

Rhode Island School of Design

FY21 ROPA+ Analysis

Budget Committee Meeting

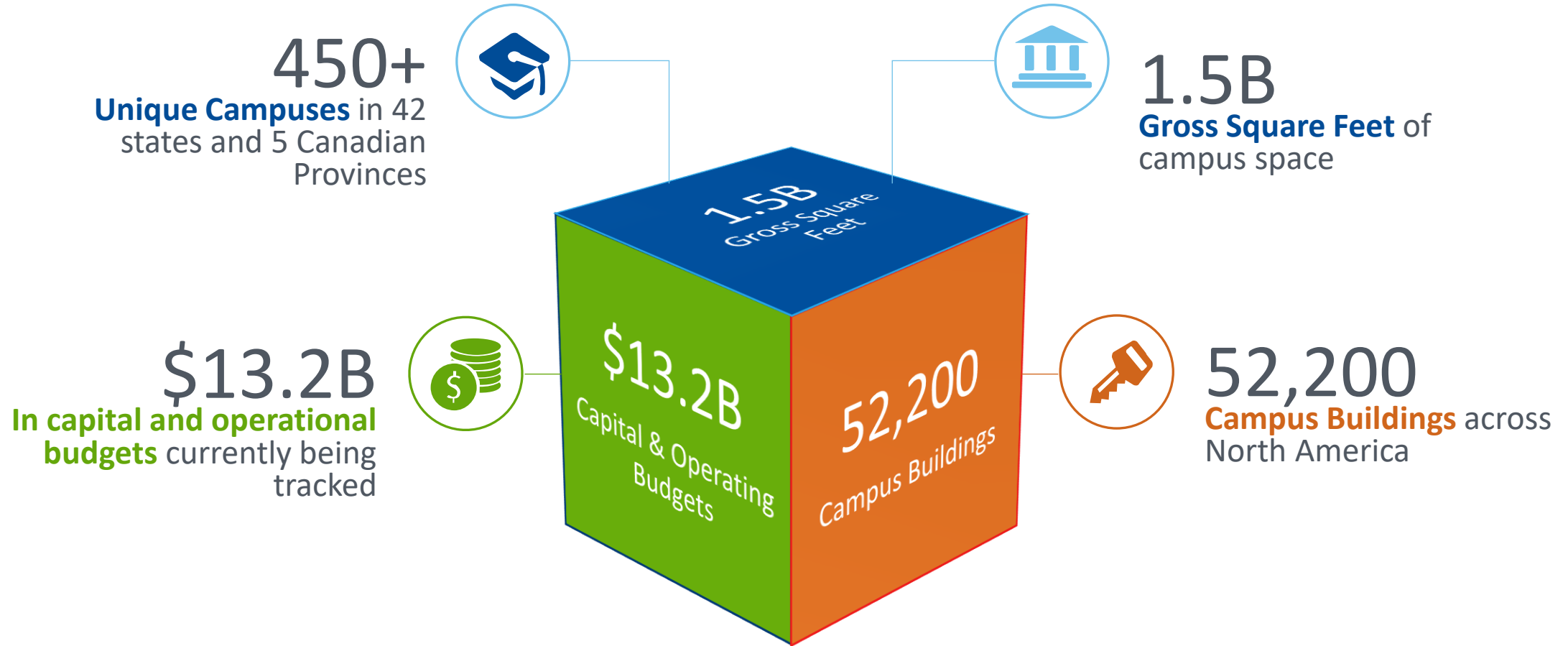
January 25, 2022

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



Gordian and Sightlines

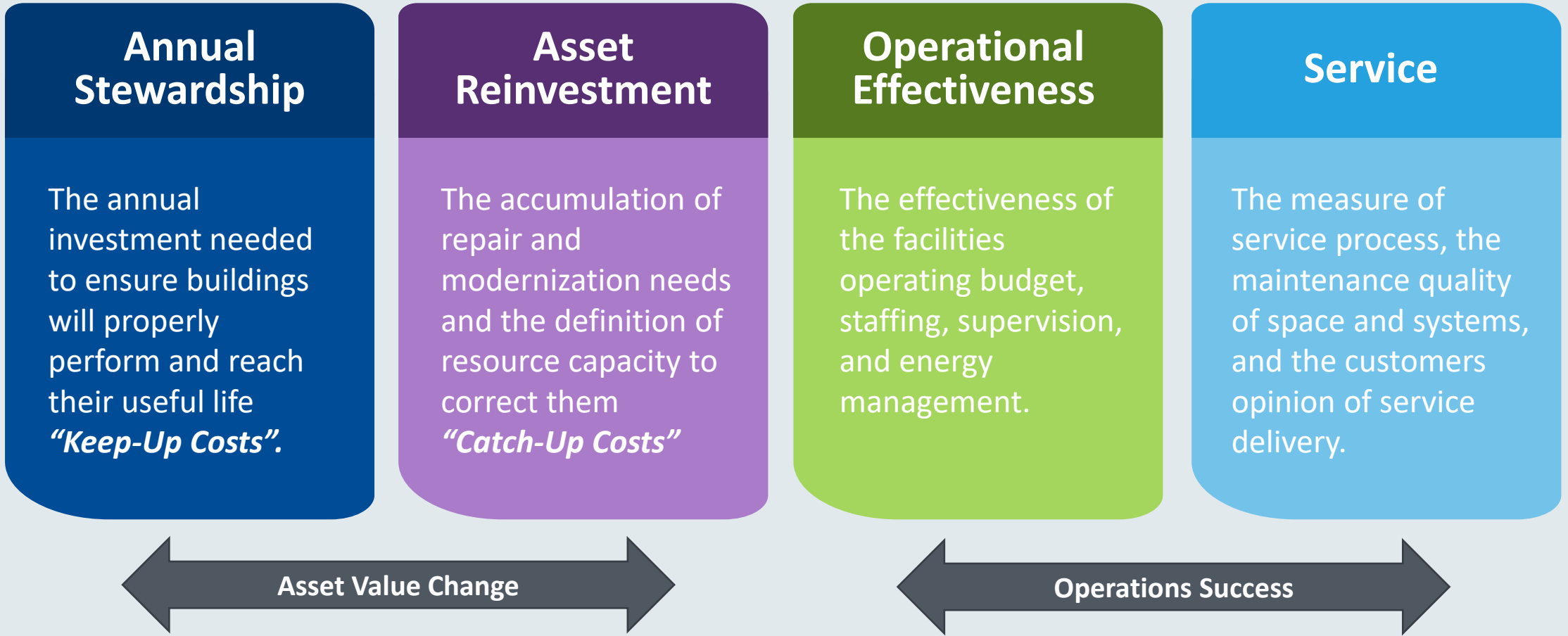
Owners of the largest verified facilities database in higher education



Sightline's members serve **over 20%** of US College Enrollment



Vocabulary for Facilities Benchmarking & Analysis



Rhode School of Design's Facilities Peers Institutions



Institution
Bentley University <i>Waltham, MA</i>
Brown University <i>Providence, RI</i>
Emerson College <i>Boston, MA</i>
Massachusetts College of Art and Design <i>Boston, MA</i>
Mount Holyoke College <i>South Hadley, MA</i>
Pratt Institute <i>Brooklyn, NY</i>
Siena College <i>Loudonville, NY</i>
Wesleyan University <i>Middletown, CT</i>



Comparative Considerations

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

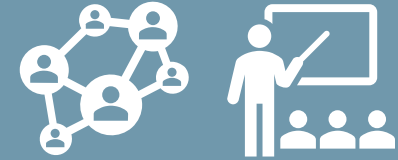
COVID-19 Amplifies Core Facilities Challenges



**Enrollment uncertainty
and the pressure for more space**



**Reduction or elimination of
resources available to address
growing capital renewal**



**Learning and program needs
altering classroom expectations
and requirements**



**De-stabilized strategic priorities
making project alignment
problematic**



**Institutional financial losses and
expected pressures putting
facilities operating budgets
at risk**

Qualifying Metrics – *Tech Rating*



Tech Rating Affects:



Staffing Demands

More complex systems will require higher skillsets to maintain.



Repair & Replacement Cost

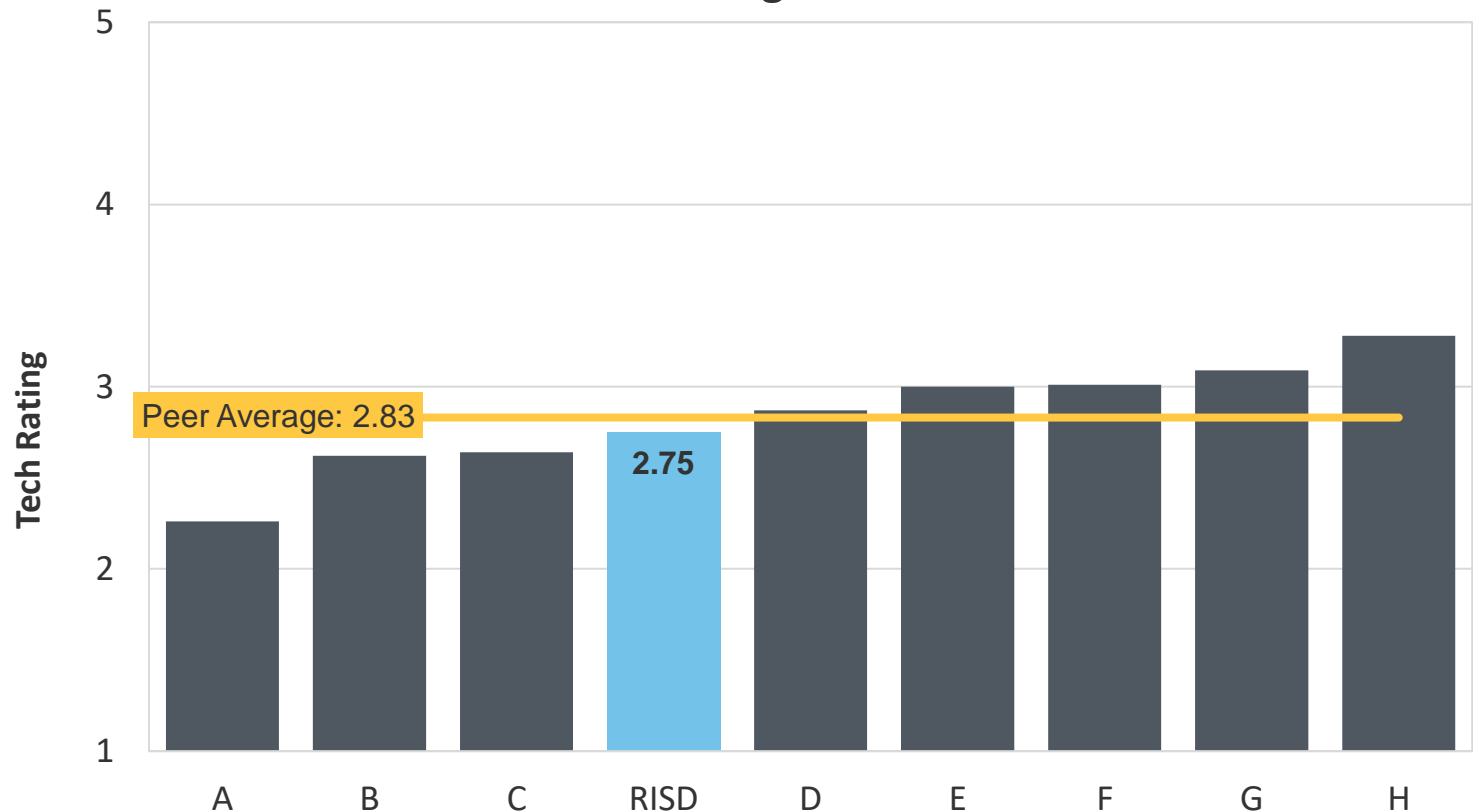
Complex systems will require more capital investment to repair and replace.



Energy Consumption

Complex systems can be more energy intensive.

Tech Rating vs. Peers



Qualifying Metrics – Density Factor

Density Affects:



Staffing Levels

More space will require more staff to clean/maintain space to meet facility standards.



Material and Supplies

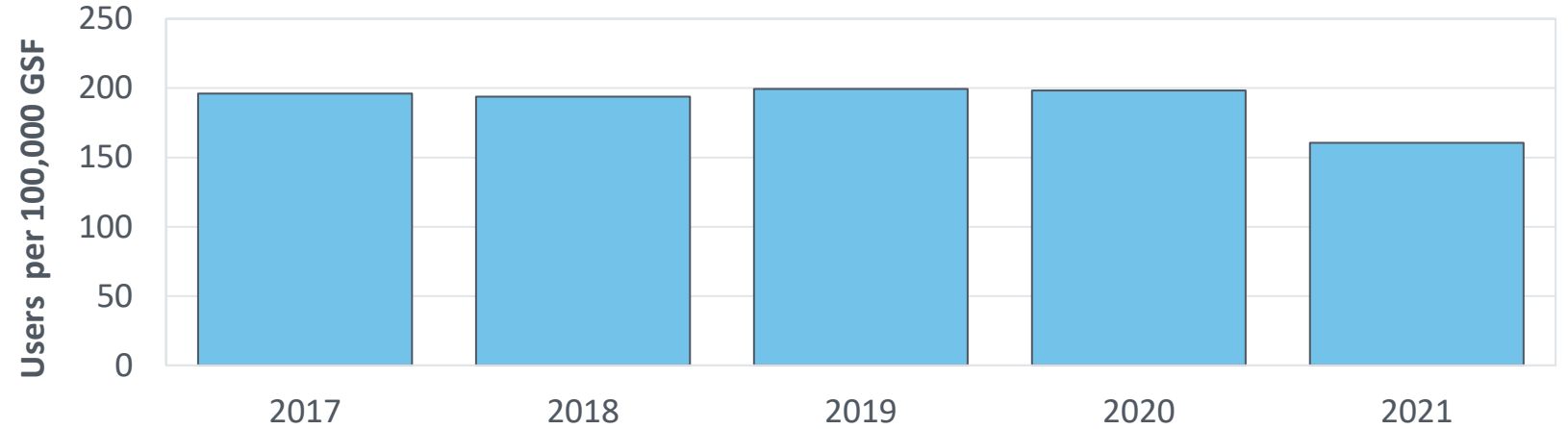
Material and supply demand influenced by how often the space is used.



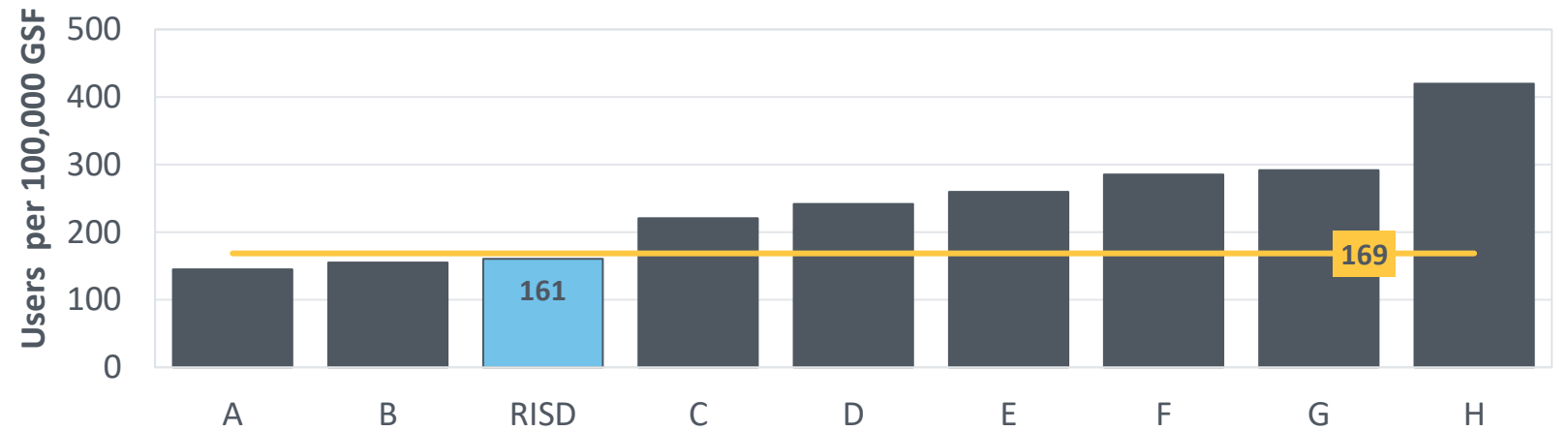
Wear and Tear of Facilities

High traffic and space usage result in sooner lifecycle replacement.

