

Rhode Island School of Design FY17 ROPA+ Final Presentation

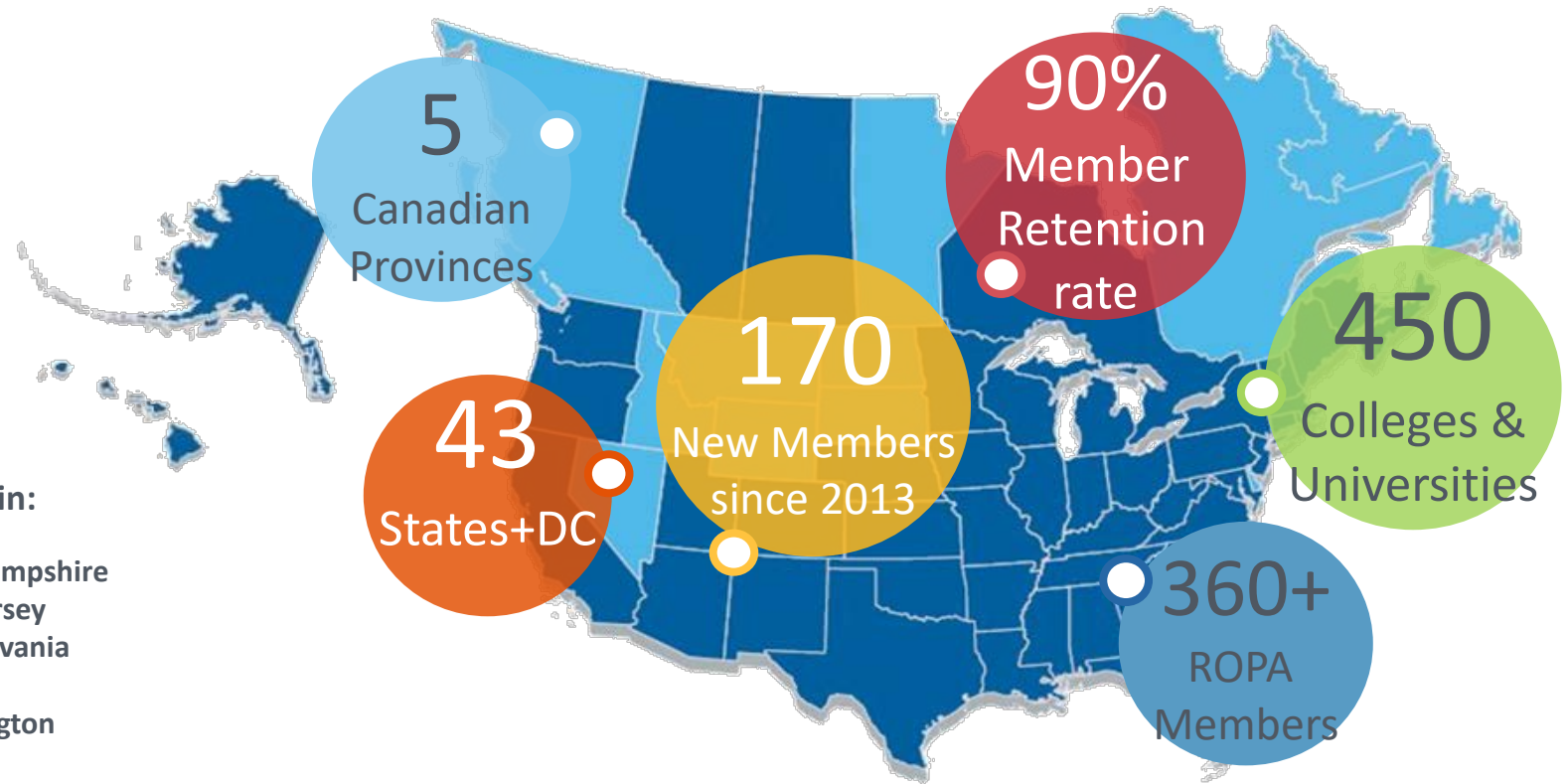
October 19, 2017

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



Who Partners with Sightlines?

Robust membership includes colleges, universities, consortiums and state systems

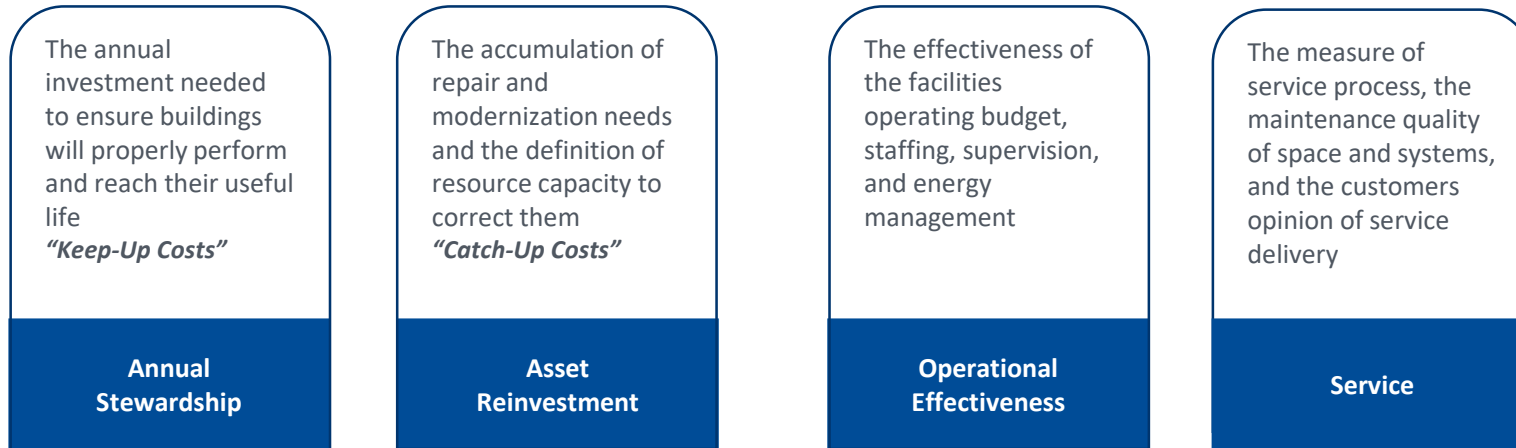


Sightlines has advised state systems in:

- Alaska
- California
- Florida
- Hawaii
- Maine
- Massachusetts
- Minnesota
- Mississippi
- Missouri
- Nebraska
- Ohio
- New Hampshire
- New Jersey
- Pennsylvania
- Texas
- Washington

A Vocabulary for Measurement

The Return on Physical Assets – ROPASM



Institutions
Art Center College of Design
Bentley University
Berklee College of Music
Bowdoin College
Brown University
California Institute of the Arts
Connecticut College
Ithaca College
Massachusetts College of Art and Design
Mount Holyoke College

Comparative Considerations

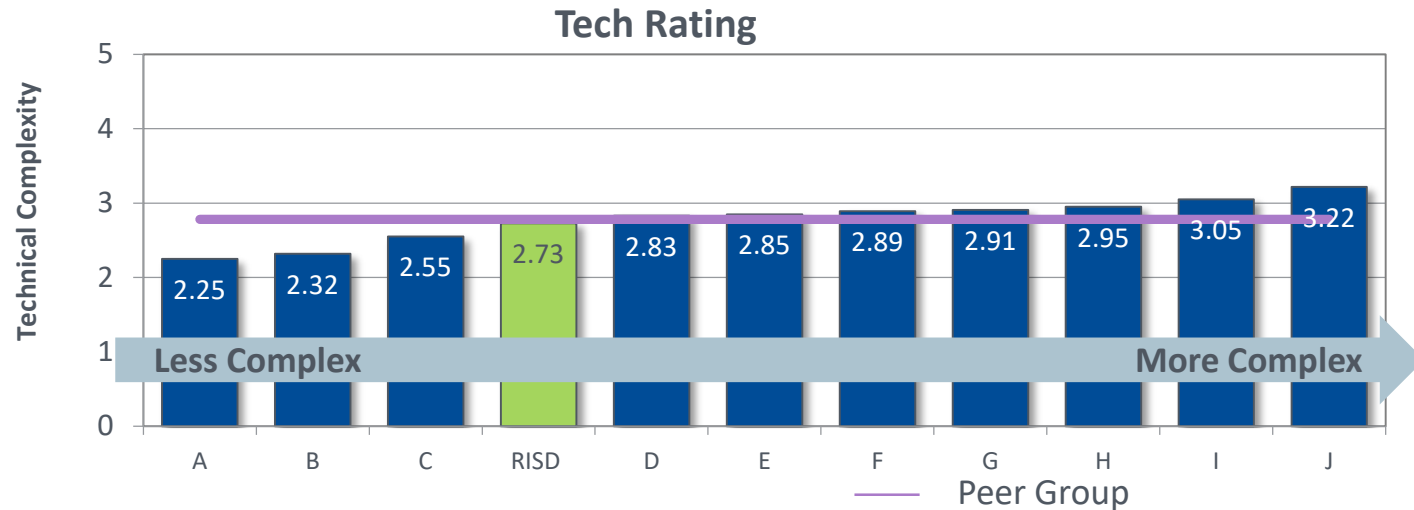
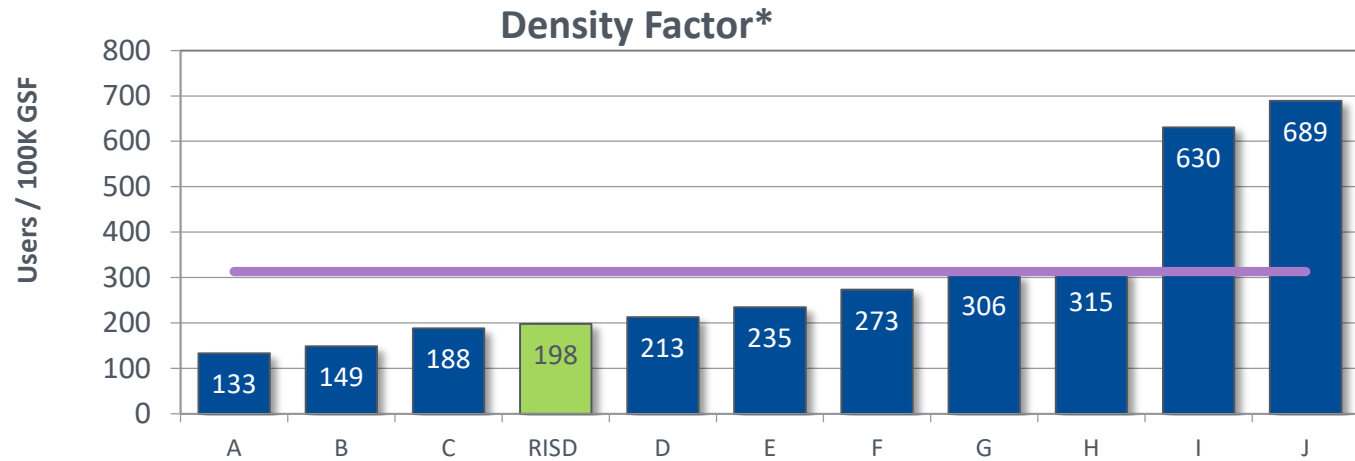
Size, technical complexity, region, geographic location, and setting are all factors included in the selection of peer institutions

Core Comments

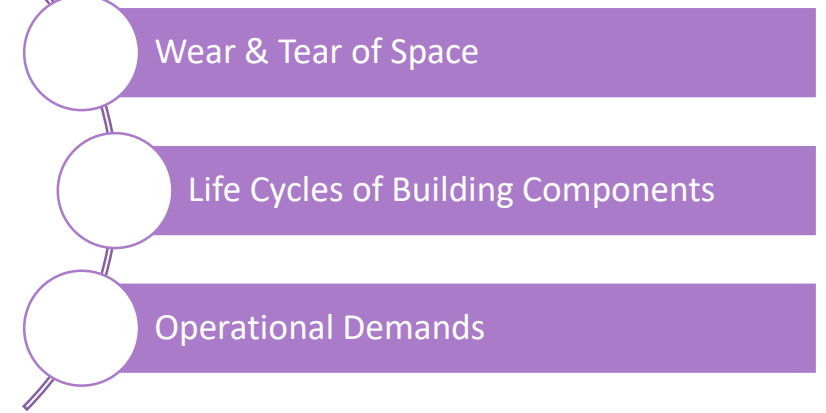
Waiting for final deck to be established

Physical Drivers of Campus

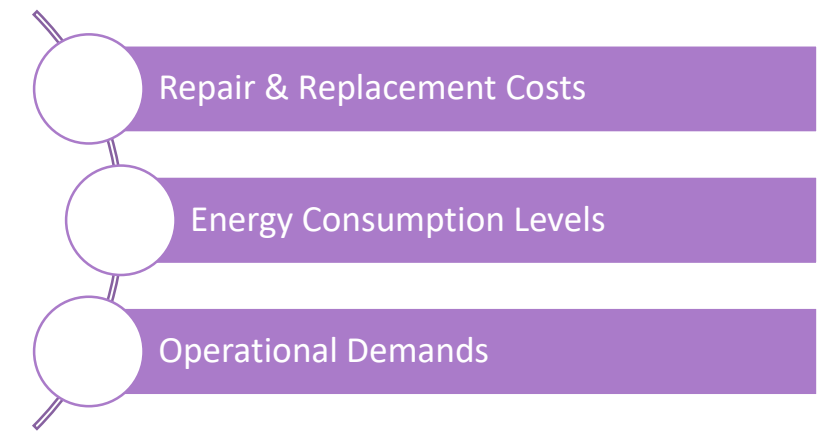
Similar physical attributes to peer institutions



Density Factor Impacts:

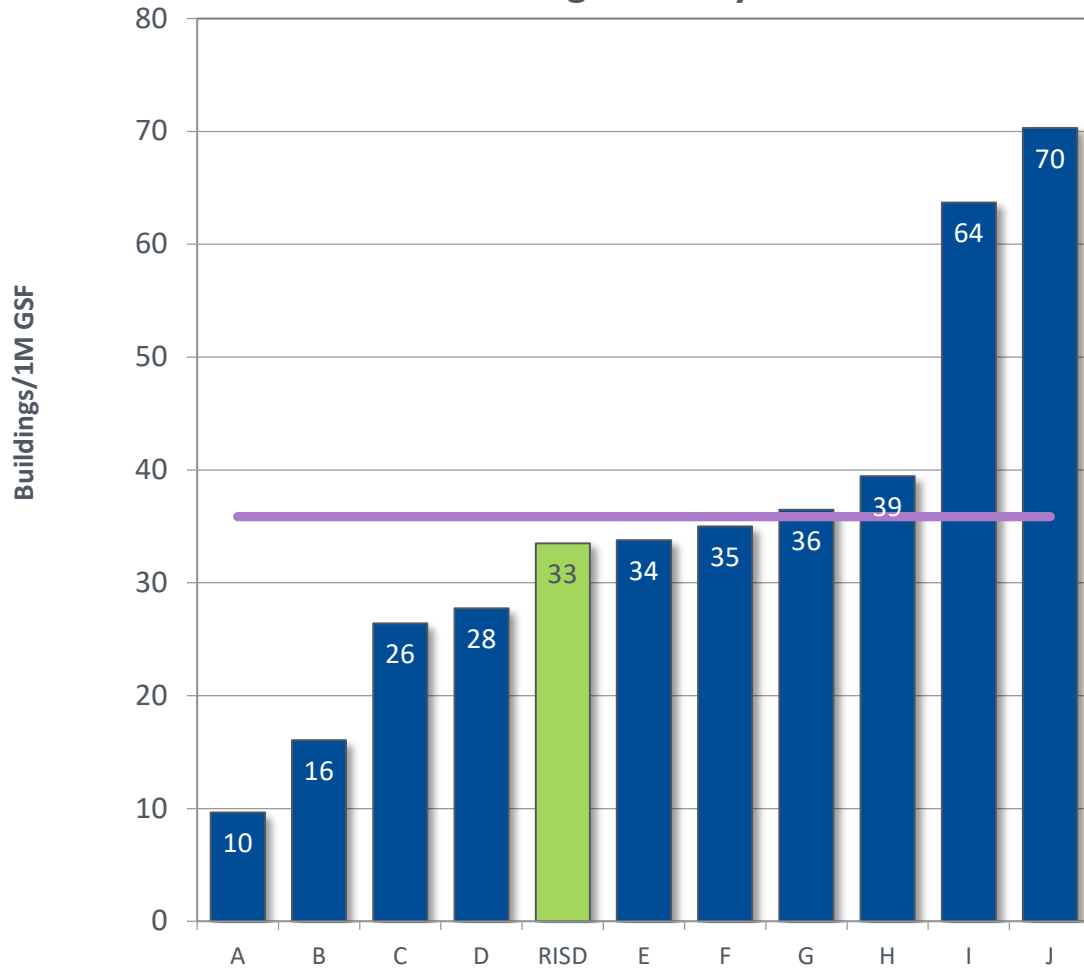


Tech Rating Impacts:

