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FY23 Facilities Benchmarking & Analysis

University of Alaska Southeast

Duncan Ketel & Rachel Gonzalez

Comprehensive Facilities Intelligence Solutions

UNIVERSITY of ALASKA SOUTHEAST

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 and improve environmental stewardship

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Vocabulary for Facilities Benchmarking & Analysis

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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.

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University of Alaska – Southeast Peer Institutions

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Return on Physical Assets (ROPA+) includes all space at UAS totaling 556,487 GSF

Facilities Peer Institutions	Location
University of Maine at Fort Kent	Fort Kent, ME
University of Maine at Farmington	Farmington, ME
University of Maine at Machias	Machias, ME
University of Maine at Presque Isle	Presque Isle, ME
Slippery Rock University of PA	Slippery Rock, PA
Mansfield University of PA	Mansfield, PA
Lockhaven University of PA	Lock Haven, PA
University of Maine at Augusta	Augusta, ME

Comparative Considerations

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

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Space Profile

UAS's Technical Complexity is On-Par With Peers

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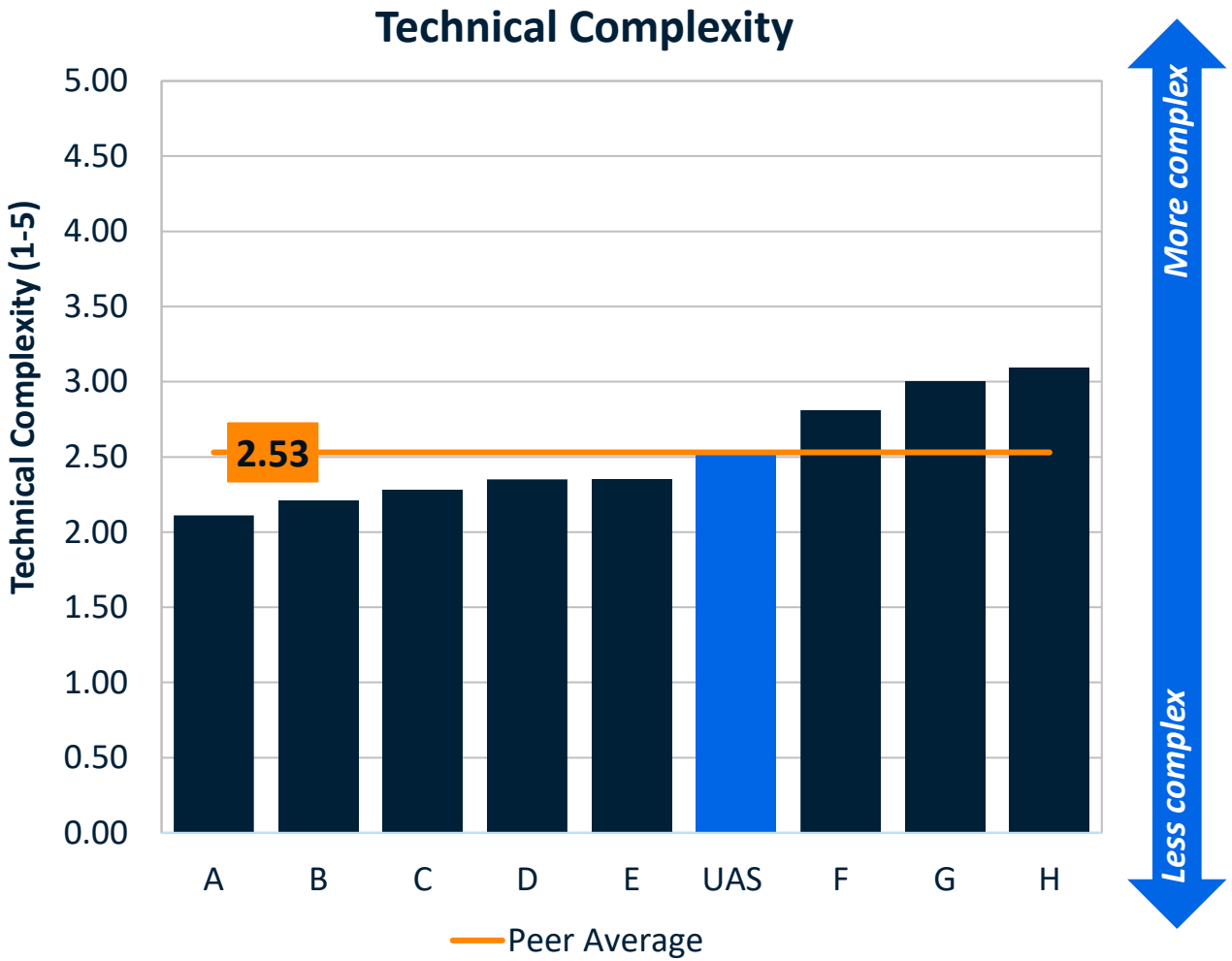
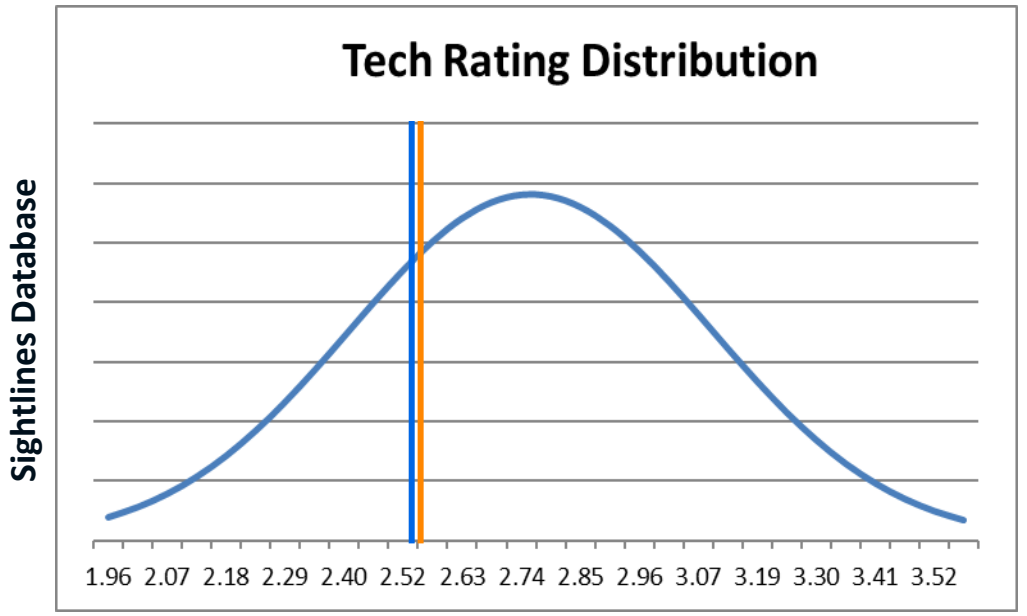


Areas Impacted by Tech Rating				
Energy Consumption	Maintenance Staffing	Replacement Values	Stewardship Targets	Operational Demand



Institutions arranged by Technical Complexity

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UAS' Campus has Grown Similar to Peers in GSF

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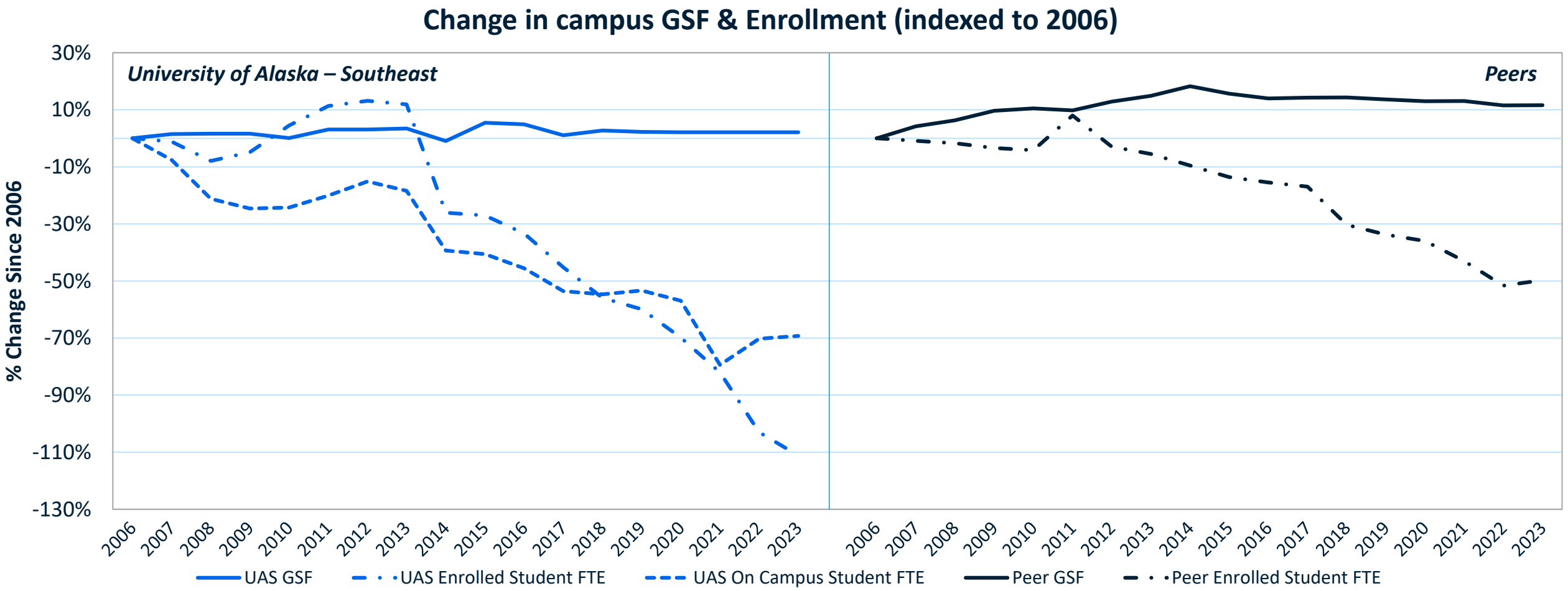
In-person enrollment trends are showing similar rate of growth following FY22



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UAS has a Lower Density Campus than Peers

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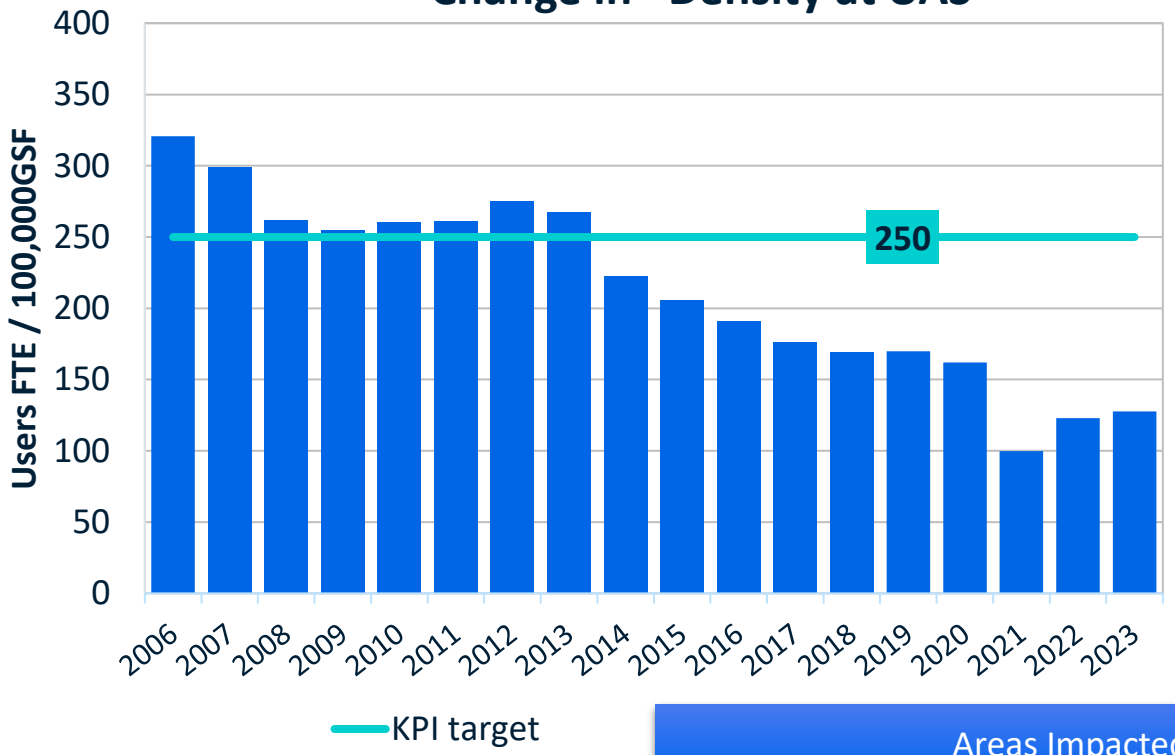
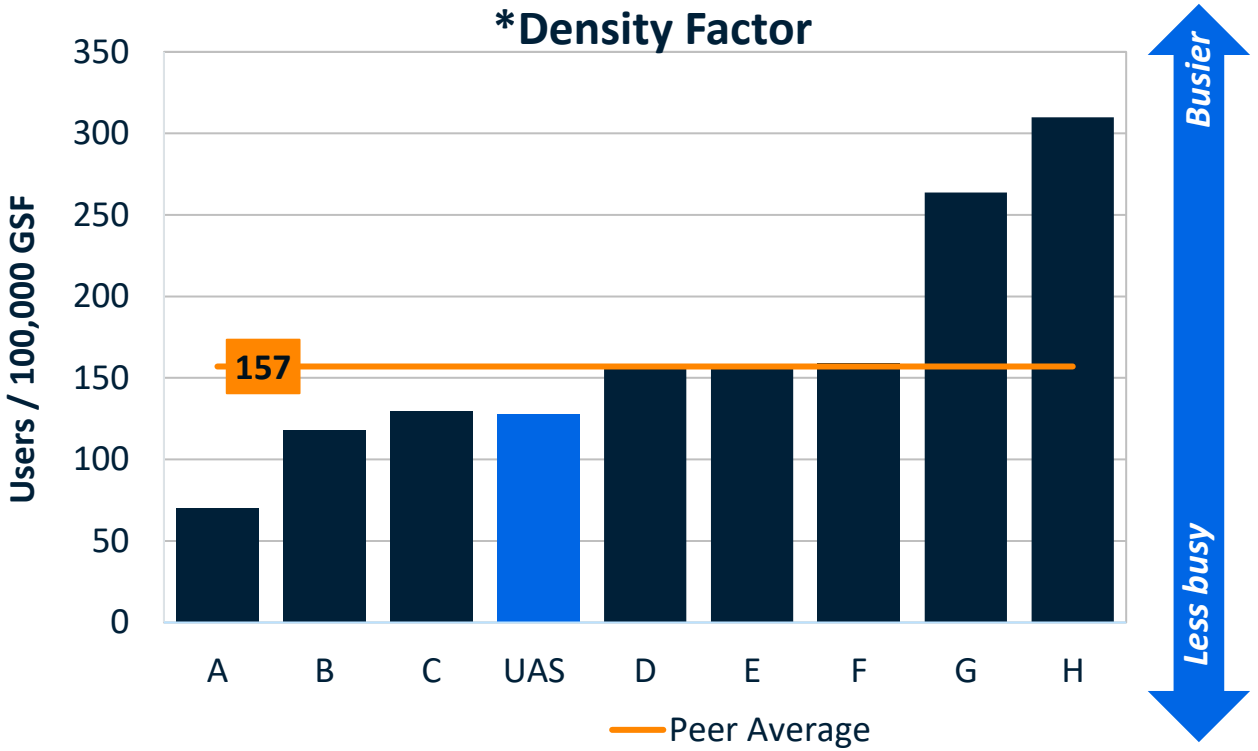
Density factor measures the busyness of campus