RISD Density Factor Over Time



Density Factor vs. Peers



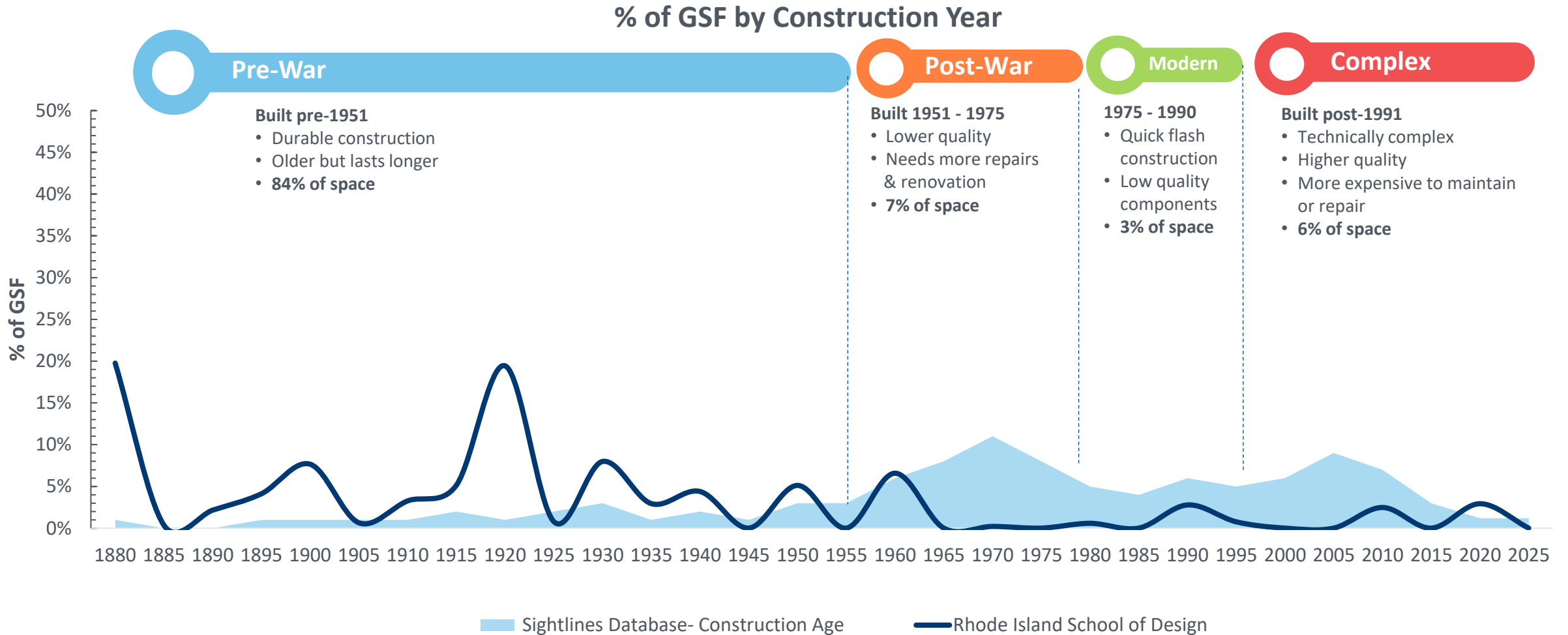
Space Profile





RISD Has More Pre-War Space Than the Database

A campus' age drives the overall risk profile

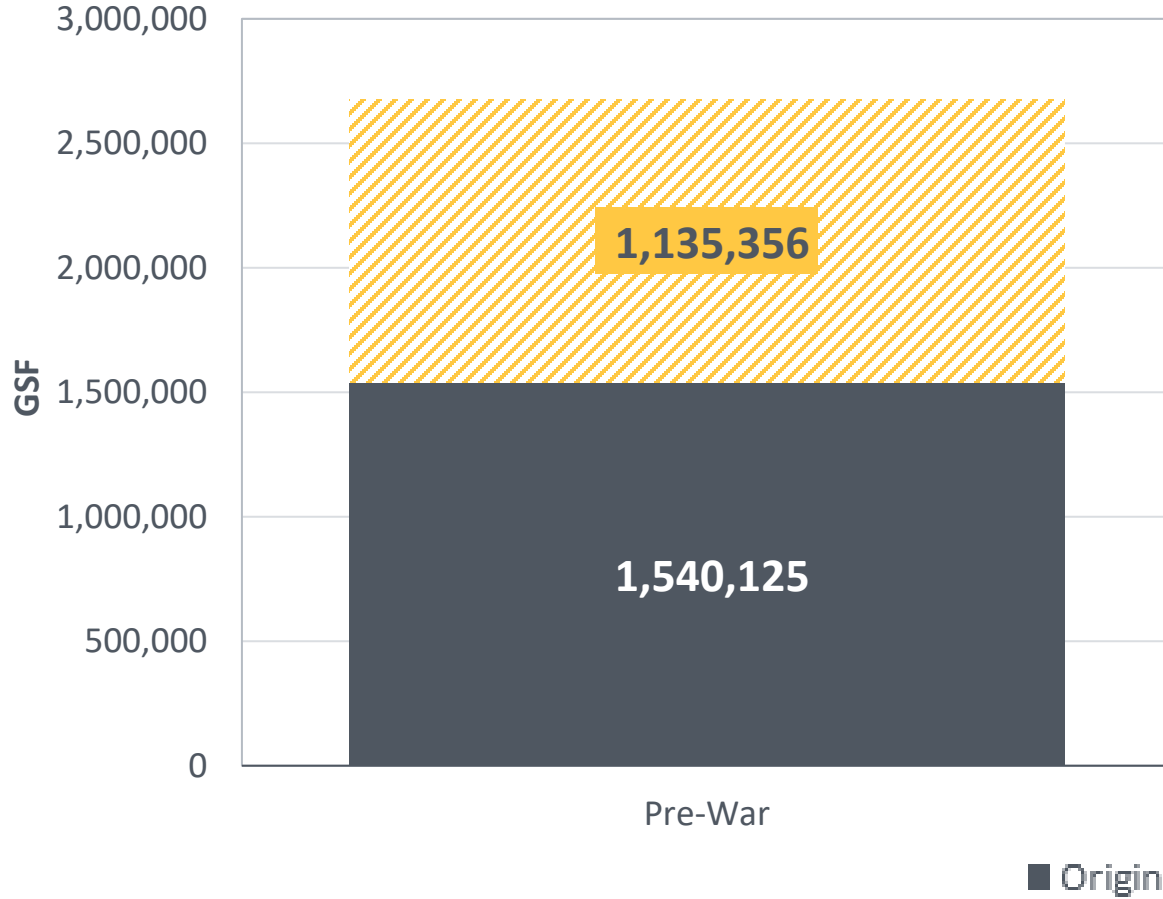




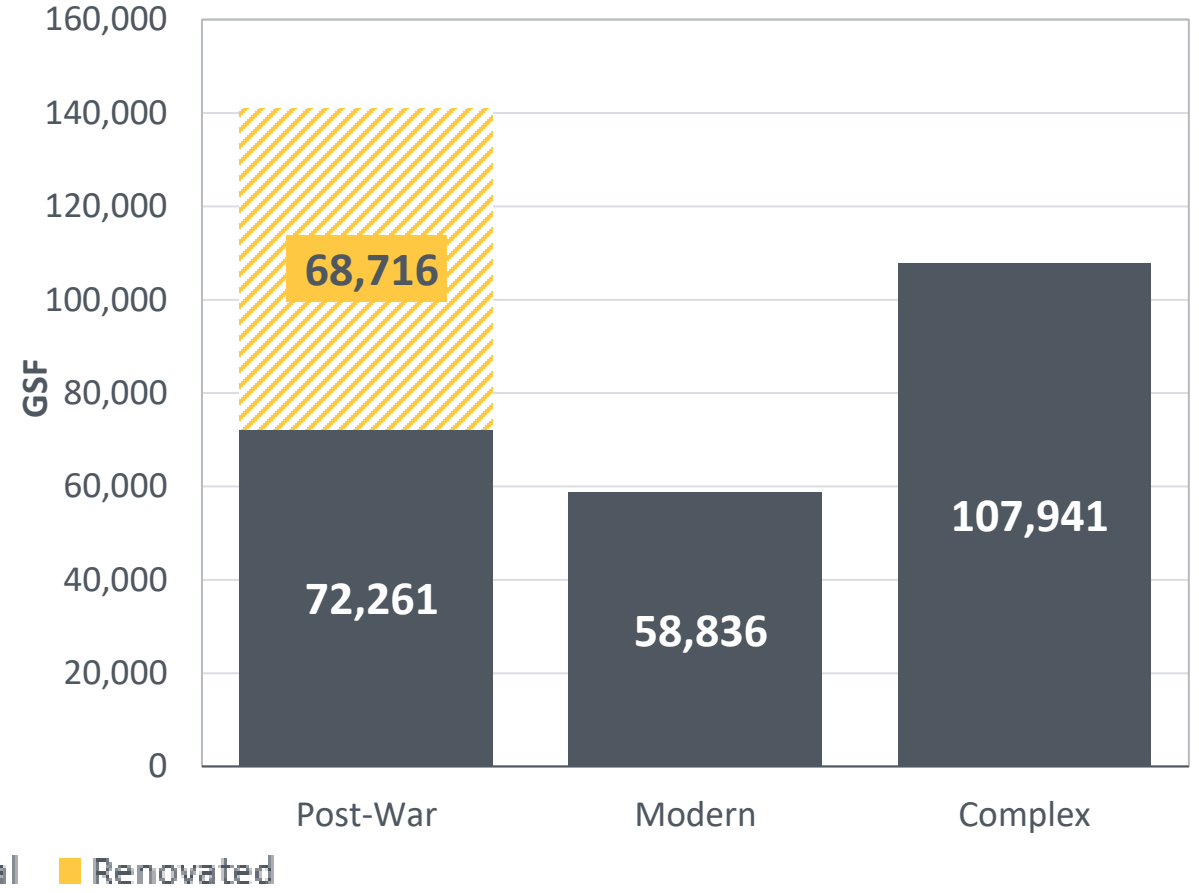
RISD Renovates Campus' Oldest Facilities