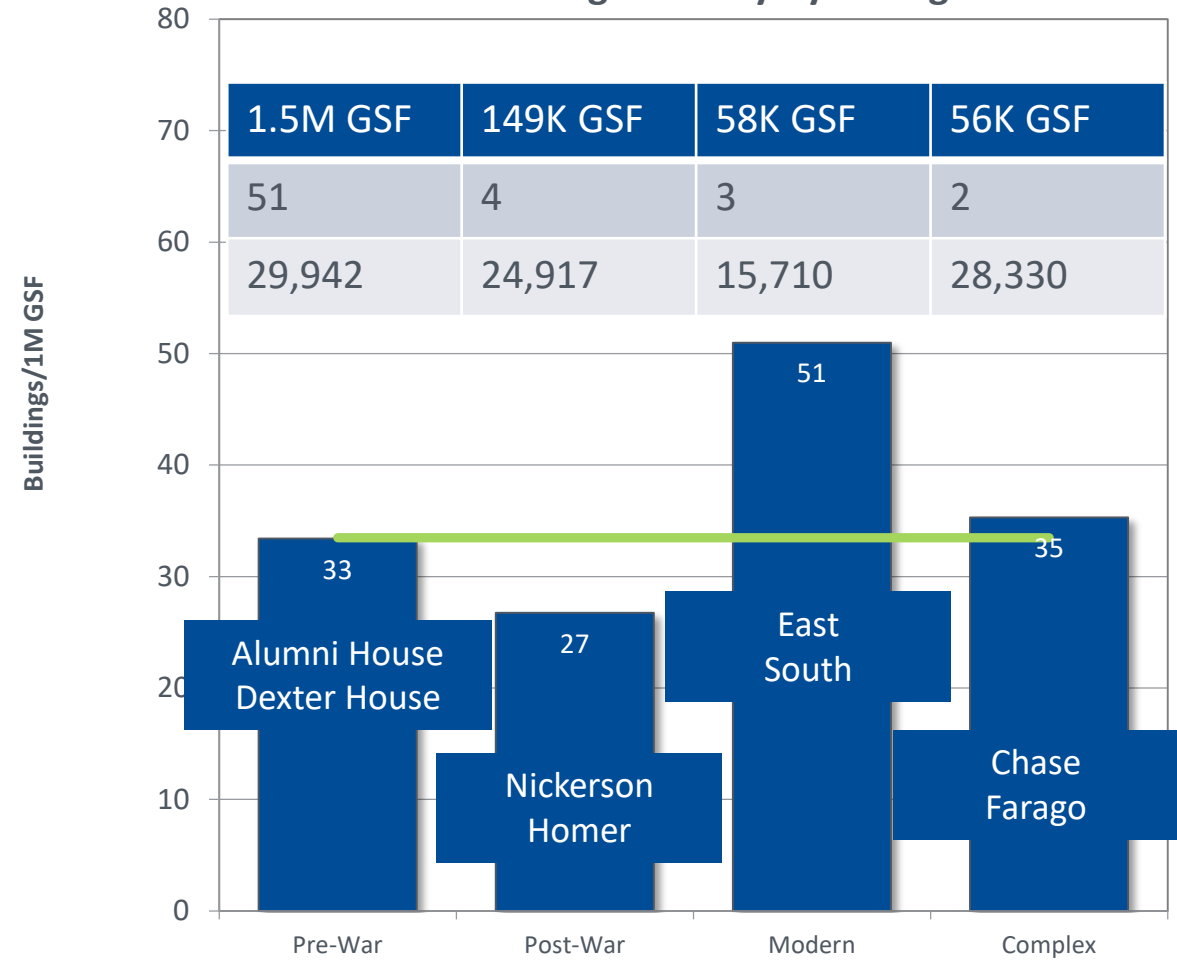


Building Intensity

Building Intensity

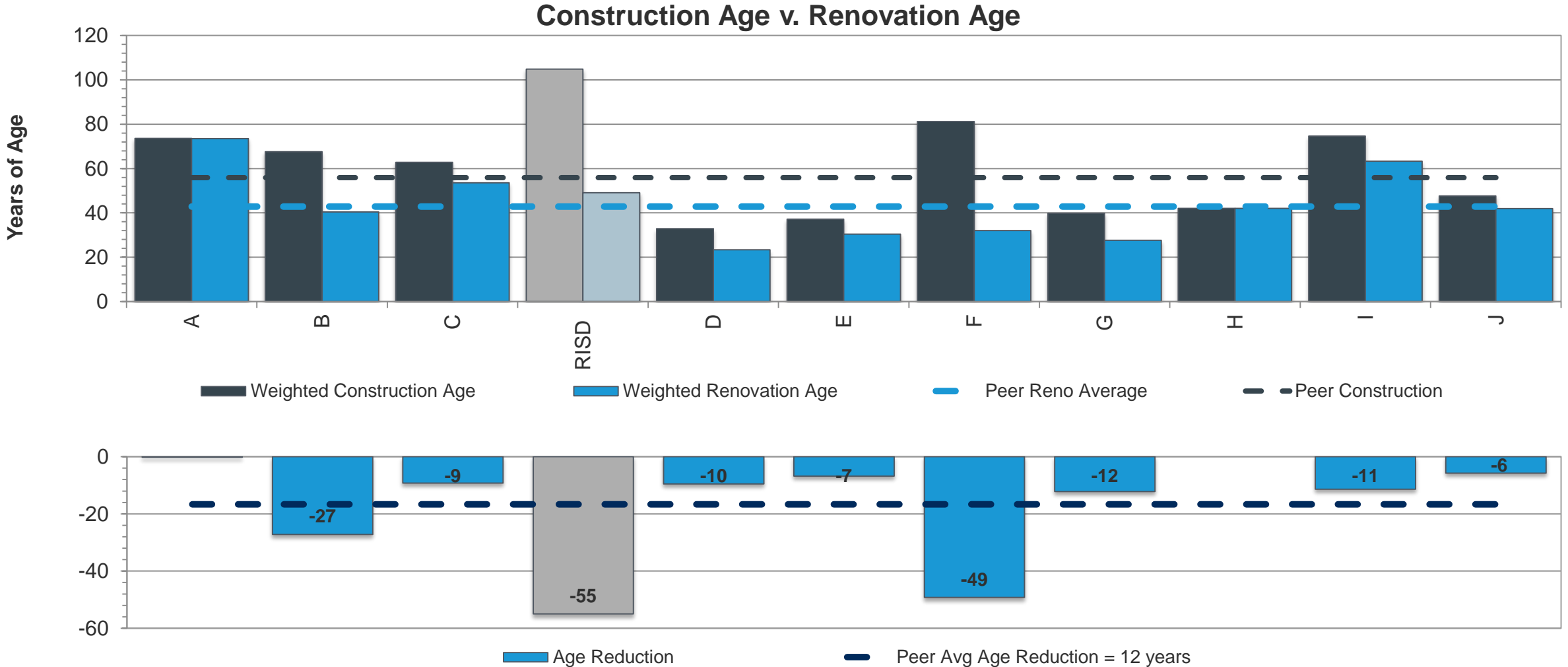


RISD Building Intensity by Vintage



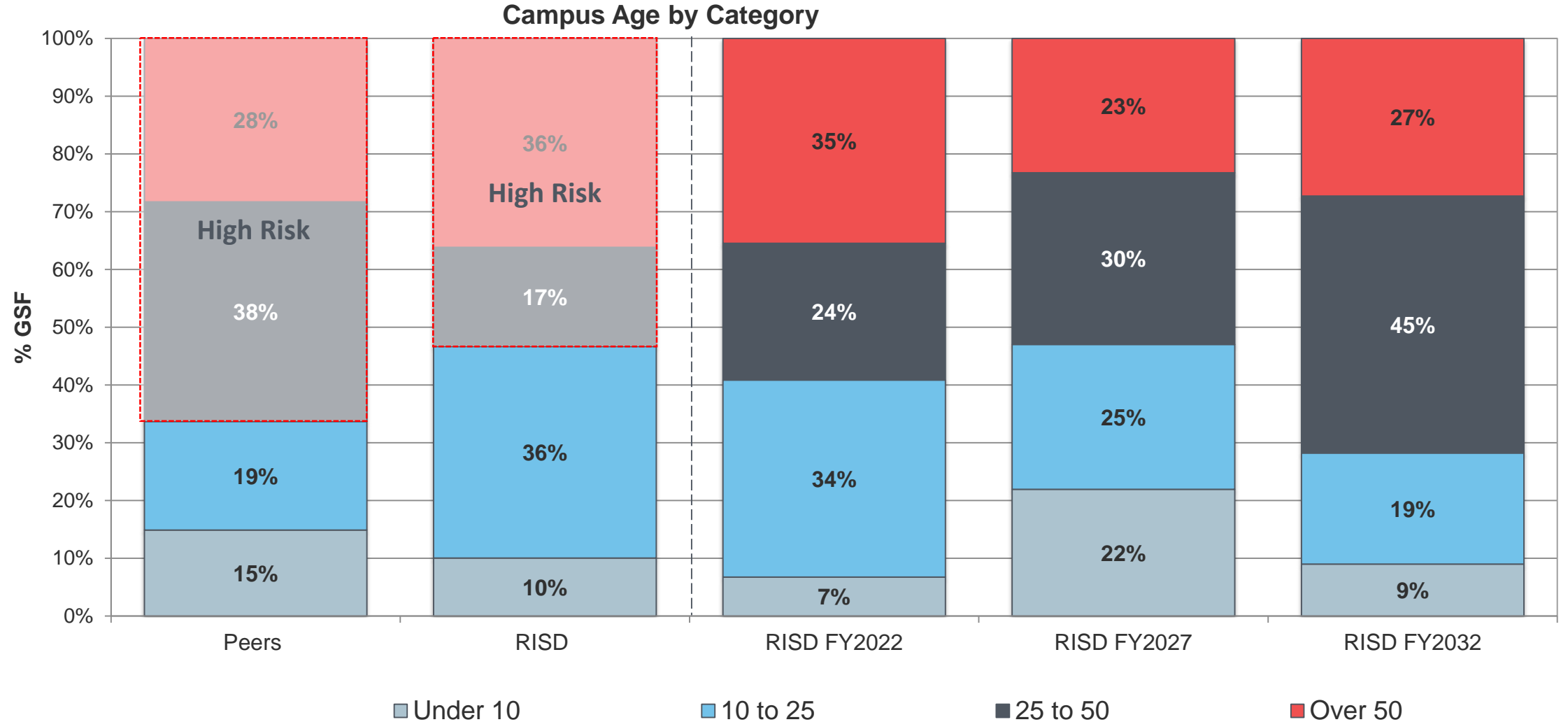
Resetting the Clock Through Renovations

RISD has older facilities on average, but has made more impact with renovations



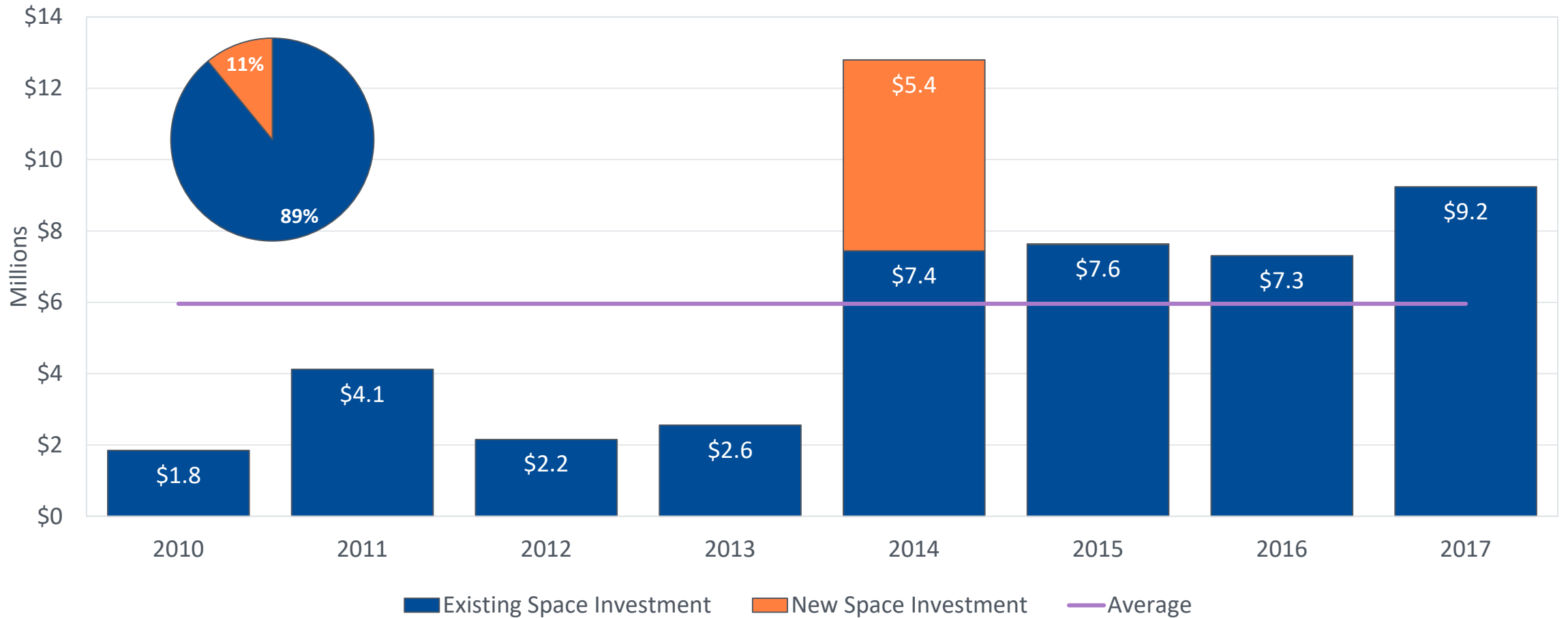
A Shifting Campus Age Profile

Understanding the Impact of Age on Capital Demands



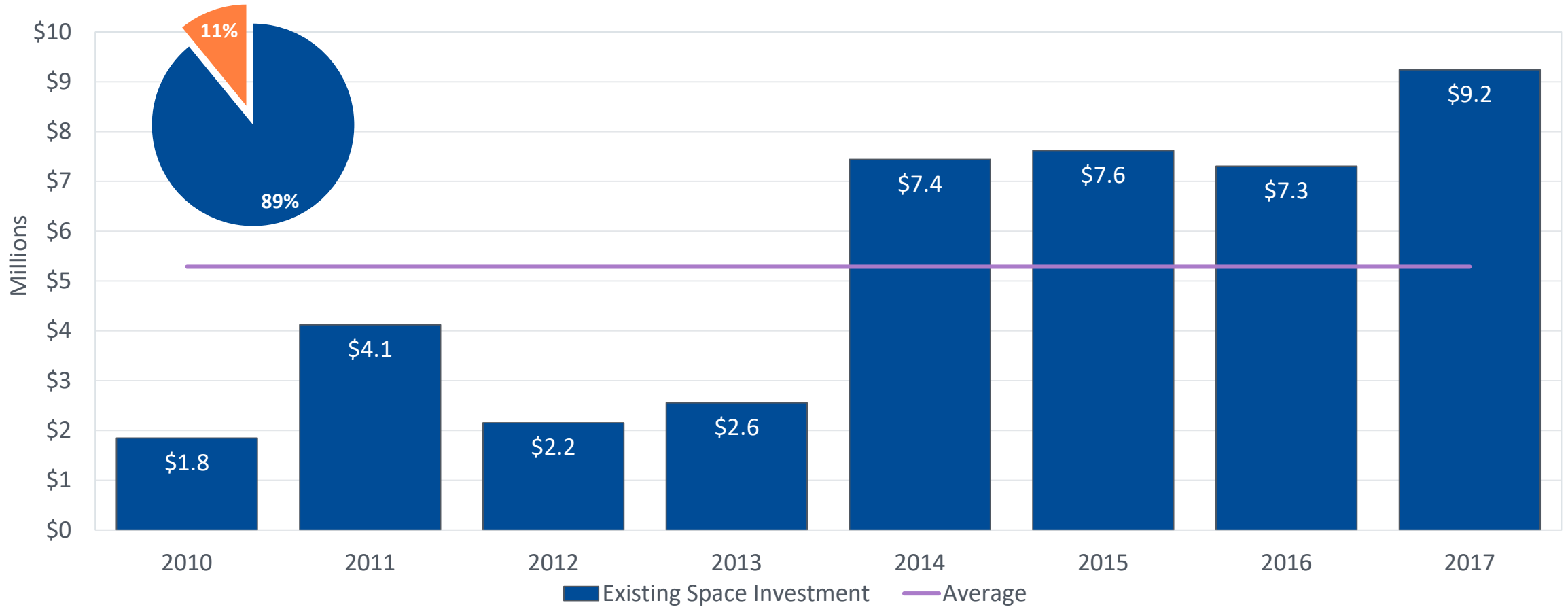
Total Capital Investment

Total Capital Investment