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

**Density is calculated using On-Campus Student FTEs, Faculty FTE, and Staff FTE*

Institutions arranged by Density Factor

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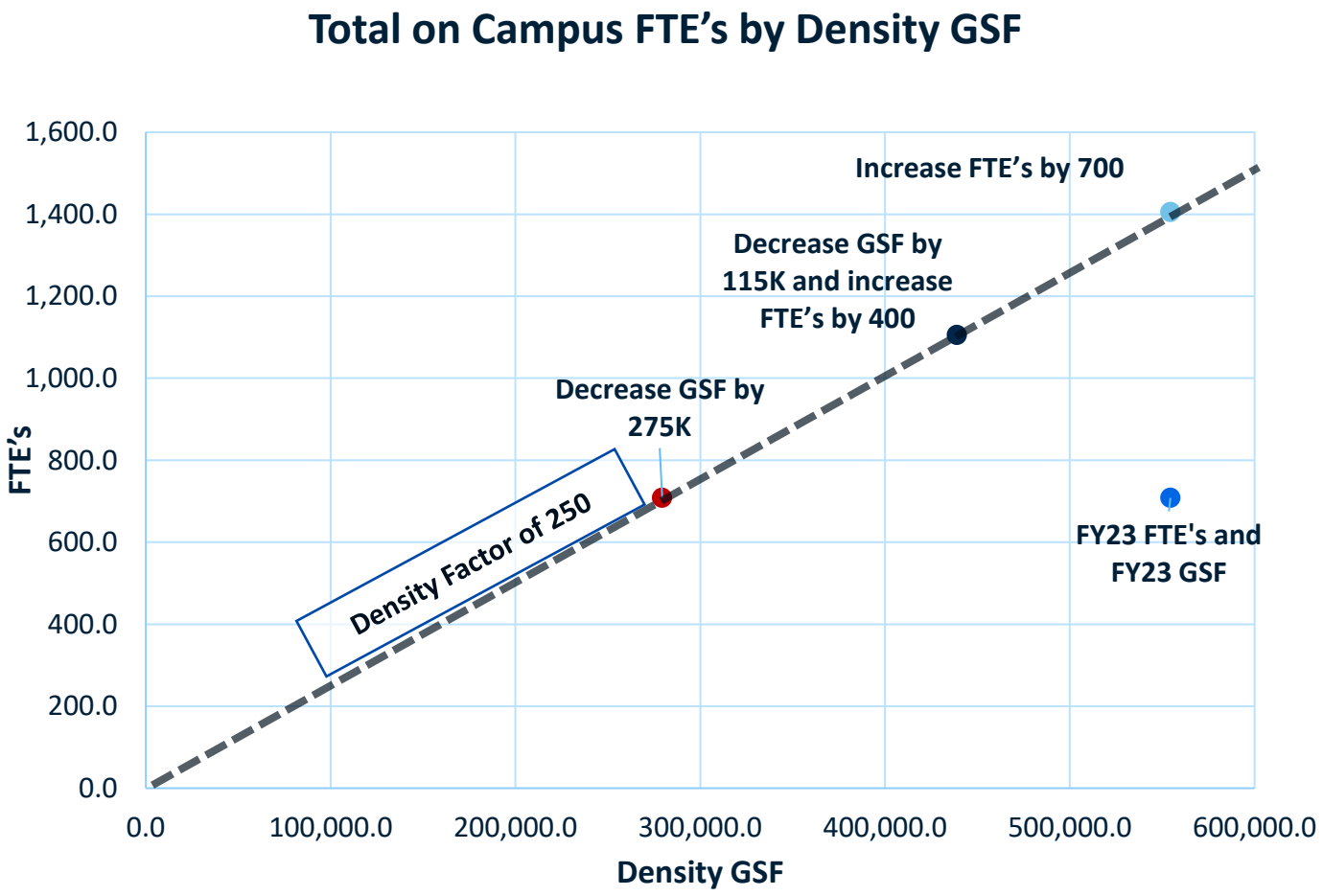
UAS Steps to Reach Target

UAS can add FTE's, decrease usable square footage, or both to reach target



**Density is calculated using On-Campus Student FTEs, Faculty FTE, and Staff FTE*

Scenarios to Reach 250 KPI Target:

1. Decrease total GSF by 275,000 GSF
2. Increase total FTE's by 700 (no space Changes)
3. Use a targeted approach to decrease GSF, which includes:
   - Transfer the NSRL- 17,591 GSF
   - Demolish Mattocks House- 1,200 GSF
   - Demolish Mathisen House GSF- 1,604.00
     - Should Mathisen be included in Density calculations?
   - Adjust Density GSF at Donald Sperl Joint Use to 21,355 (37.3%)
   - Remove or Sell an older residence hall building?
     - Banfield Hall, is 17,748 GSF, oldest residence building

Total GSF removed from Density – 74,040

- Still requires adding 400 FTE's
- Removing an additional 40,960 GSF

- Are there other buildings that are underutilized, which could have increased utilization allowing for more demolition of space?

Building and Grounds Intensity

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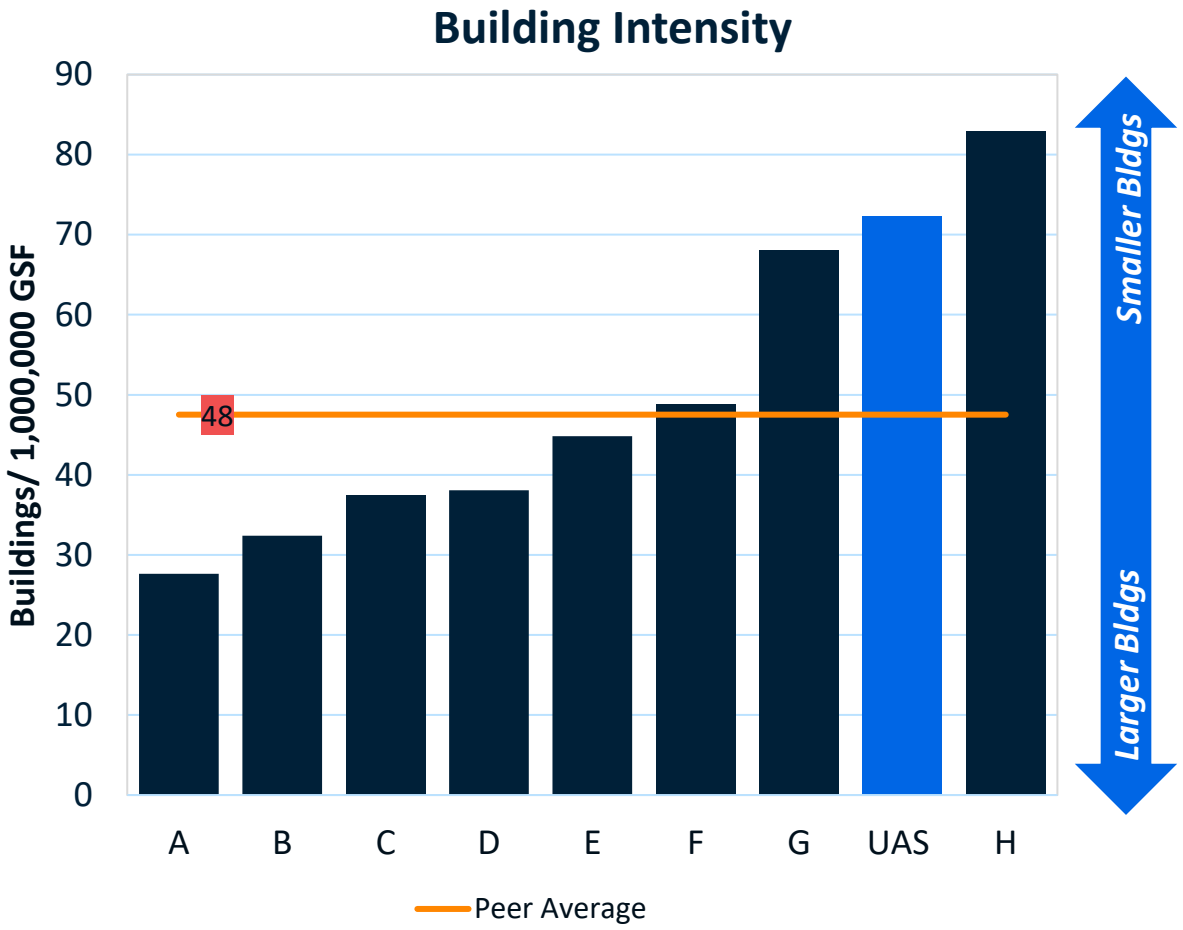
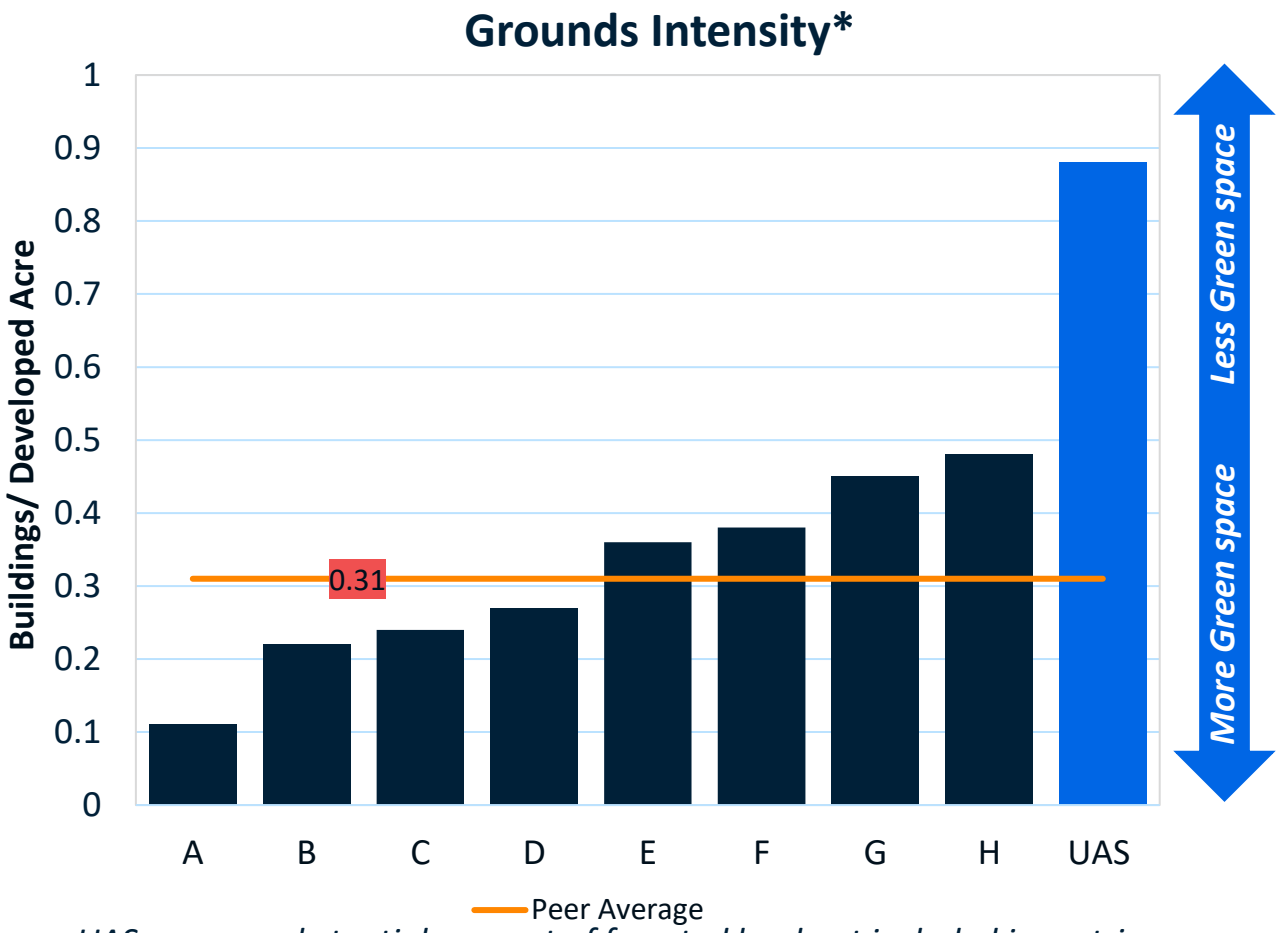
UAS' smaller buildings and compact grounds produces challenges in efficiency for staff





*Grounds intensity calculations only include buildings on developed grounds acreage. UAS owns a substantial amount of forested land not included in metric

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UAS Carries a Significantly Younger Campus Age

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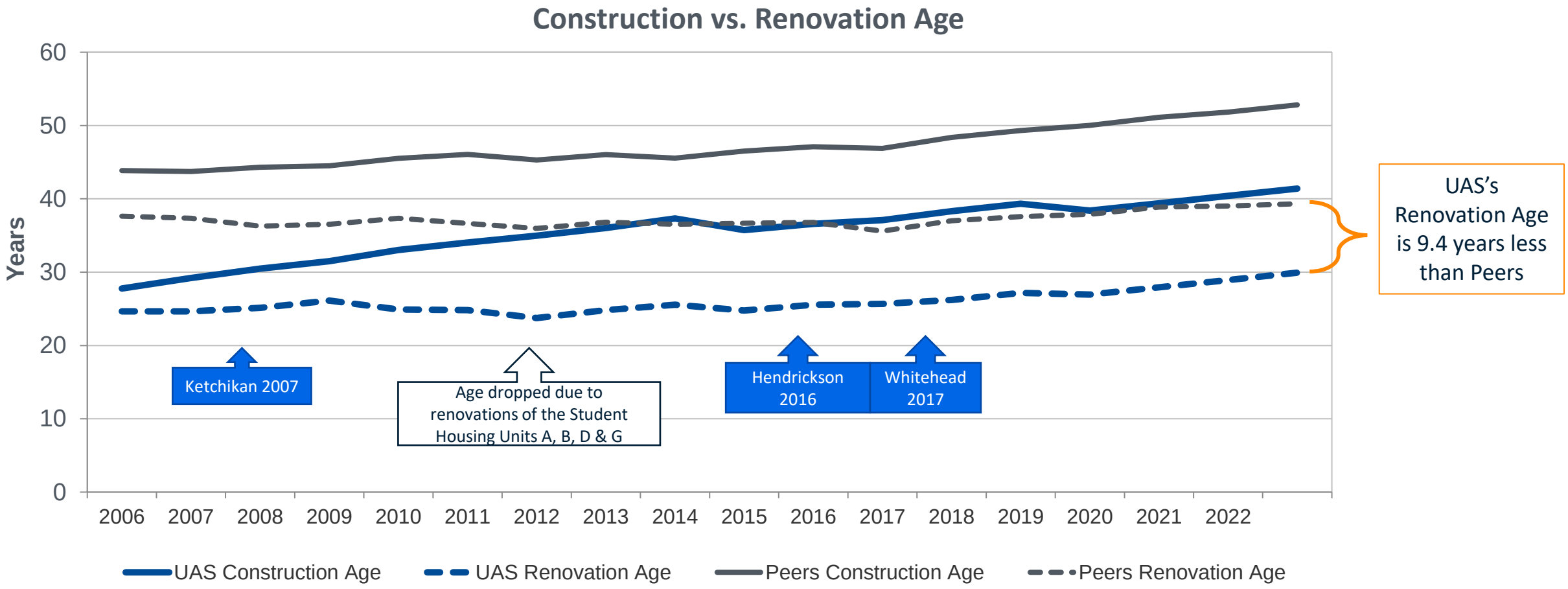
UAS has been more effective at renovating buildings compared to peers



