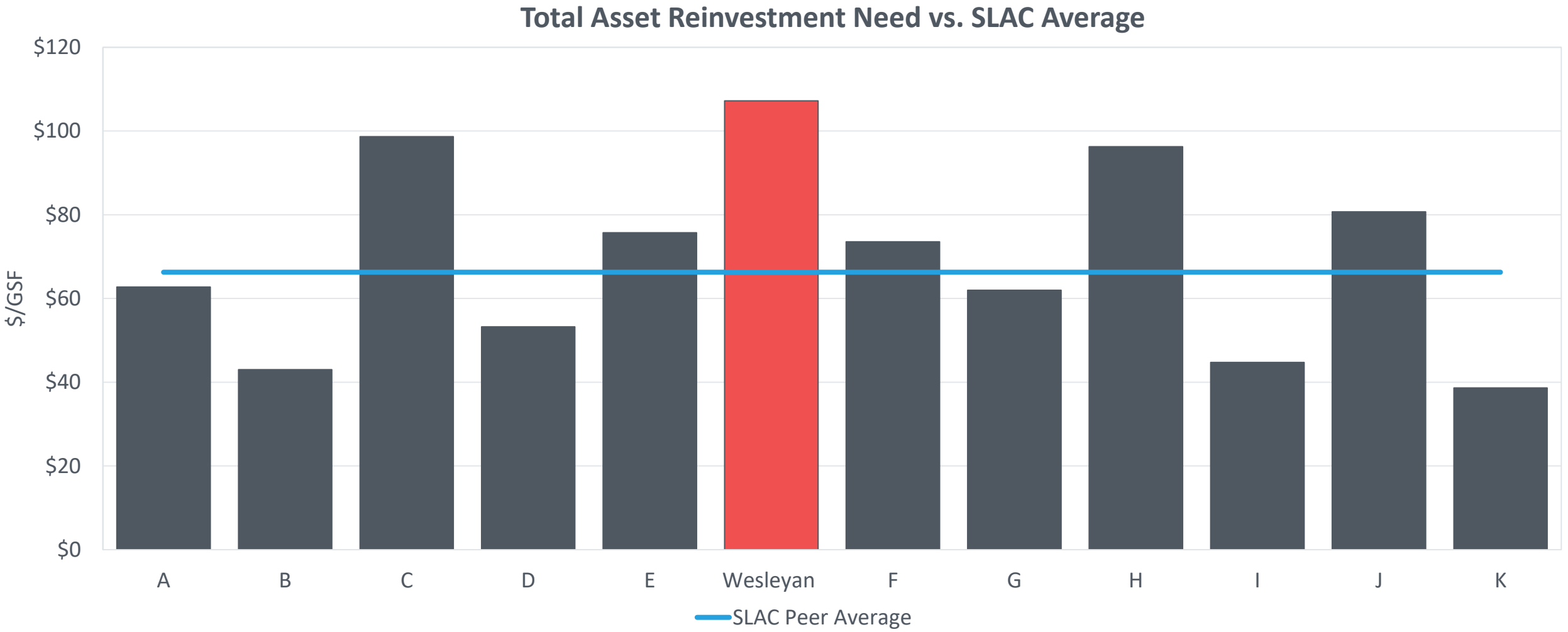
Asset Reinvestment Continues to Grows at Steady Pace

In the last 10 years, AR Need have increased by 27%



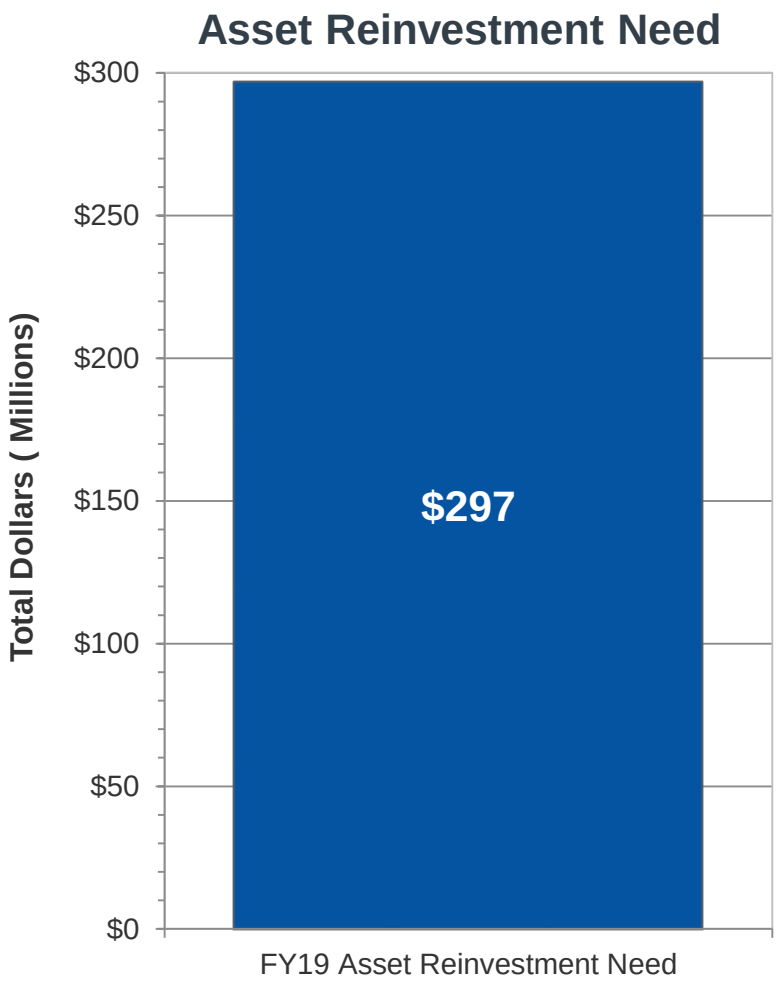
FY19 Total Asset Reinvestment Need Above SLAC Average

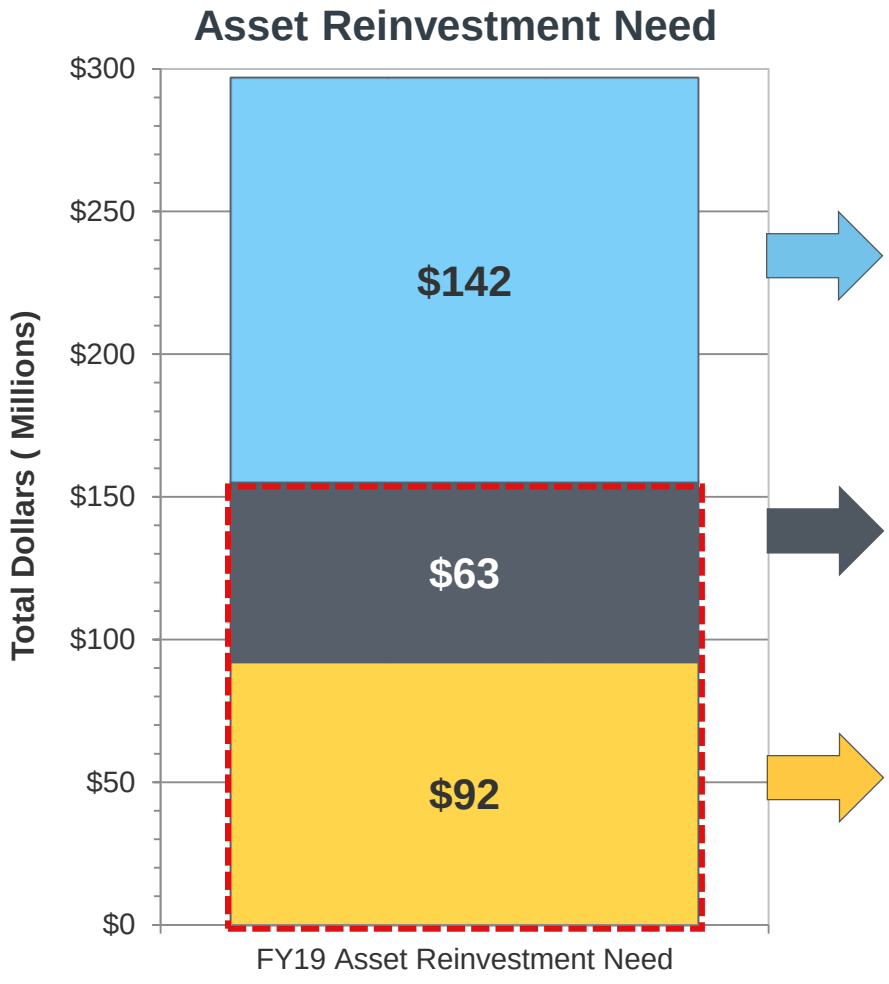
Wesleyan's Backlog is at $107/GSF; SLAC Peers: $66/GSF; SL database: $89/GSF



Wesleyan's Ten-Year Backlog of Need

Sightlines quantifies $155 Million in system-specific need





- ✓ Modernization/Programmatic need is $142M.
- ✓ Sightlines recommends a 10 year capital strategy to address the total need.