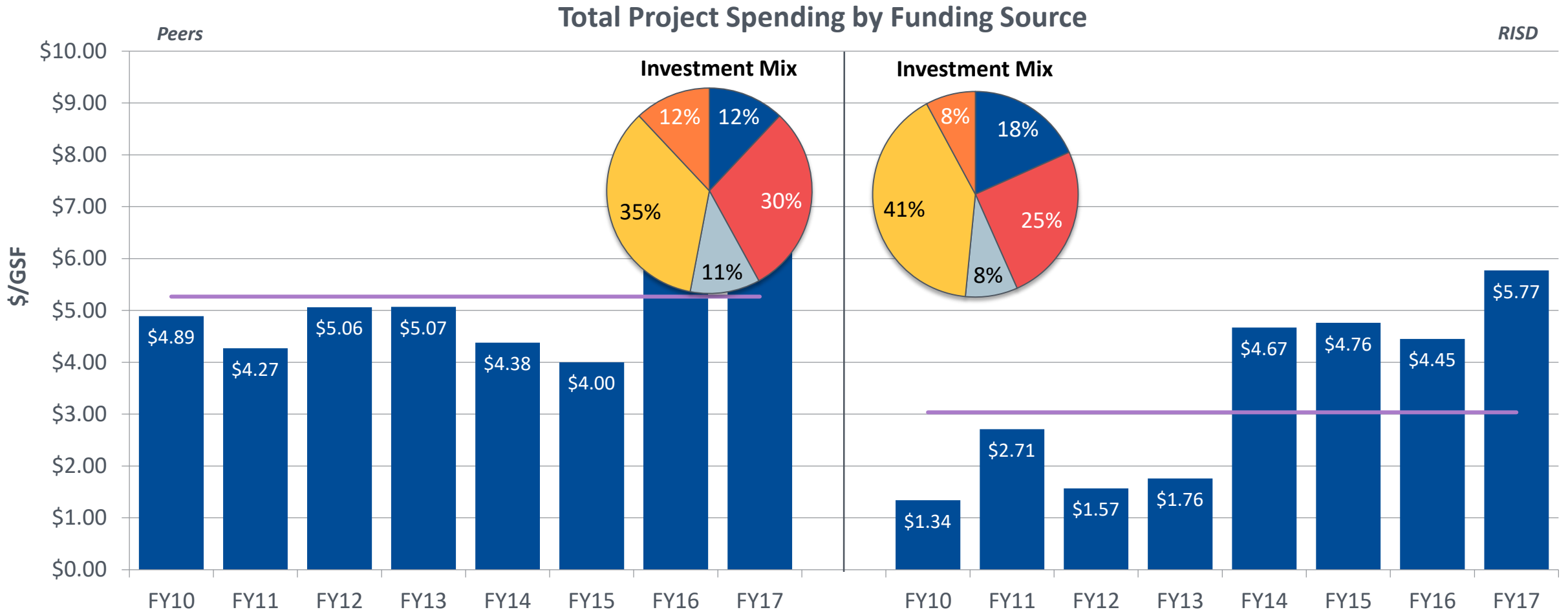
Total Capital Investment

Total Capital Investment



Despite Positive Growth, Peers Out Invest RISD

One-Time funds assist peers in investing an average of \$2.30/GSF more than RISD

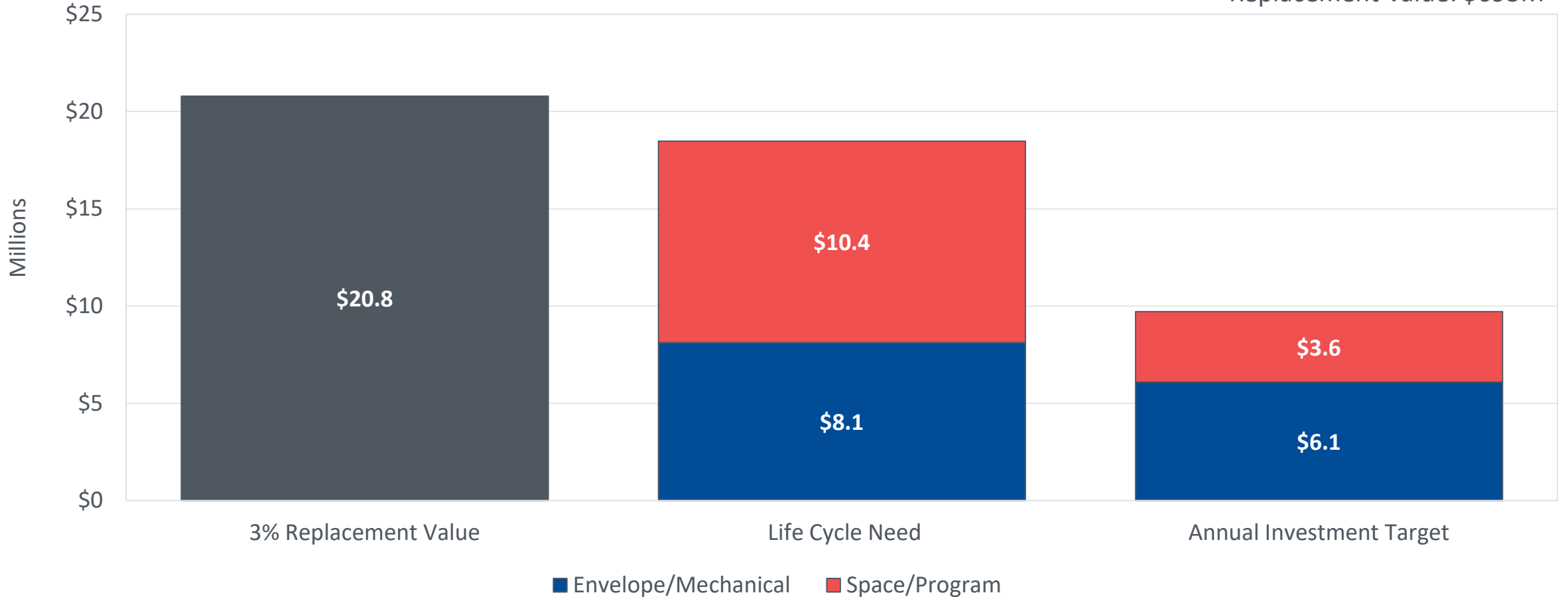


Defining an Annual Investment Target

Annual Funding Target: \$9.7M

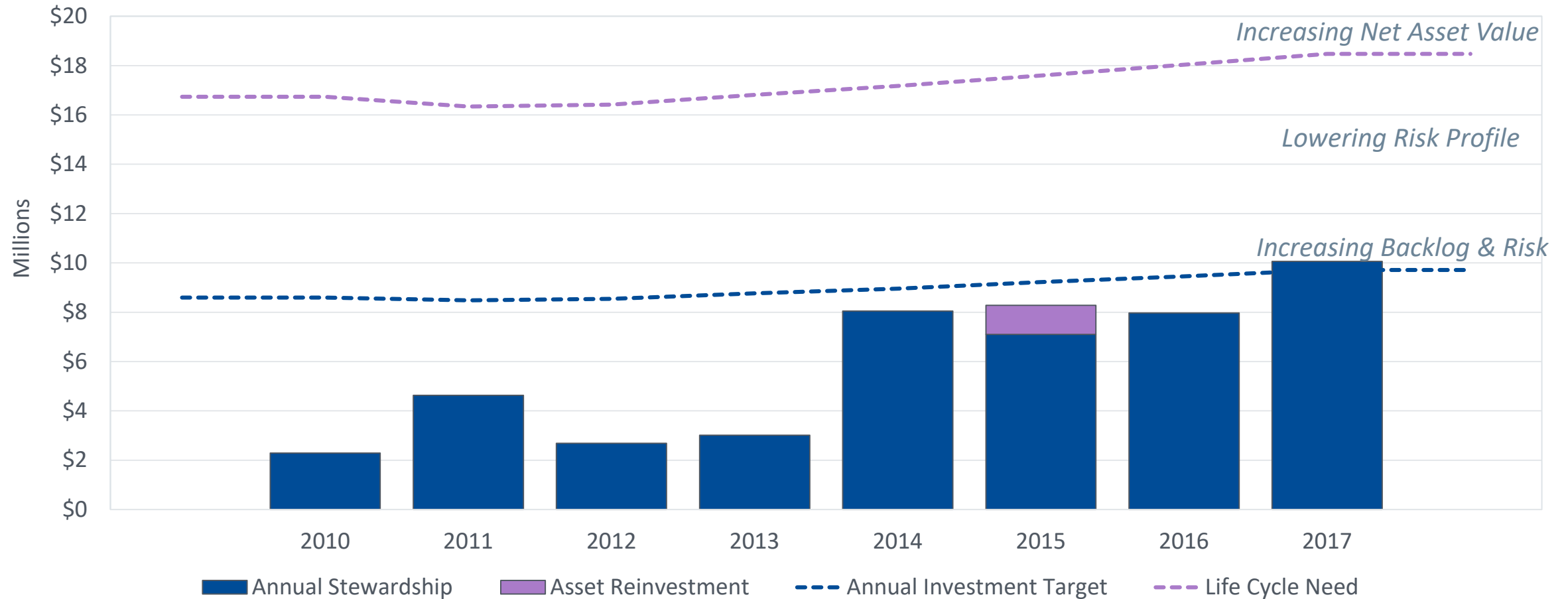
FY17 Annual Investment Target

Replacement Value: \$693M



Investment Levels Hit Target in FY17

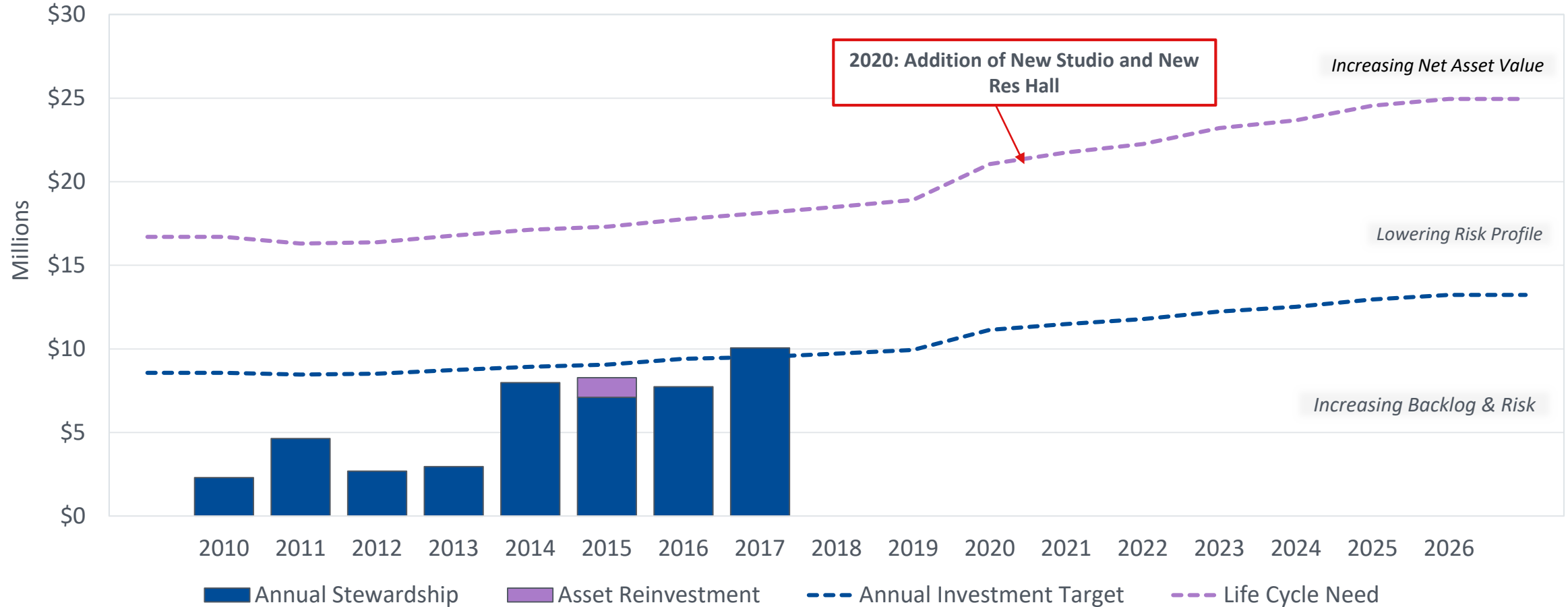
Total Capital Investment vs. Funding Target