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Ketchikan & Sitka are Younger through Renovations

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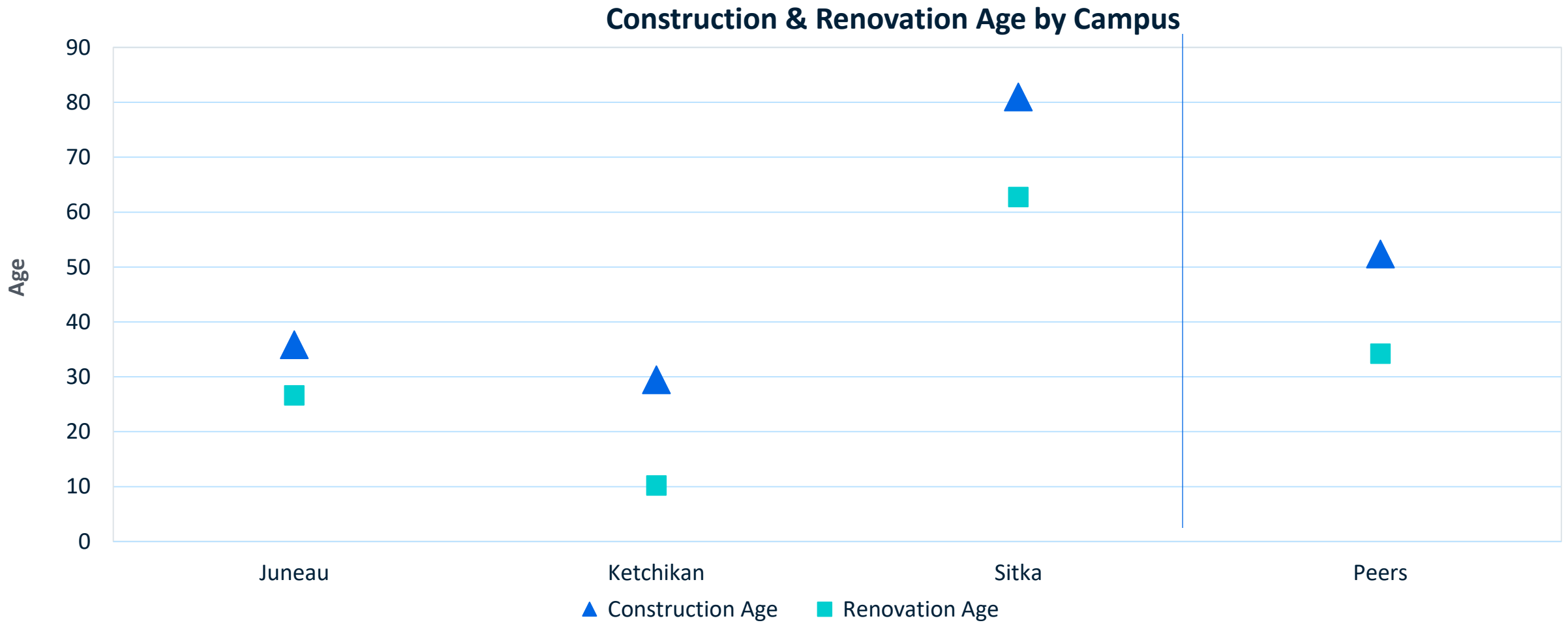
However, Sitka still remains over 50 years old



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UAS Has More Low Risk Space Than Peers

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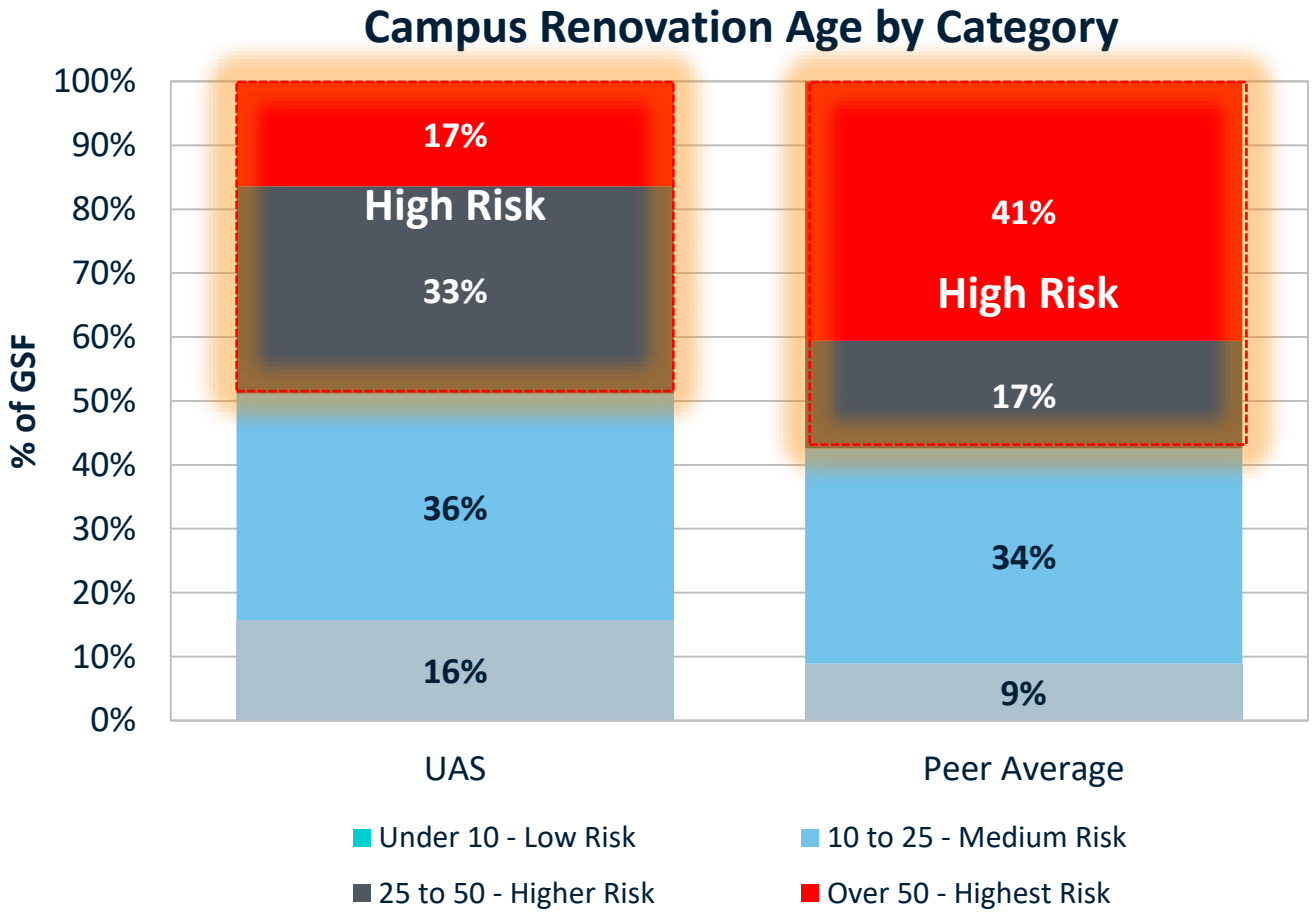
Lower risk space affords the opportunity to plan ahead for future needs



	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.
25-50	**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.
10-25		**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.

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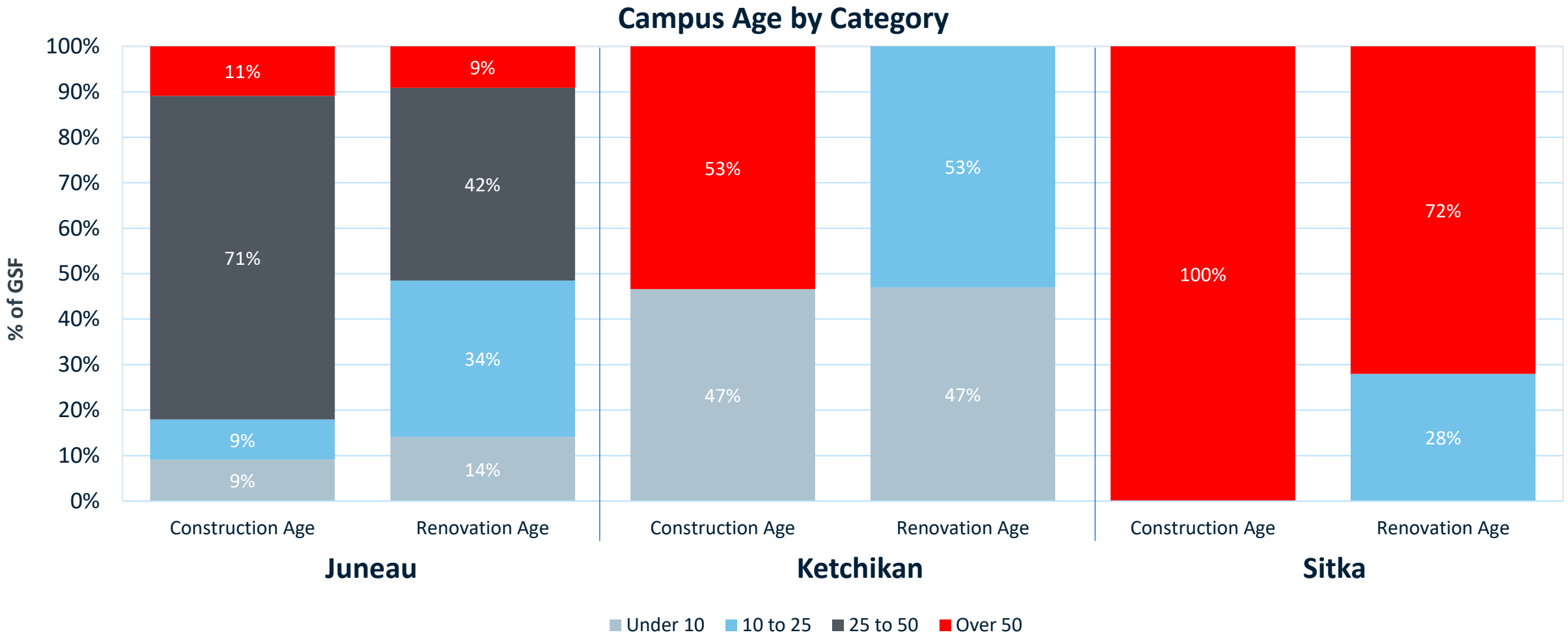
Understanding Campus Age

Renovations reduce overall age profile decreasing capital and operational need



UAS Has Flexibility of Managing a Young Campus

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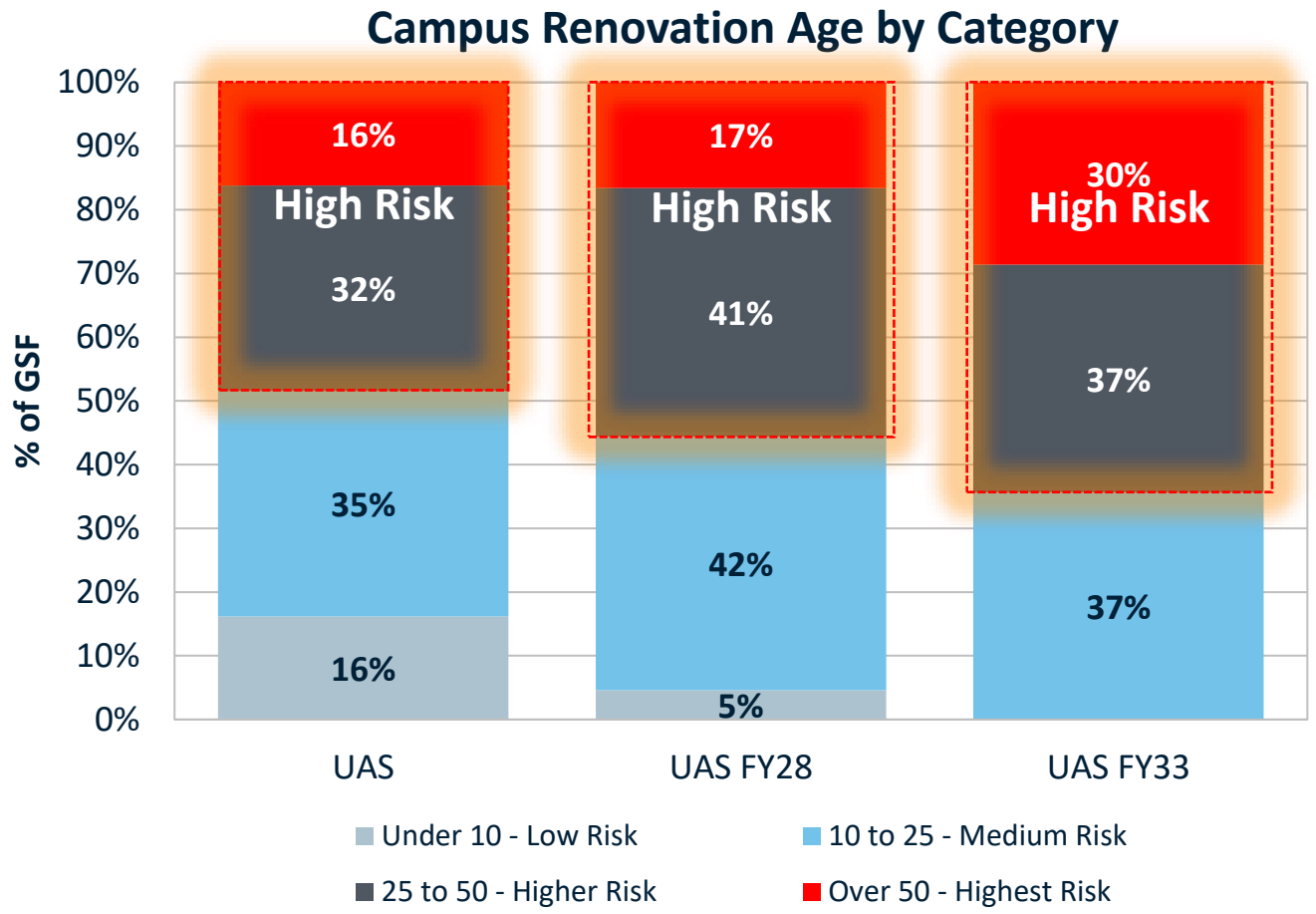
Unless UAS begins to fully renovate space in 5 years 58% of space will be “High Risk”



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Understanding the Impact of Age on Future Need