- ✓ Total 10 year renewal need is $63M.
- ✓ This represents the life cycle needs coming due between 2020-2029.

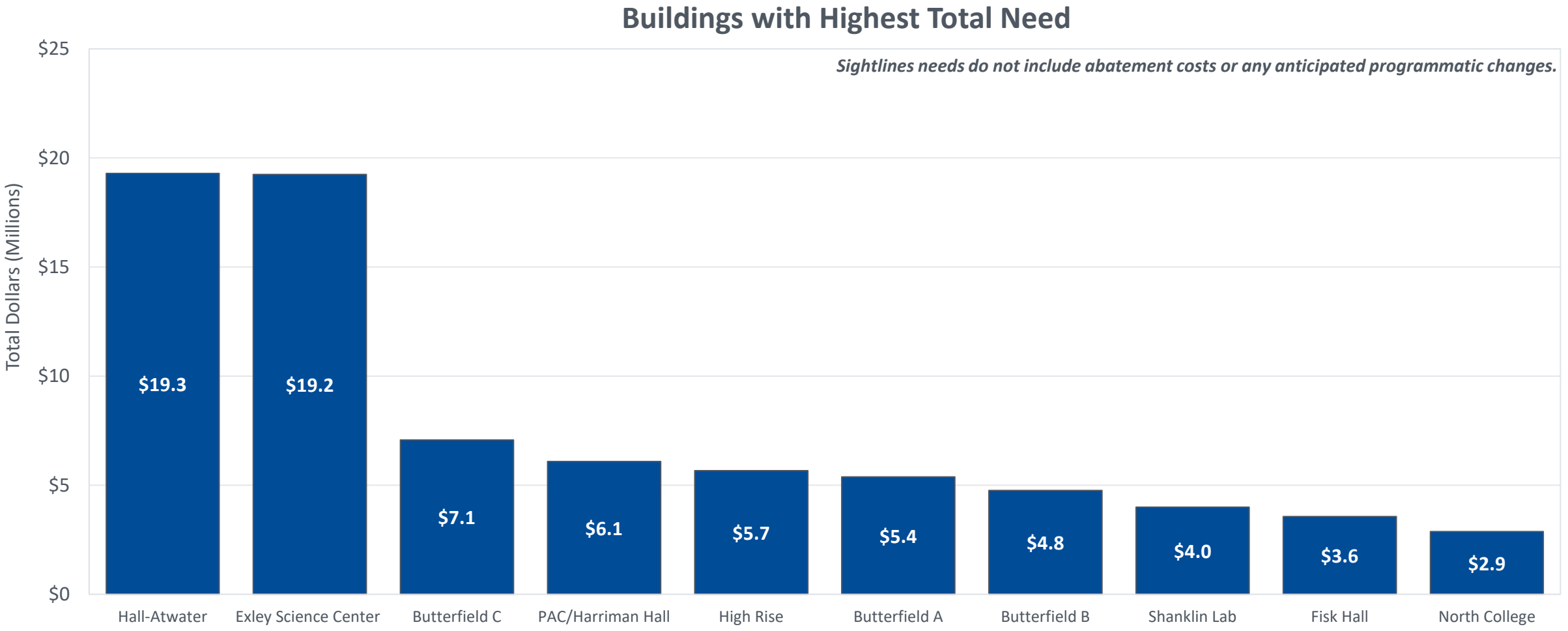
- ✓ Current Need Today *(Backlog)*

Modernization and Infrastructure Renewal Need Current Need

GORDIAN®

Top 10 Buildings with Highest Need (Total Dollars)