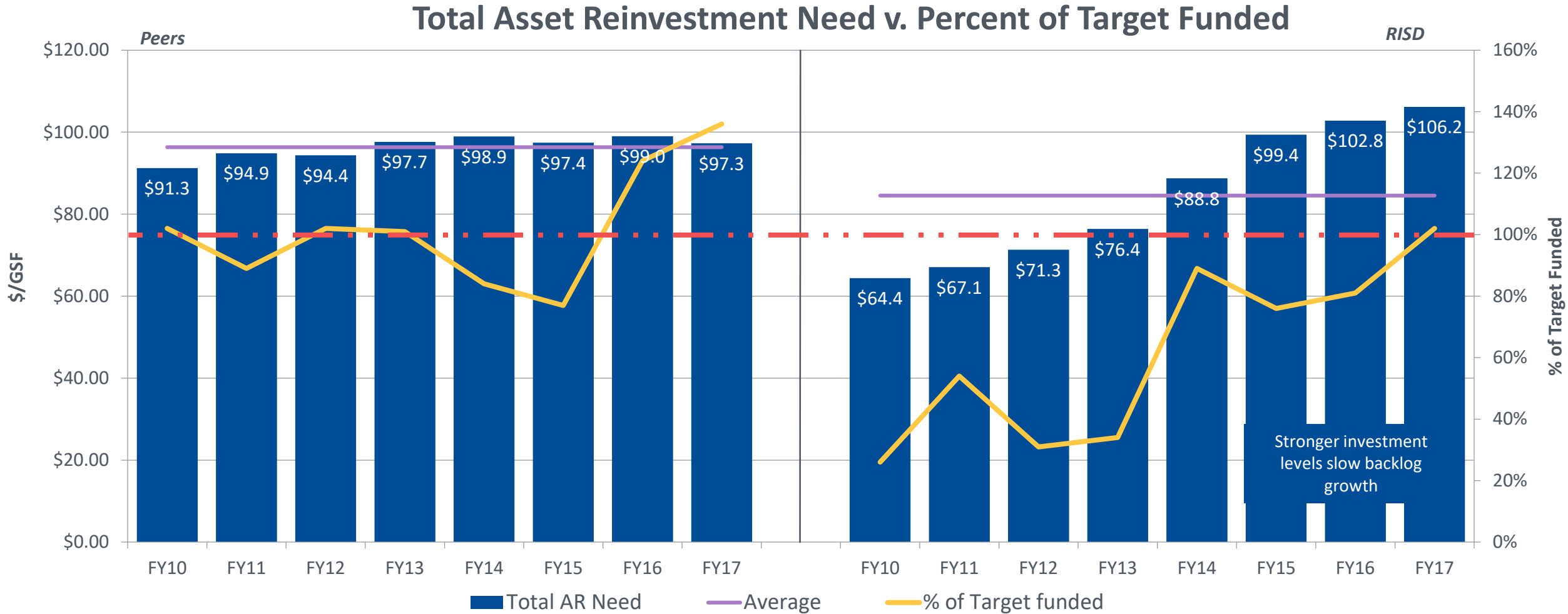
Projected 2026 Target Funding Level

Future target levels continue to rise due to inflation and added square footage

Total Capital Investment vs. Funding Target

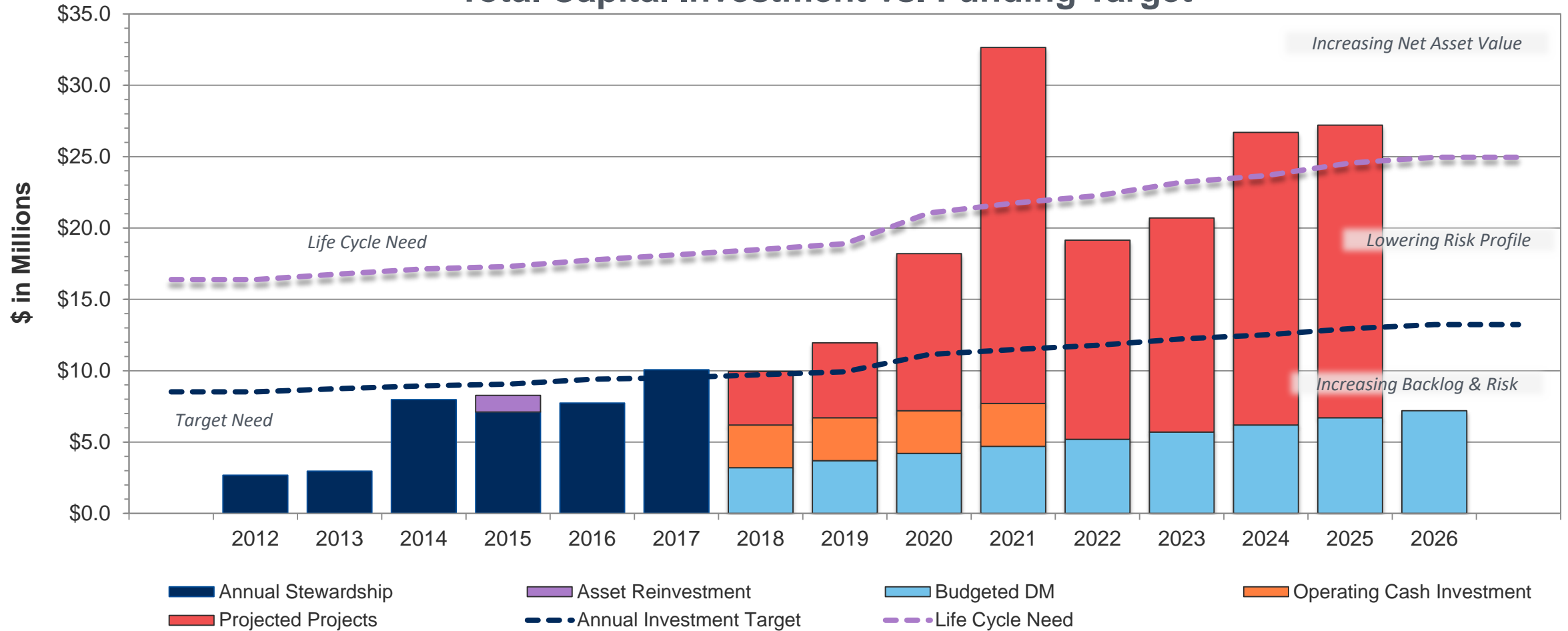


Spending to Target Slows AR (backlog) Growth



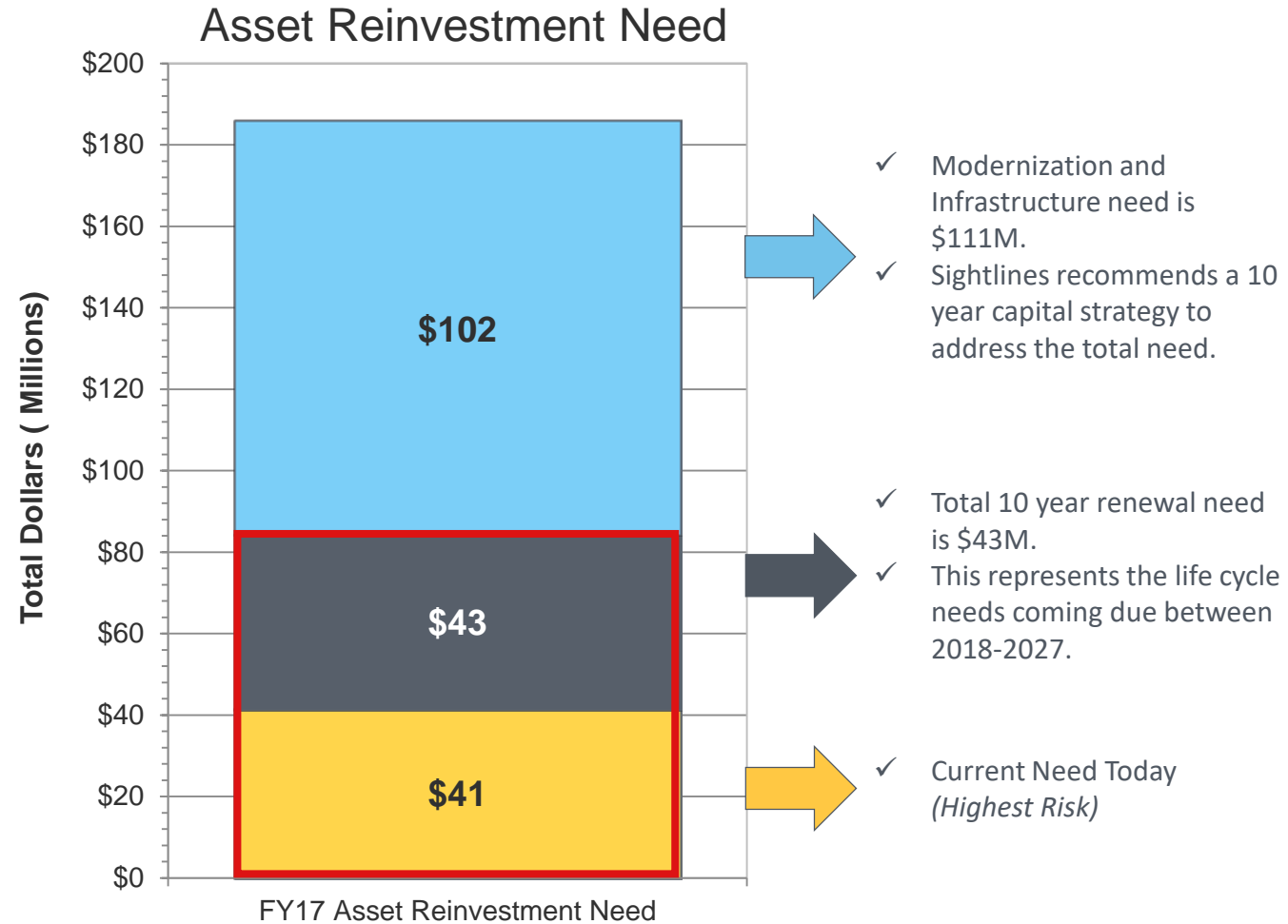
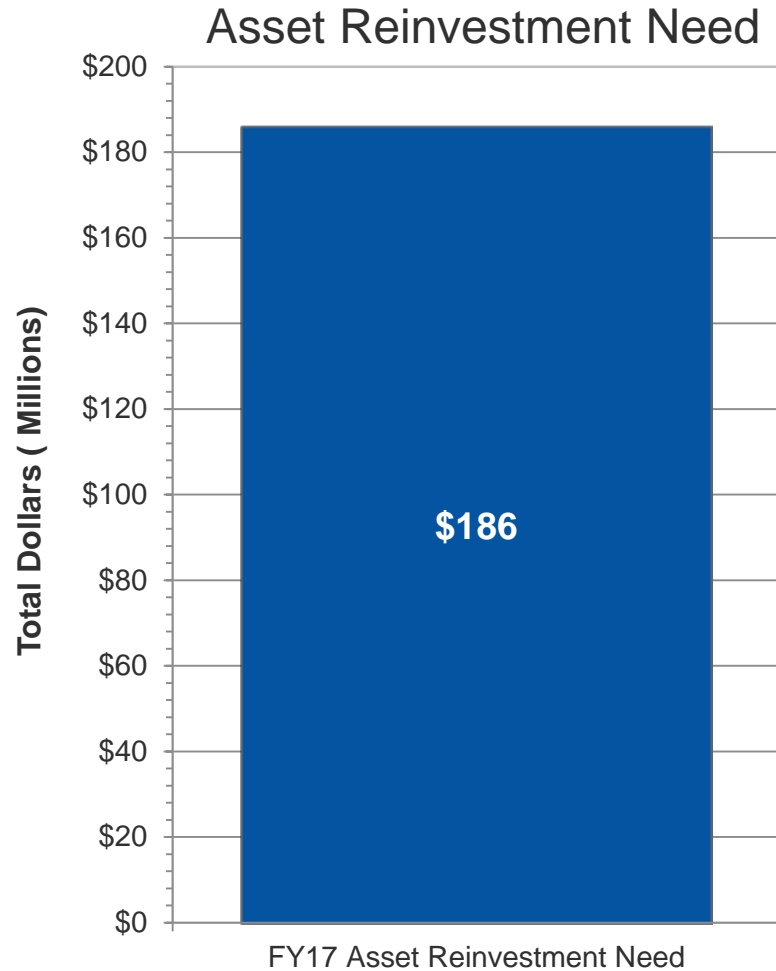
Projected 2026 Target Funding Level

Total Capital Investment vs. Funding Target



ROPA+ Prediction: RISD

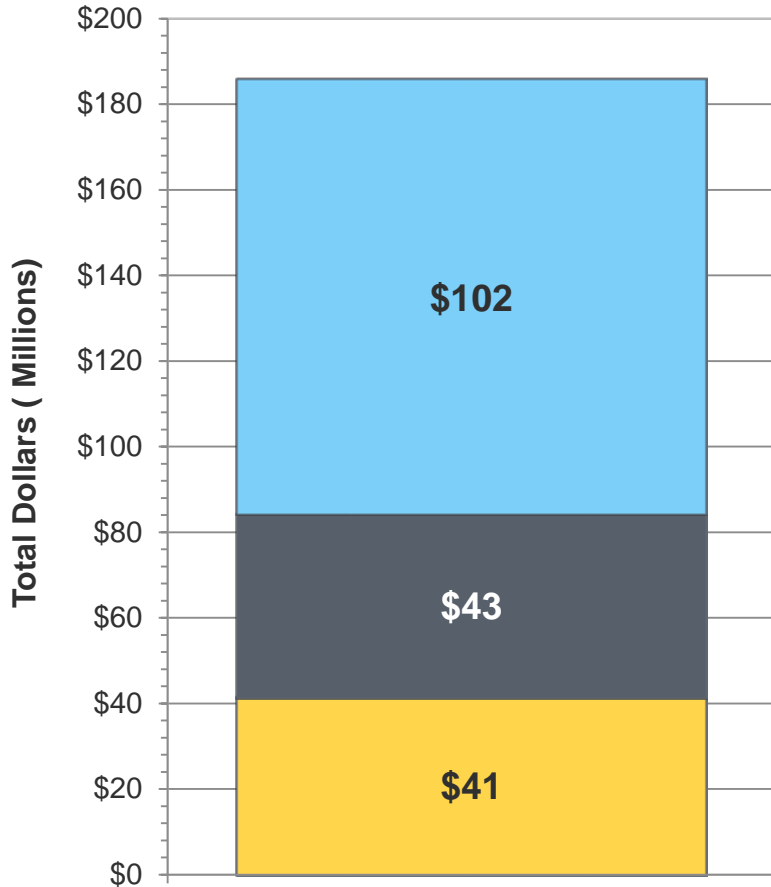
ROPA+ Prediction quantifies \$84 Million in system-specific need



Total Current Need by System

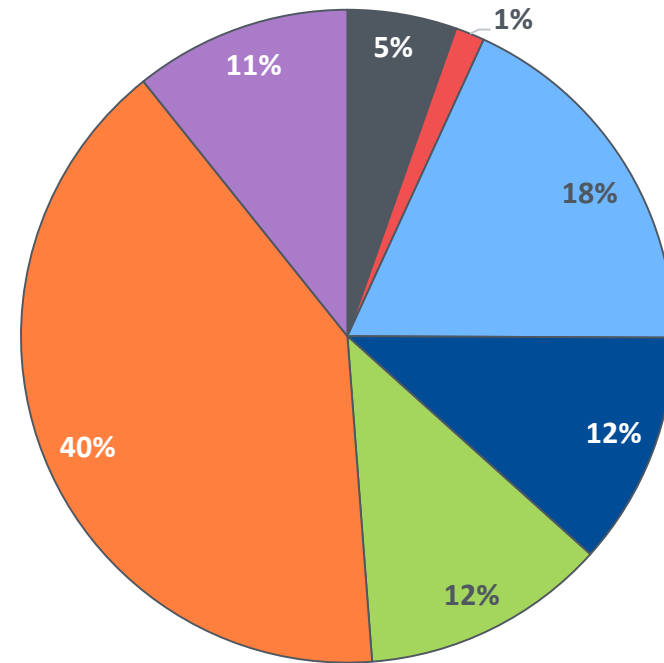
40% of Current Need is HVAC

Asset Reinvestment Need



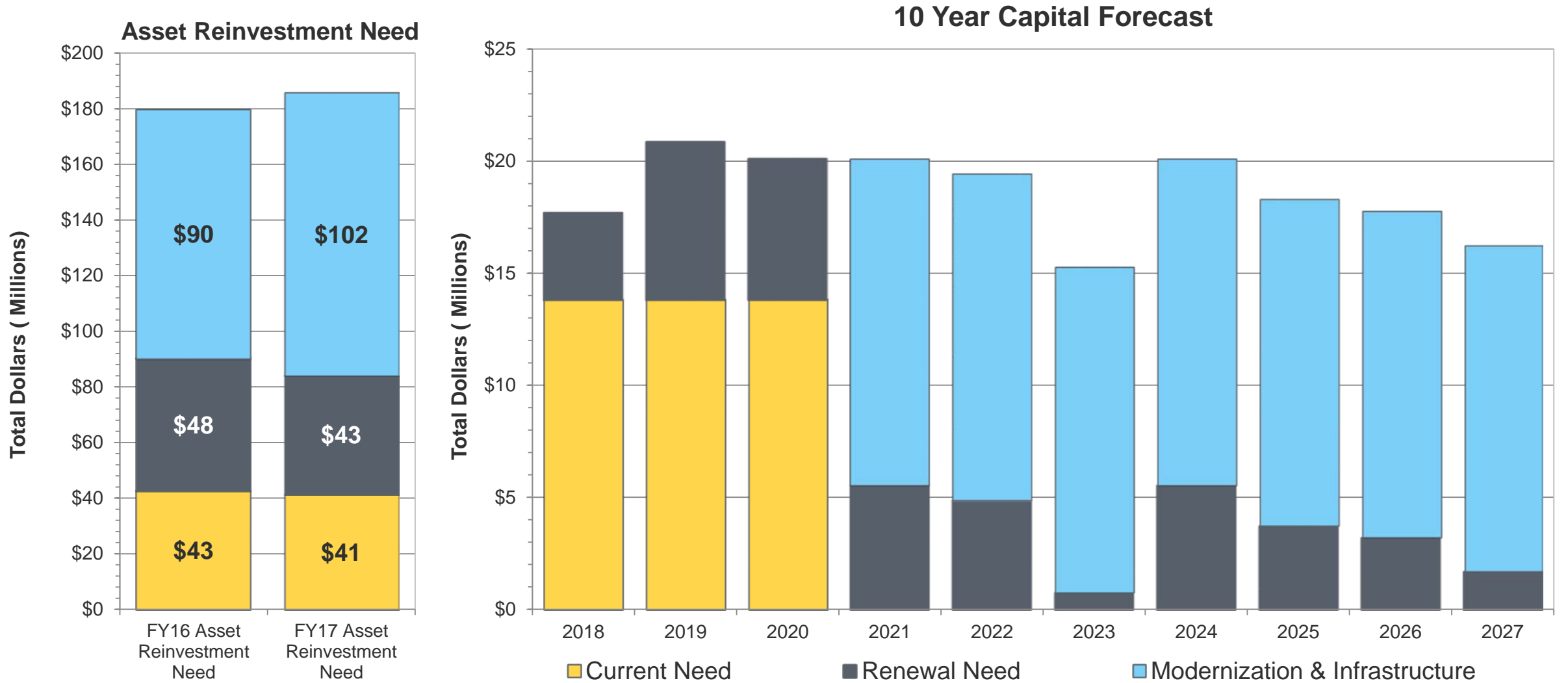
FY17 Asset Reinvestment Need

Total Current Need by System



■ Small Building Renovation ■ Roofing ■ Electrical ■ Plumbing ■ Interiors ■ HVAC ■ Building Exteriors