Renovated spaces reduce overall risk exposure and maintain high value

Renovations by Construction Vintage



Renovations by Construction Vintage

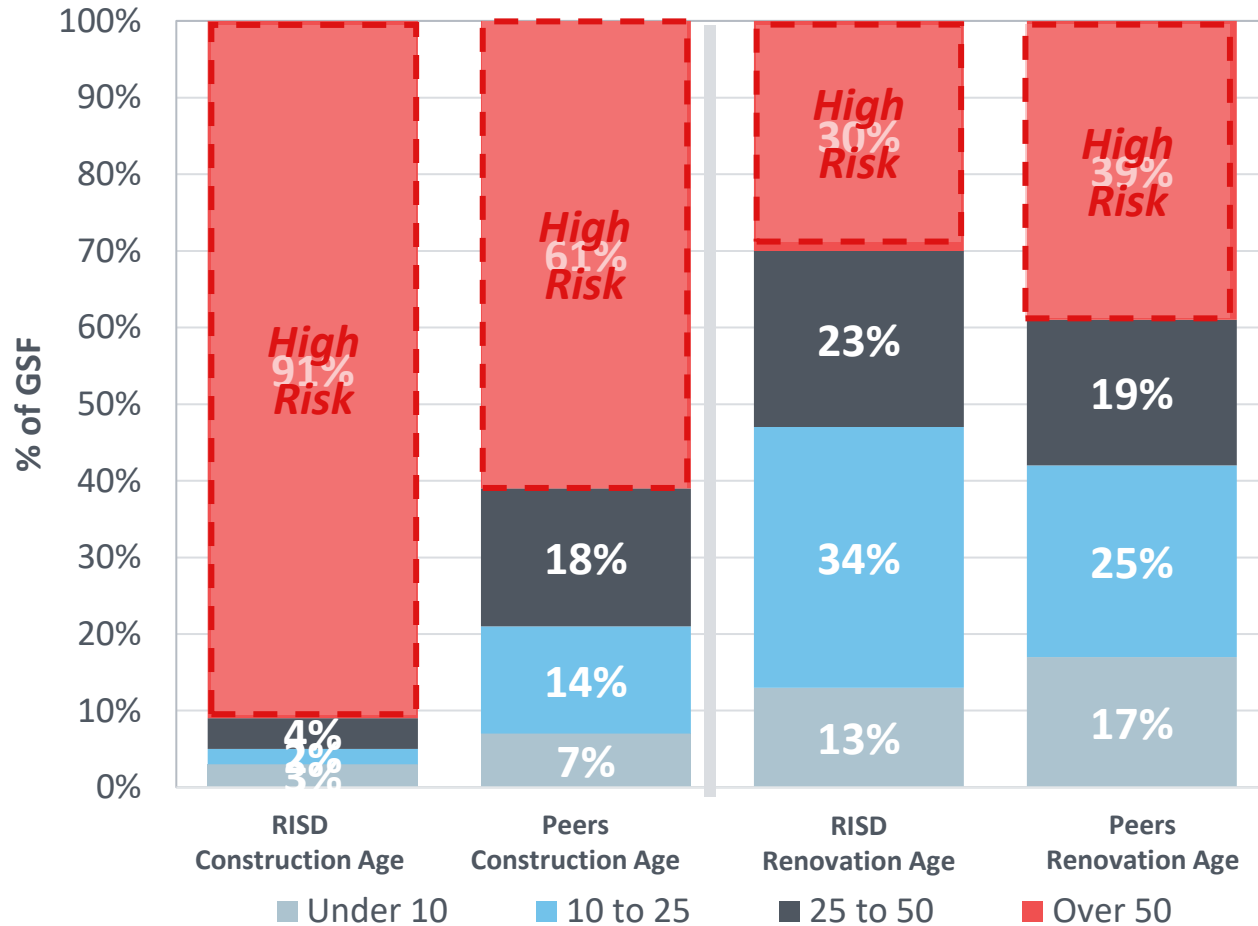




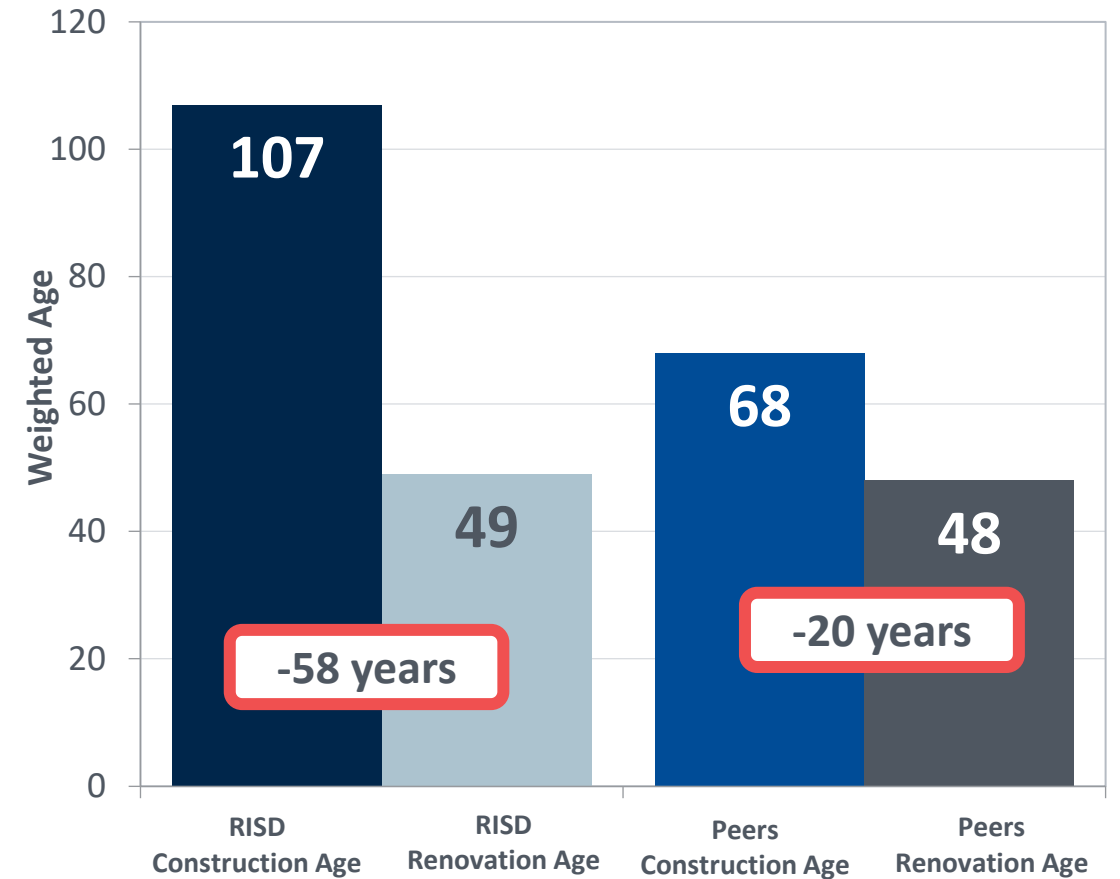
RISD's Construction Profile Has Been Offset By 58 Years

Strategic renovations have shifted campus age and reduced risk profile

Construction Age vs. Renovation Age Categories



Weighted Construction vs. Renovation Age



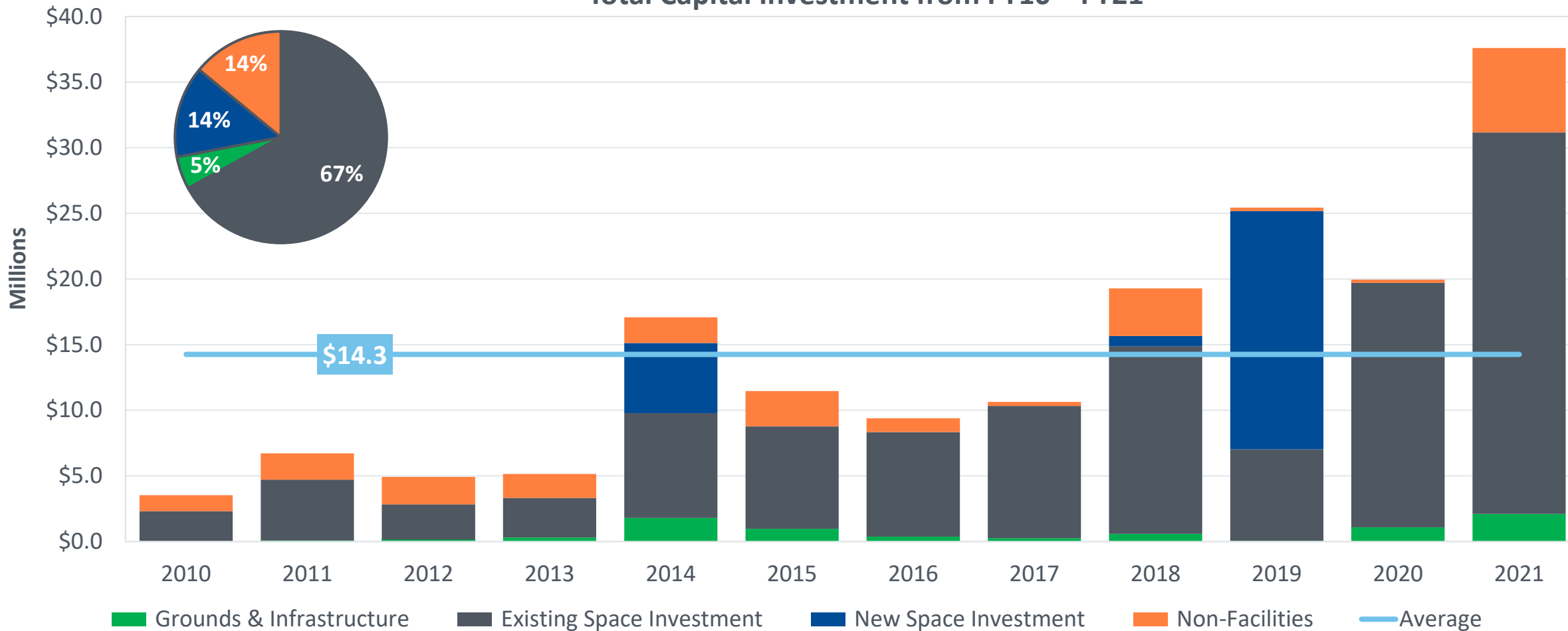
Capital Investment



\$171.1M of Capital Invested into RISD from FY10-FY21



Total Capital Investment from FY10 – FY21

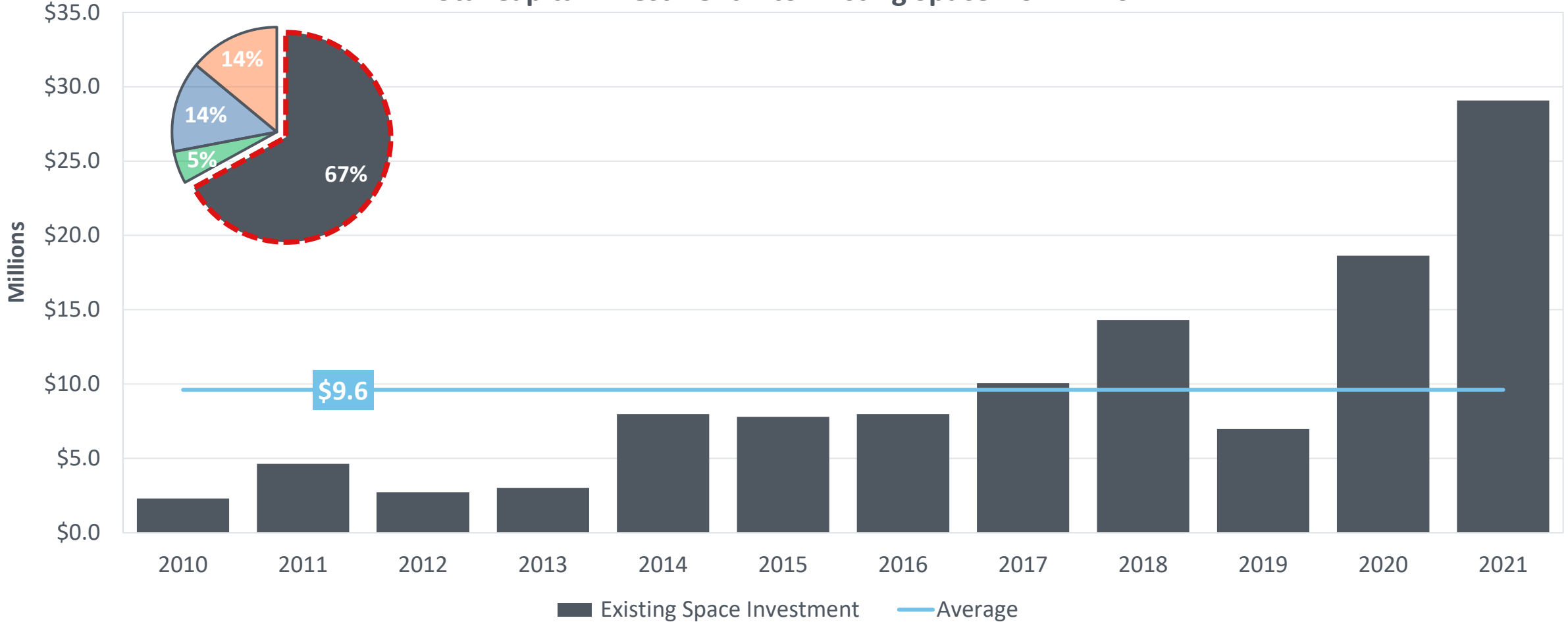




Existing Space Investment Increases and Peaks in FY21

Capital investment dedicated towards existing space spending grew by 56% from FY20