These buildings make up 27% of Wesleyan' space

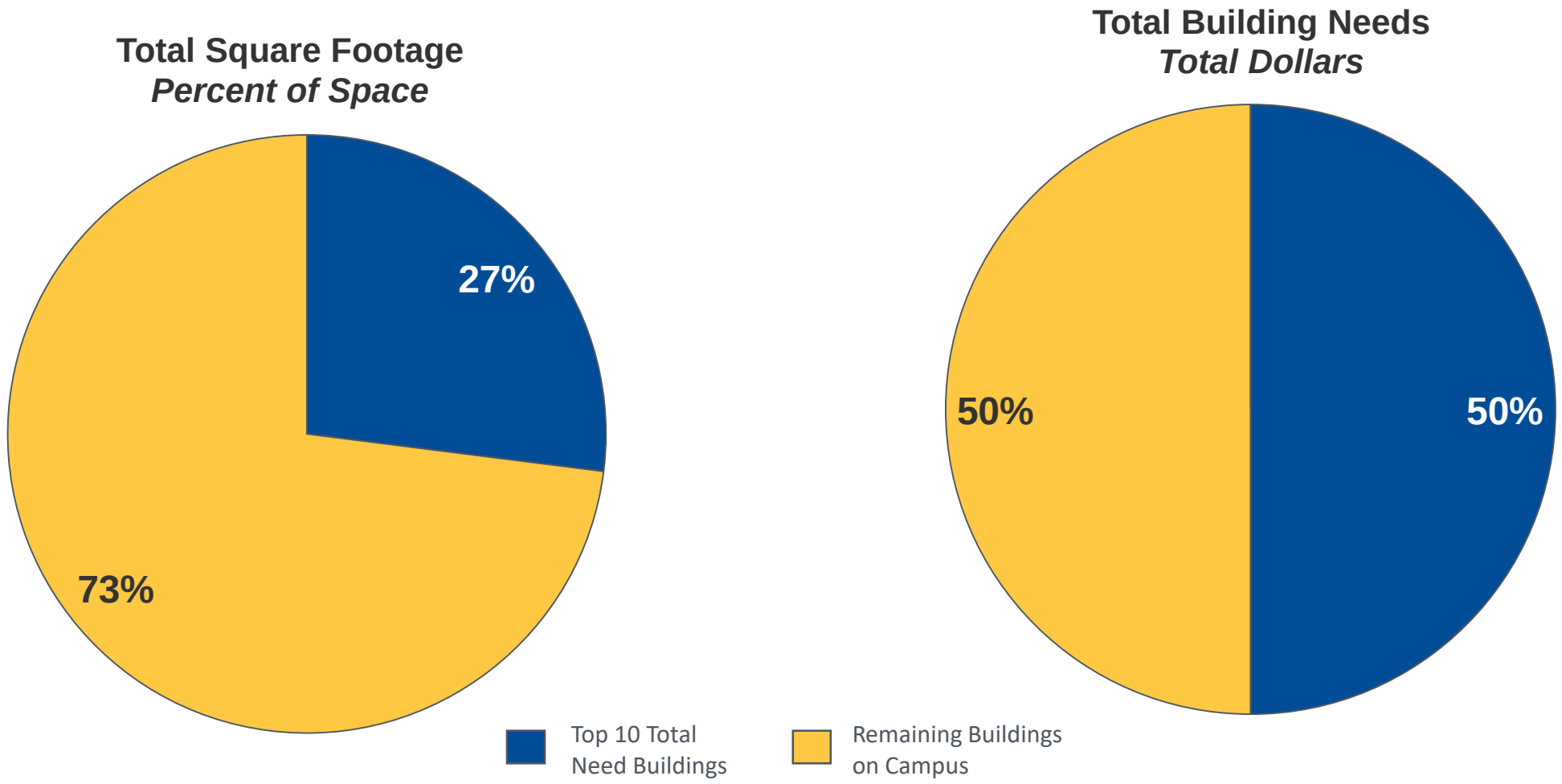


**Includes only current and renewal needs*

GORDIAN®

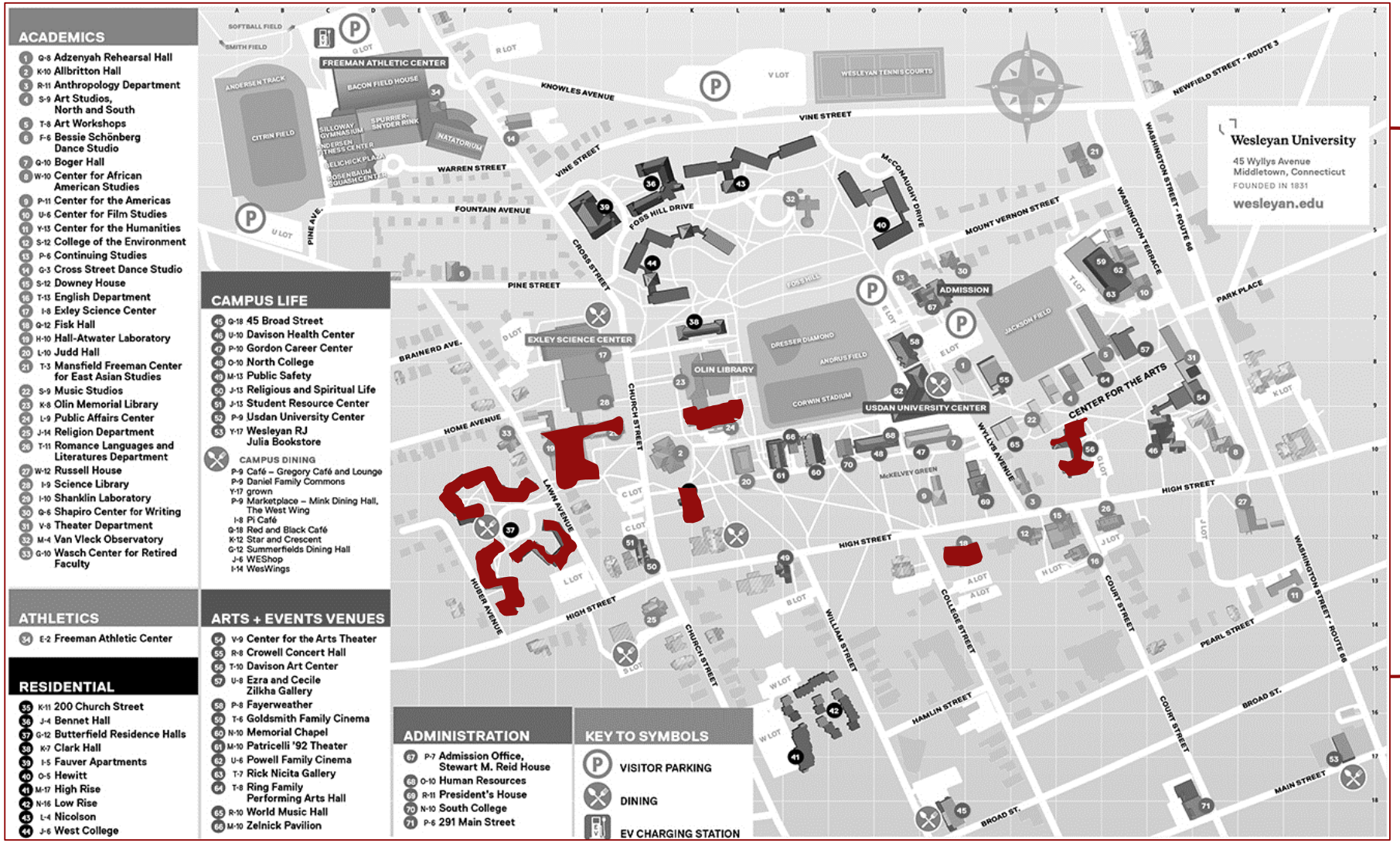
Understanding Wesleyan's Top 10 Total Building Needs

Buildings represents 27% of Wesleyan space and 50% of total building needs



*Includes only current and renewal needs

Mapping Out Buildings Needs Over $100/GSF

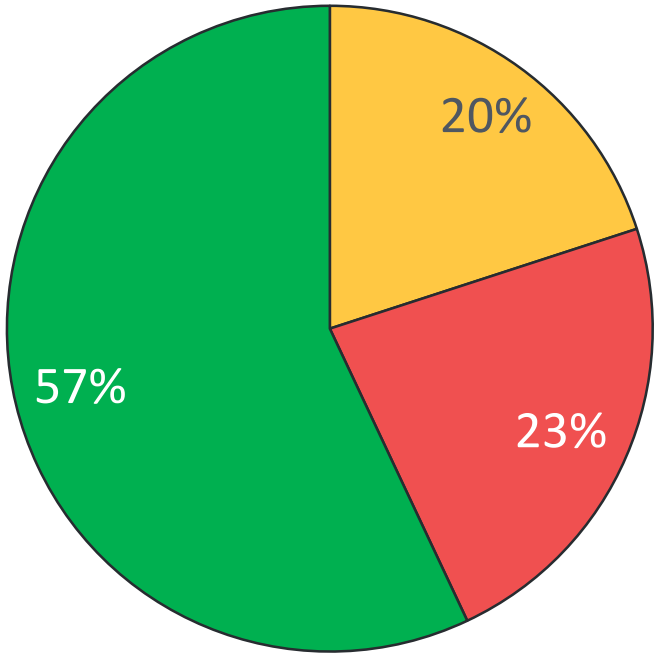


Top 10 Buildings with Highest $/GSF Need:

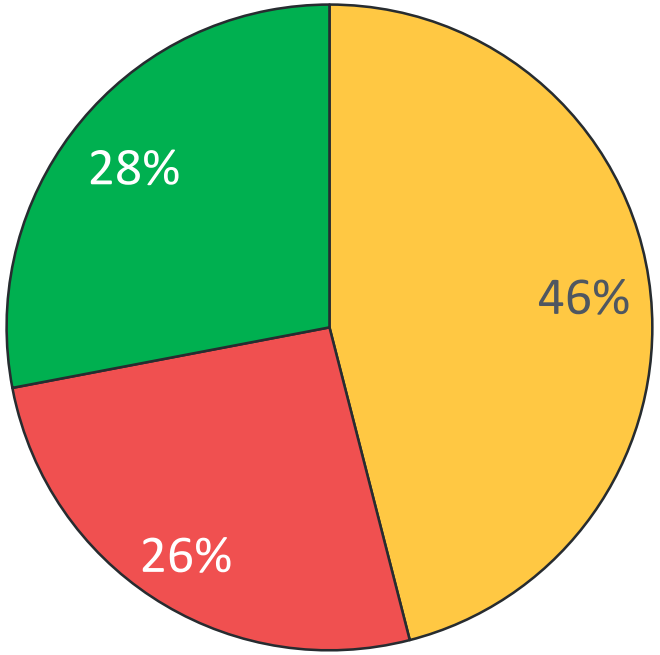
Hall-Atwater
Shanklin Lab
200 Church Street
Butterfield B
Butterfield C
PAC/Harriman Hall
Davison Art Center
Butterfield A
Fisk Hall
South College