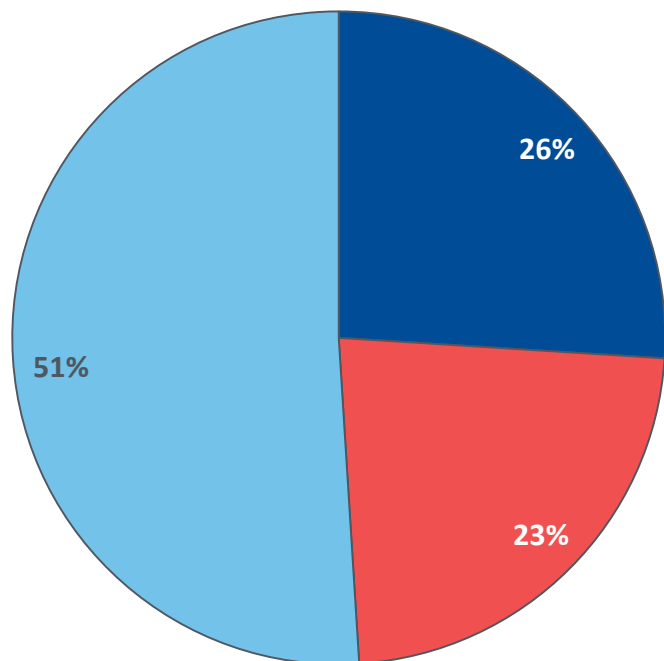
Projected Investment vs. 10 Year Needs



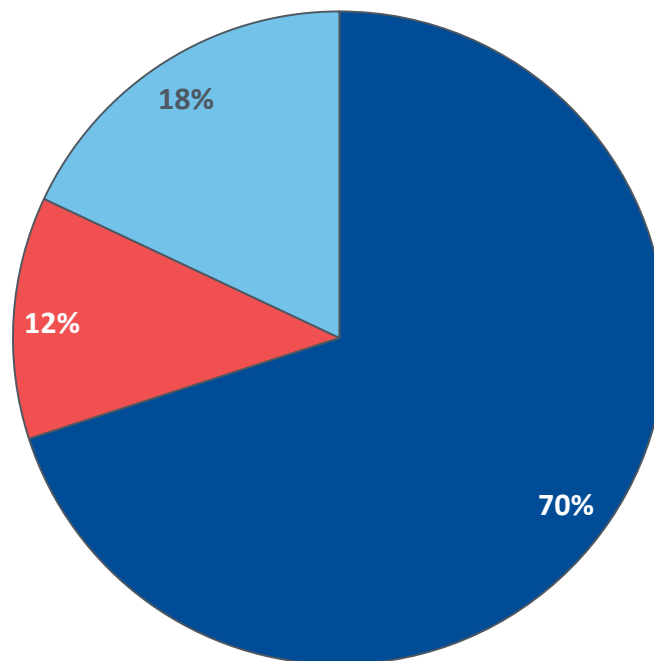
Comparing the Past and the Future

Historical funding focused on Space Renewal; Future Needs focused on Mechanical

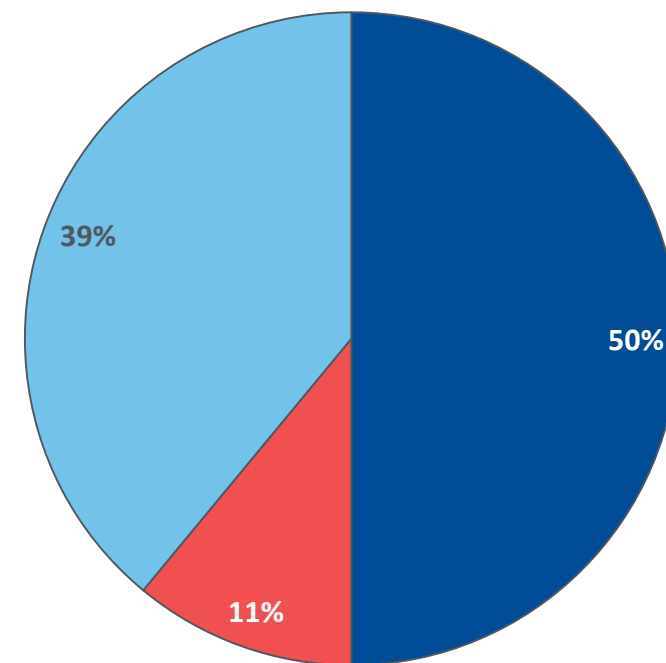
Distribution of Renewal Need
(FY10-FY16)



Distribution of Current Need
(FY17)



Distribution of Renewal Need
(FY18-27)

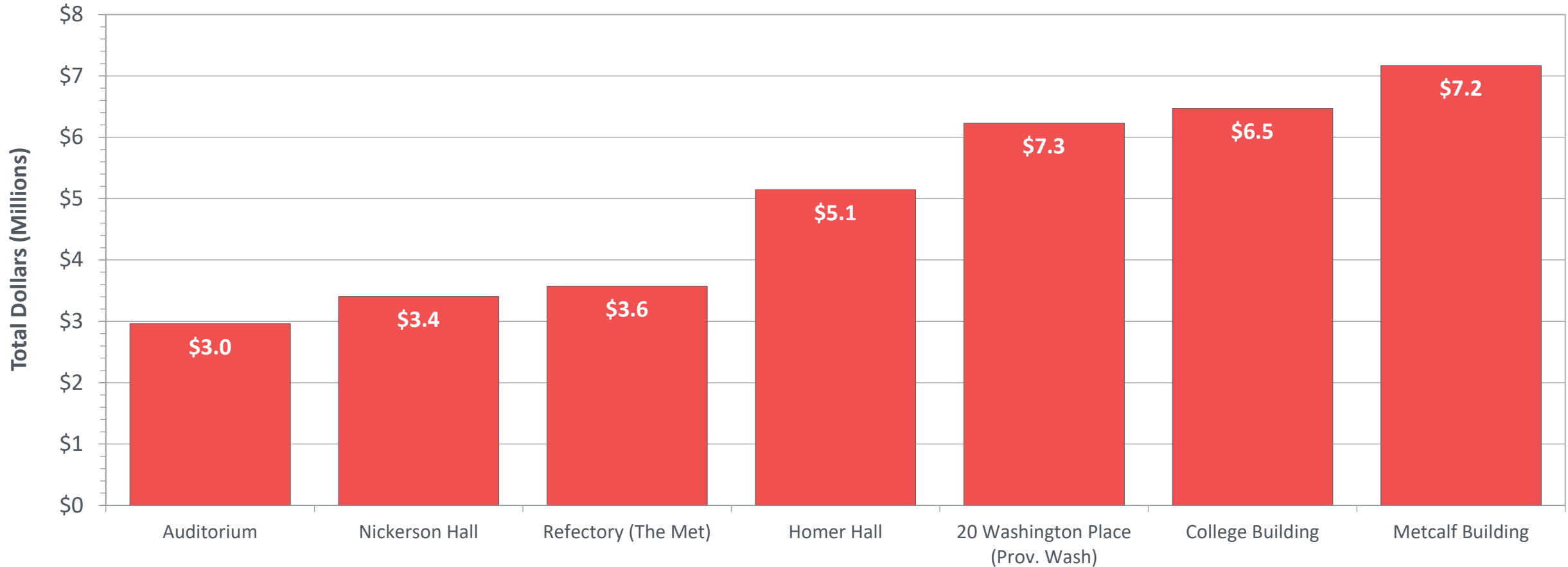


■ Mechanical ■ Envelope ■ Space Renewal

RISD'S Highest Need Buildings

6 of the 7 buildings with \$2M+ in Current Need are over 50 years old

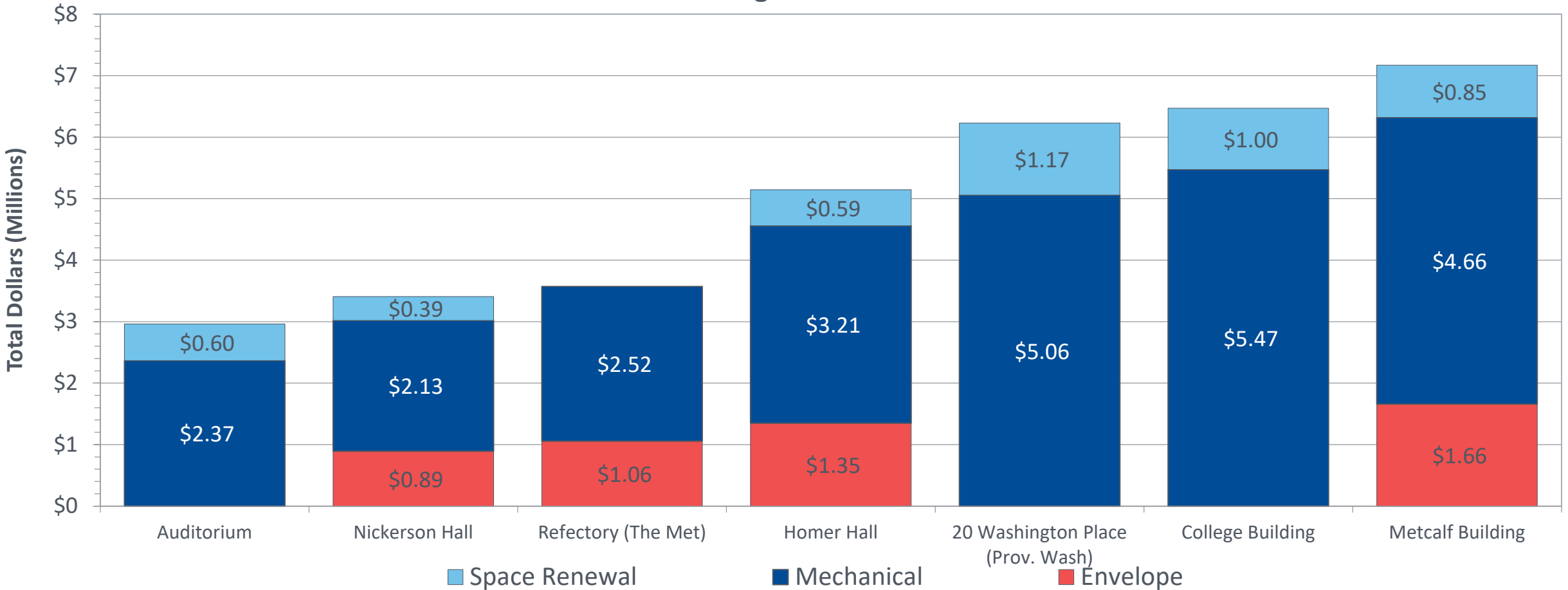
Buildings with Need \$2M+



RISD'S Highest Need Buildings

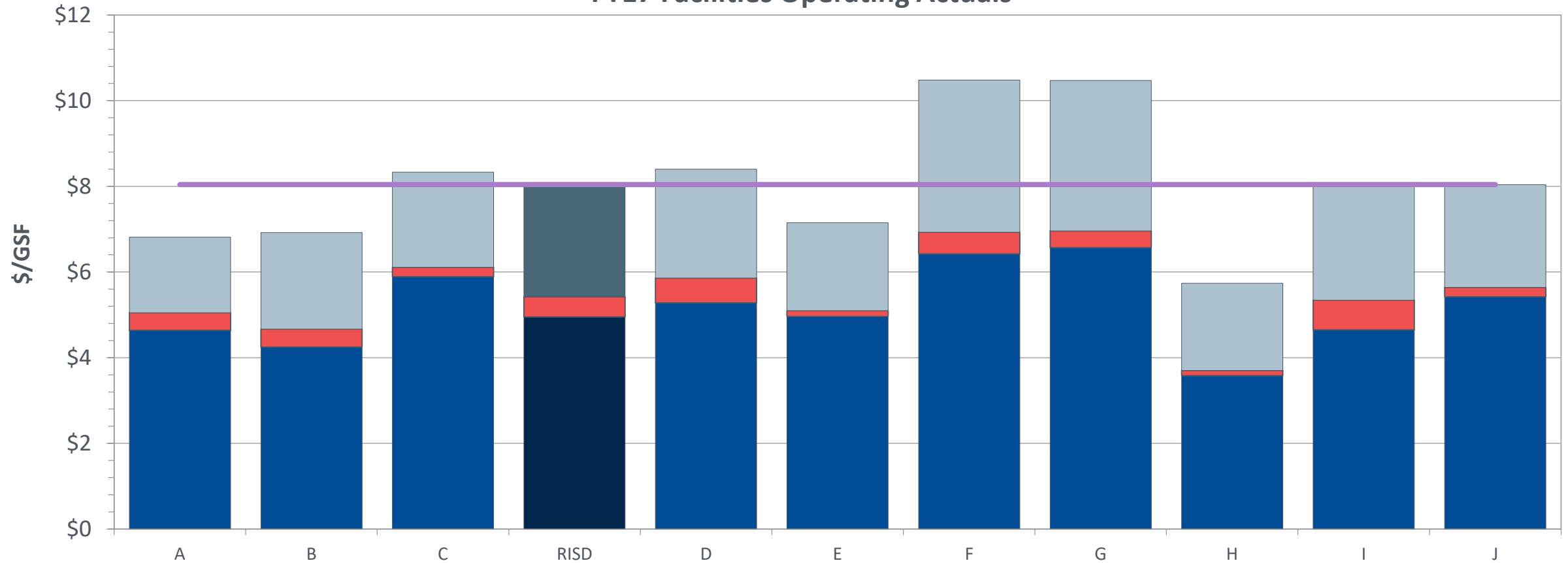
Mechanical Needs make up the majority of Current Need in buildings

Buildings with Need \$2M+



FY17 Facilities Operating Expenditures Below Peers

FY17 Facilities Operating Actuals

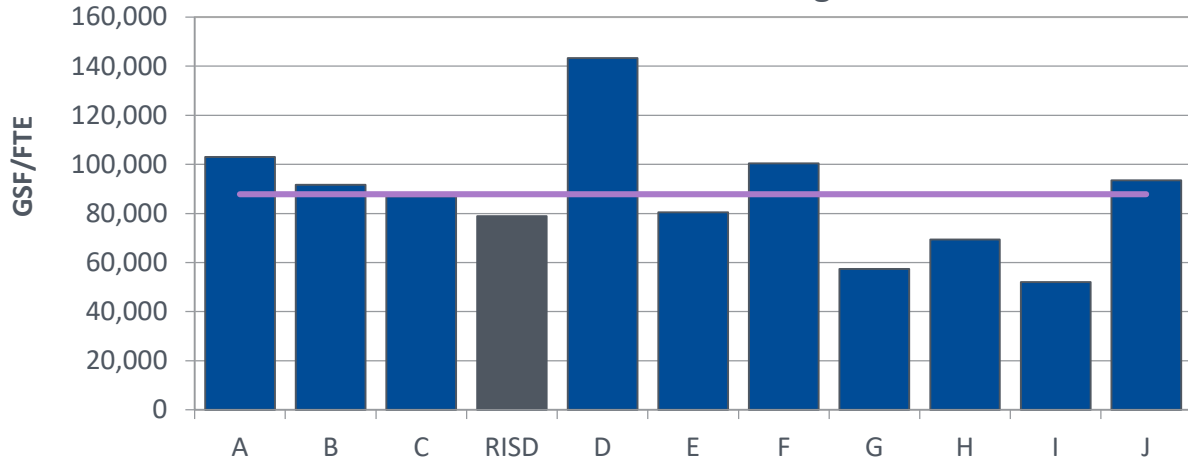


* Institutions arranged by Tech Rating

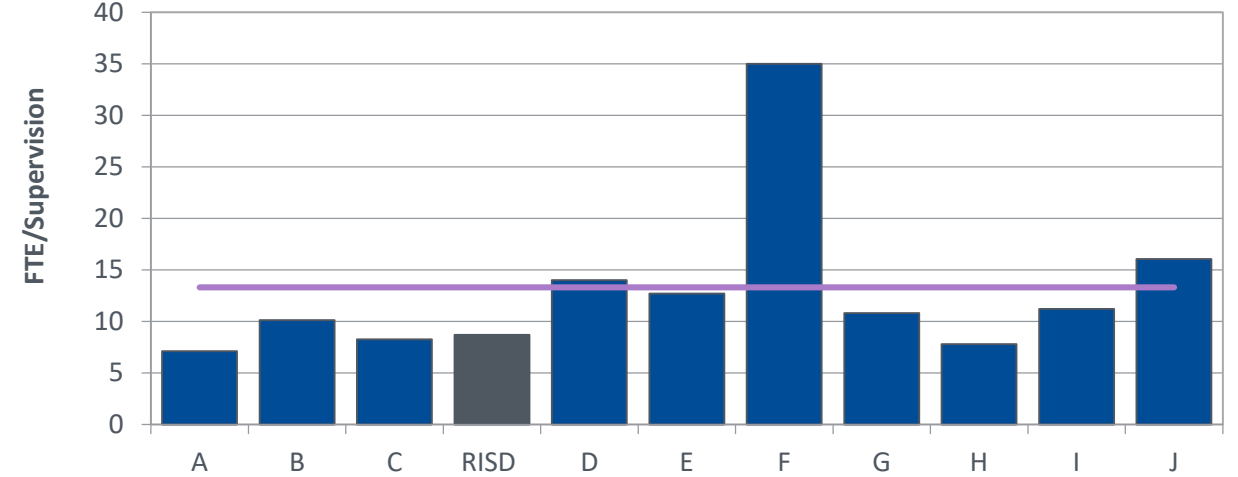
■ Daily Service
 ■ PM
 ■ Utilities
 — Peer Average