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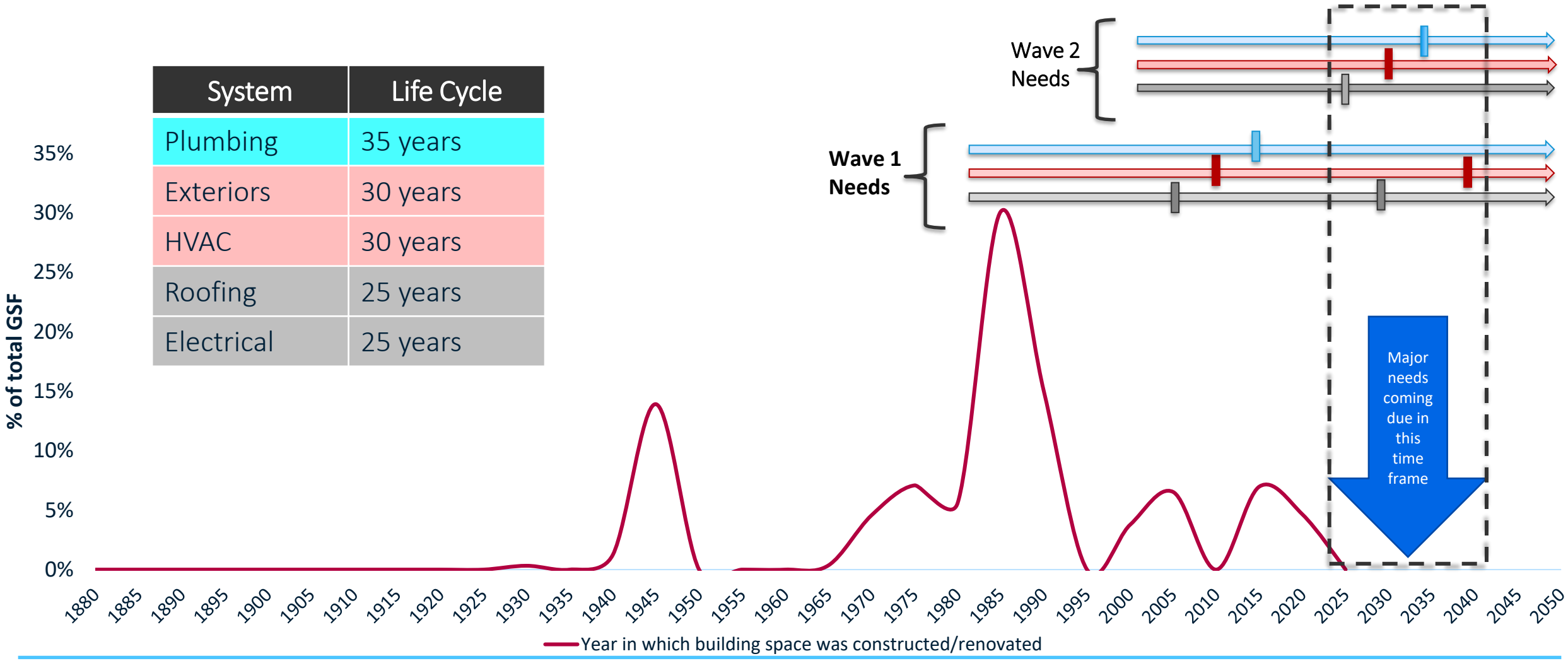
Different construction waves will have competing life cycle needs in the future

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



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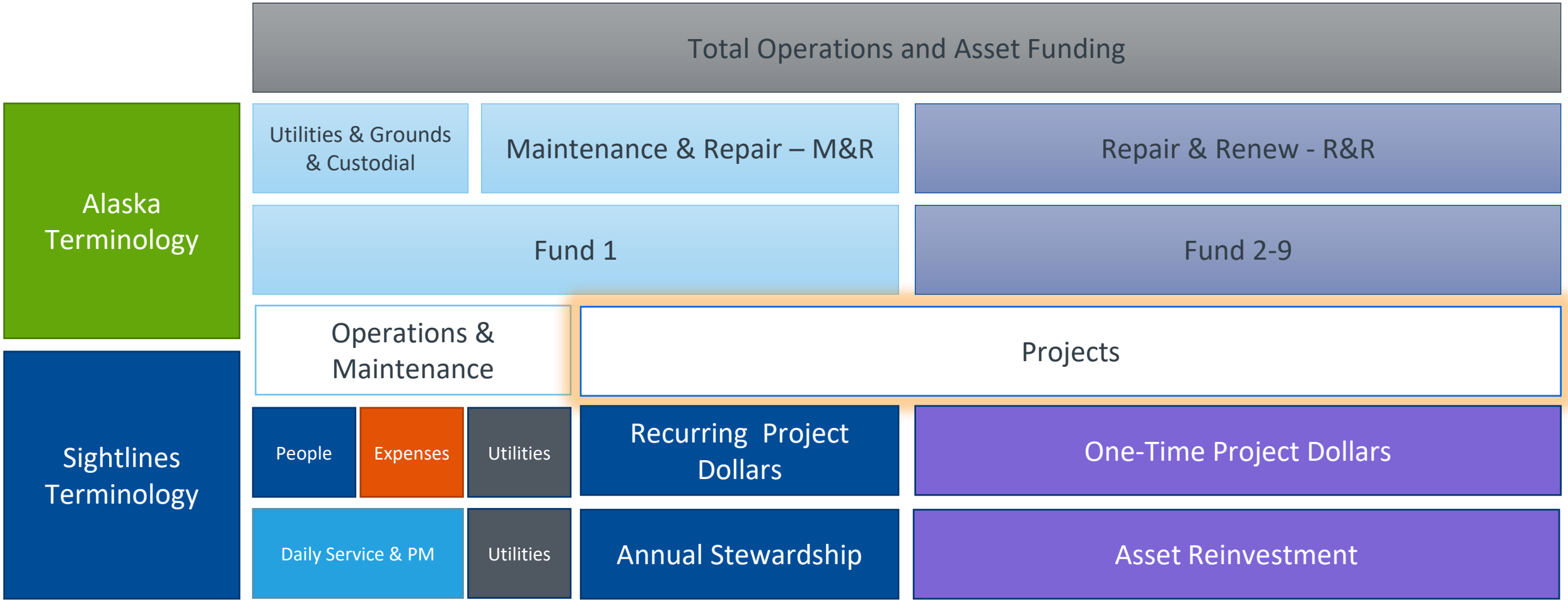
Capital Profile

Capital Funding Sources



New Space Spending Increased in FY23

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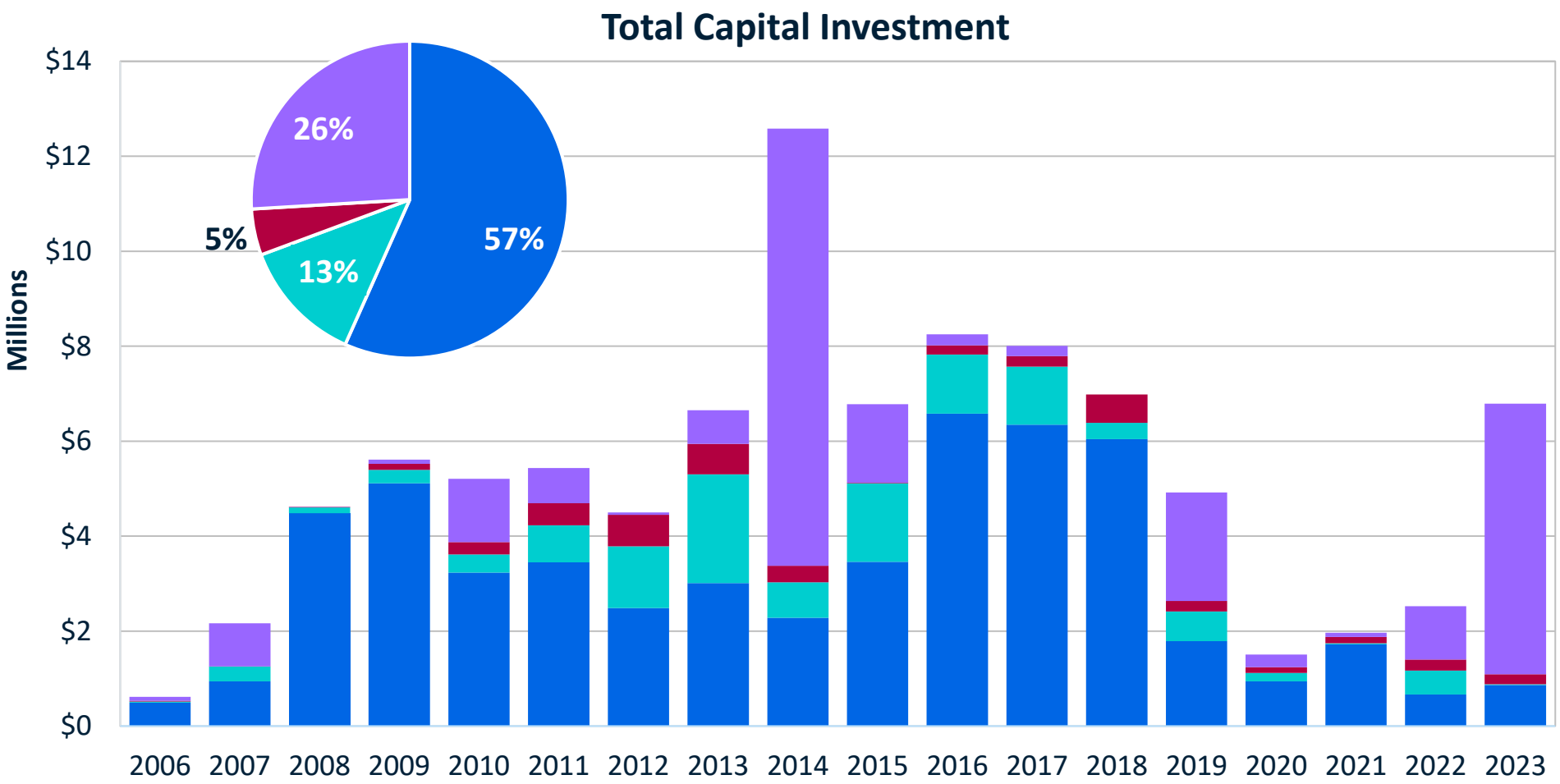
Existing Space investment decreased in recent years, but makes up majority of investment



Existing Space

- Exterior Doors
- Windows
- Pointing
- Roofs
- Insulation
- Gutters
- Mechanical Systems
- HVAC Projects
- Electrical Systems
- Carpeting
- Painting
- Replacement of Light Fixtures
- Furniture Replacement
- Room reconfiguration
- ADA Work
- Fire/Sprinkler Systems
- Asbestos Removal

Infrastructure

- Utility: Work Done on Central Utility Plants
- Utility: Underground Piping
- Grounds: Sidewalks
- Grounds: Parking Lots
- Grounds: Signage
- Grounds: Grass and Turf Fields

Non-Facilities

- Master Plans
- Feasibility Studies
- IT
- Equipment Purchases

New Space

- Any addition of GSF (new construction, additions to existing buildings)

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Defining an Annual Investment Target

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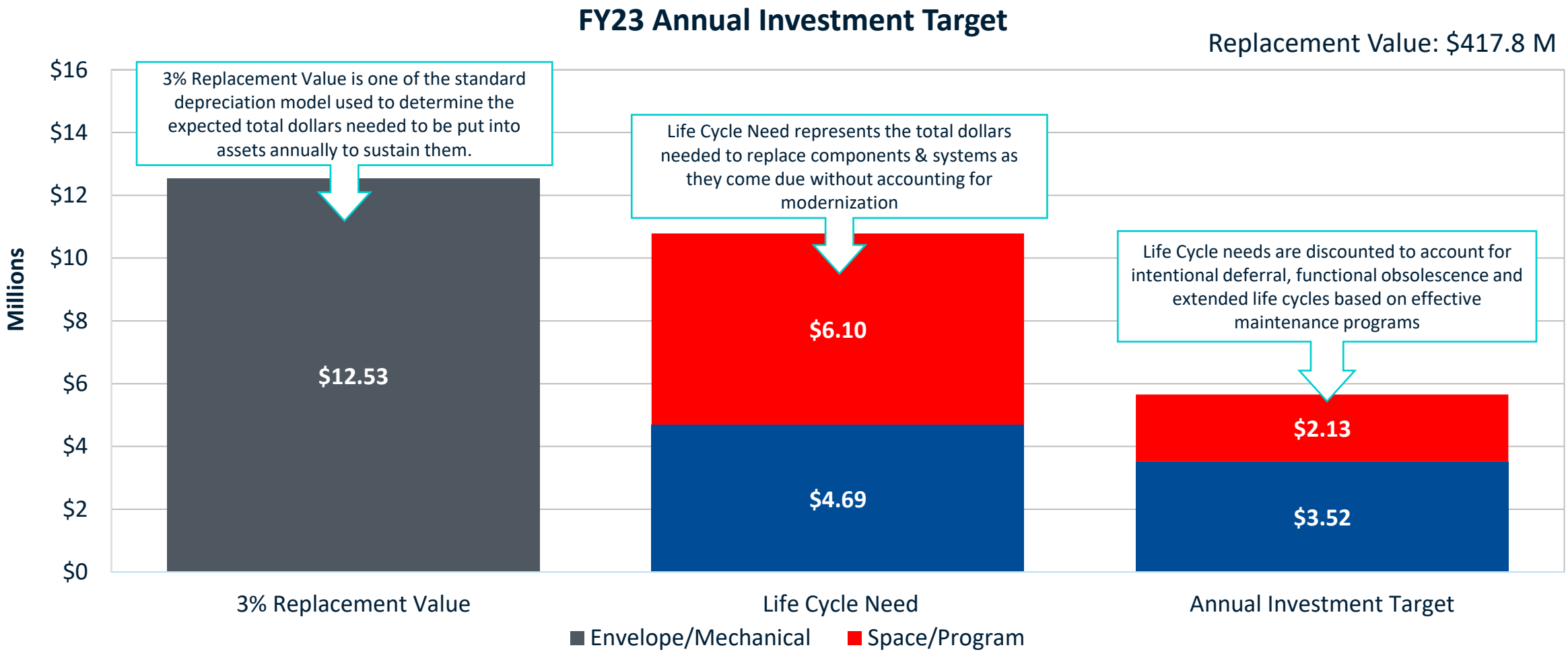
Annual Funding Target: $5.7M



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Recurring Capital Spending Falls Short of Target

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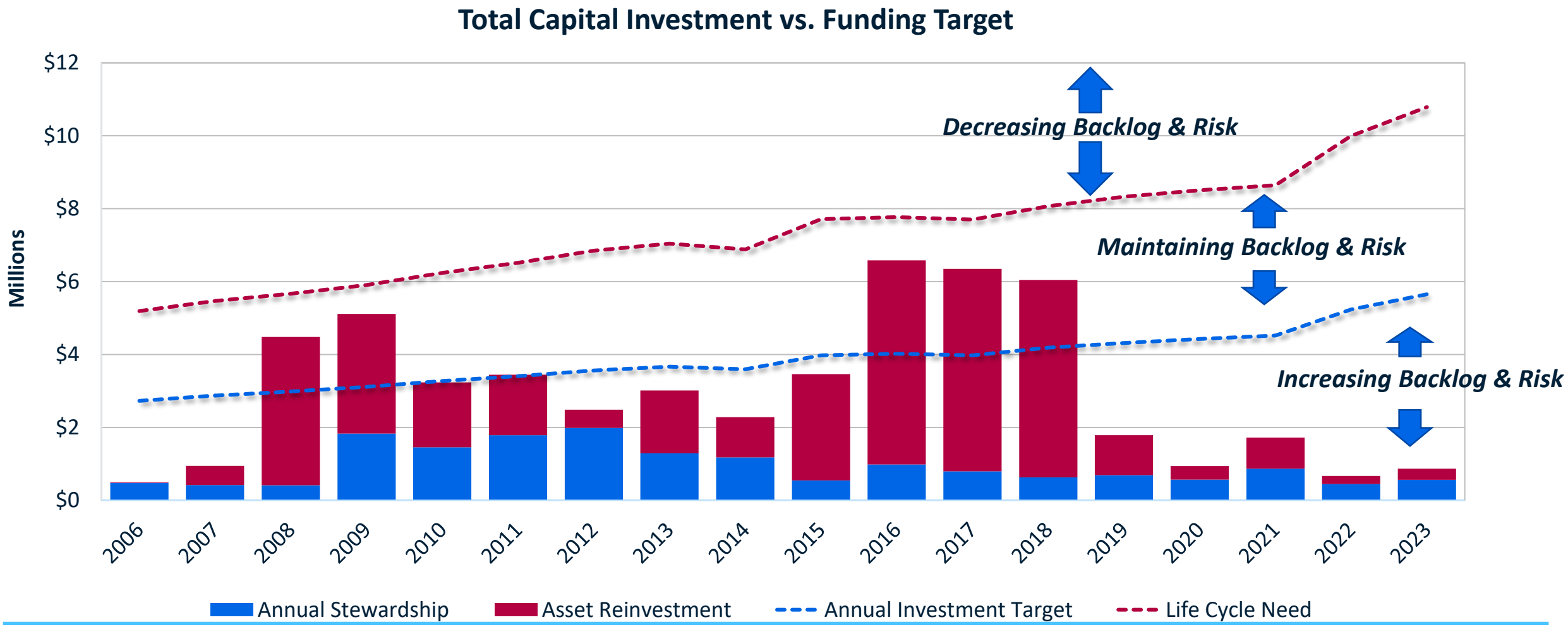
Since FY18 UAS has increased its backlog, caused by a decrease in existing space investment