Capital Investment Does Not Map To Future Needs

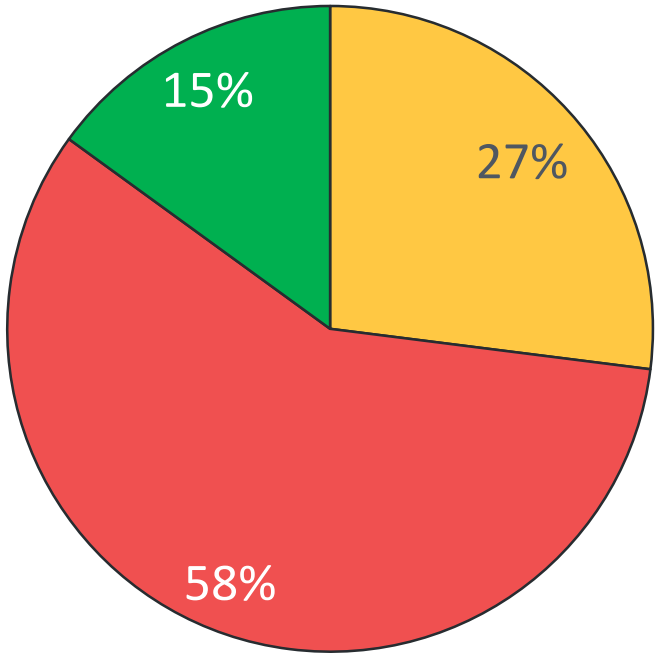
FY02-FY19 Total Capital Investment Mix



FY02-FY19 Major Maintenance Funds Capital Investment Mix



FY20-FY29 Future Capital Investment Mix



Envelope Mechanical Space/Program

**FY02-FY19 investment mix does not include new space, non-facilities, or safety/infrastructure*

GORDIAN®

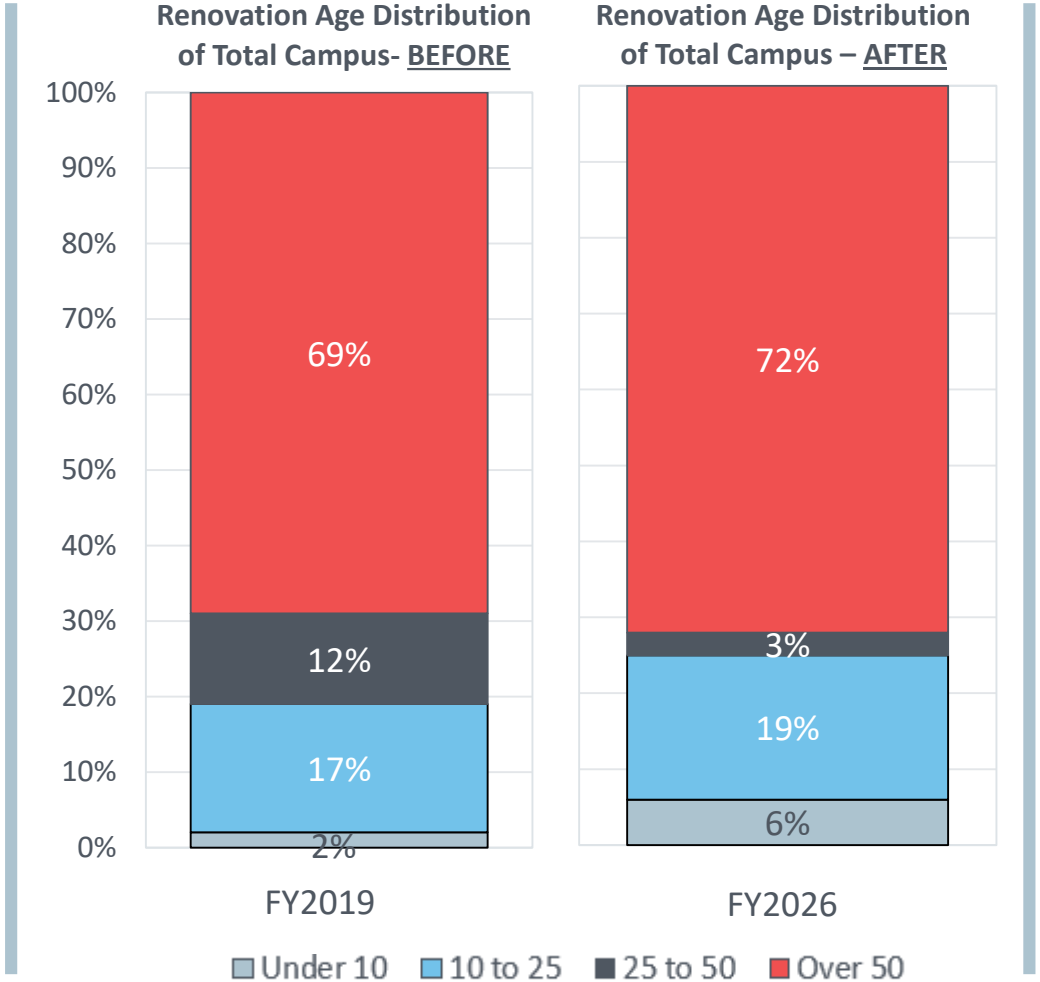
Matching Campus Need to Campus Values

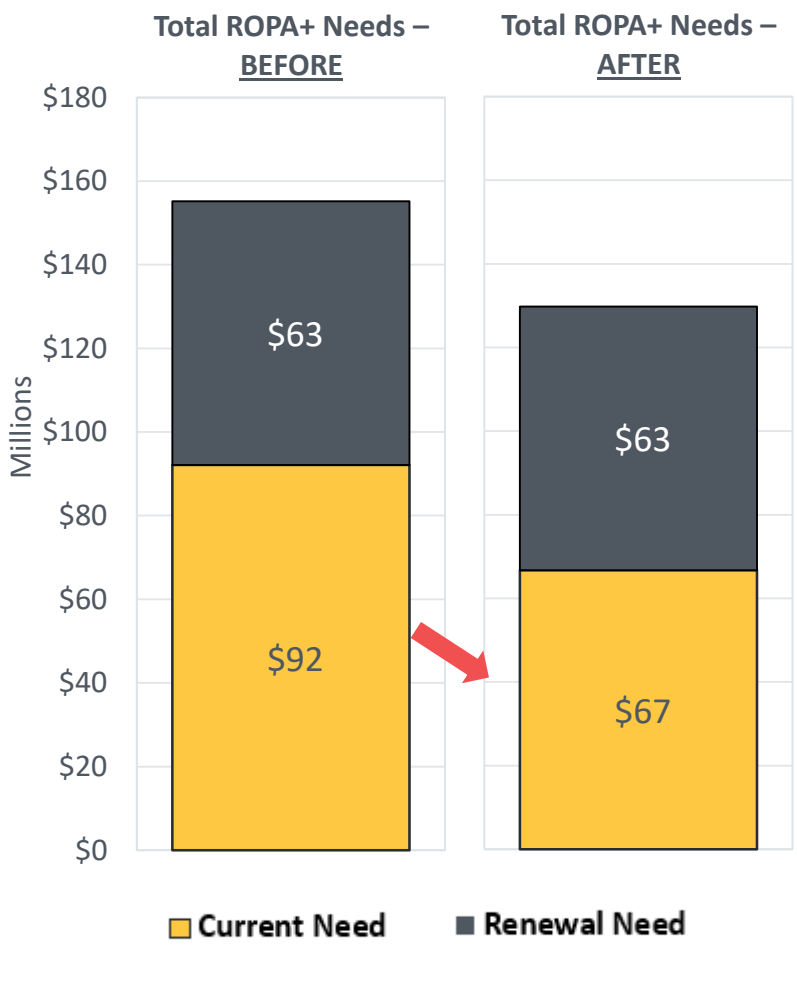
- Program Value
- Building Function
- Space Utilization
- Campus Mission

GORDIAN®

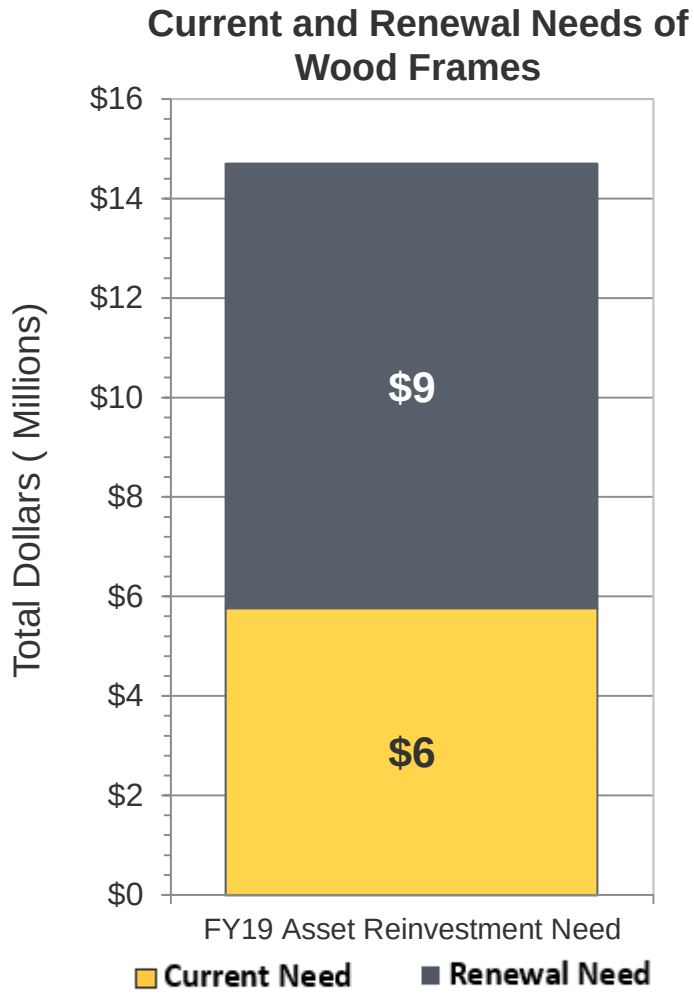
Hall-Atwater and PAC Need with Strategic Renovations

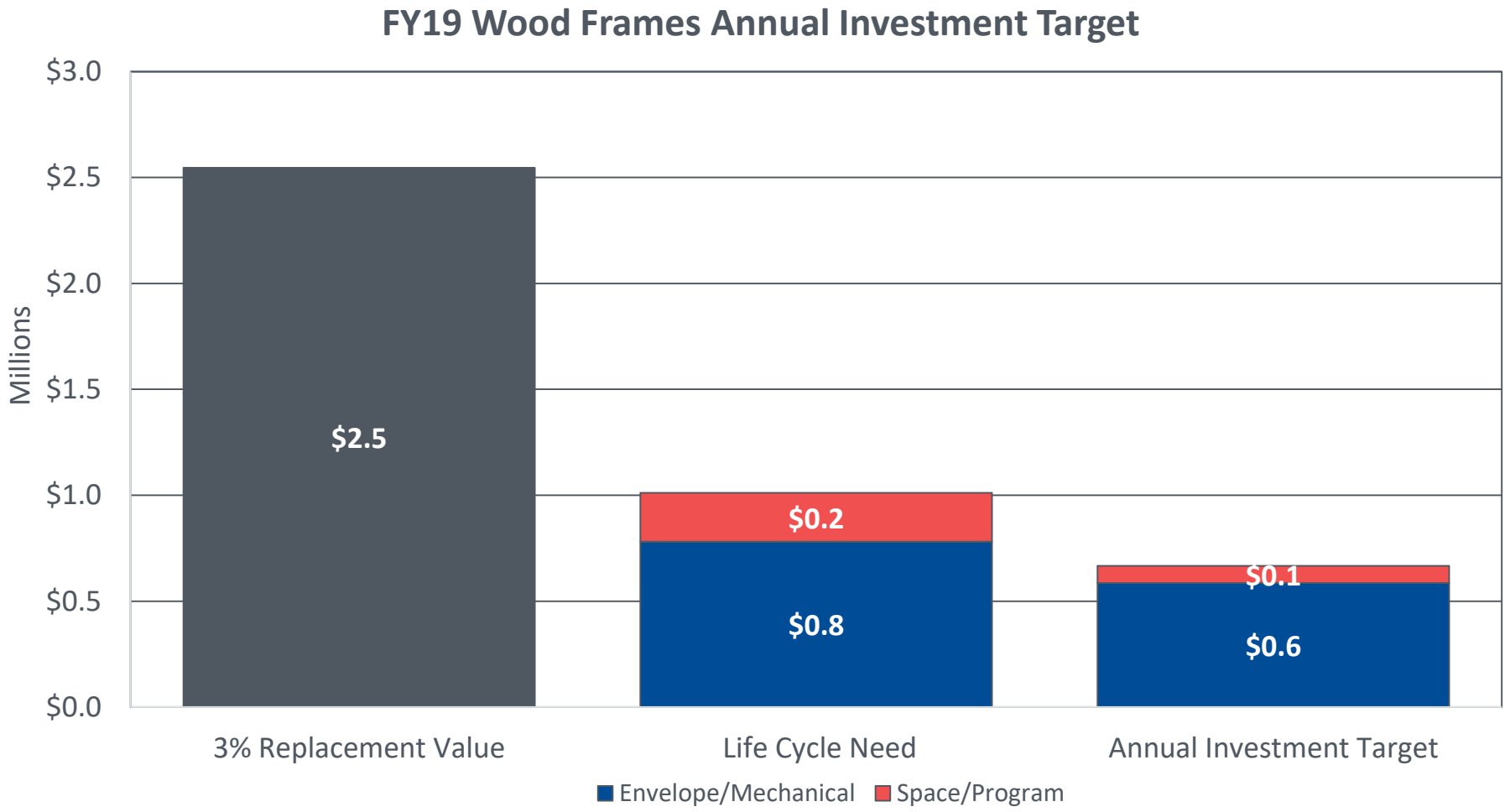
Age Category	Building Name	% of Age Category GSF
Over 50	Hall- Atwater	9%
	PAC/Harriman Hall	
Total Percentage of Space		**6%**