Total Capital Investment into Existing Space from FY10 – FY21



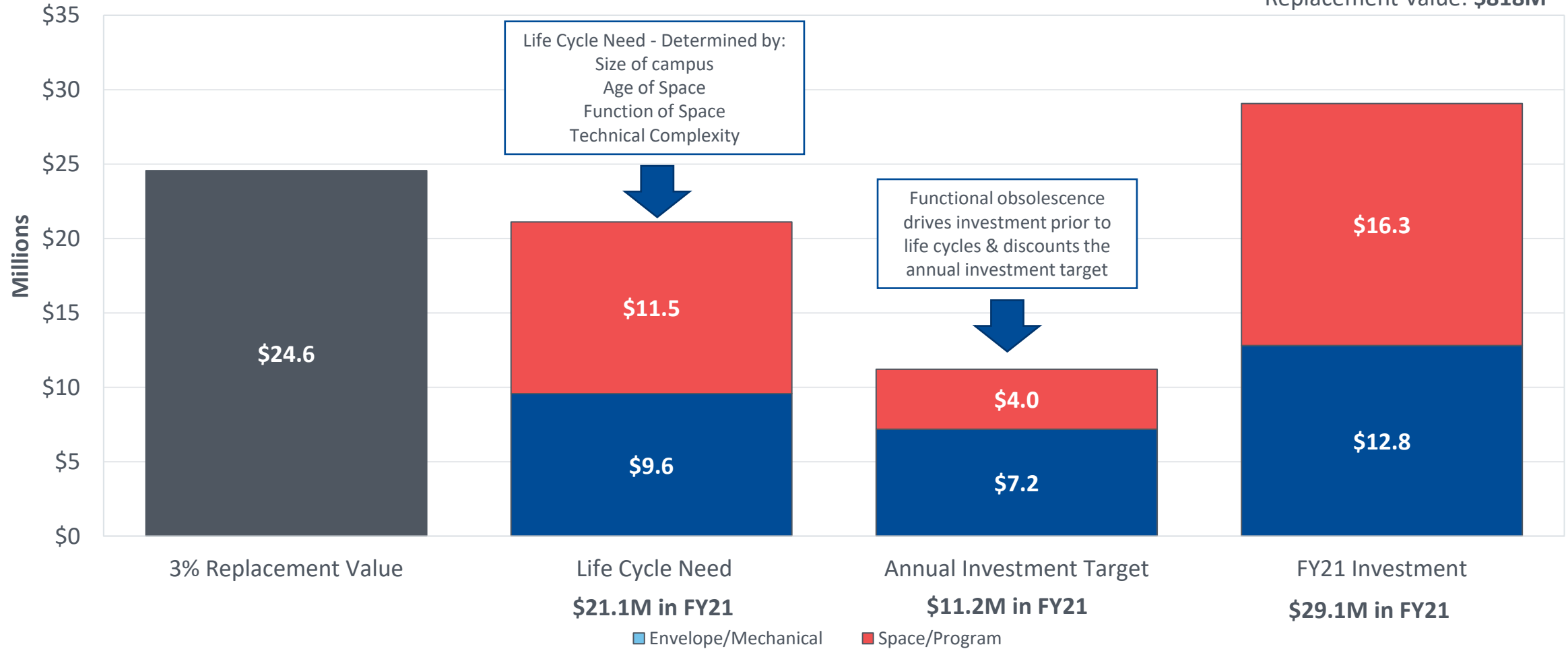


Defining an Annual Investment Target

FY21 Annual Funding Target: \$11.2M

FY21 Annual Investment Target

Replacement Value: \$818M

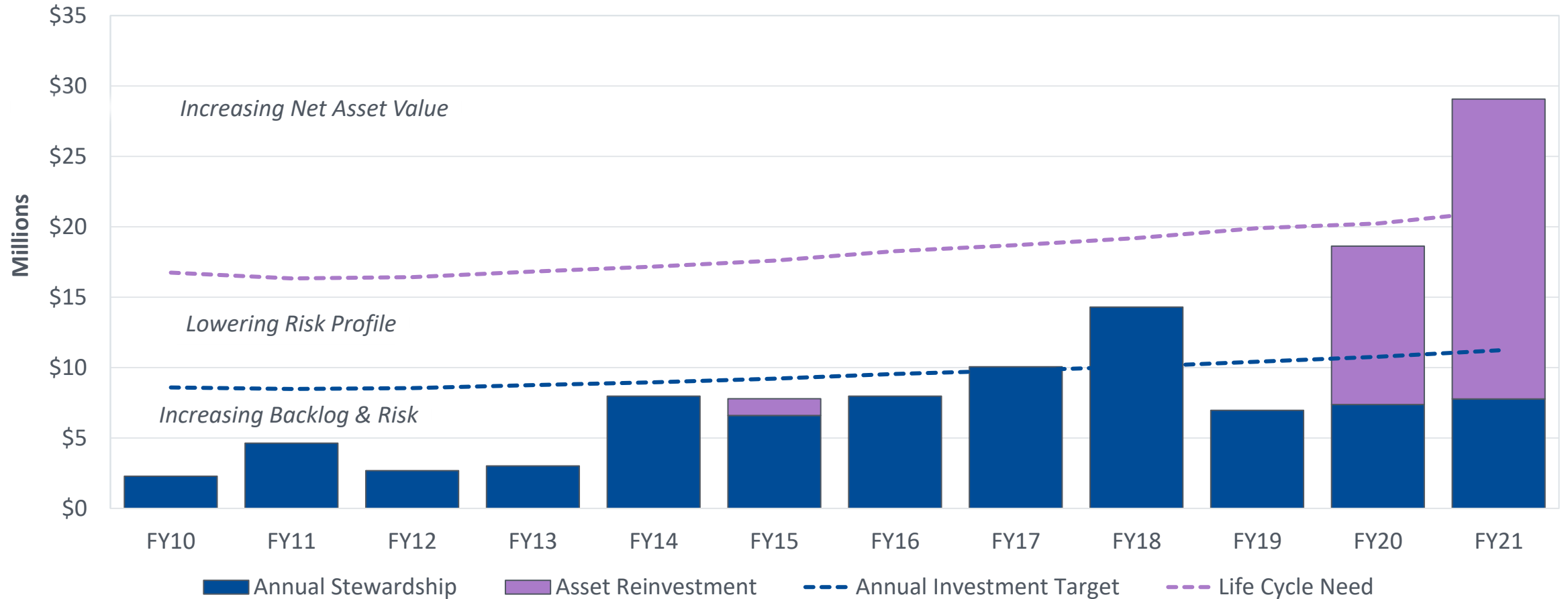




Strong Capital Investment in FY21 Lowers Risk Profile

Achieving the Annual Investment Target will help to offset backlog

Total Capital Investment into Existing Space vs. Funding Target

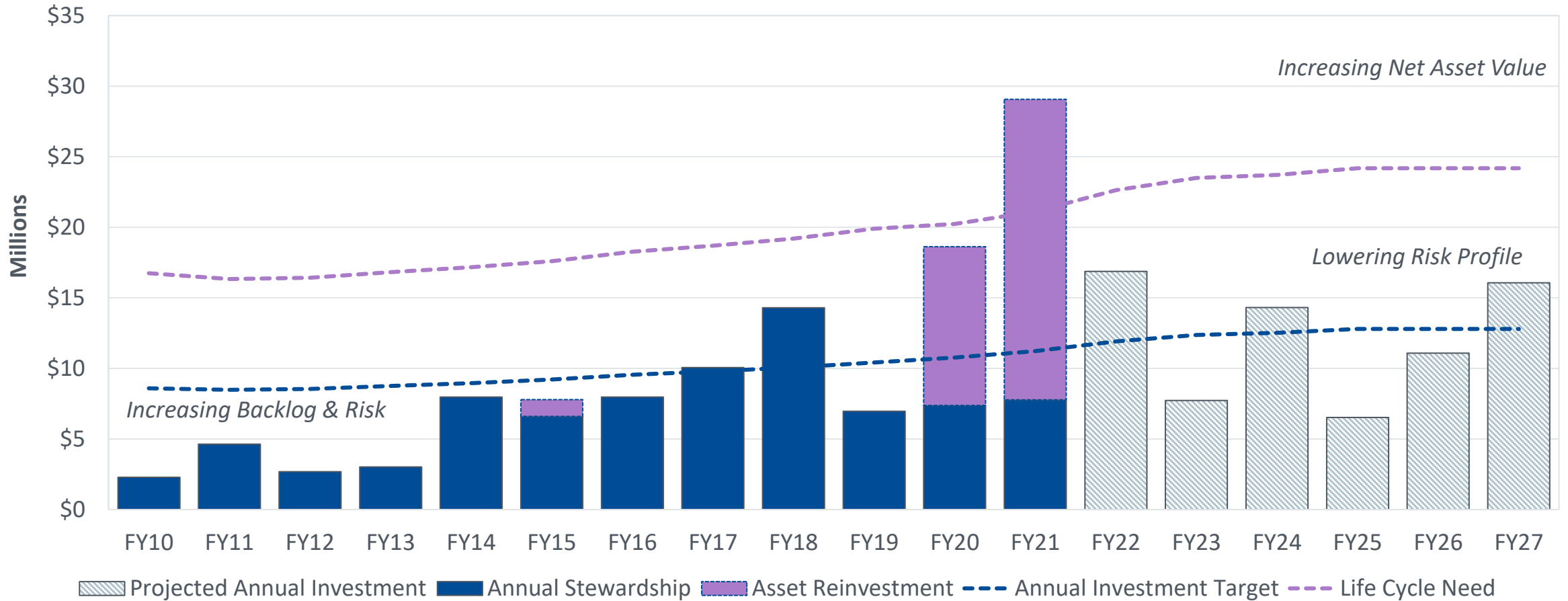


Future Investments will Continue to Shift Risk Profile



\$72.6M is projected to be invested in FY22- FY27

Total Capital Investment into Existing Space vs. Funding Target

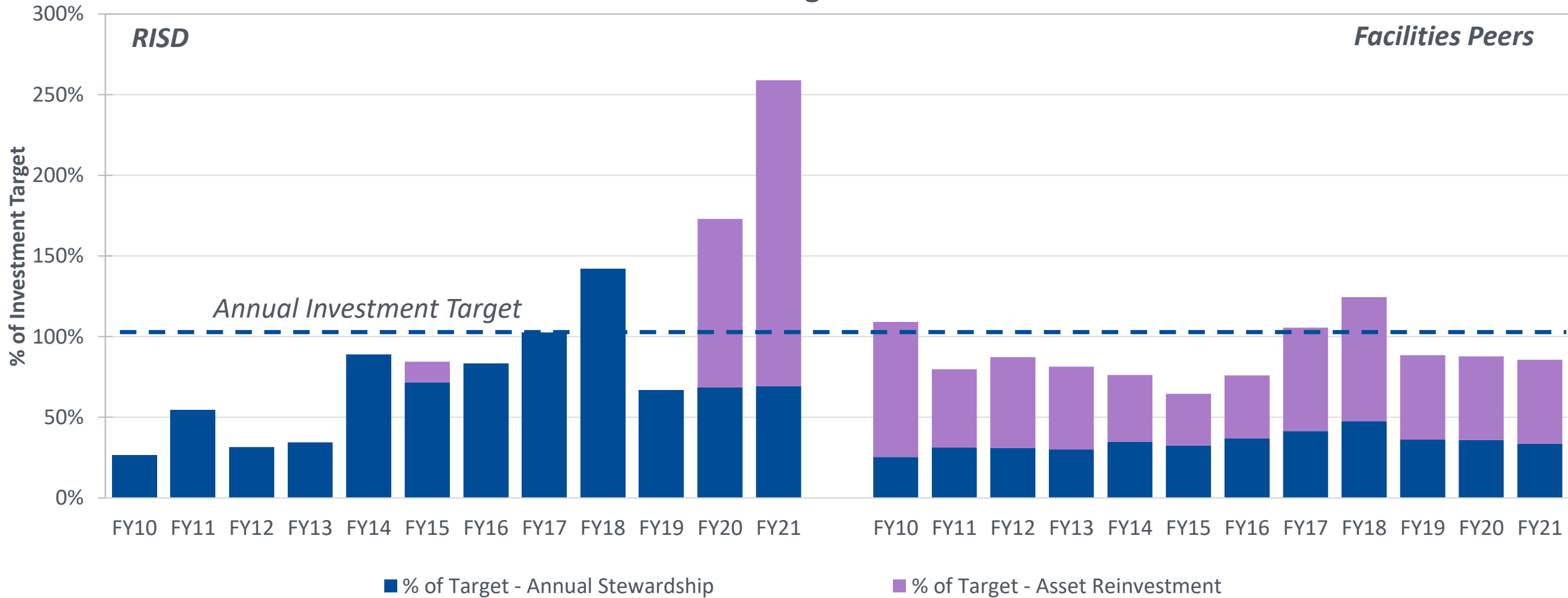




RISD Exceeds Annual Investment Target in FY21

Targeted renovations funded with Asset Reinvestment funds help RISD achieve the annual investment target