Maintenance Metrics

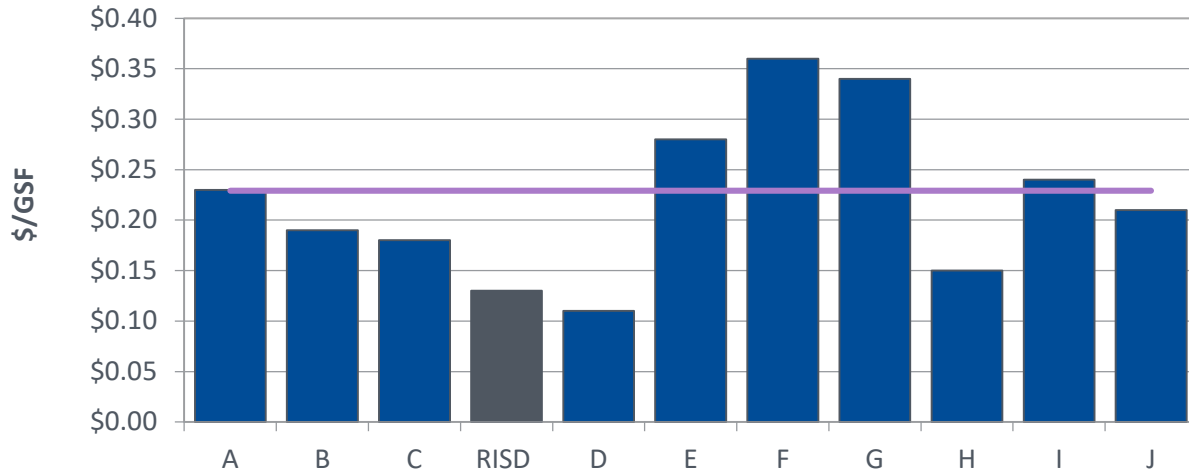
Maintenance Staffing



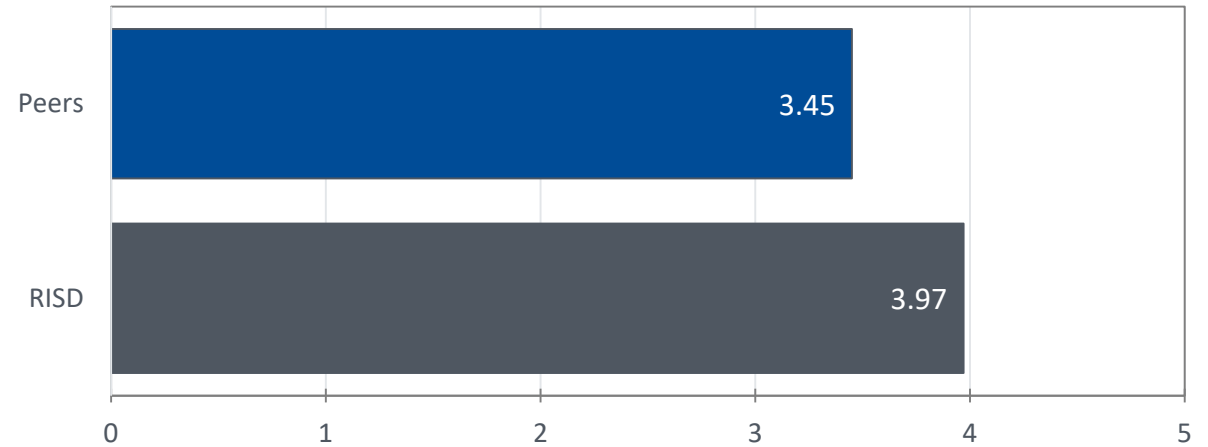
Maintenance Supervision



Maintenance Materials

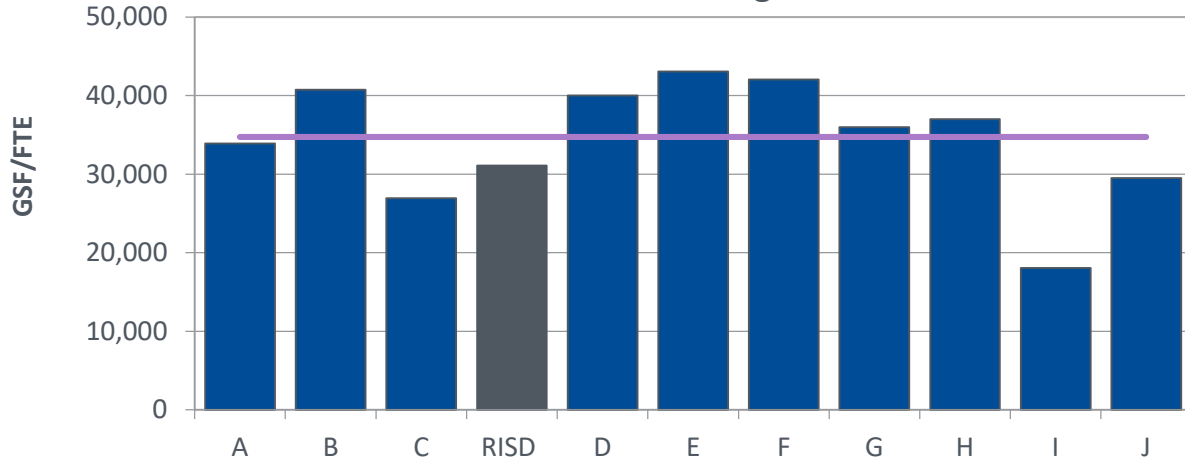


General Repair/ Impression

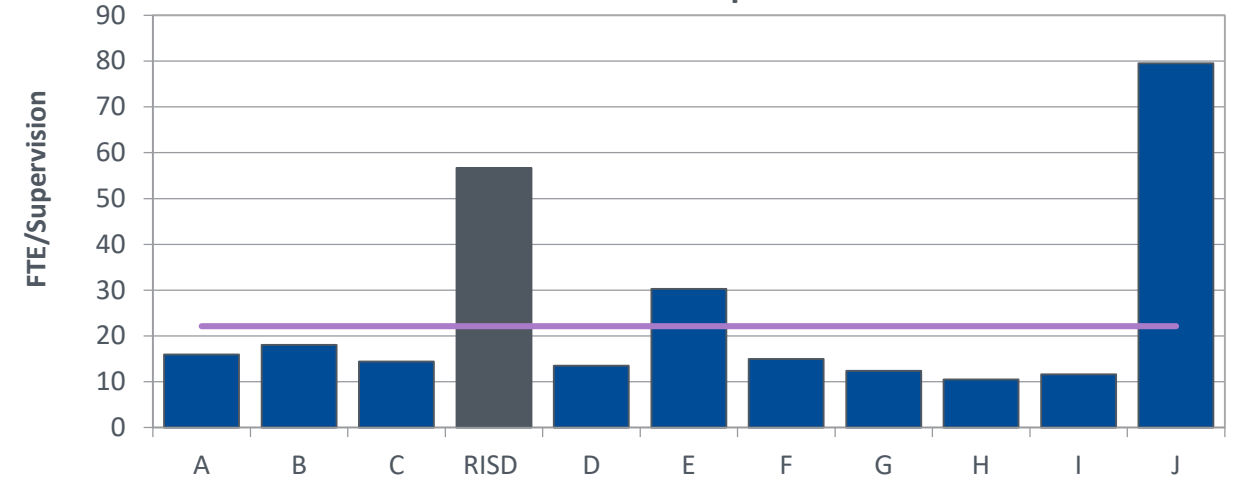


Custodial Metrics

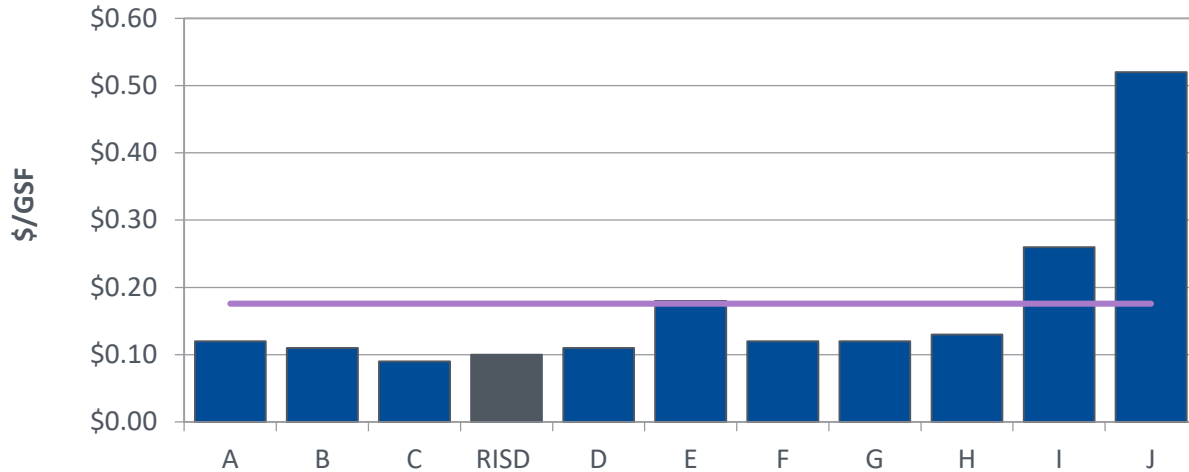
Custodial Staffing



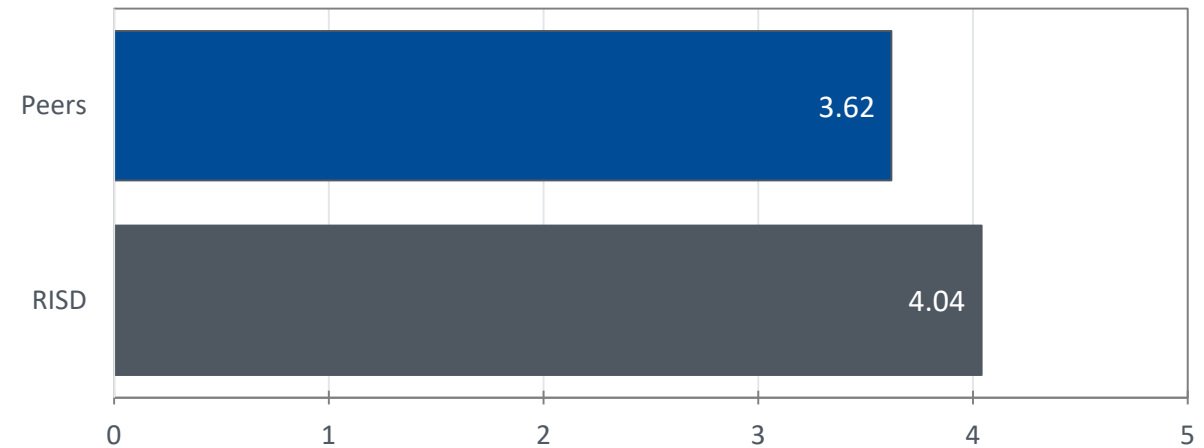
Custodial Supervision



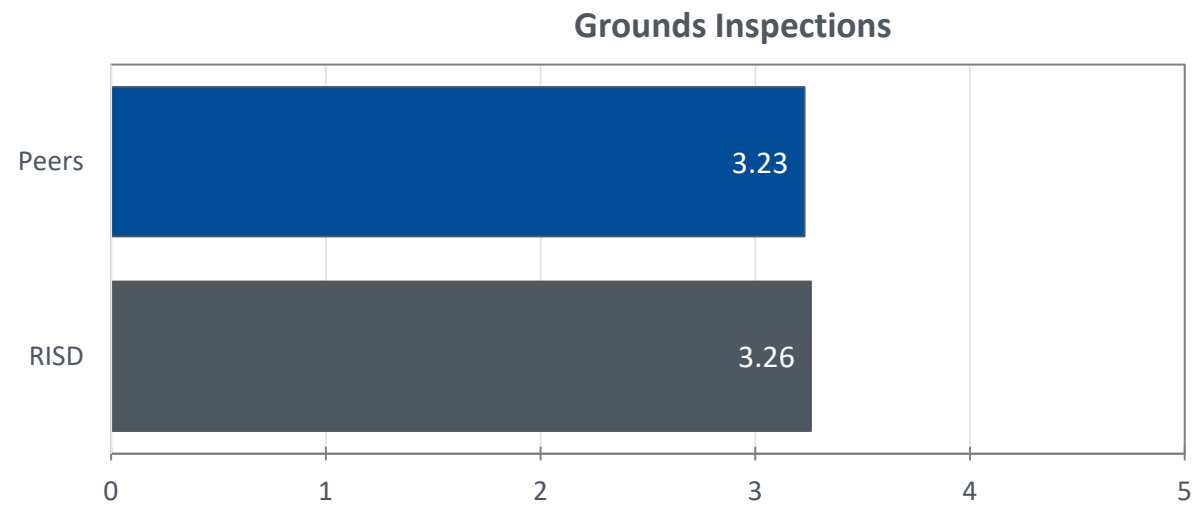
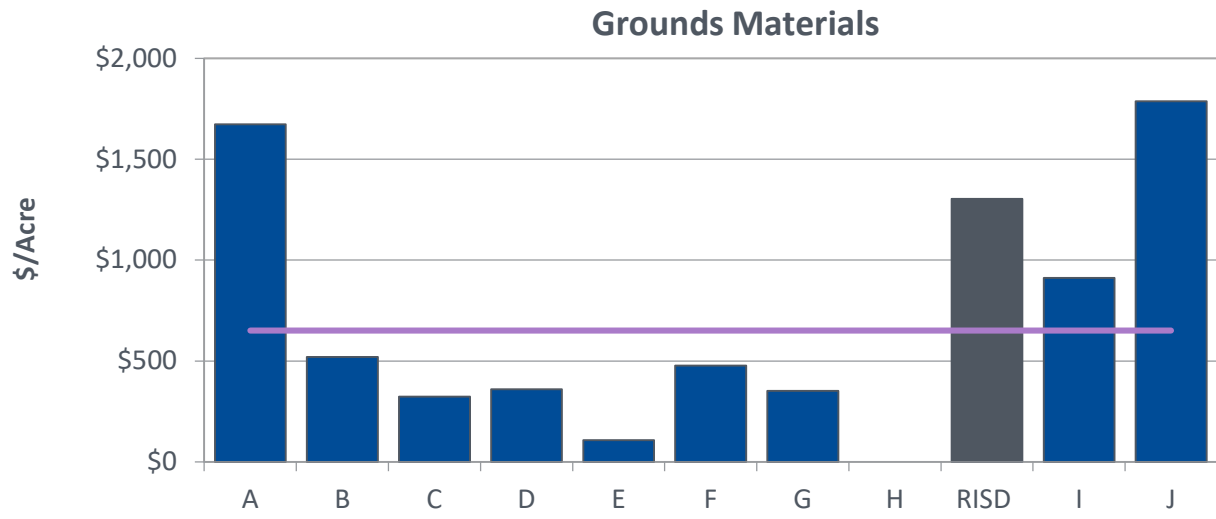
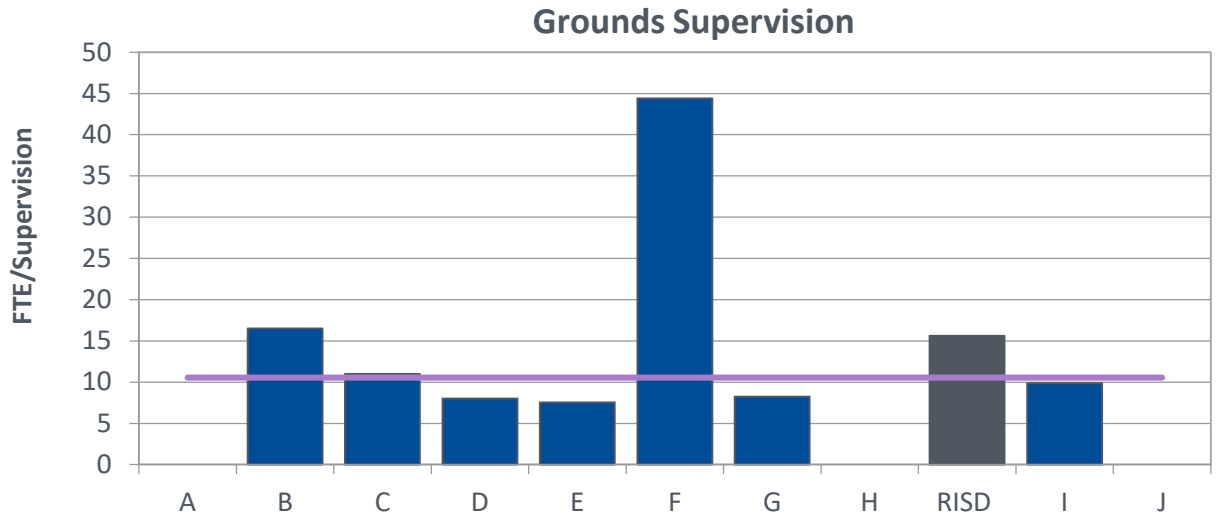
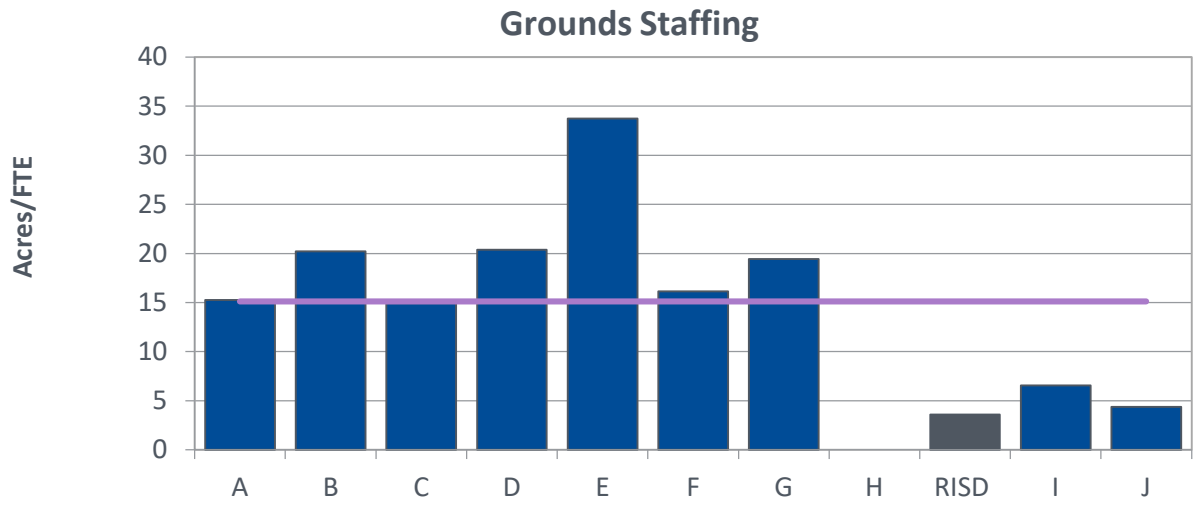
Custodial Materials