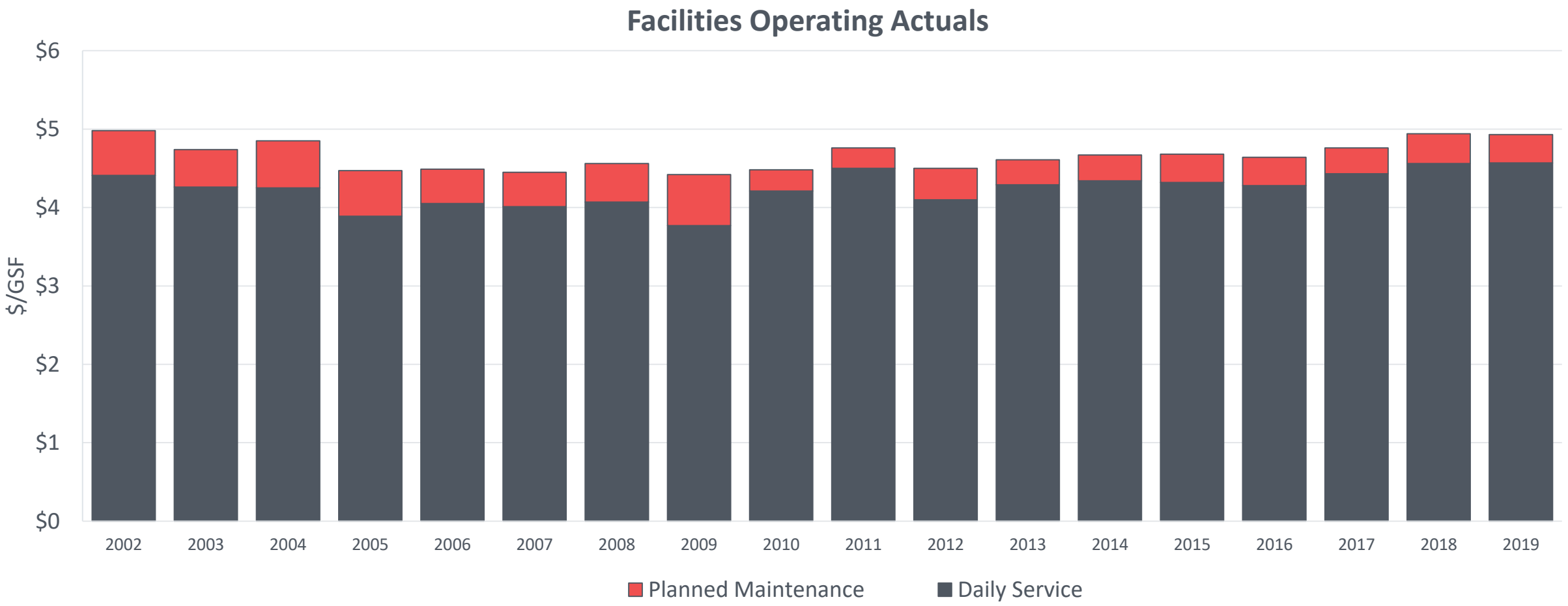
Total Cost of Ownership for Wood Frames





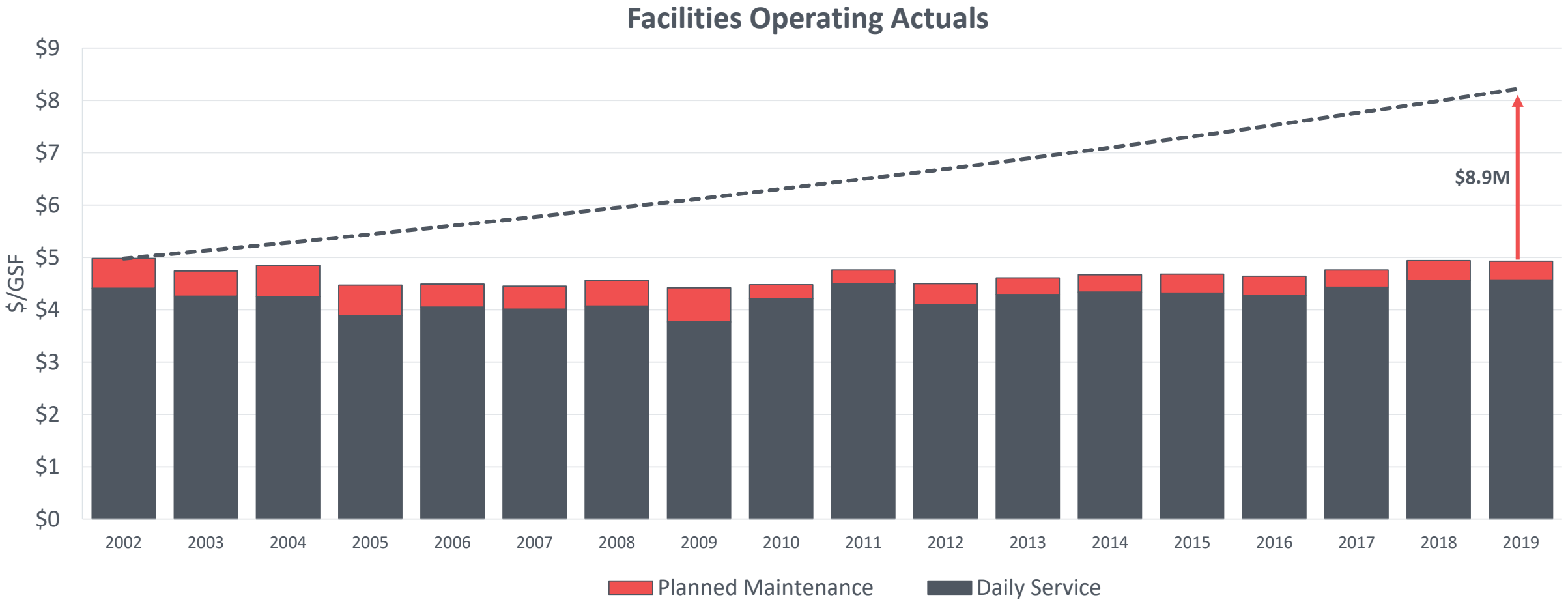
Operations

Facilities Operating Expenditures Over Time



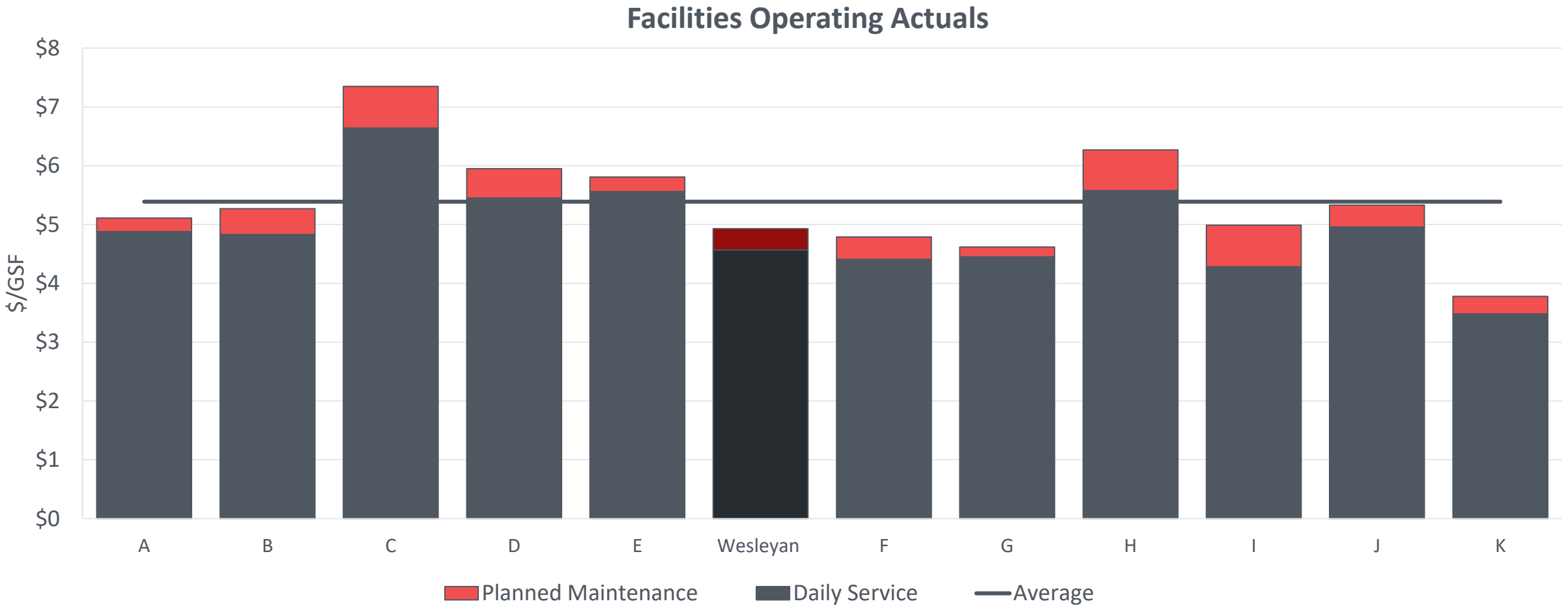
Operating Efficiencies Save $8.9M Annually by FY19

Investment of $3.25/GSF or $8.9M additional resources to match inflation growth in FY19