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Defining an Annual Investment Target- Housing Campus

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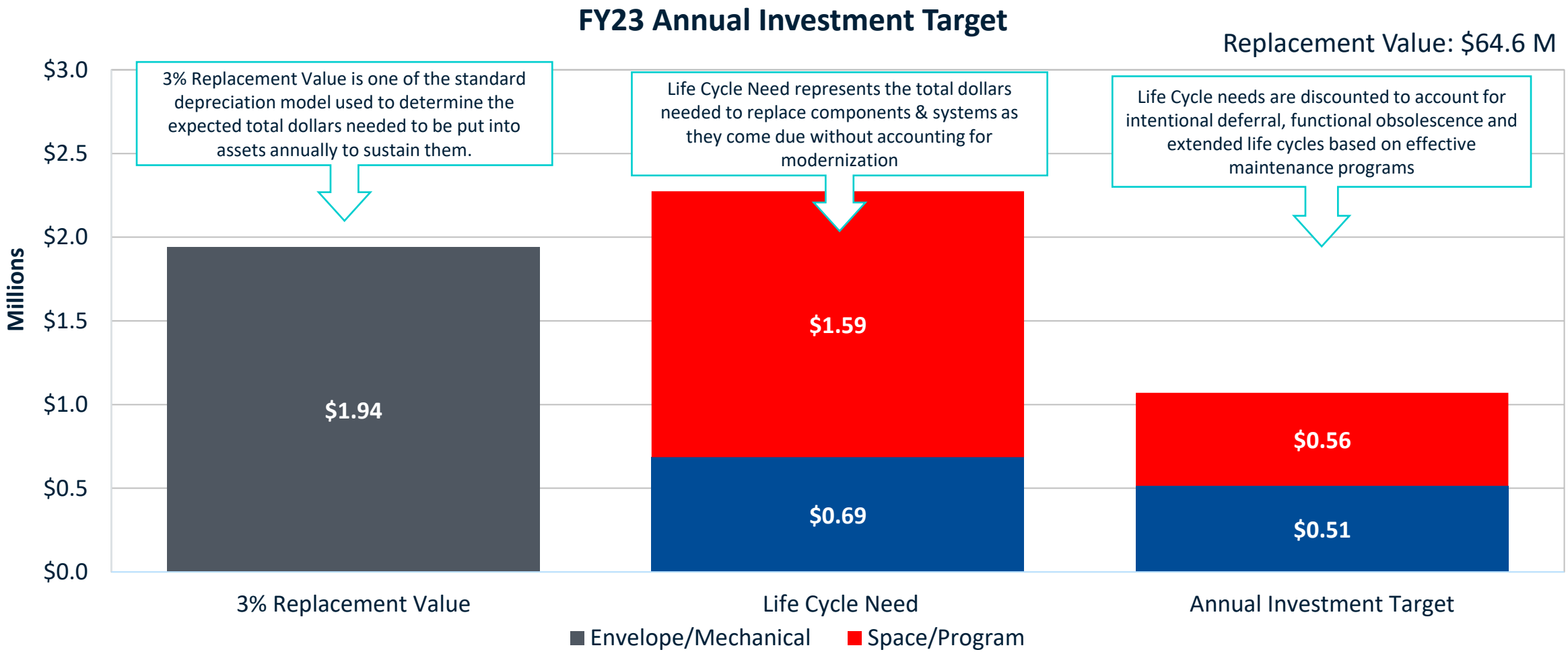
Annual Funding Target: $1.07M



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Recurring Capital Spending Falls Short of Target- Housing

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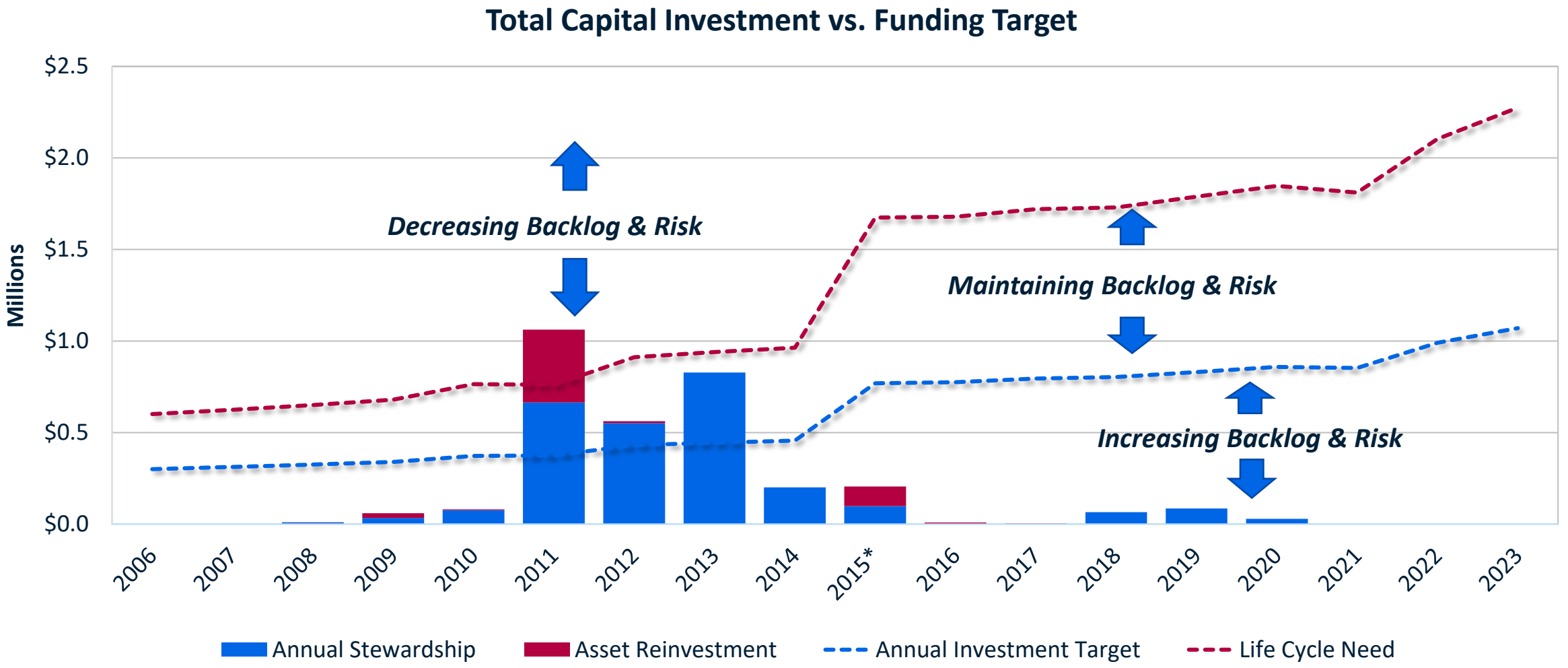
Since FY13 UAS Housing has increased its backlog, due to a lack of investment



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**Capital targets increased in 2015 due to construction of freshman residence hall*

Juneau Campus Capital Spending Sets the Trend

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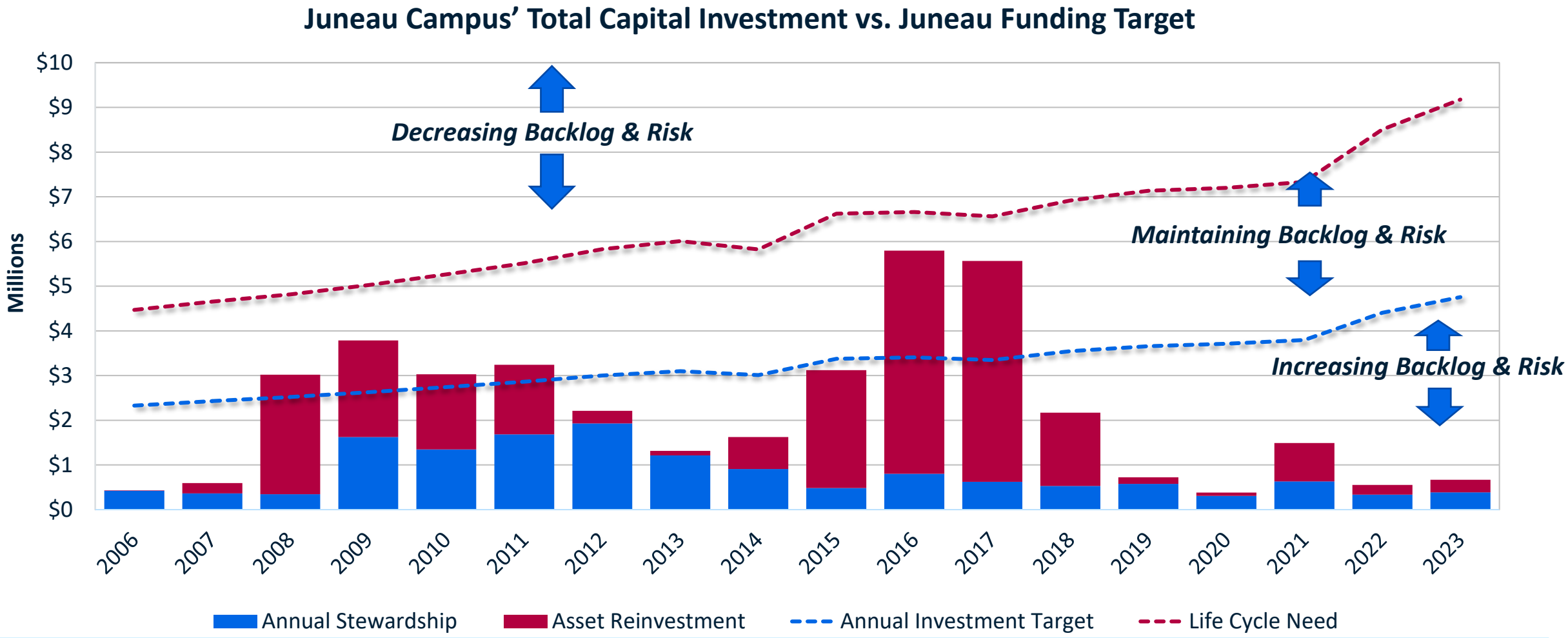
Unlike the combined spending trend, Juneau begins to miss targets after FY17



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Ketchikan Campus Spending Frequently Meets Target

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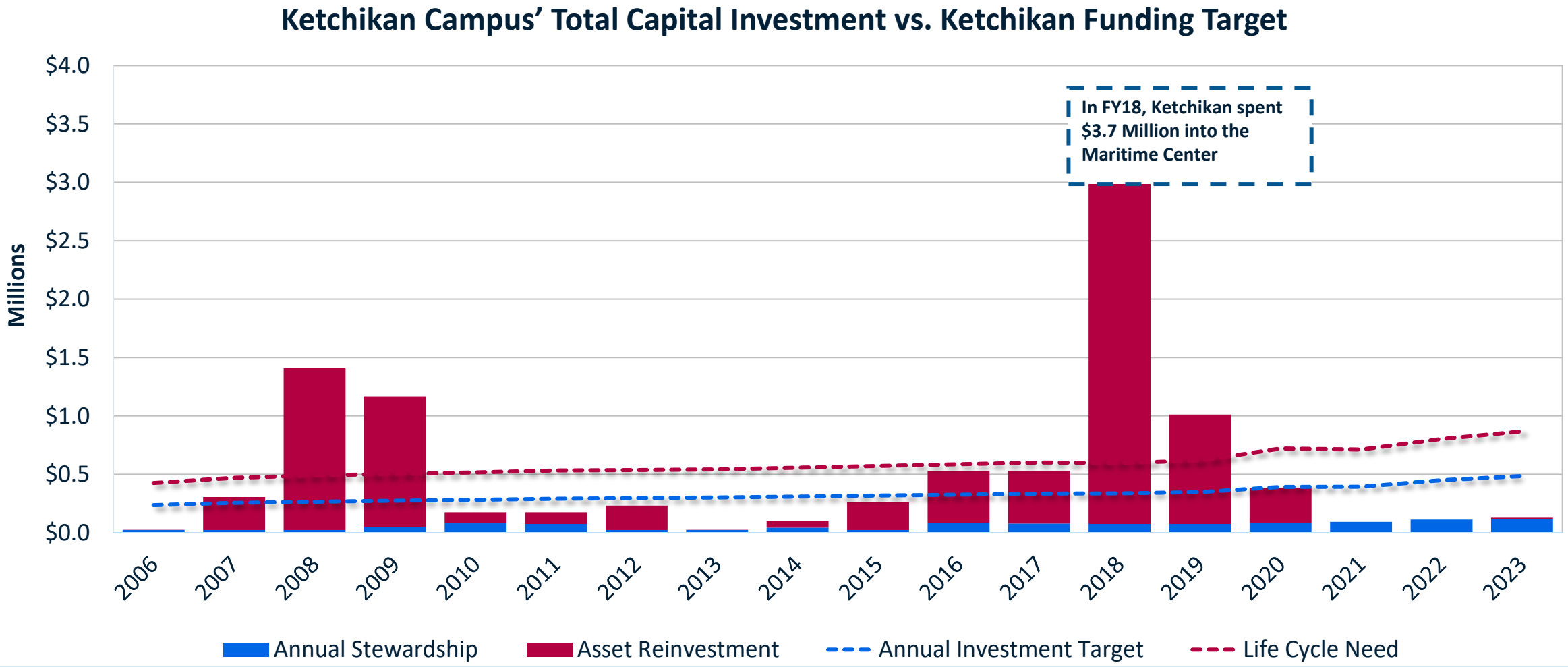
After FY20 spending has decreased and missed capital targets



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Sitka Campus Missed Targets Increases Backlog and Risk