Cleanliness Inspection

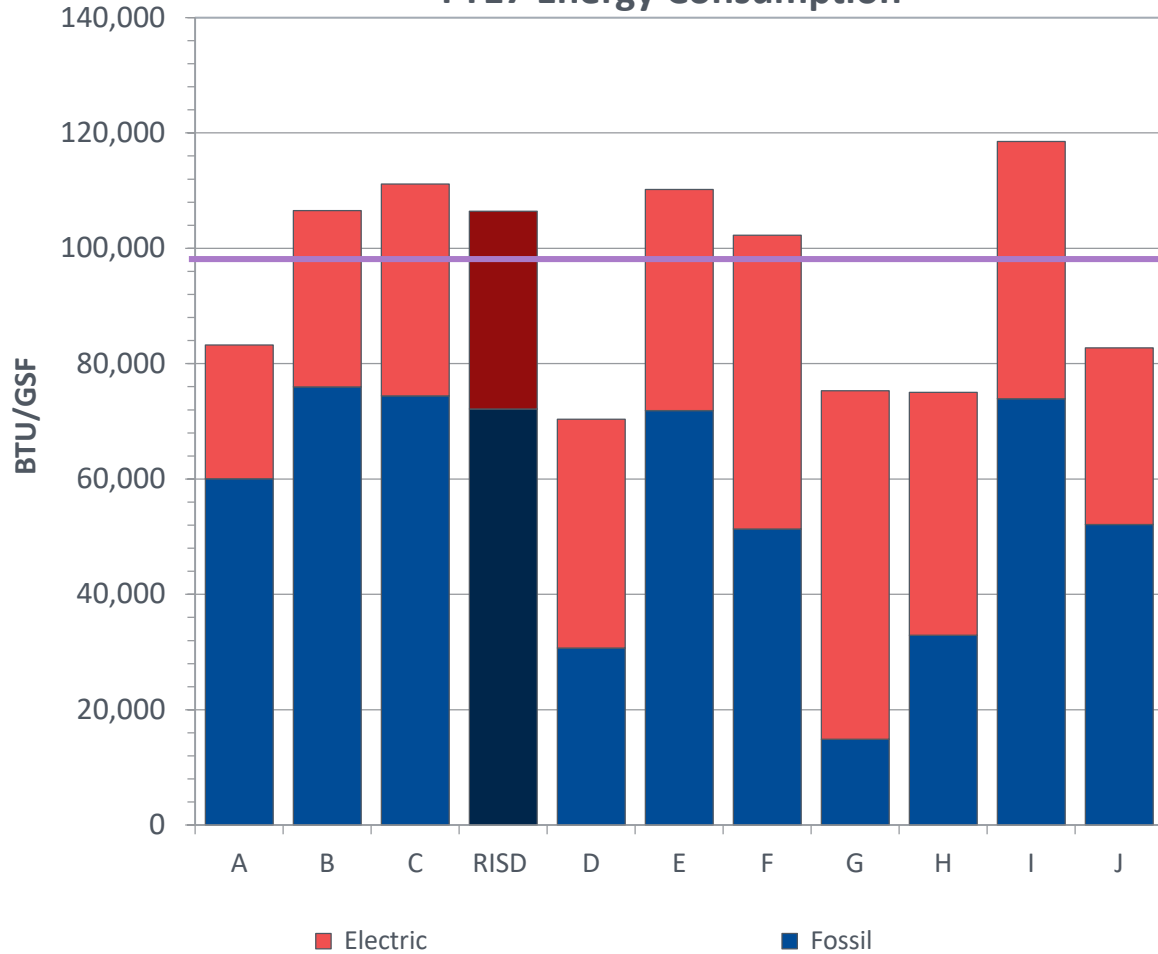


Grounds Metrics

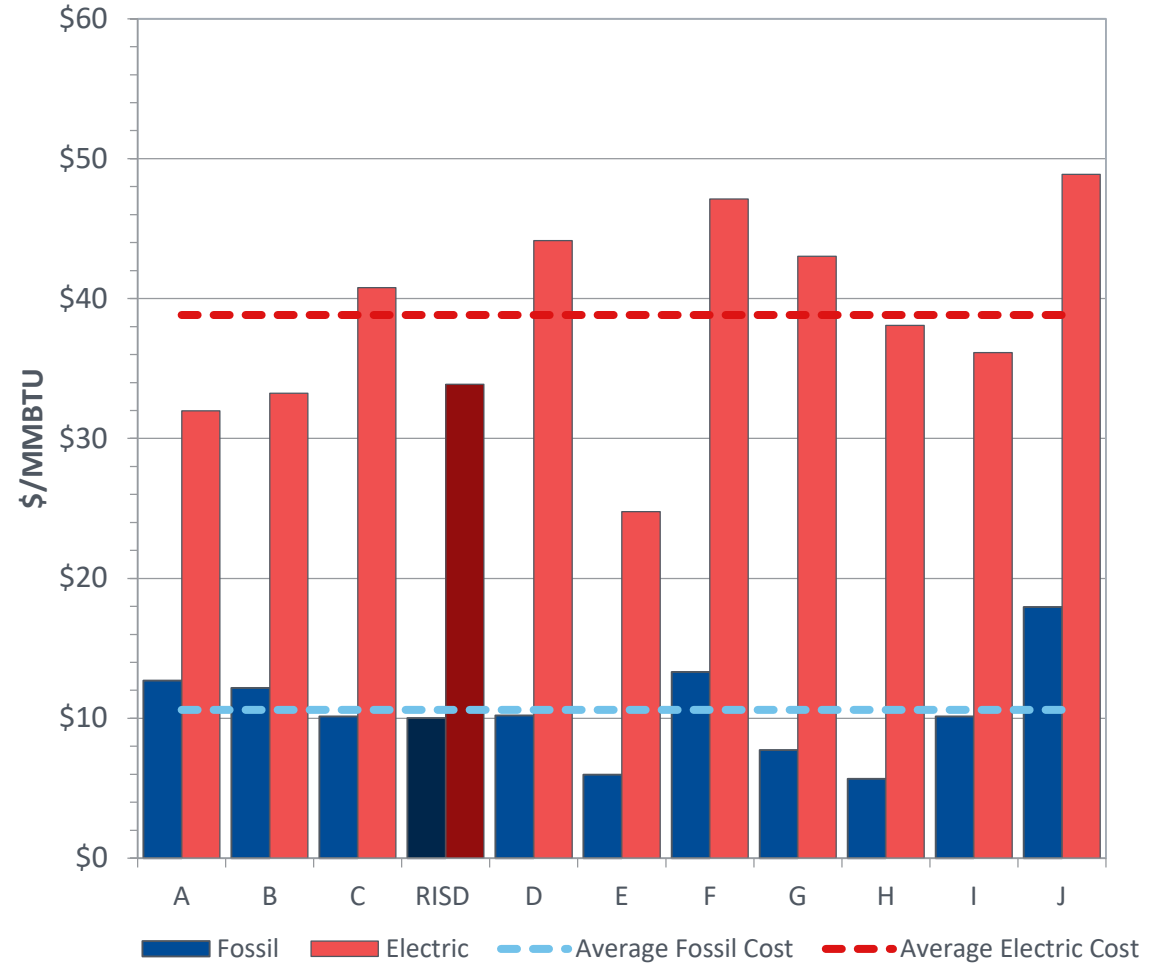


Energy Snapshot

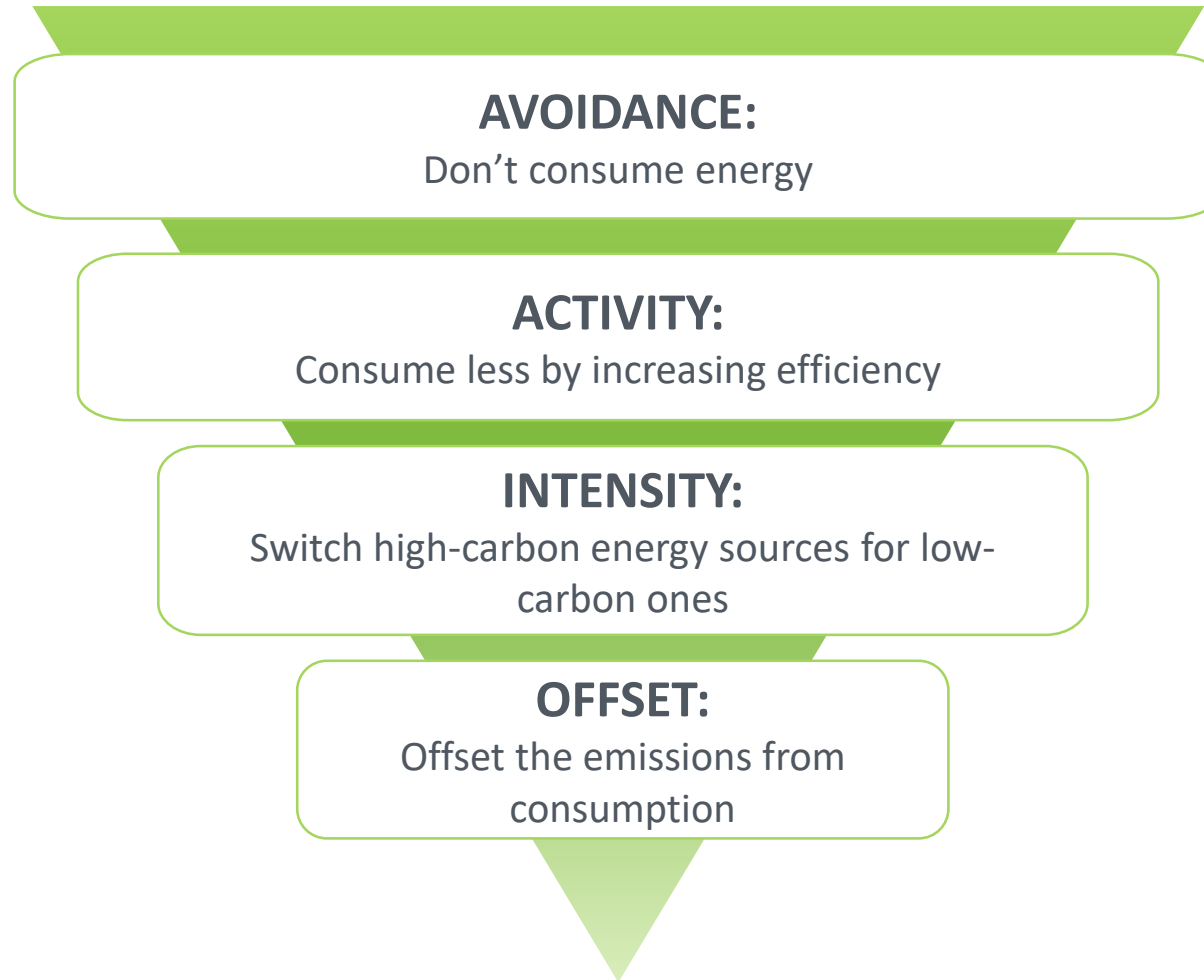
FY17 Energy Consumption



FY17 Energy Cost

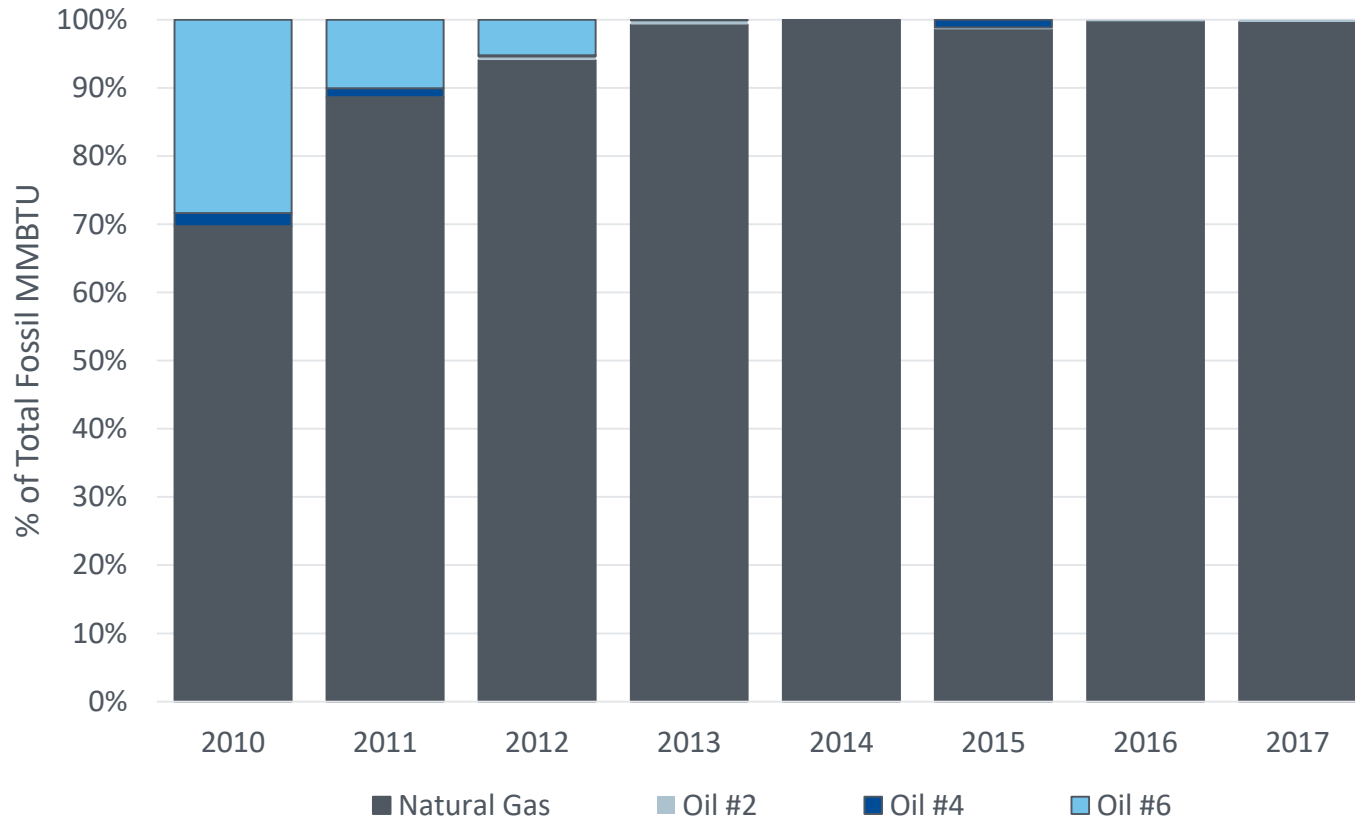


Carbon Management for Energy

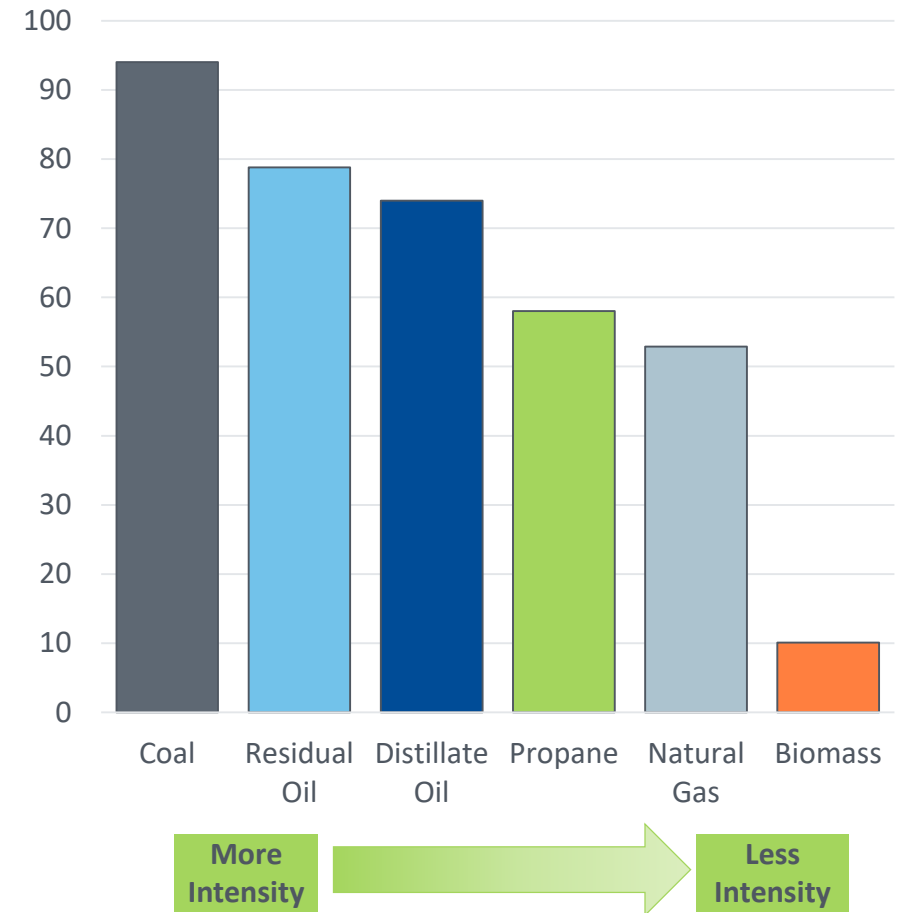


Scope 1 Stationary: Fuel Mix

RISD Longitudinal Fuel Mix

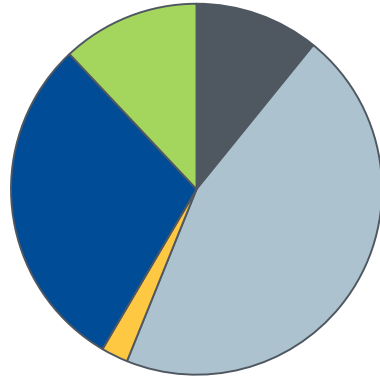


Carbon Intensity

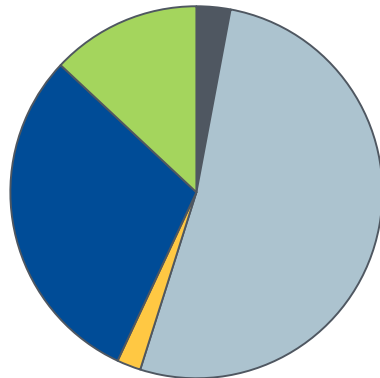


Scope 2 Purchased Electric: Fuel Mix