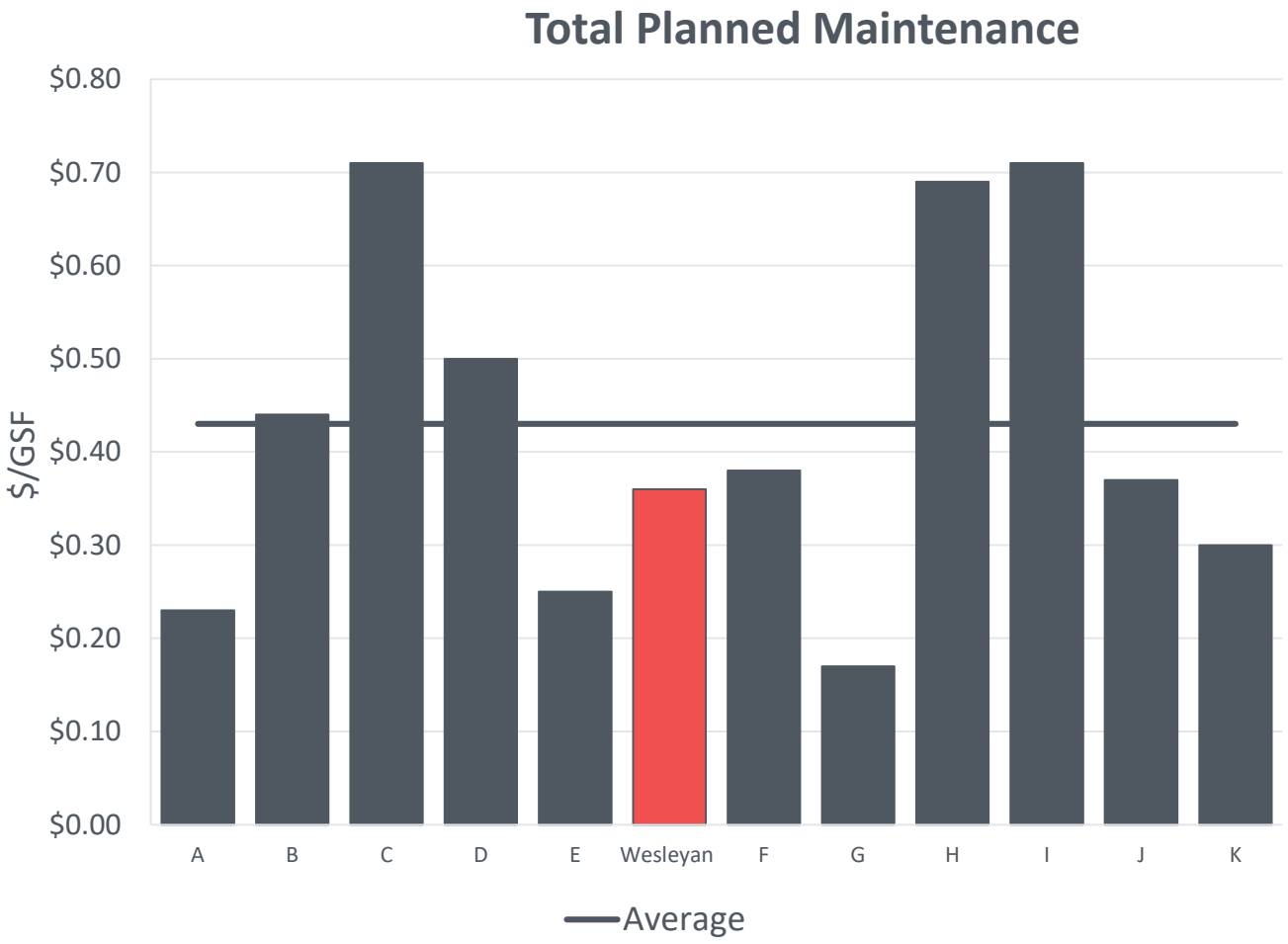
FY19 Facilities Operating Expenditures

Wesleyan operates with $1.26M less in total operating actuals compared to SLAC peer average

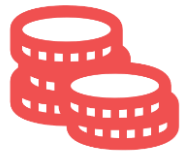


Planned Maintenance Below SLAC Average

Additional $193K needed to reach SLAC average



THEORY



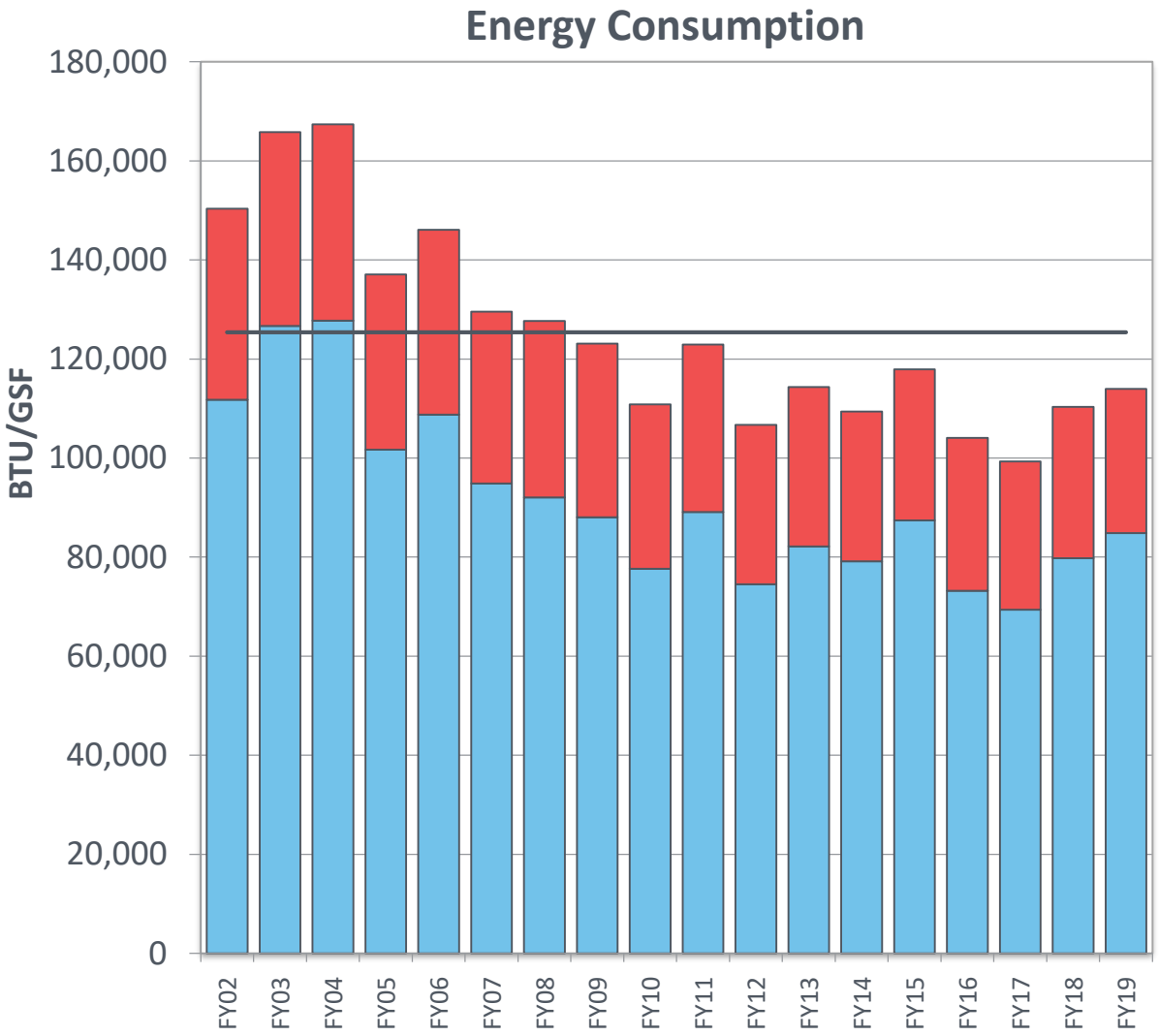
$1.00 invested in Planned Maintenance now