% of Target Funded

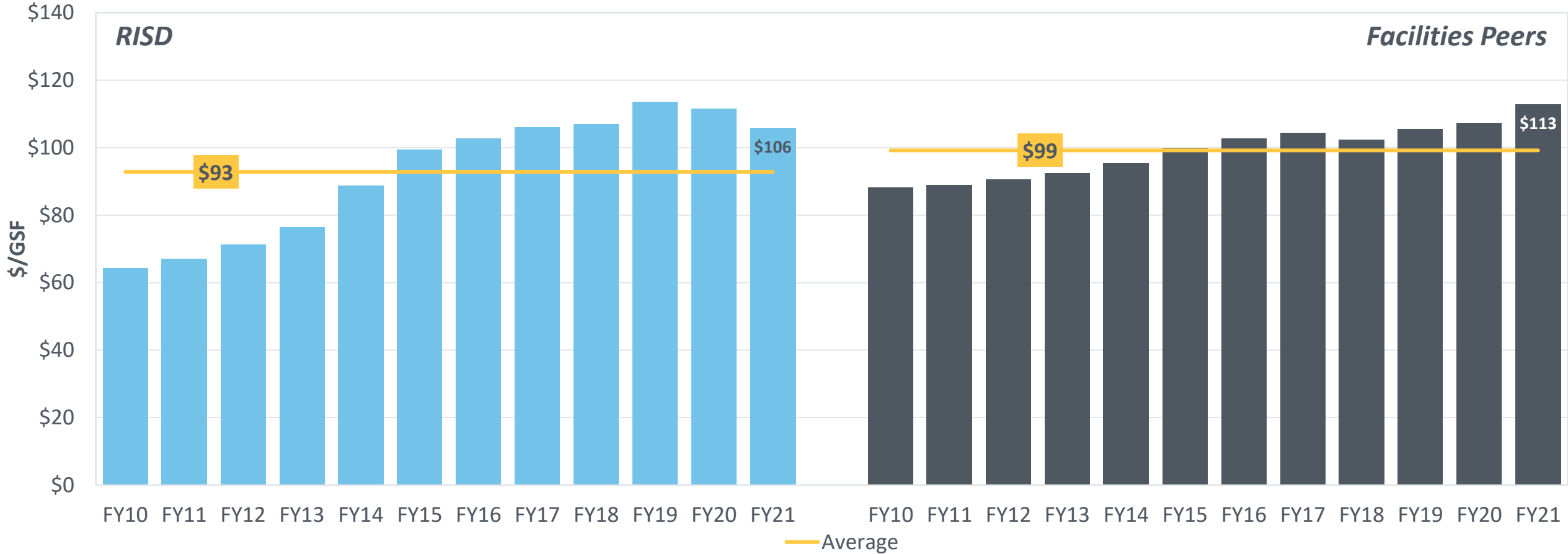


RISD Surpassing Annual Investment Target Results in Lower AR Need



RISD's AR Need has grown by 65% compared by peers by 28% since FY10

Total Asset Reinvestment Need vs. Peers

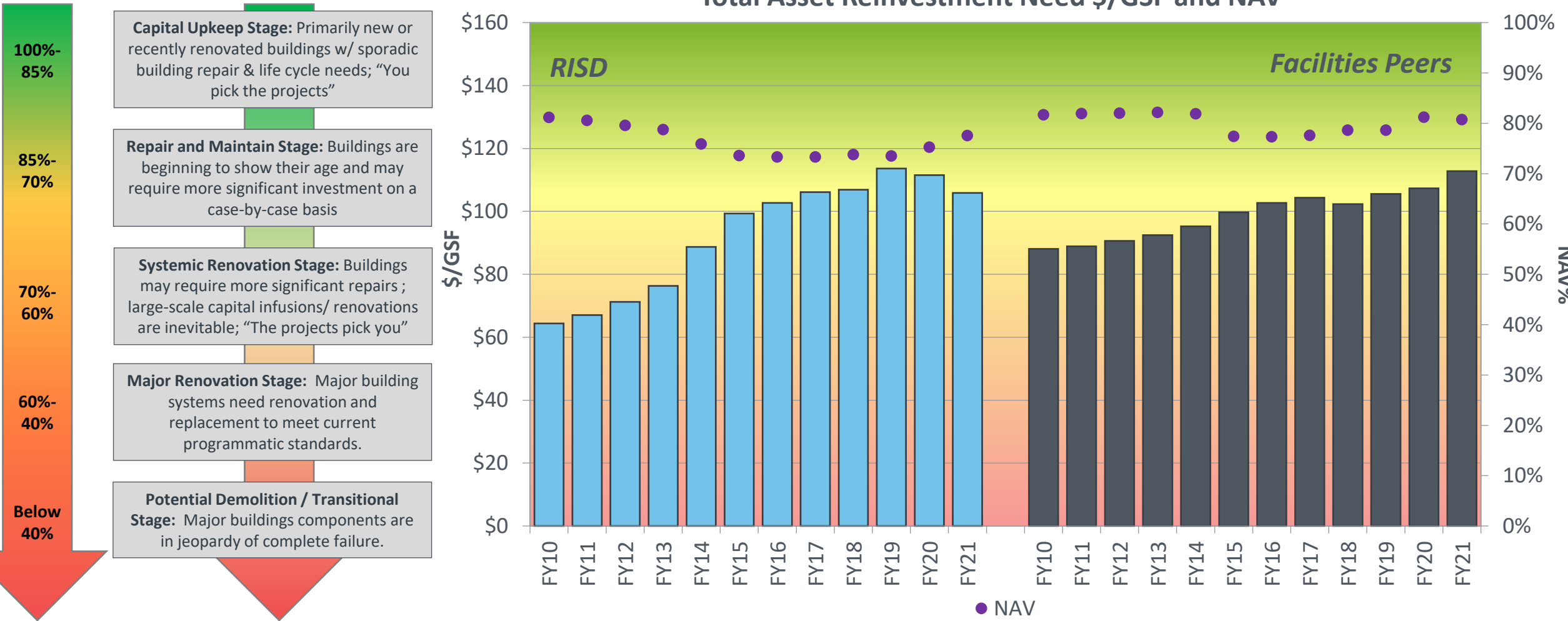


RISD Surpassing Annual Investment Target Results in Lower AR Need

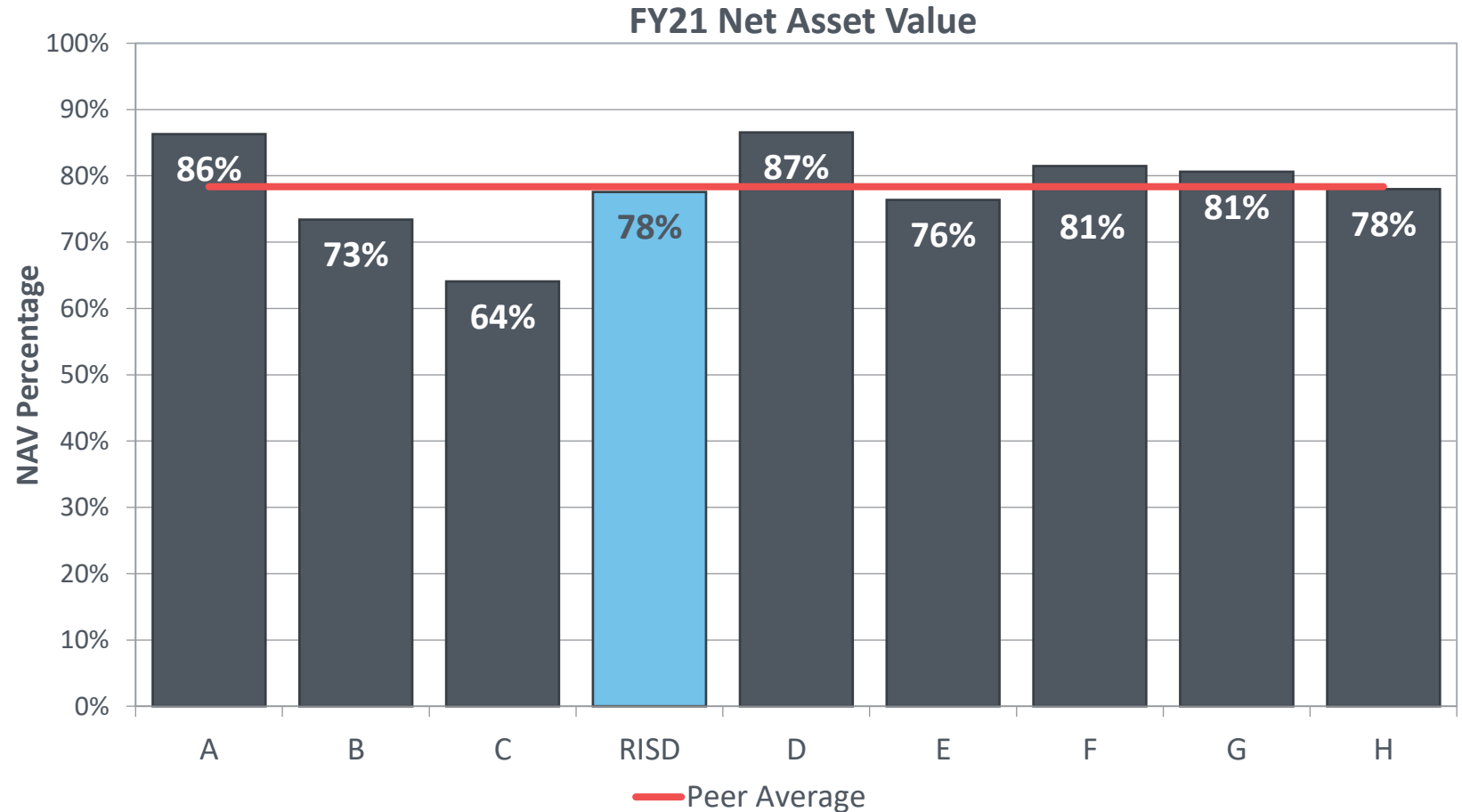
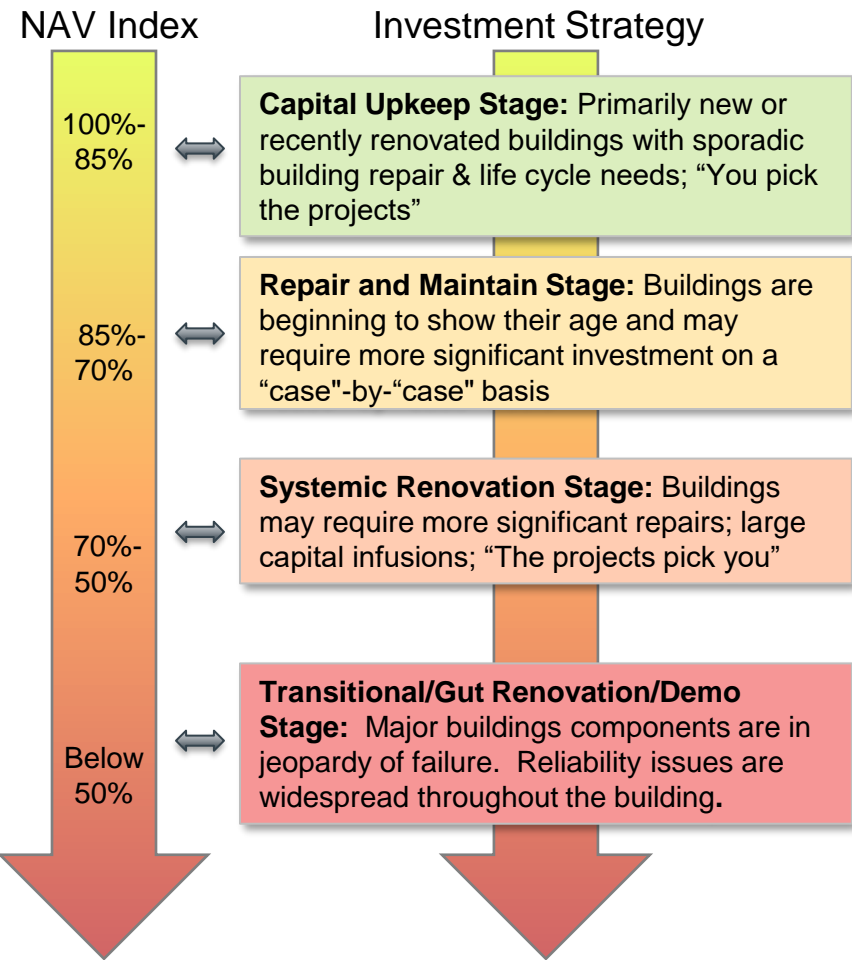


RISD'S NAV increases as AR Need decreases in FY21

Total Asset Reinvestment Need \$/GSF and NAV



RISD's NAV is Falling into the Repair and Maintain Stage



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

Institutions arrayed by Technical Complexity

ROPA+ Prediction Overview

Regionalized costs based on comprehensive database of building systems

6 Subsystems

Roof

Envelope

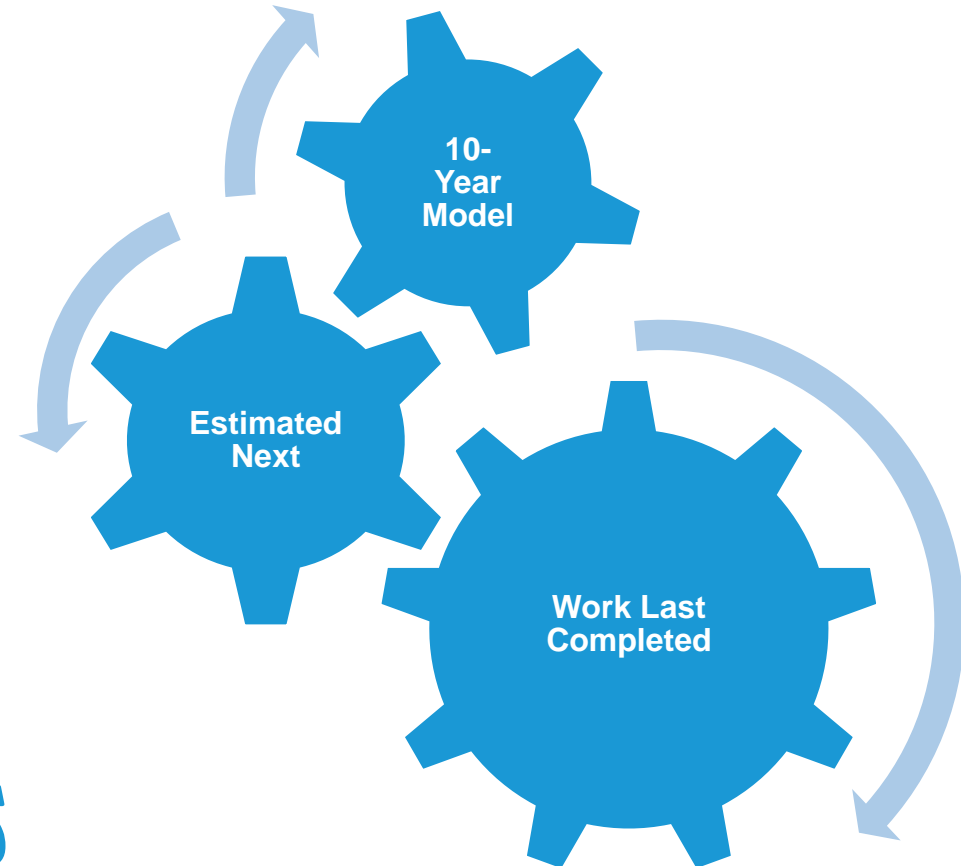
HVAC Systems

Electrical

Plumbing

Interiors

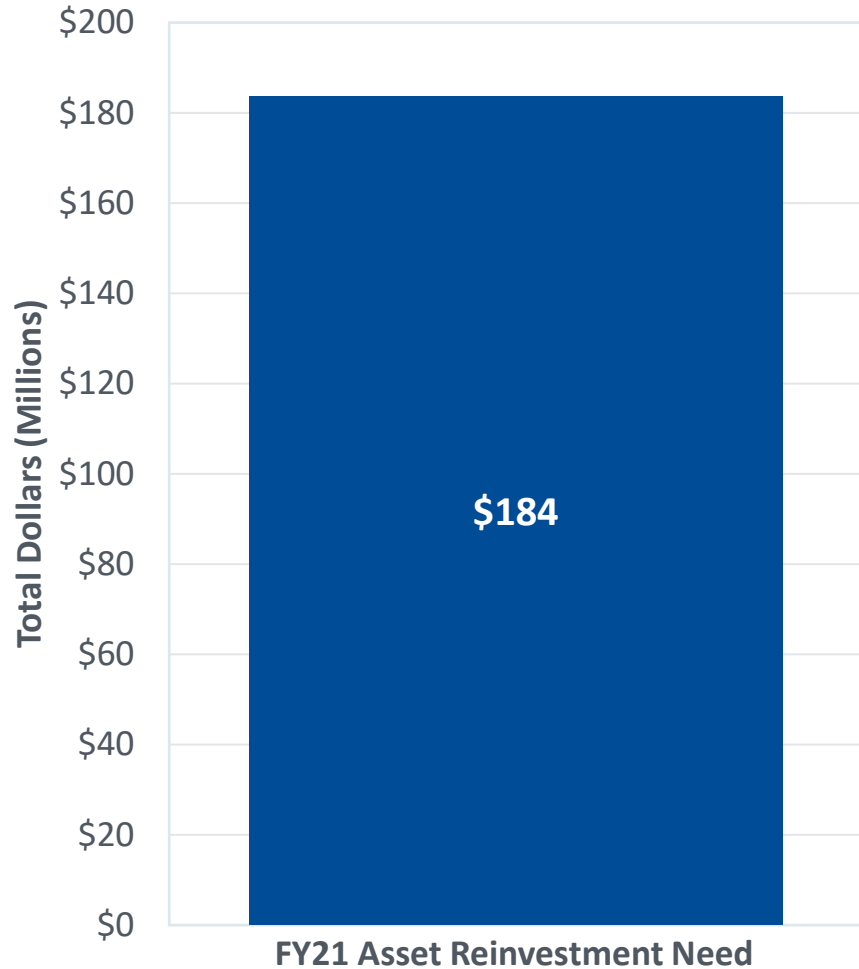
96% of Building Costs



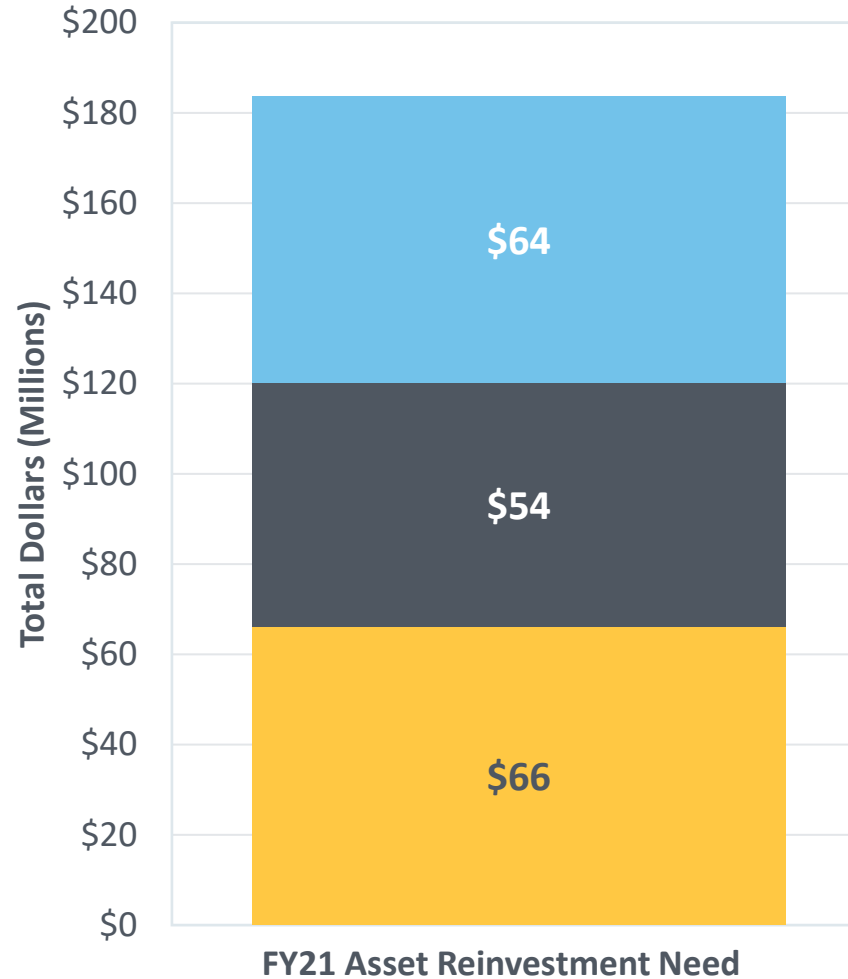
ROPA+ Prediction: Predictive Investment Model



Asset Reinvestment Need



Asset Reinvestment Need



Modernization:

- Modernization and Infrastructure need is estimated at \$64M.
- Sightlines recommends a 10-year capital strategy to address the total need.

Renewal Need:

- Life cycle needs coming due between 2022-2031.
- Total \$54M

Current Need:

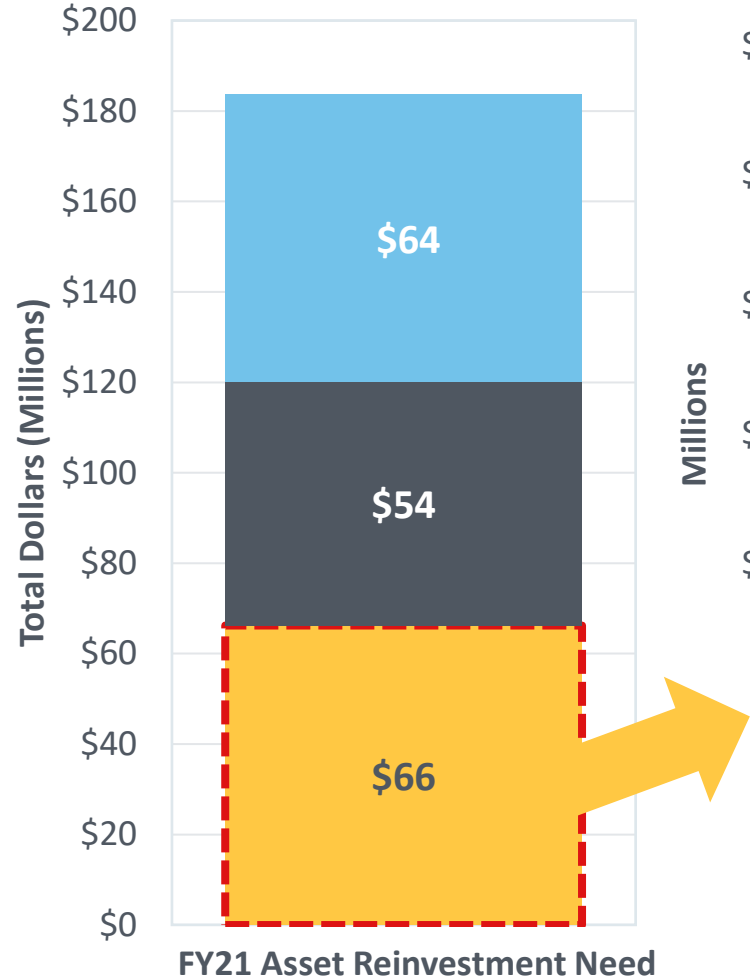
- The subsystem has met its useful life cycle.
- The subsystem is functioning with substantial degradation of efficiency or performing at increased cost
- Life cycle needs already past due.