NEWE Grid Fuel Mix (2010)



NEWE Grid Fuel Mix (2012)



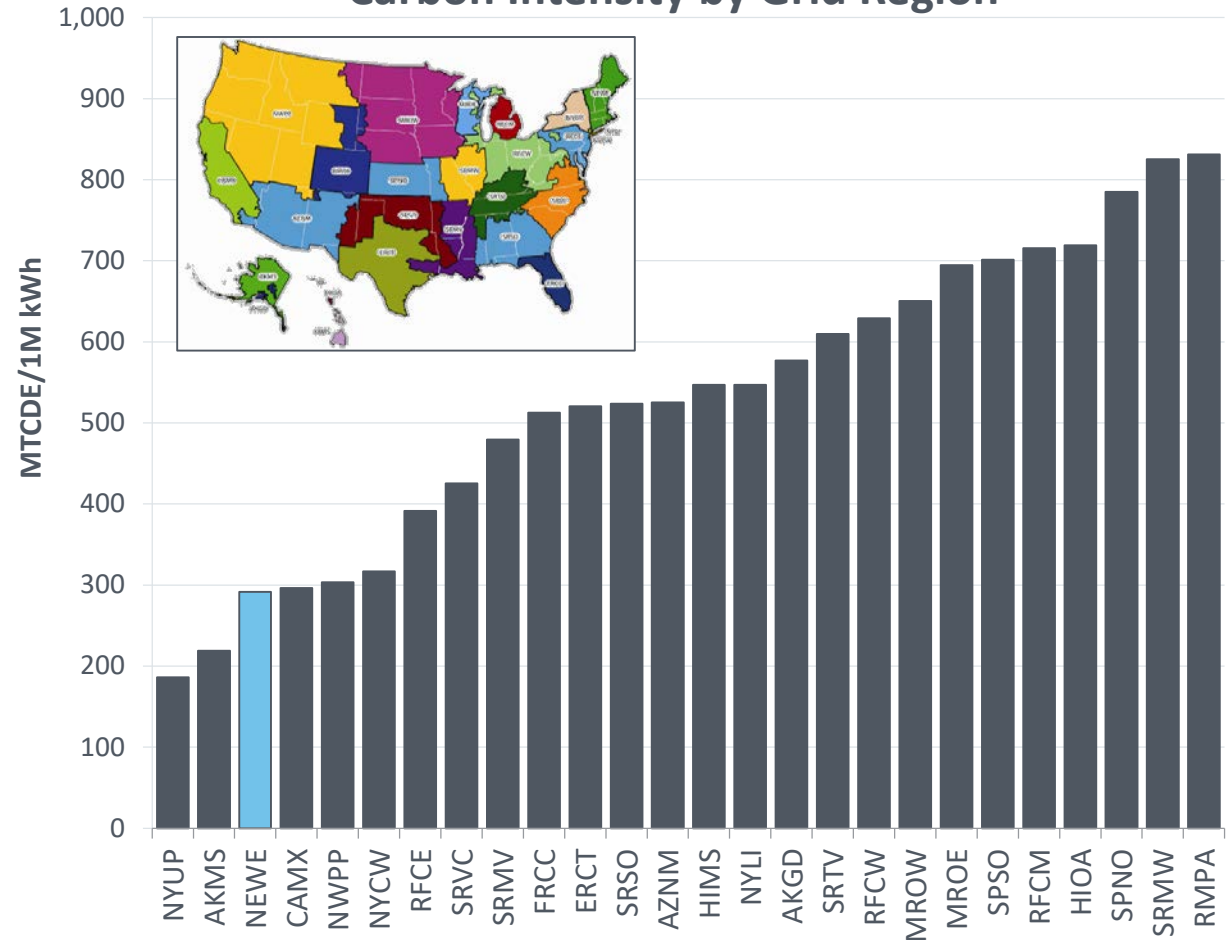
■ Coal ■ Natural Gas ■ Other Fossil ■ Nuclear ■ Renewable

More Activity



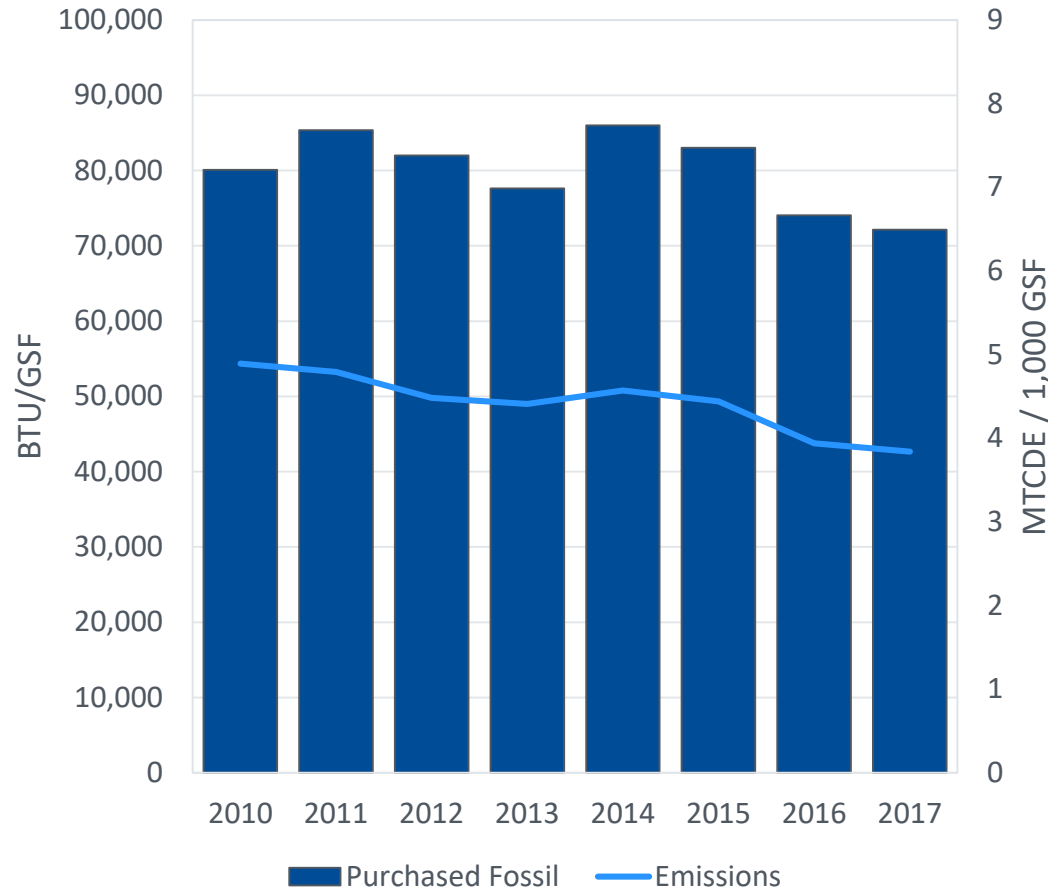
Less Activity

Carbon Intensity by Grid Region

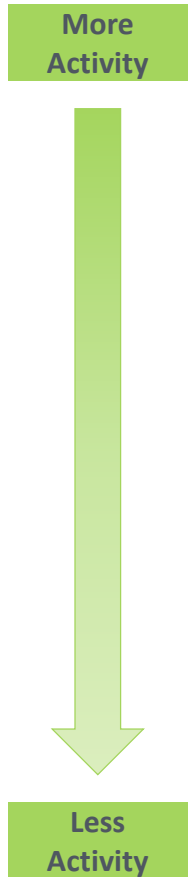
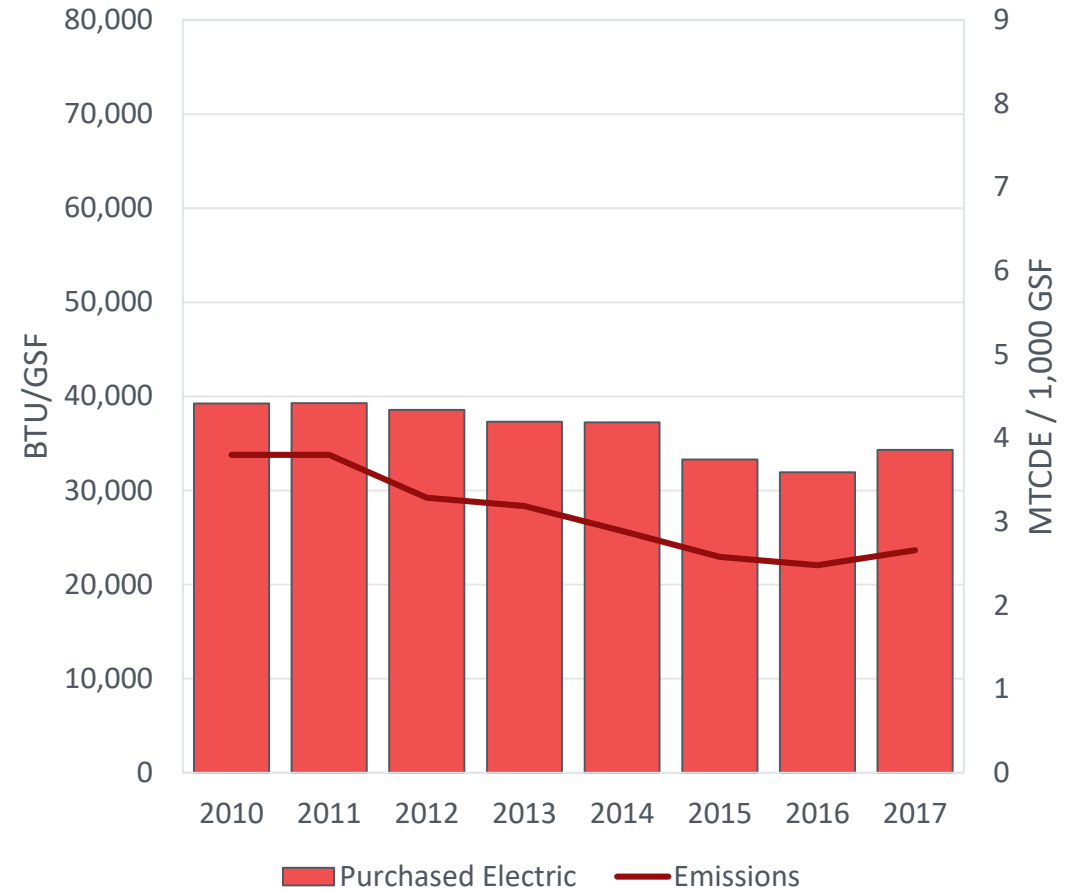


Scope 1 Stationary and Scope 2 Electric Emissions

Fossil Consumption vs. Emissions



Electric Consumption vs. Emissions



Concluding Comments

Waiting for final deck to be established



Questions & Discussion