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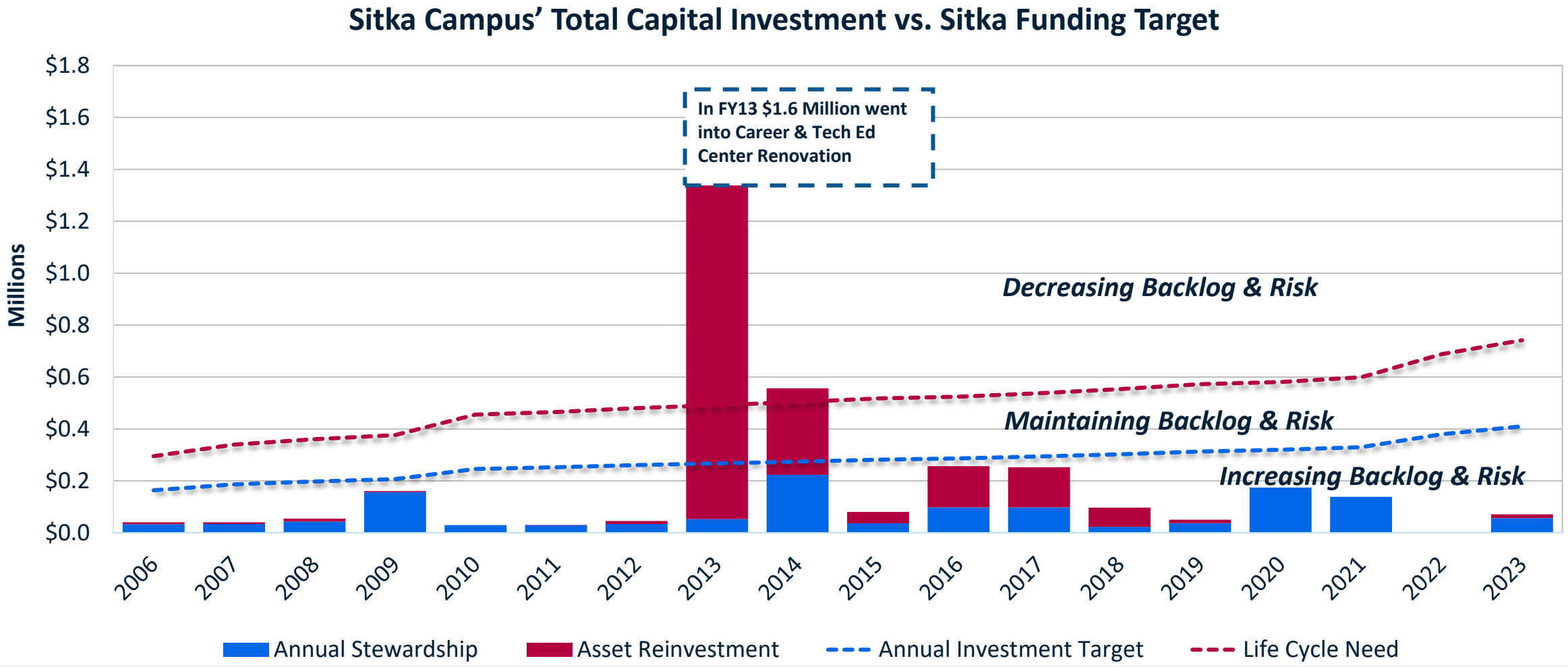
Backlog continues to increase with missed capital targets



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UAS Spends Higher to Target than Peers

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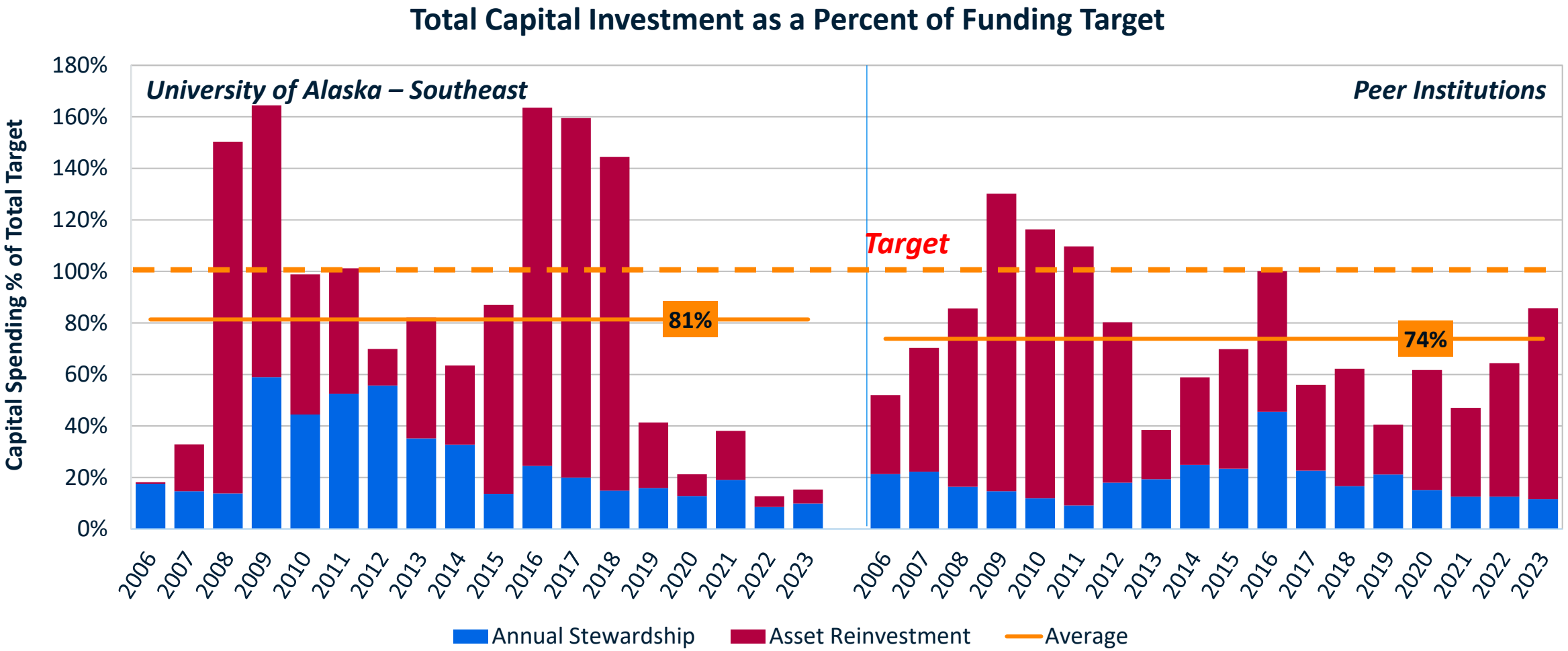
Since FY19, UAS has spent 26% to target, peers 60%



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Disparity In Reaching Targets Across Campuses

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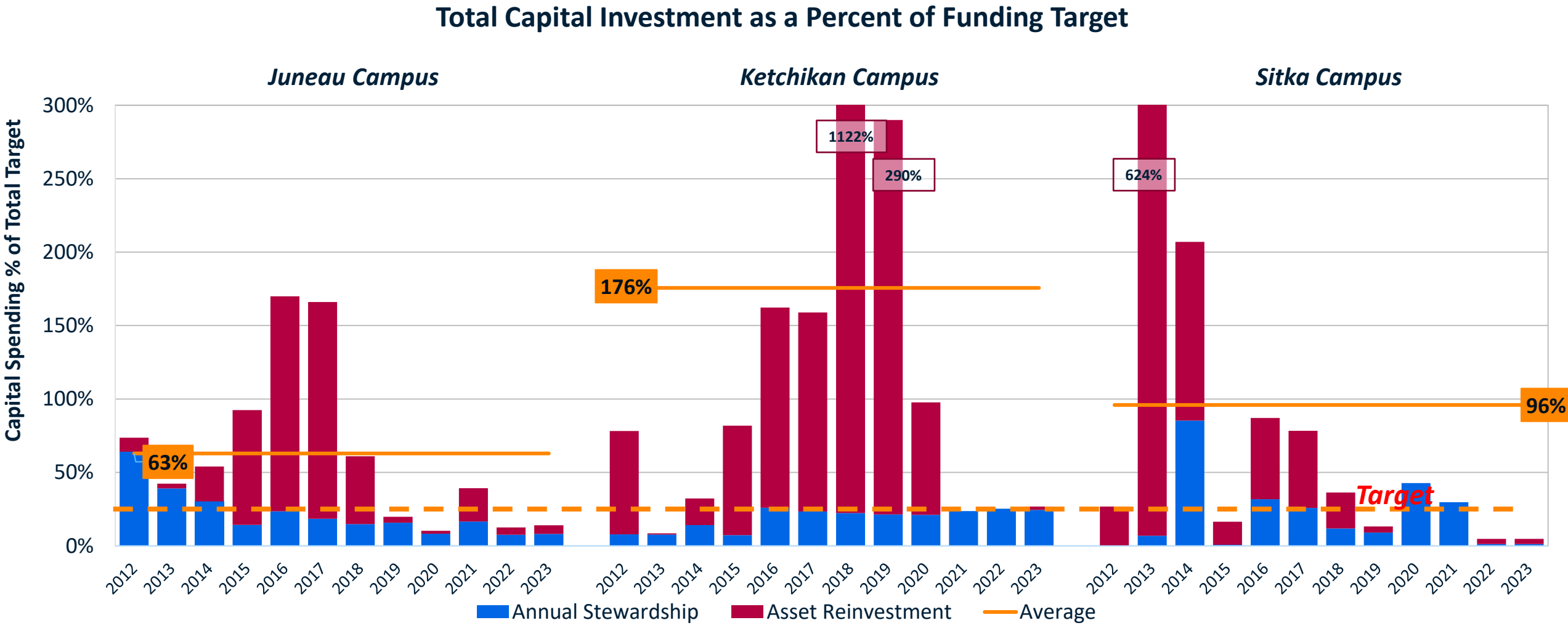
Large infusions of capital inflate average spend to target



Total Need is Less than Peers

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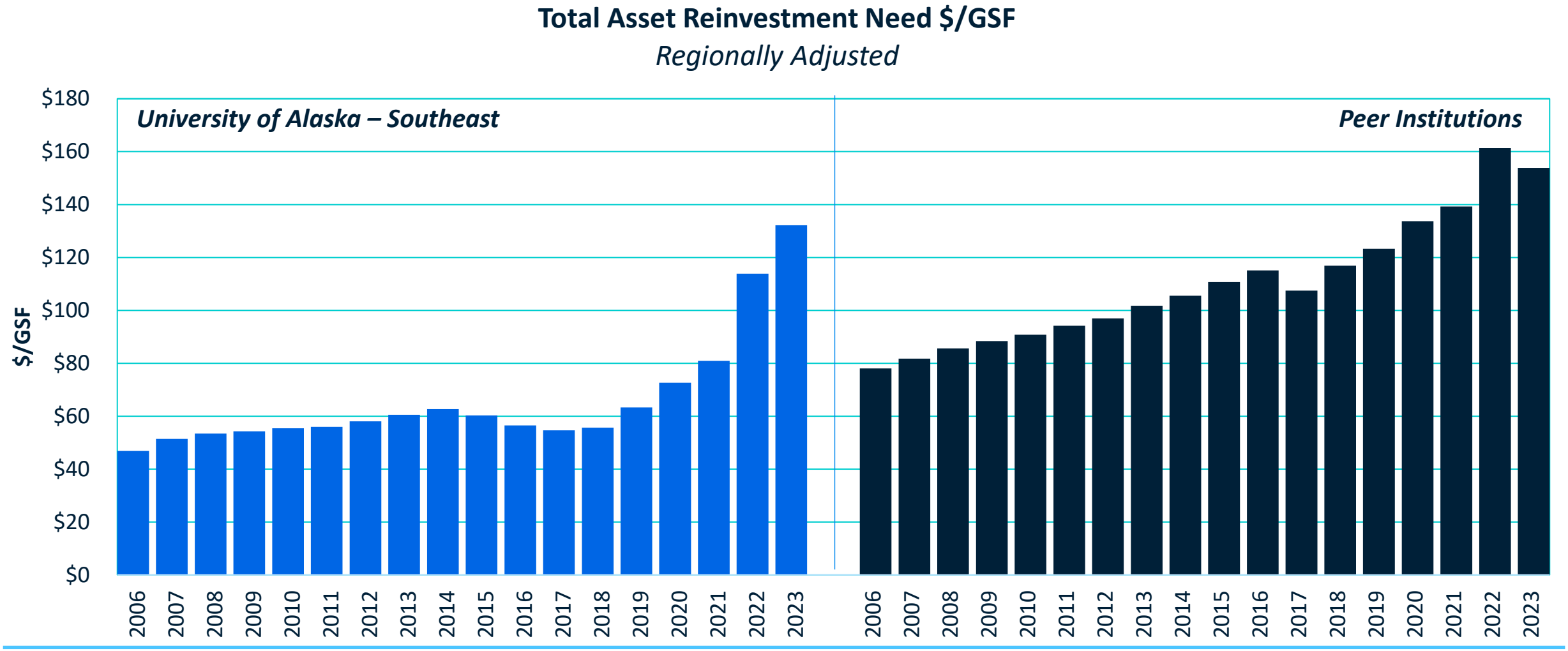
Total need based on FY23 Facilities Condition Assessment



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Deferred Maintenance/capital need saw a dramatic increase in FY22 due to unprecedented 16% inflation

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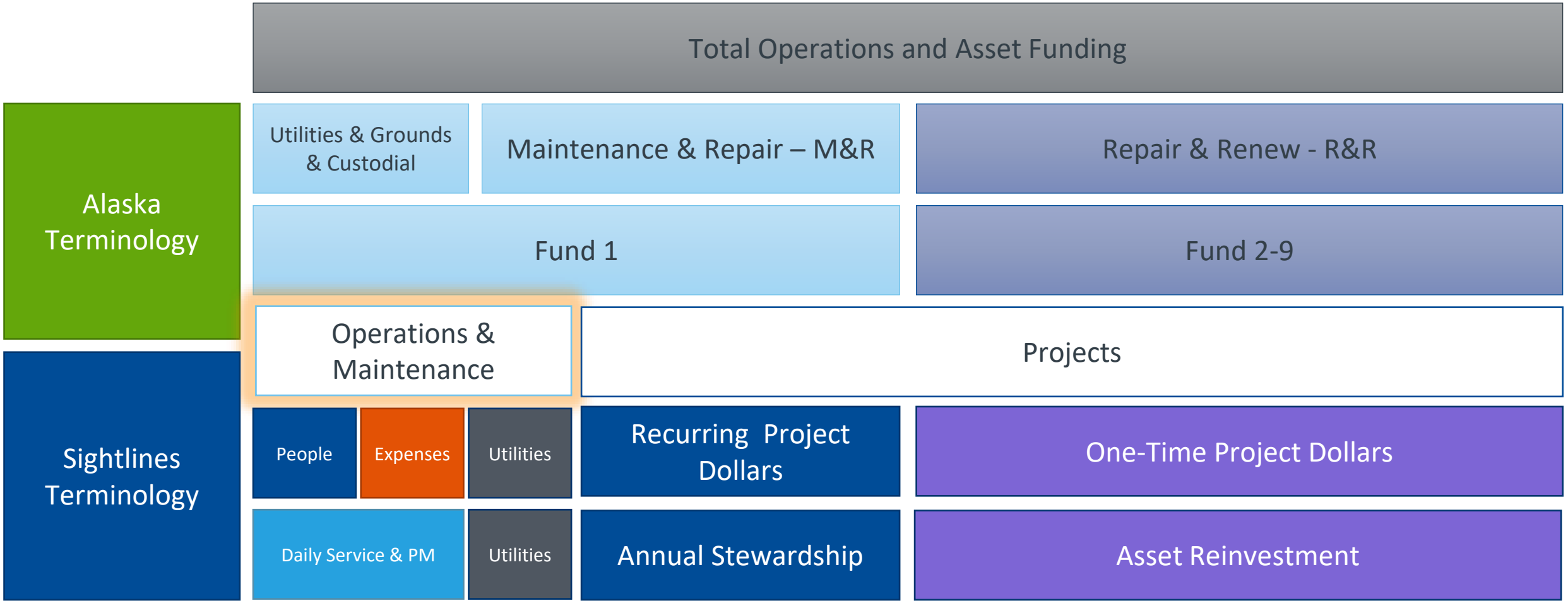
Operations Success