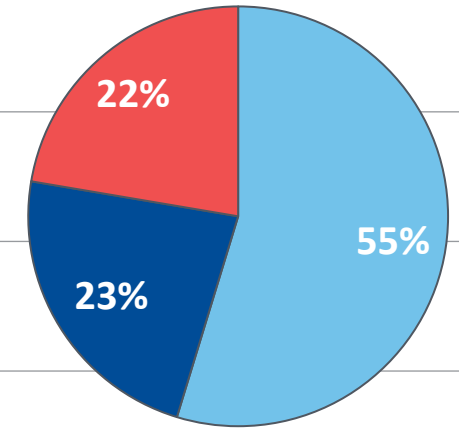
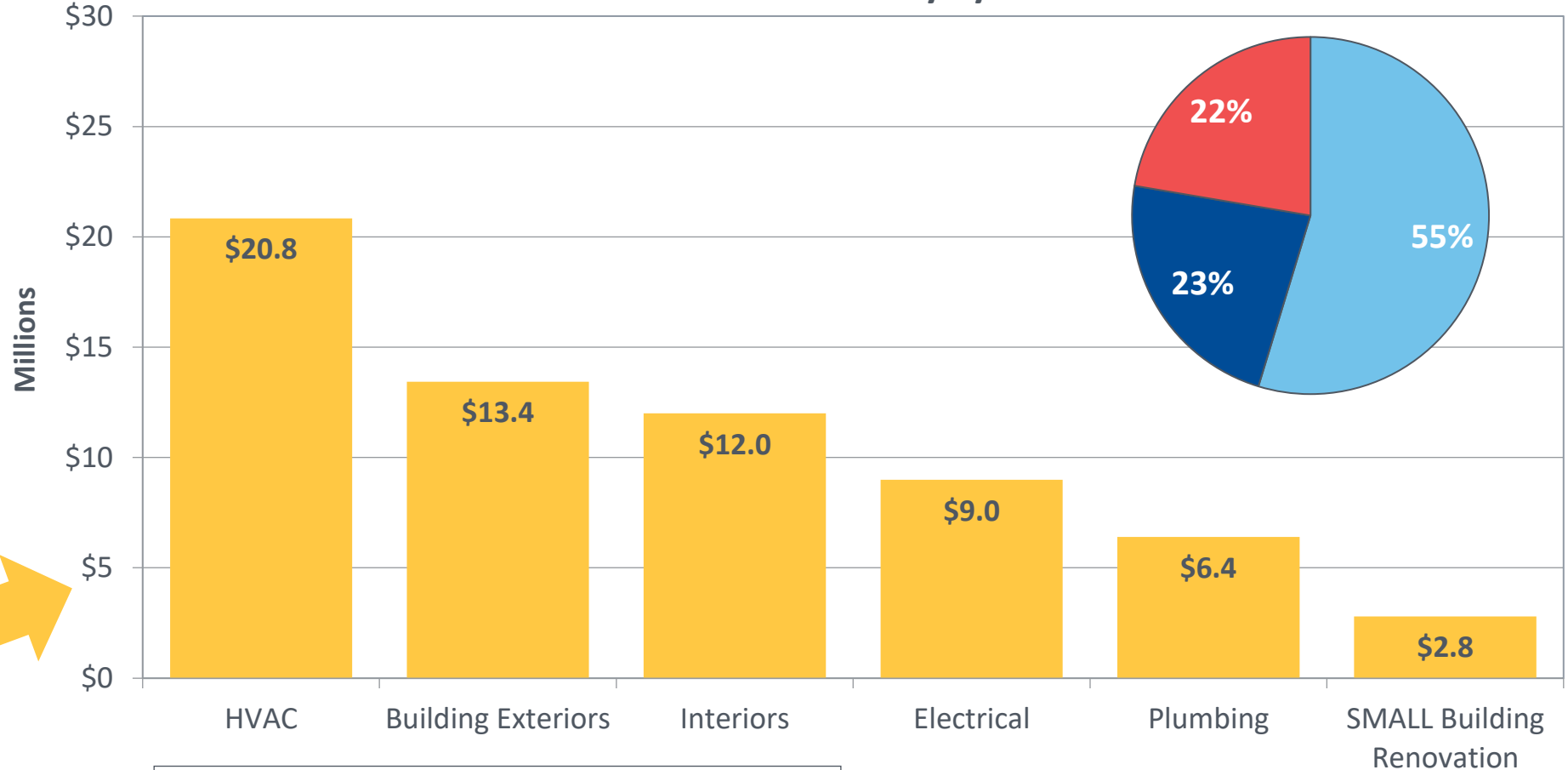
Current Needs Represent 36% of RISD's Total Needs

55% of Current Need Falls into Mechanical Systems

Asset Reinvestment Need



Current Needs by System



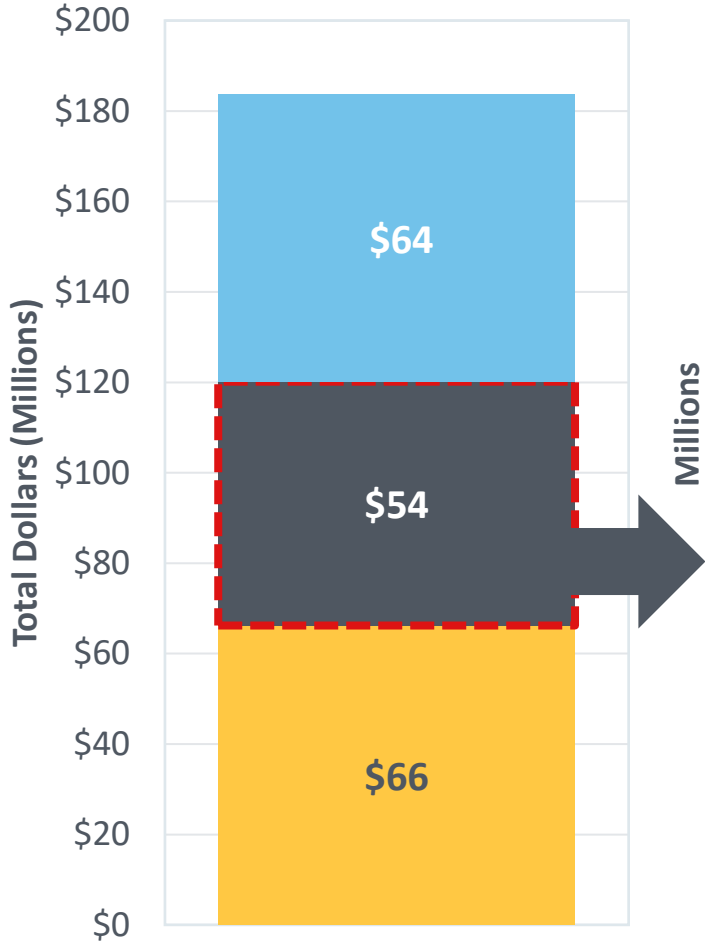
- Envelope – Exteriors, Roofing
- Mechanical – HVAC, Electrical, Plumbing
- Space Renewal – Interiors, Small Building Reno



Renewal Needs Represent 26% of RISD's Total Needs

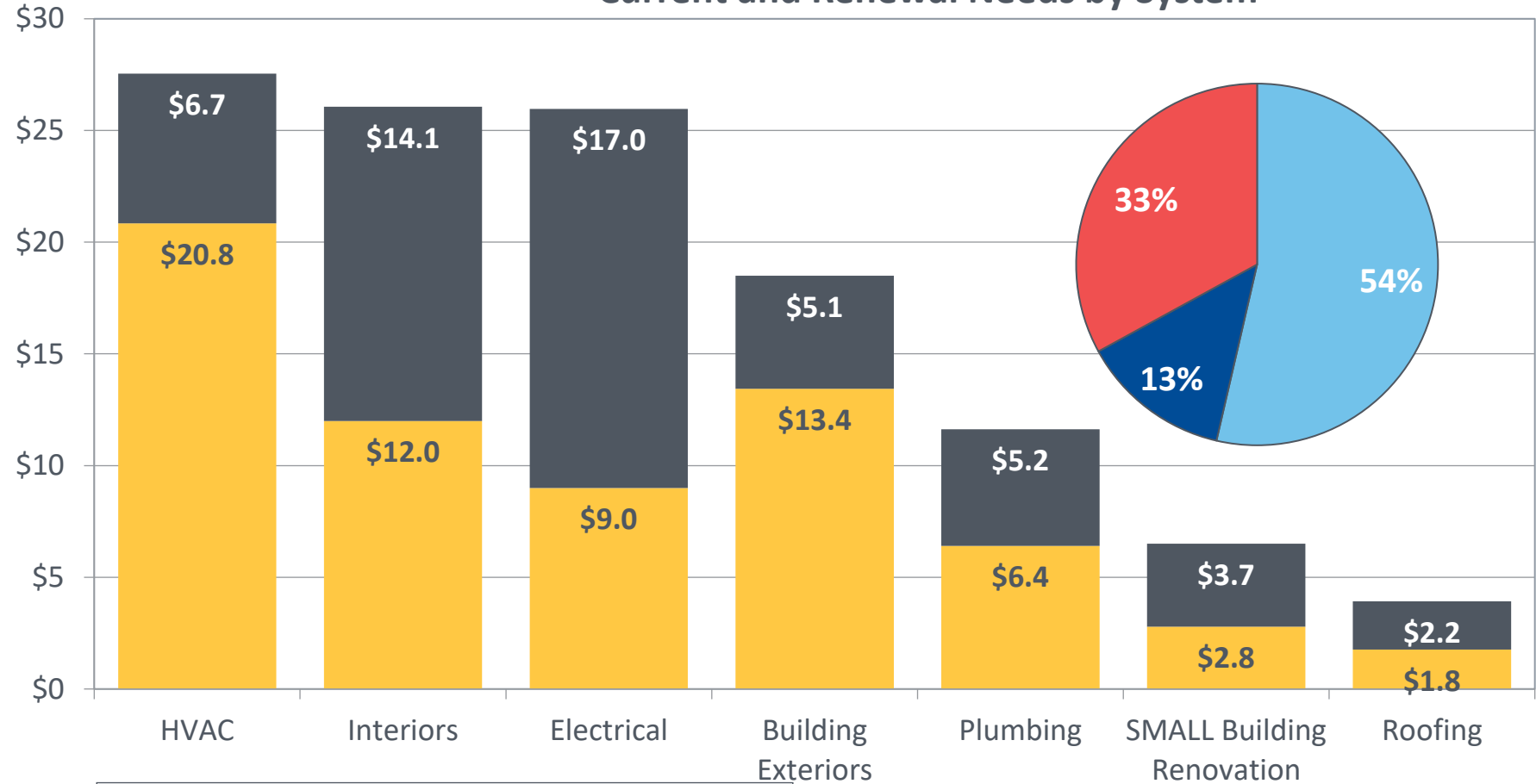
Needs associated with Electrical systems comprise 31% of the identified renewal need

Asset Reinvestment Need



FY21 Asset Reinvestment Need

Current and Renewal Needs by System

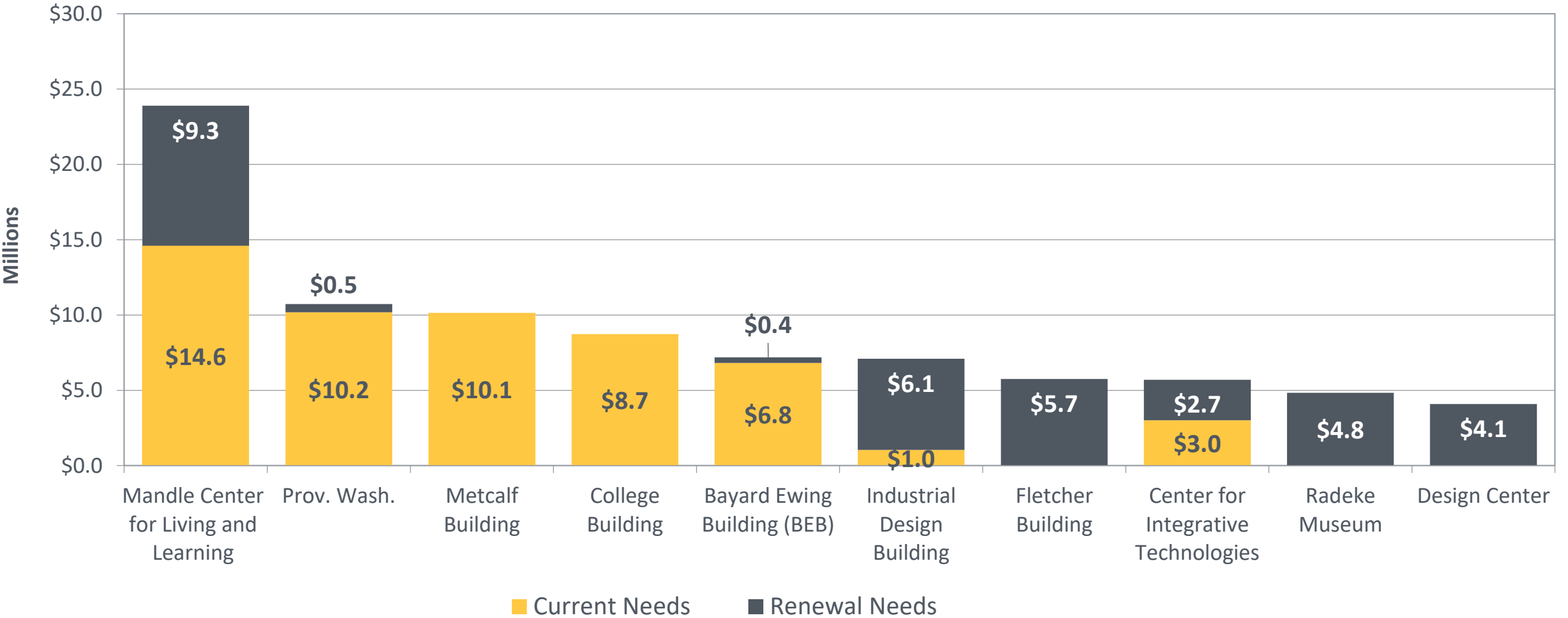


- Envelope – Exteriors, Roofing
- Mechanical – HVAC, Electrical, Plumbing
- Space Renewal – Interiors, Small Building Reno