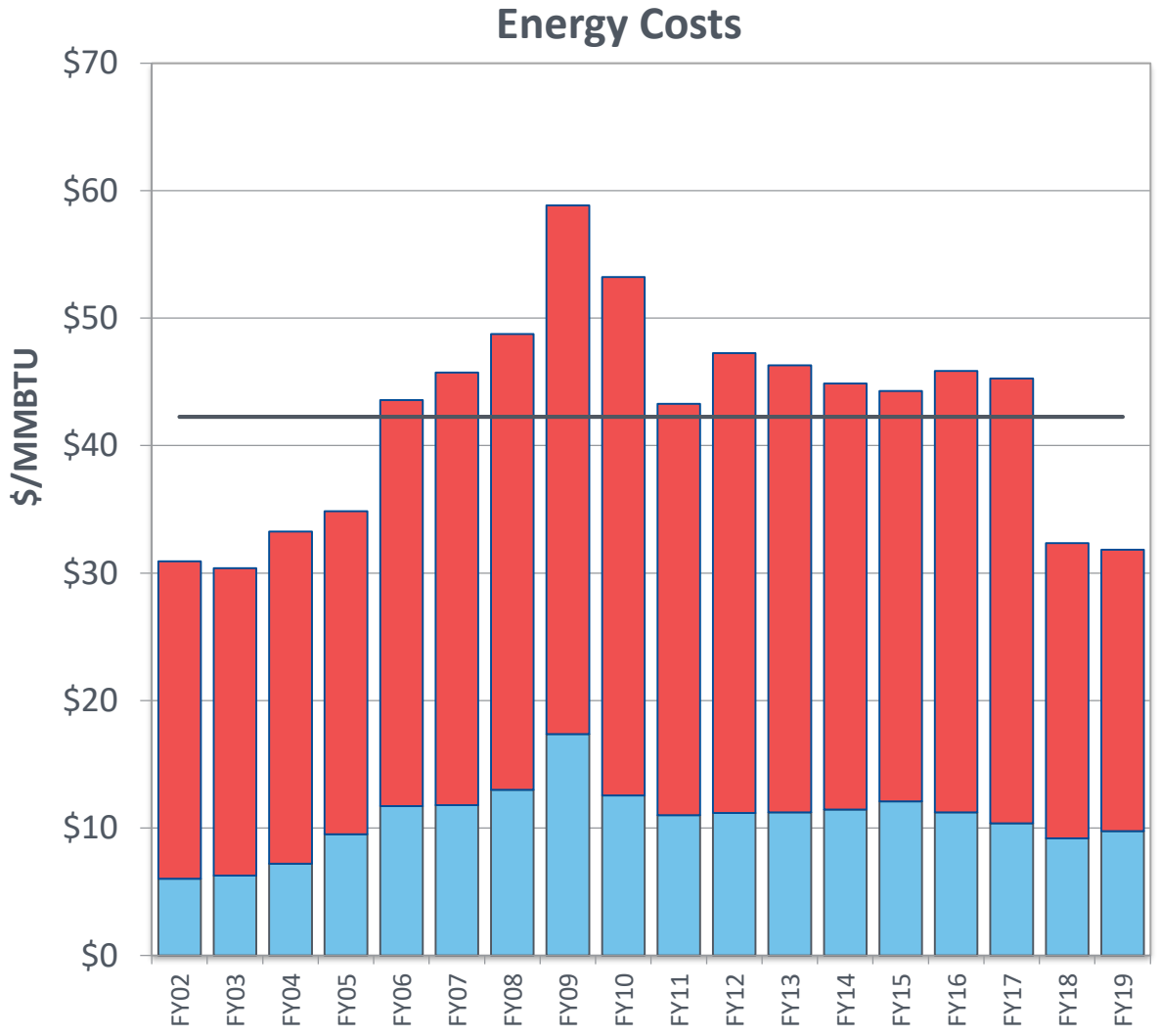
SAVES $2.78 in reactive maintenance later

Strategic Deferral of PM

- Usually in buildings/systems over 50 years old targeted for renovation or replacement
- Reallocates resources from the older buildings/systems to younger buildings and systems.
- Use Assessment in coordination with work order reporting to start identifying these opportunities.