Capital Funding Sources



Facilities Operating Expenditures vs. Peers

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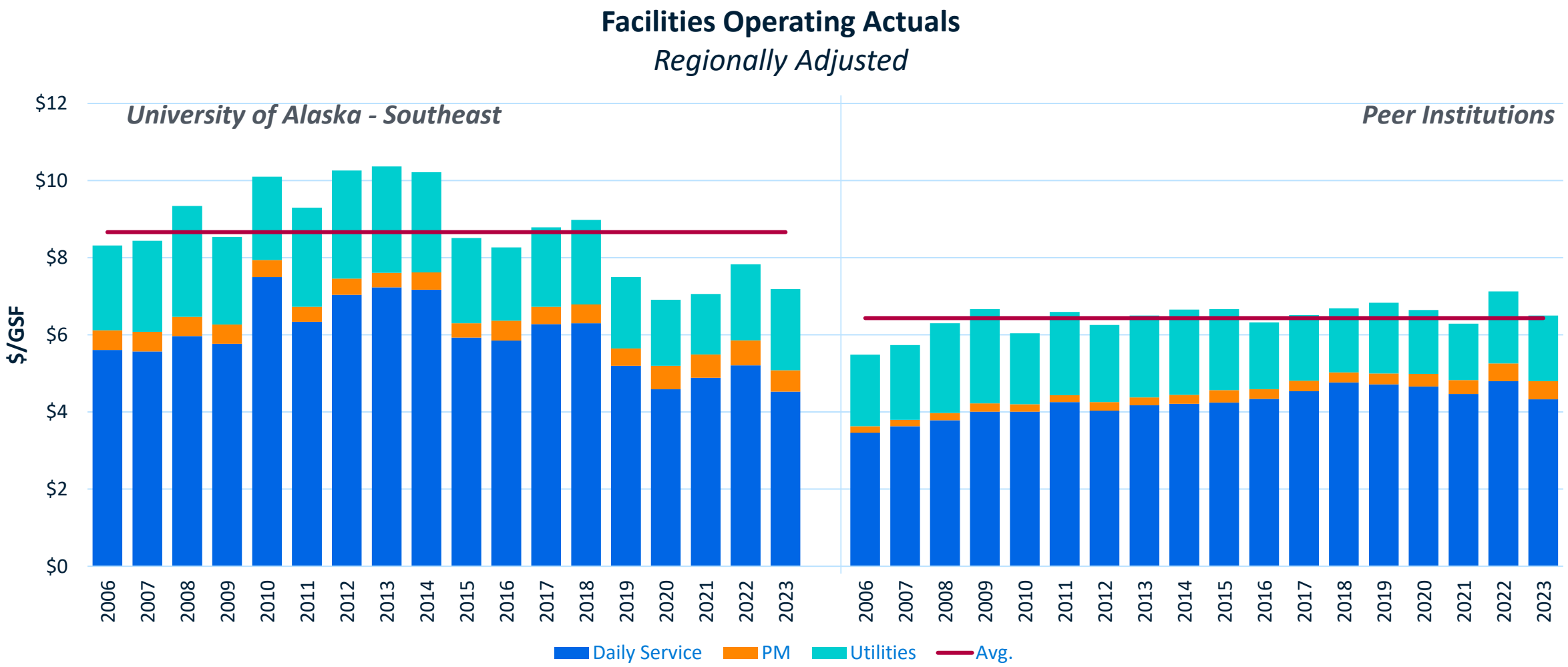
UAS has reduced its Daily Service expenditures in recent years below peer average



Budget Cuts Limit Purchasing Power

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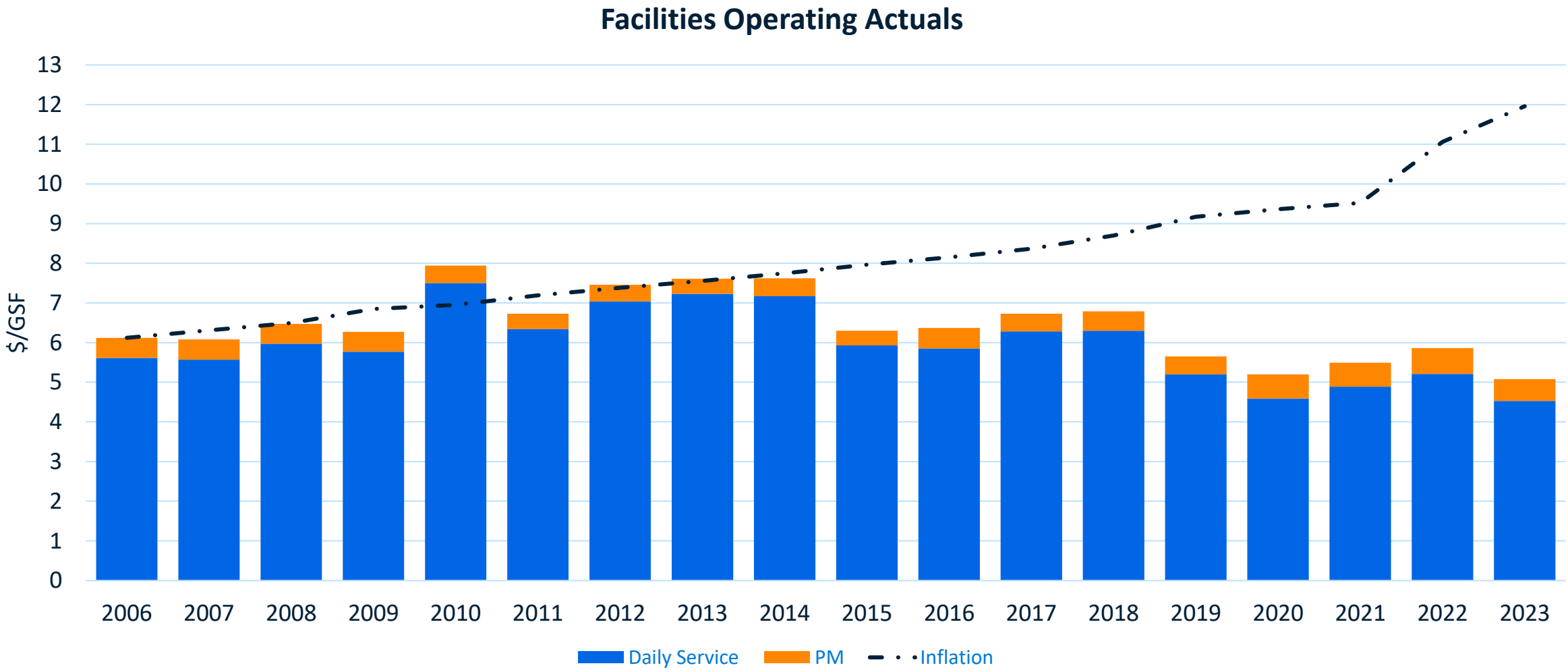
UAS operational spending is 58% less than 2006 actuals when accounting for inflation



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2023 increase to inflation line due to 8% increase in construction material prices

Juneau Campus Decreasing Budget Similar to Combined Trend

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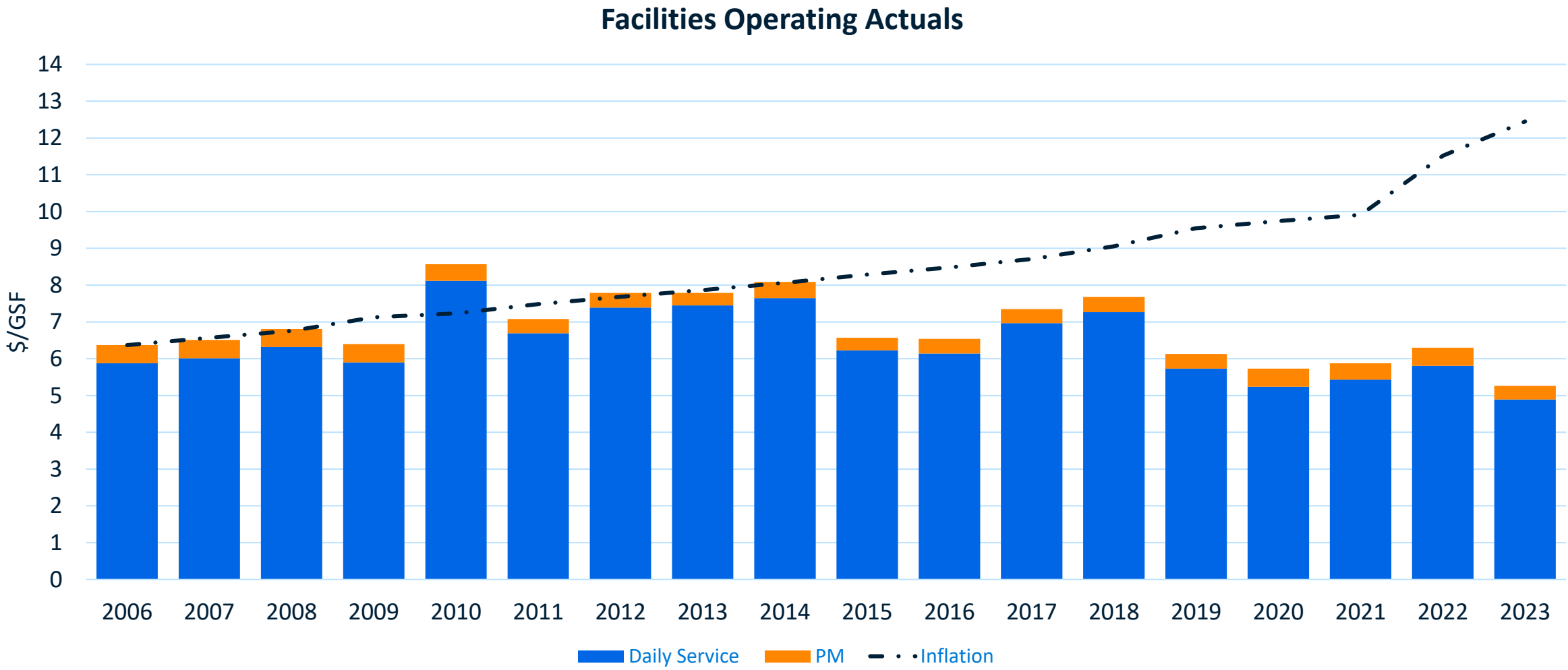
Juneau operational spending is 58% less than 2006 actuals when accounting for inflation



2023 increase to inflation line due to 8% increase in construction material prices

Ketchikan Campus Budget Emphasizes PM in Recent Years

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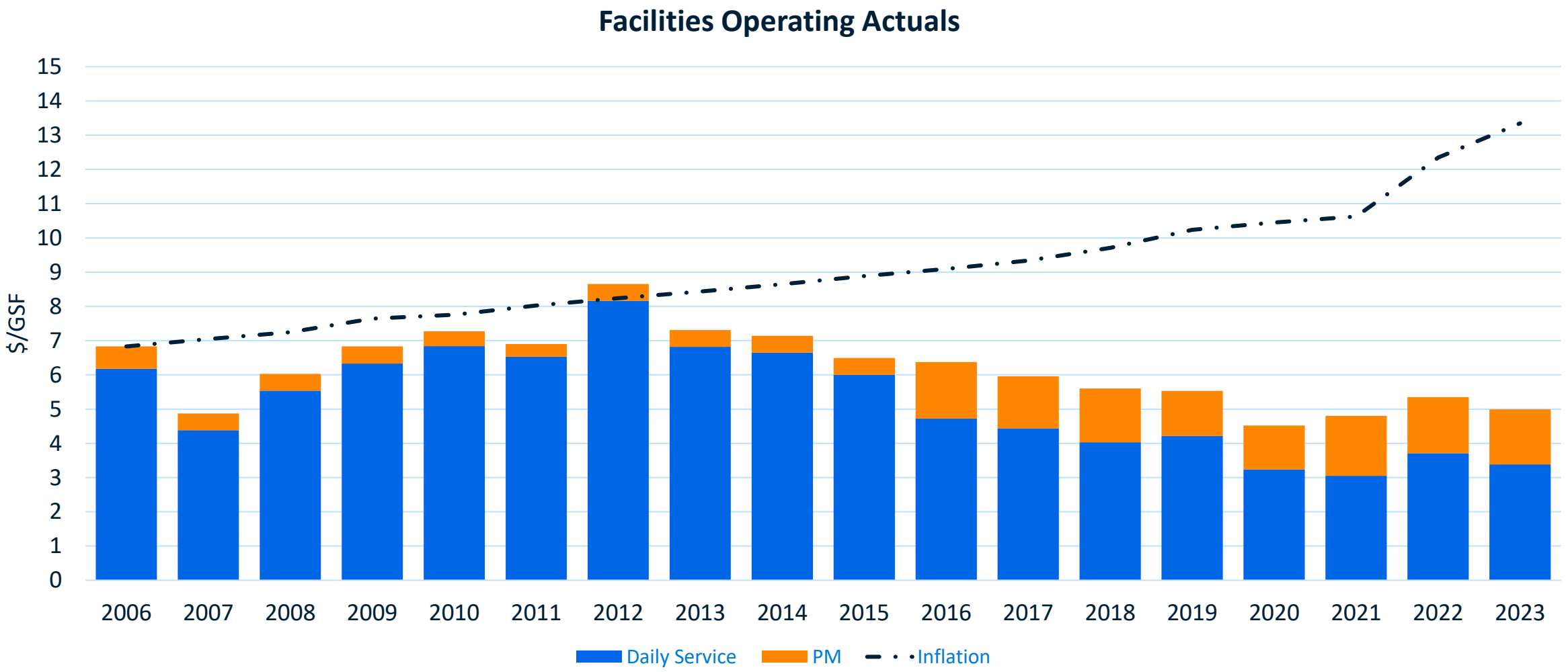
Ketchikan operational spending is 63% less than 2006 actuals when accounting for inflation



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2023 increase to inflation line due to 8% increase in construction material prices