Top 10 Highest Need Buildings Make up 73% of Total Current & Renewal Need



10 Highest Need Buildings by Current and Renewal Needs

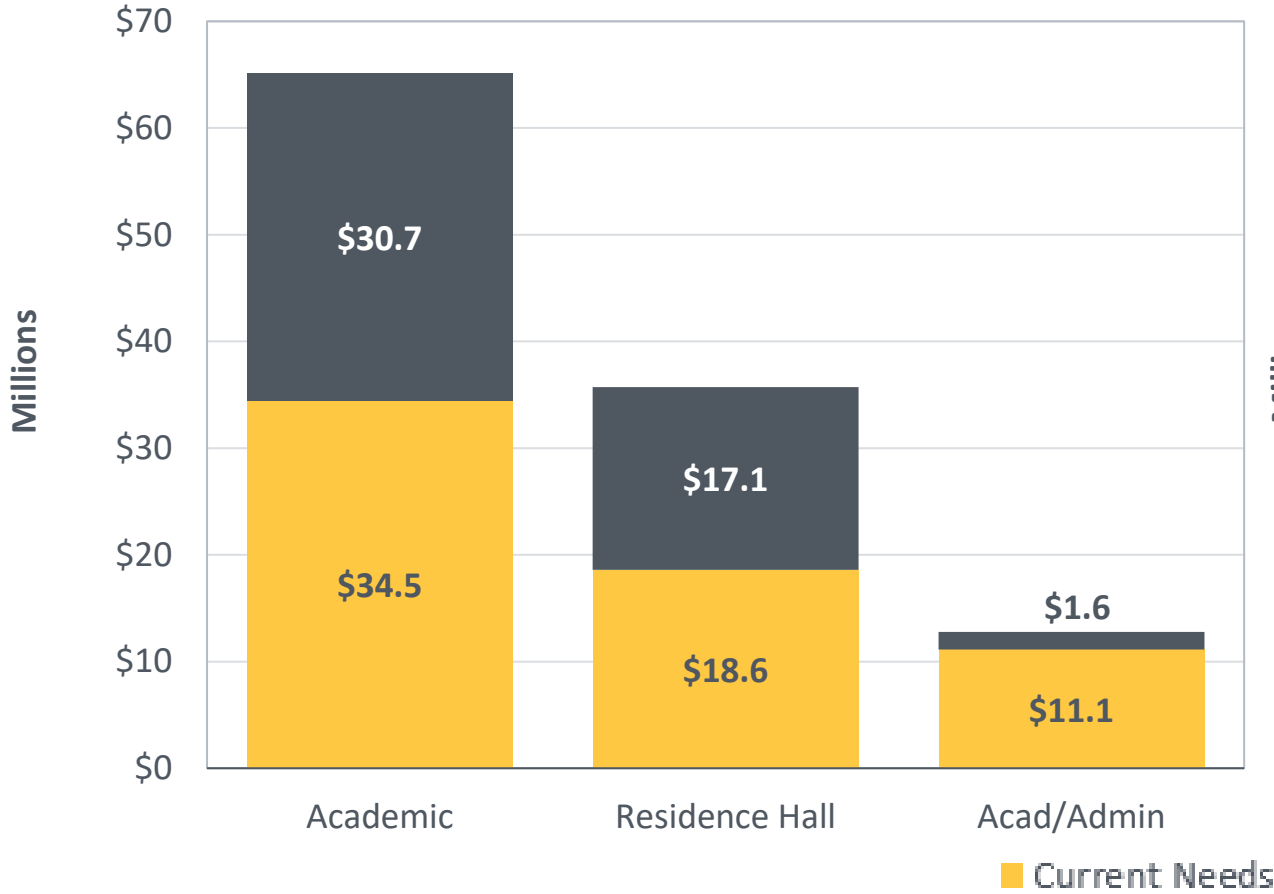


Understanding RISD's Needs by Function

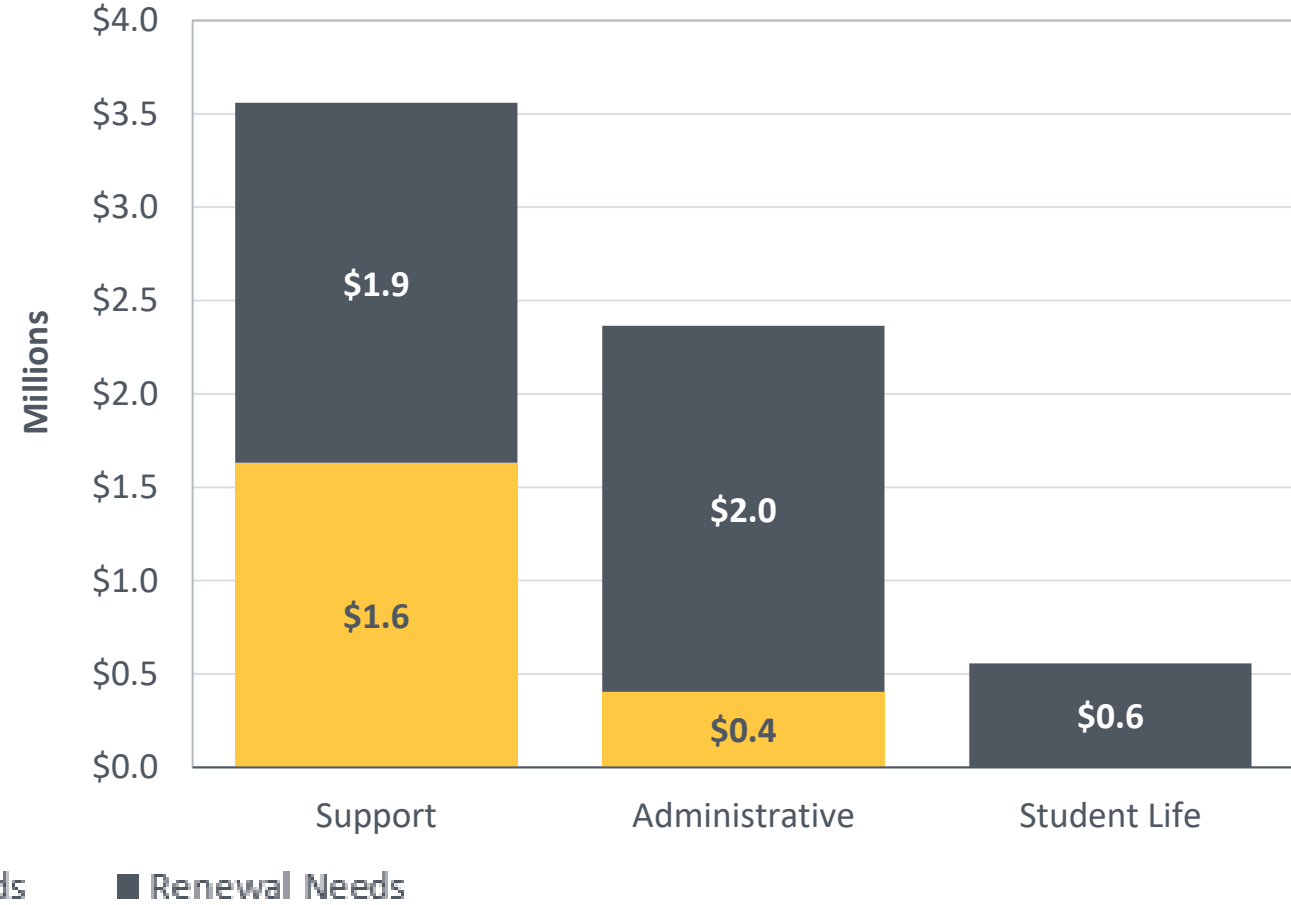


Academic buildings have the highest current and renewal needs

Current and Renewal Needs by Function



Current and Renewal Needs by Function

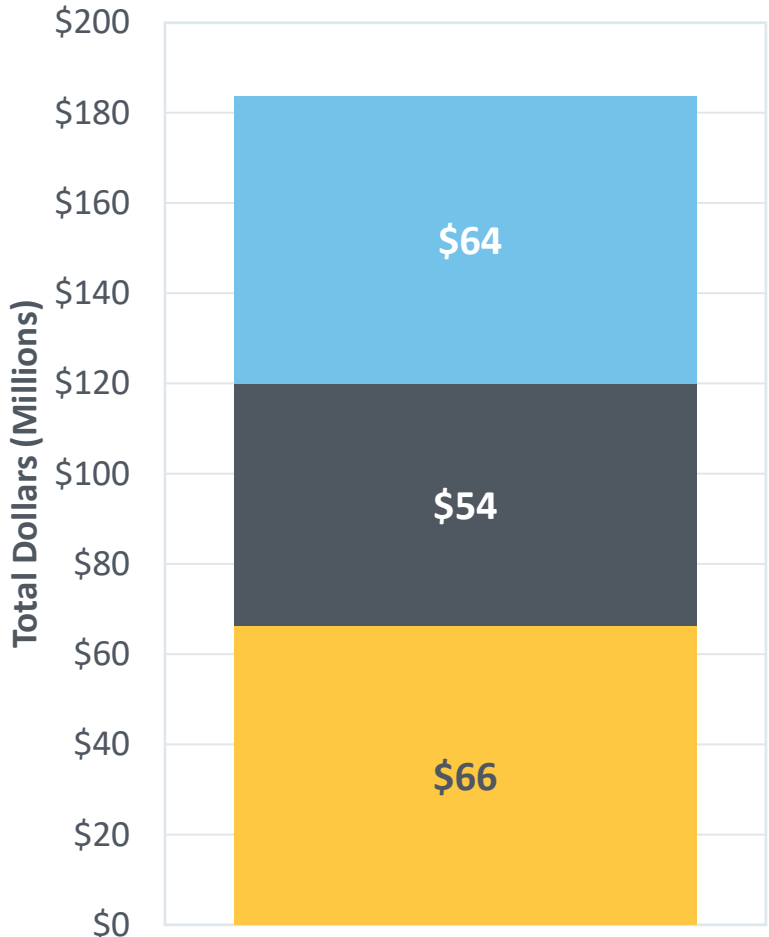


Strategic Planning Needed to Address Renewal Need



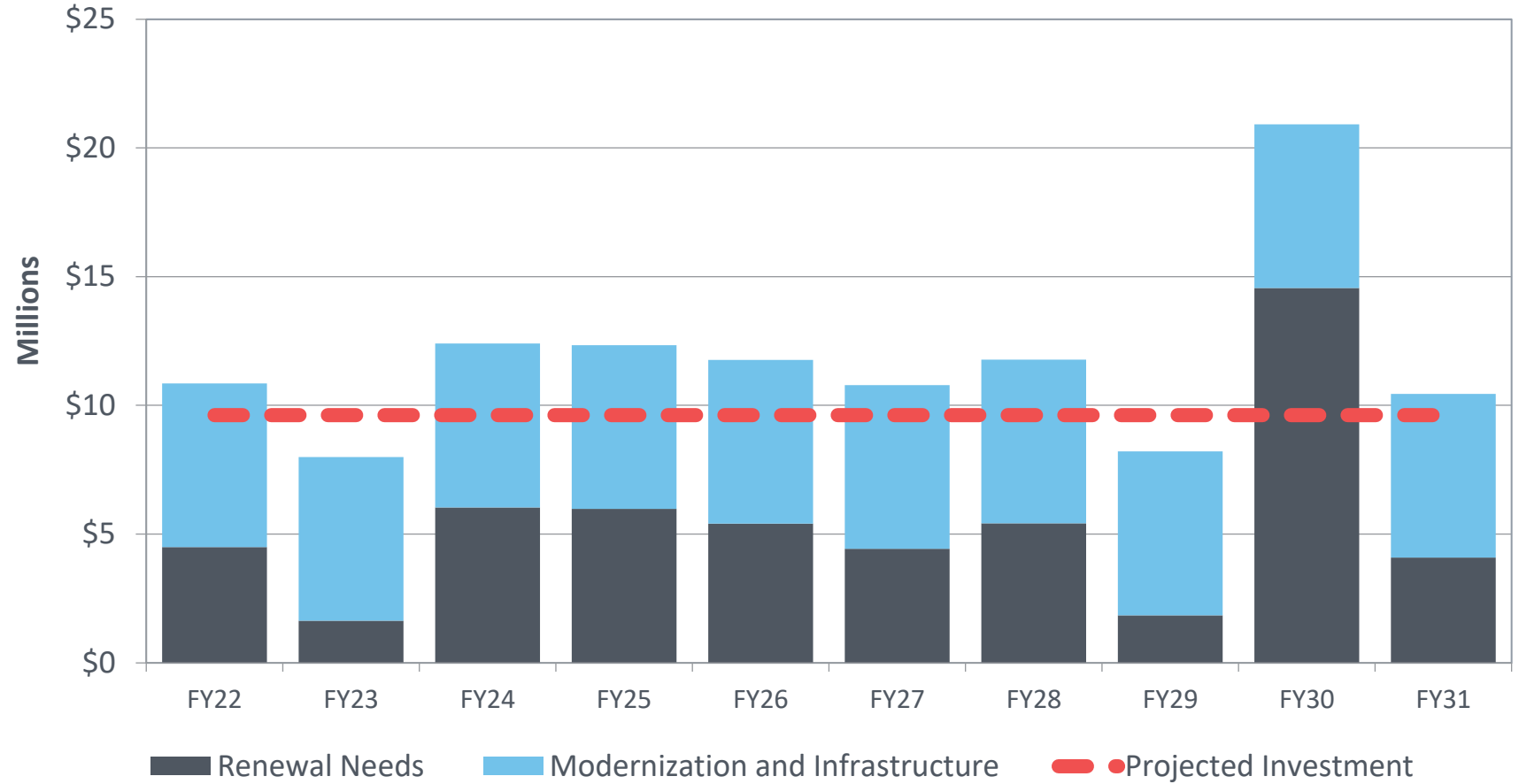
Current level of capital investment will not be enough to keep up with renewal needs of campus

Asset Reinvestment Need



FY21 Asset Reinvestment Need

Renewal, Modernization and Infrastructure Needs vs. Projected Investment



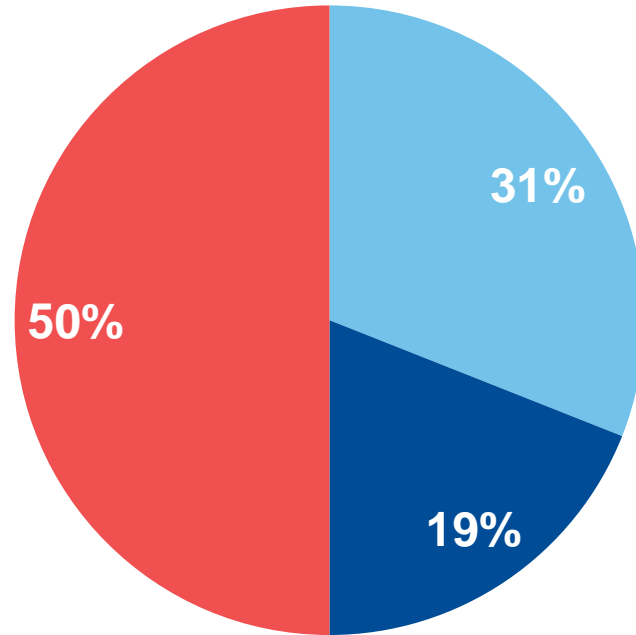
**Projected Investment of \$9.61M is the average investment from FY10- FY21*



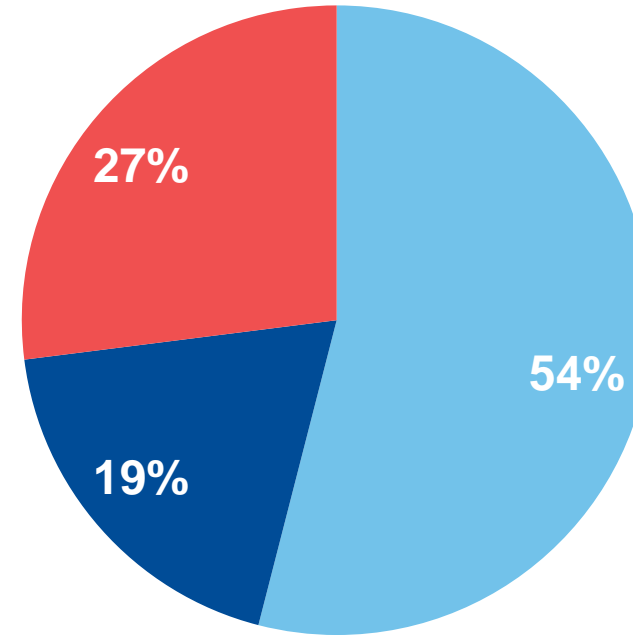
Future Resource Allocation Needed for Mechanical Projects

50% of historical capital investment directed towards space renewal projects, 54% of current and renewal need identified within mechanical systems

**Historic Capital Investment
(FY10-FY21)**



**Current and Renewal Need
(FY22-FY31)**



- Envelope – Exteriors, Roofing
- Mechanical – HVAC, Electrical, Plumbing
- Space Renewal – Interiors, Small Building Reno