Wesleyan's Historical Utility Consumption and Cost

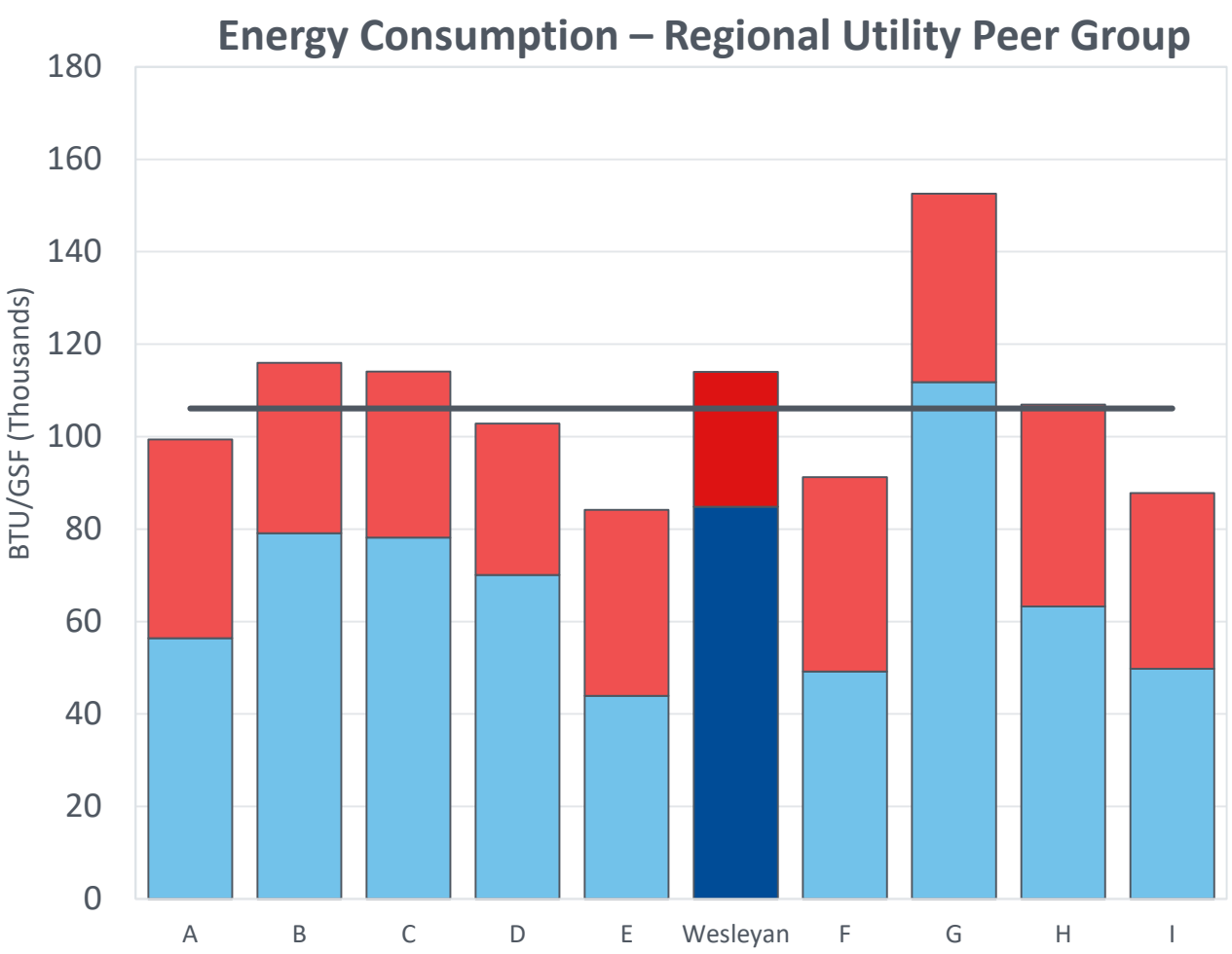


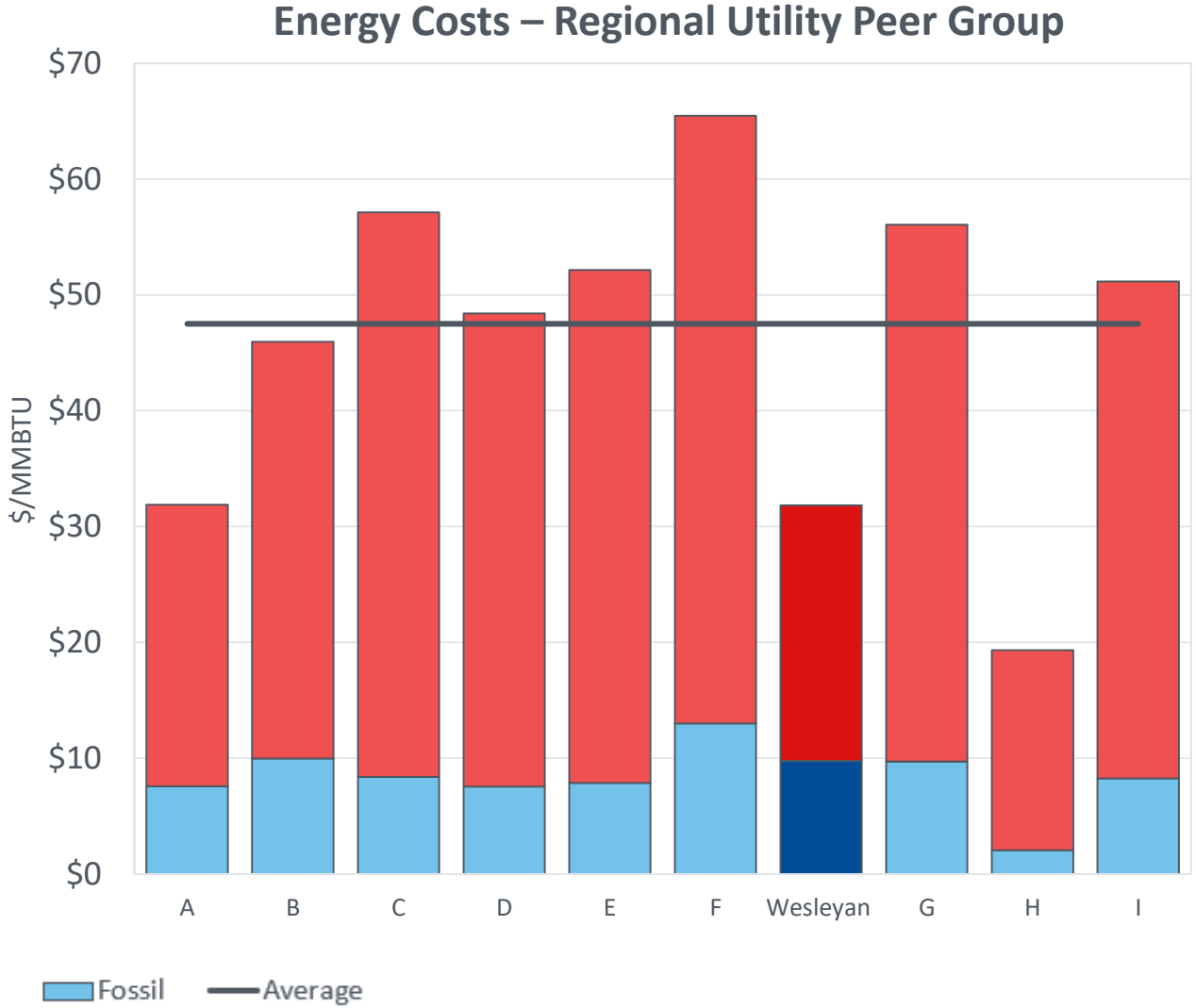


Electric Fossil Average

GORDIAN®

FY19 Regional Energy Peer Consumption and Unit Costs

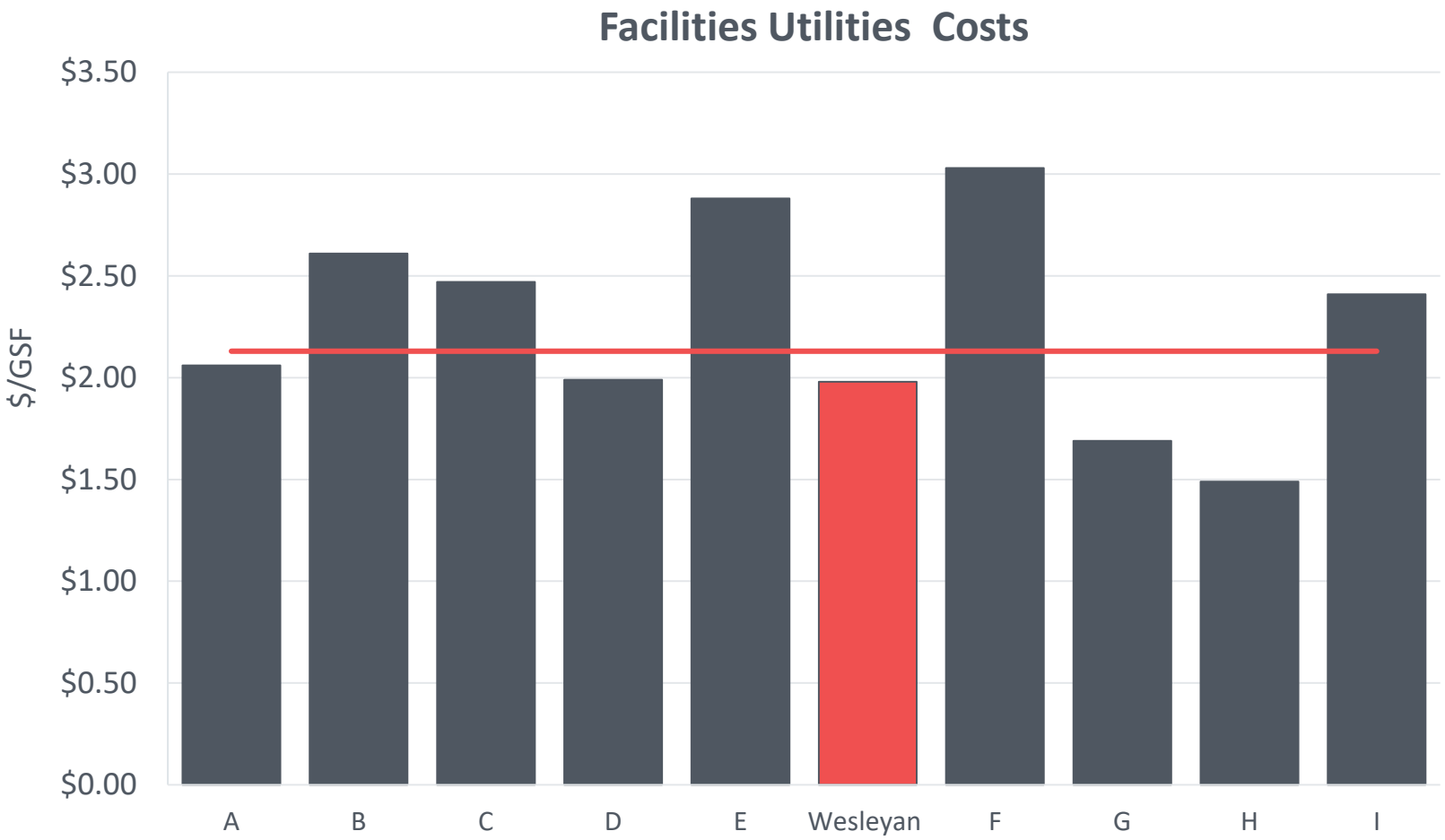




***Regional Energy Peer Group:** Babson College, Bryant University, College of Holy Cross, Connecticut College, Fairfield University, Trinity College, University of Connecticut, University of Hartford & University of New Haven*

GORDIAN®

FY19 Regional Facilities Utilities Costs



FY19 Regional Utility Peers

- Babson College
- Bryant University
- College of Holy Cross
- Connecticut College
- Fairfield University
- Trinity College
- University of Connecticut
- University of Hartford
- University of New Haven

Concluding Comments

Key Takeaways

- Campus age is increasing due to limited strategic age-resetting renovations
- Major Maintenance funds are increasing. Sightlines Annual Investment Targets are being met.
- Facilities Operations are running with less resources than peers.

Recommendations

- Utilize campus needs and values matrix to create portfolios to understand how to allocate resources to certain assets and avoid others.
- Analyze Wood Frame properties to see if the generated revenue meets the total cost of ownership of these facilities.
- Communicate directly with customers. Inform them of the institutions' priorities and goals. Survey customers for performance feedback to see if operational shifts should be implemented.