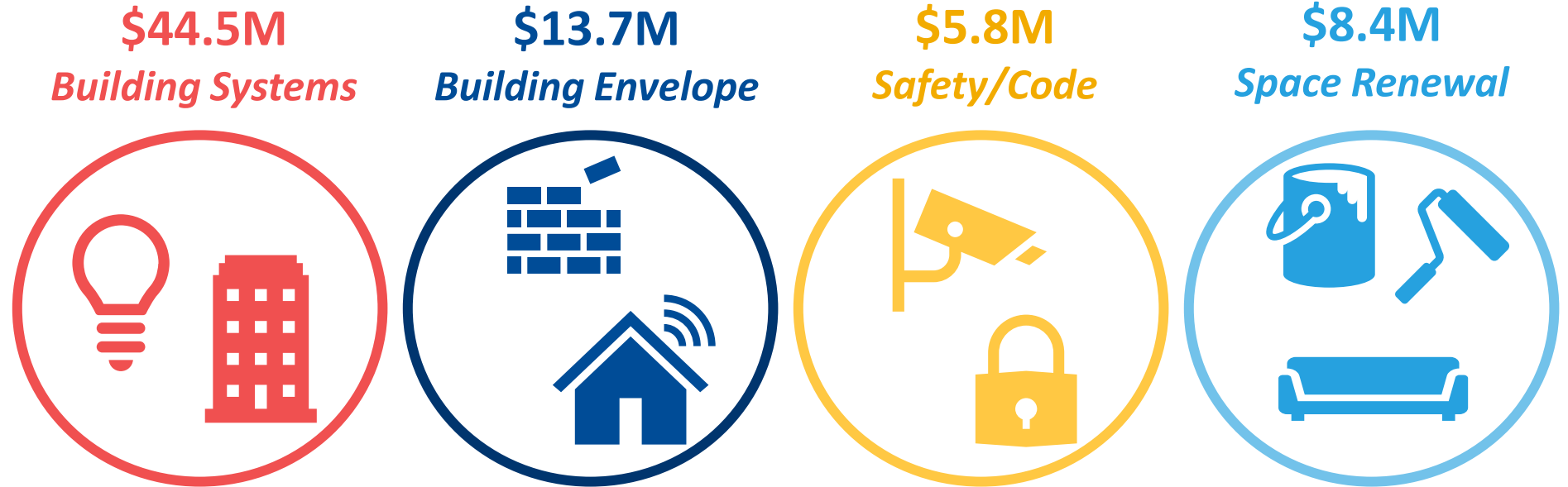


Linking RISD Capital Plan and Needs to Strategically Plan

Utilizing the ROPA+ Prediction and RISD Capital Plan to identify and select projects based on building needs

FY22-FY27 RISD Capital Plan

Over the next 6 year, RISD will invest **\$72.6 million** into various existing space projects



College Building, Mandle Center, Metcalf Building, Bayard Ewing Building (BEB), Colonial Apartments, Auditorium and South Hall have the highest targeted investments from FY22-FY27 within the capital plan

Operations Profile





Operating Expenses Decreased As RISD Responded to COVID Impacts

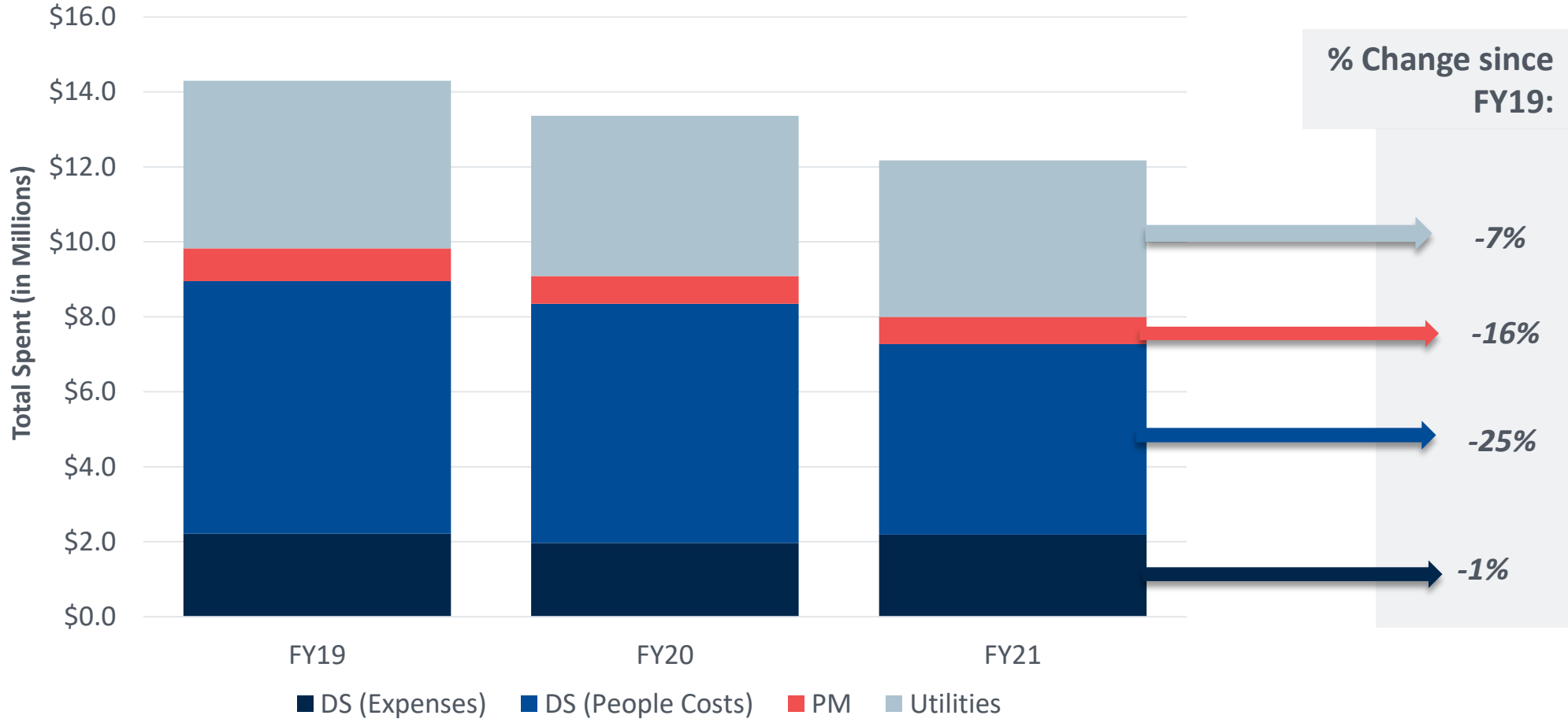
Facilities staff service campus with more responsibilities due to COVID 19 with a leaner budget

Historical Actual Operating Expenditures

Utilities
Fossil Fuel
Electric
Water/Sewer

Planned Maintenance
Internal & outsourced
work dedicated to
extending lifecycles

Daily Service
People costs,
contracted services,
materials



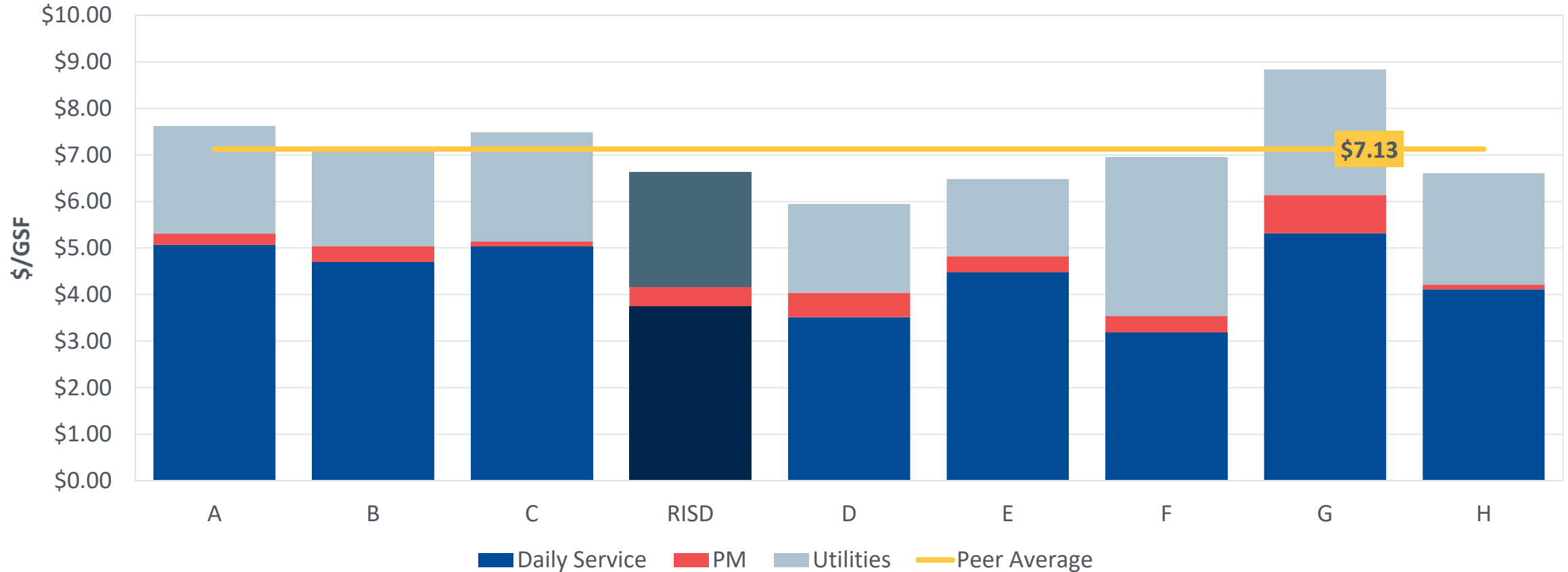


FY21 Operating Expenditures Below Peer Levels

On average, RISD spending 7% less on total operating expenditures compared to peers when regionally adjusted

FY21 Facilities Operating Actuals

Regionally Adjusted COLI



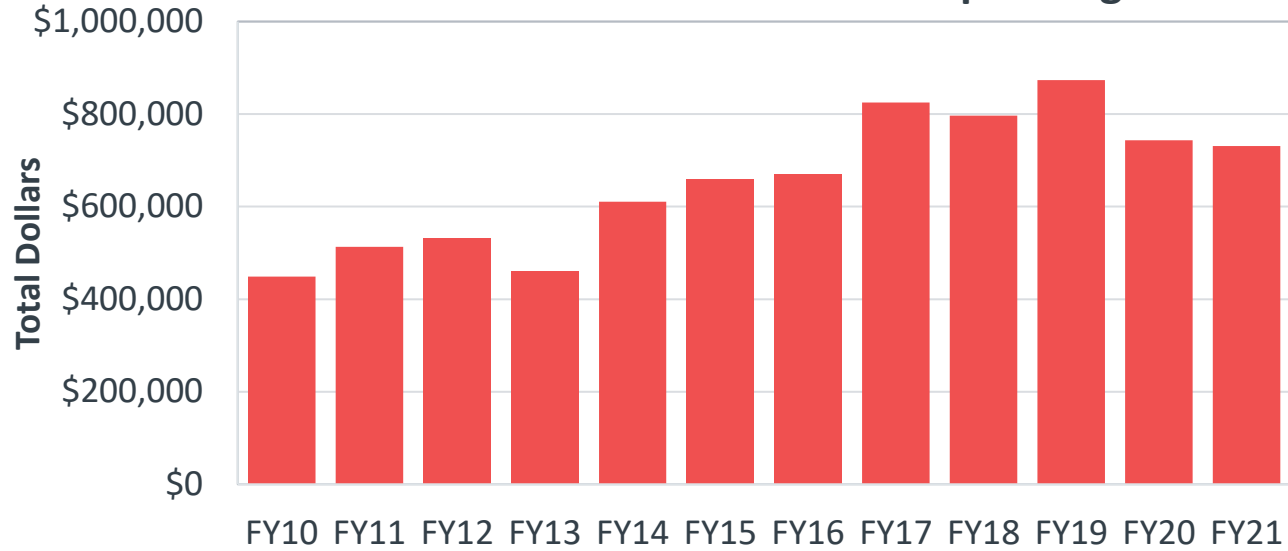
Arrayed by Technical Complexity



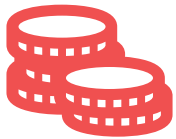
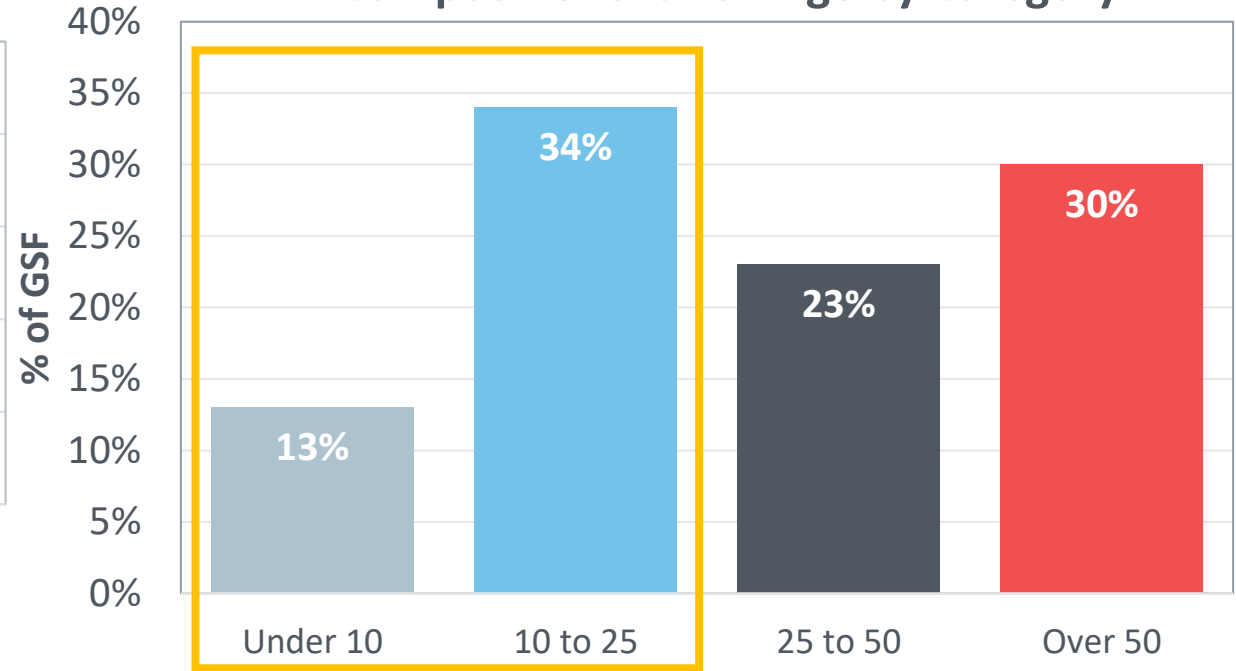
RISD's Strong Dedication to PM Impacts Future

47% of RISD's age profile require preventive maintenance to extend useful life of systems on campus

RISD Preventive Maintenance Spending



Campus Renovation Age by Category



\$1.00 invested in PM now



SAVES \$2.78 in reactive maintenance later

Capital Needs

Preventive Maintenance

Reactive Maintenance



Decreasing Staffing Levels Impacts Coverage

Steady increase of GSF/FTE, as more positions became vacant