Sitka's Recent Budget Lacks Purchasing Power of Past Years

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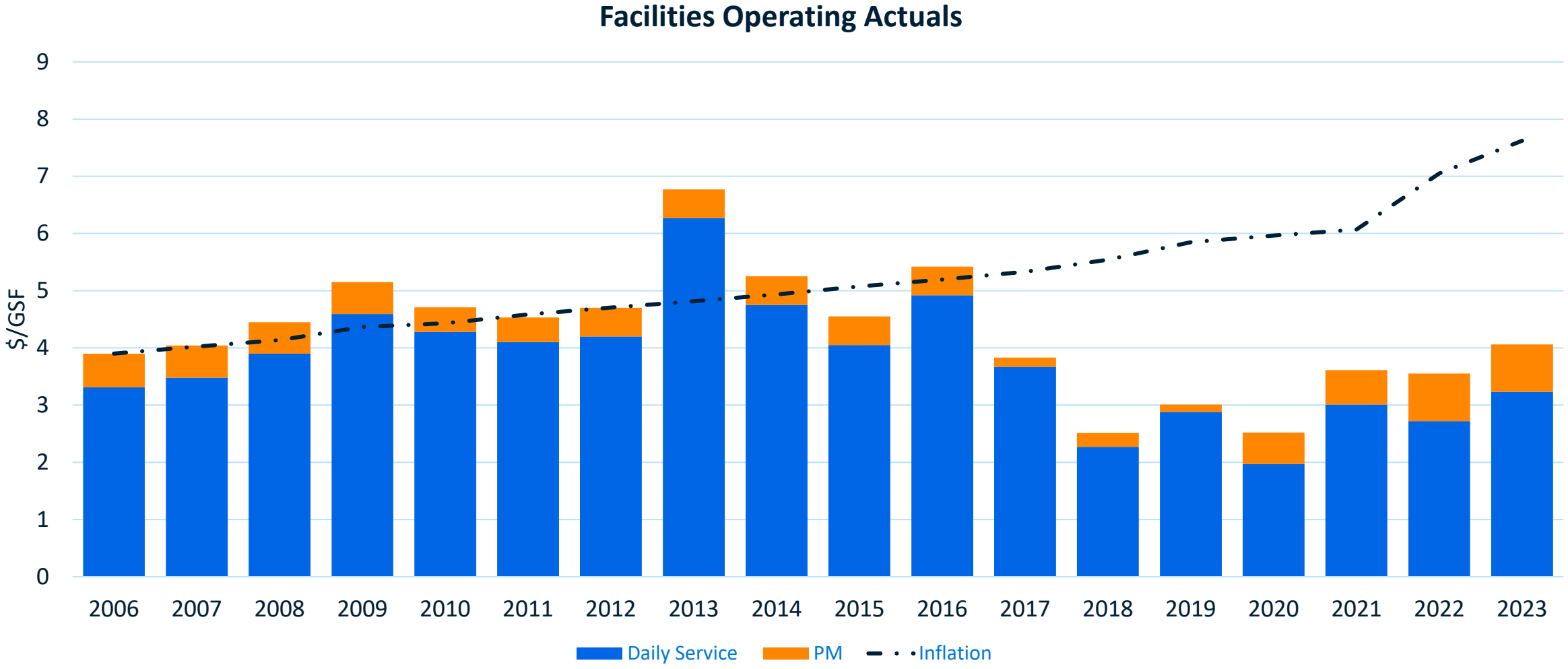
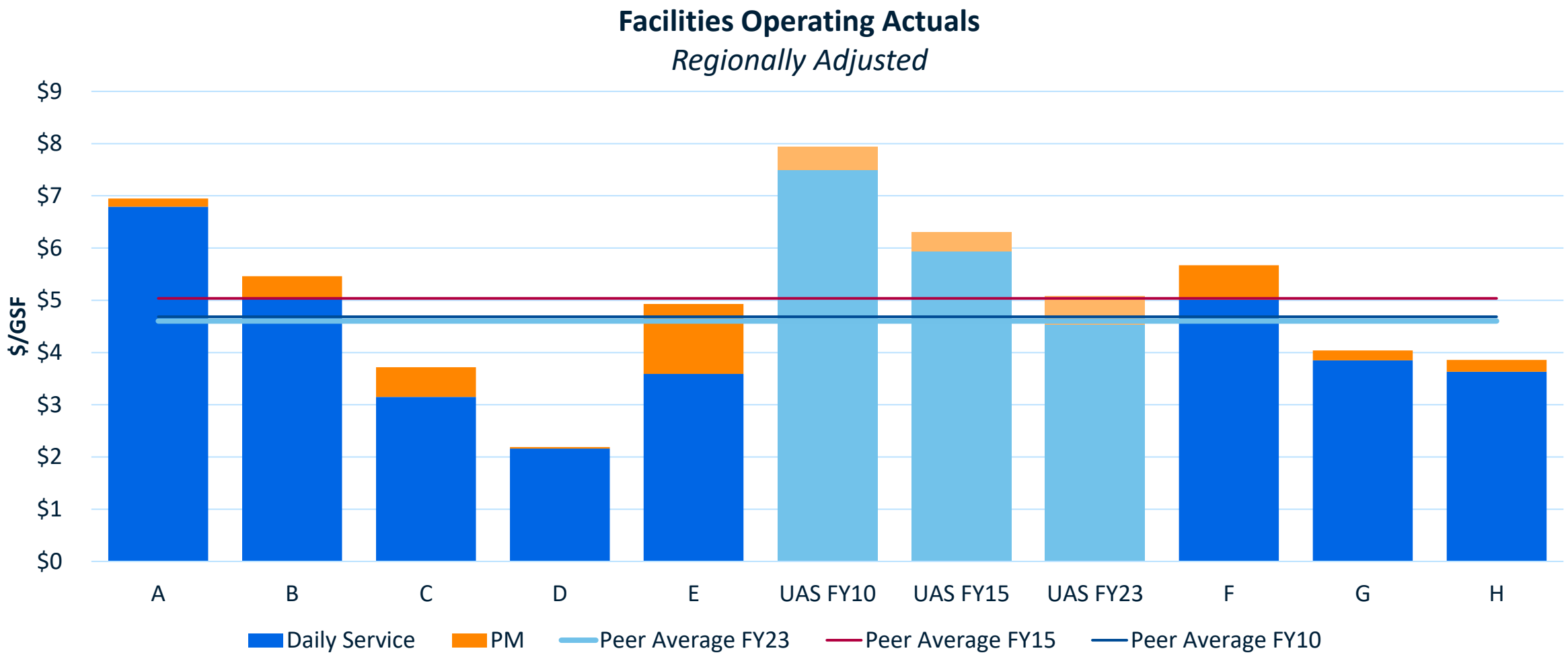
Sitka's operational spending is 47% less than 2006 actuals when accounting for inflation



2023 increase to inflation line due to 8% increase in construction material prices

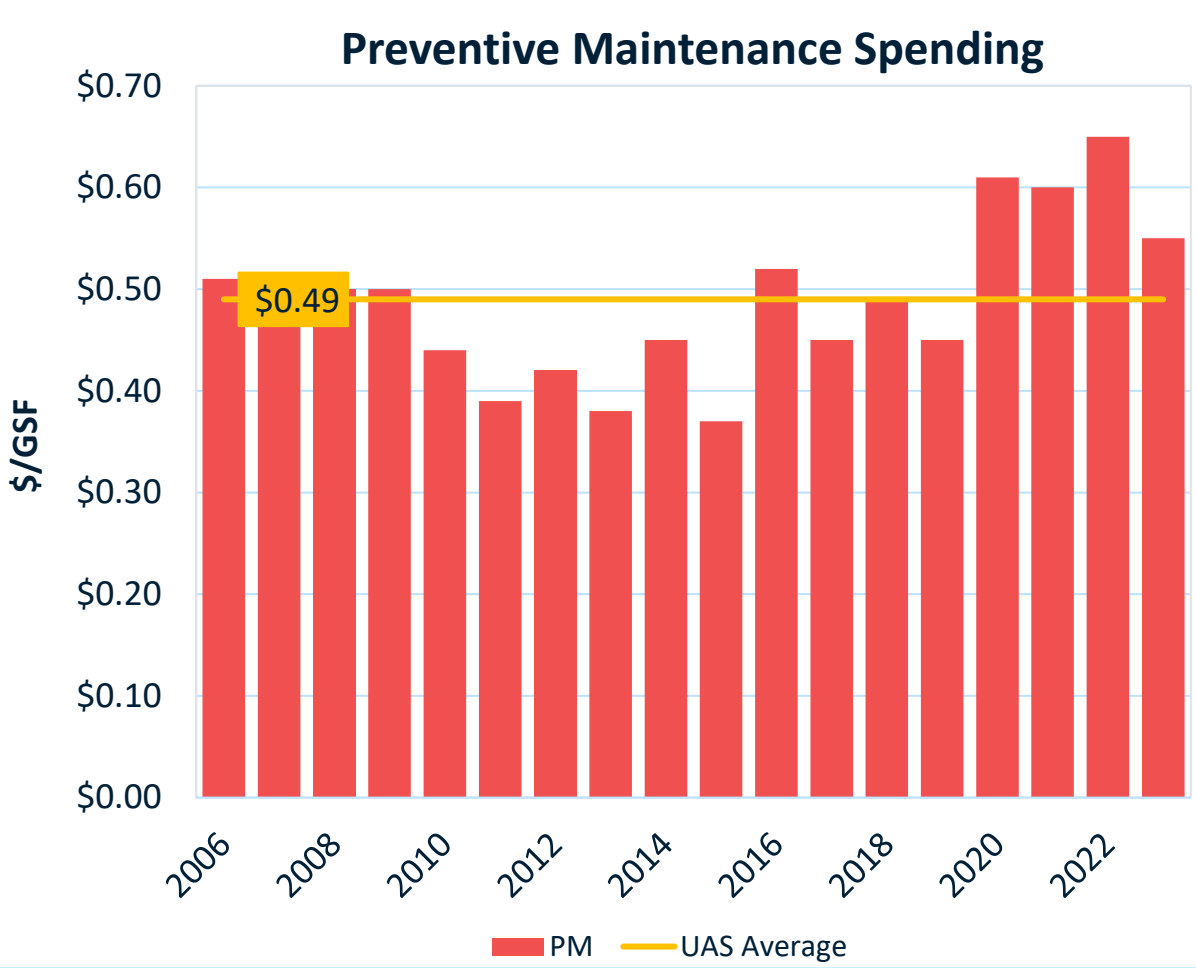
Facilities Operating Expenditures vs. Peers

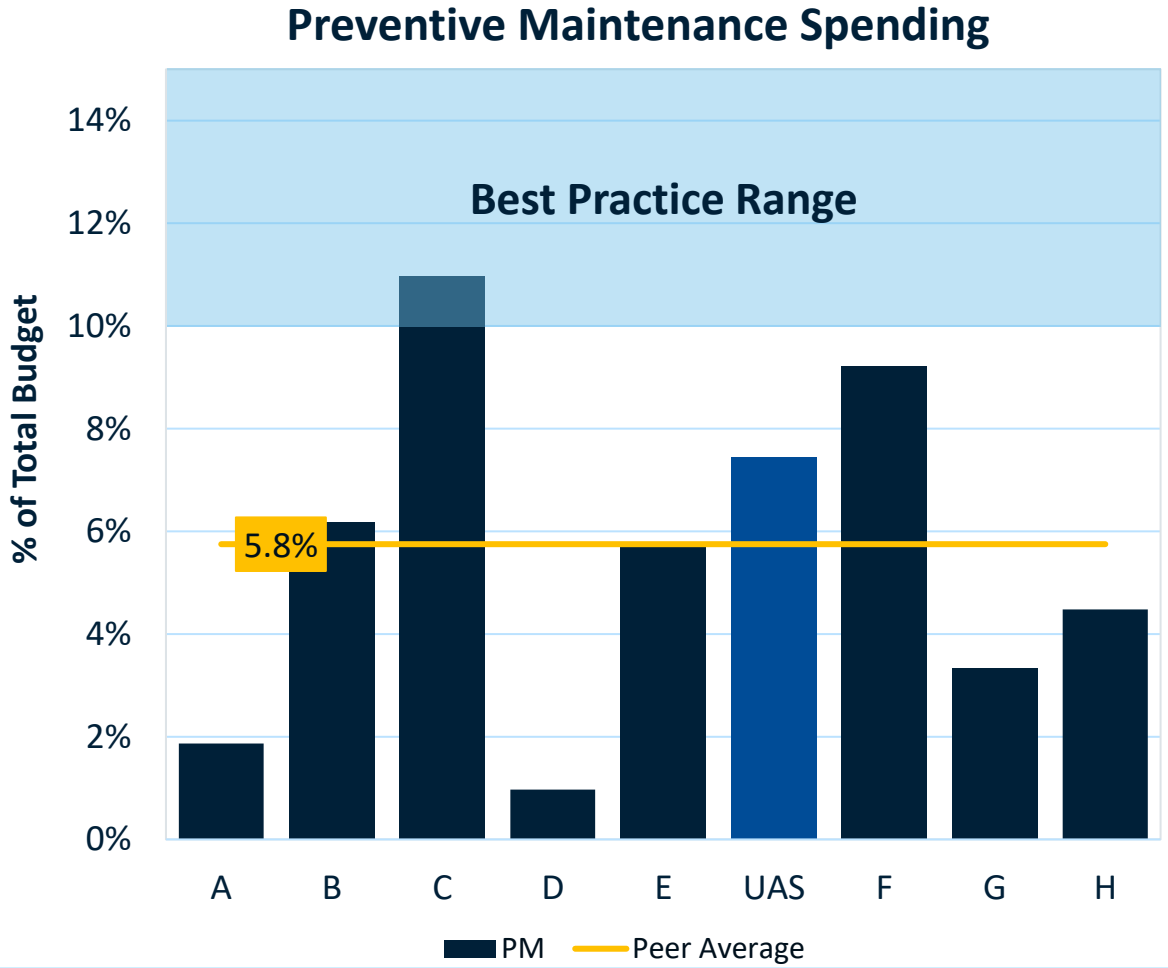
UAS has decreased its daily service expenditures, while Peer spending has increased



UAS Allocates More Resources to PM than Peers

Recent increases in PM spending result in UAS approaching “Best Practice Range”





Utility Operating Expenditures Compared to Peers

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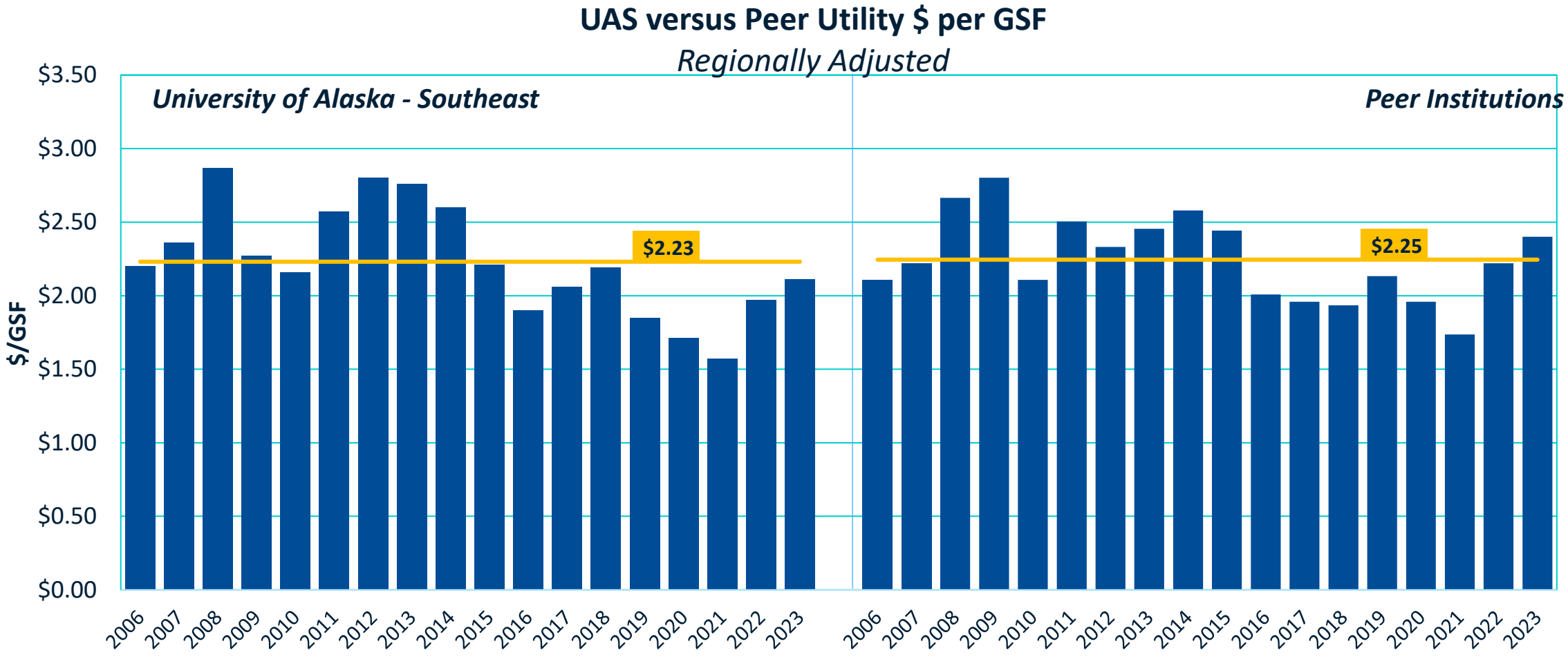
UAS utility expenditures remain aligned with peers



Total Energy Consumption

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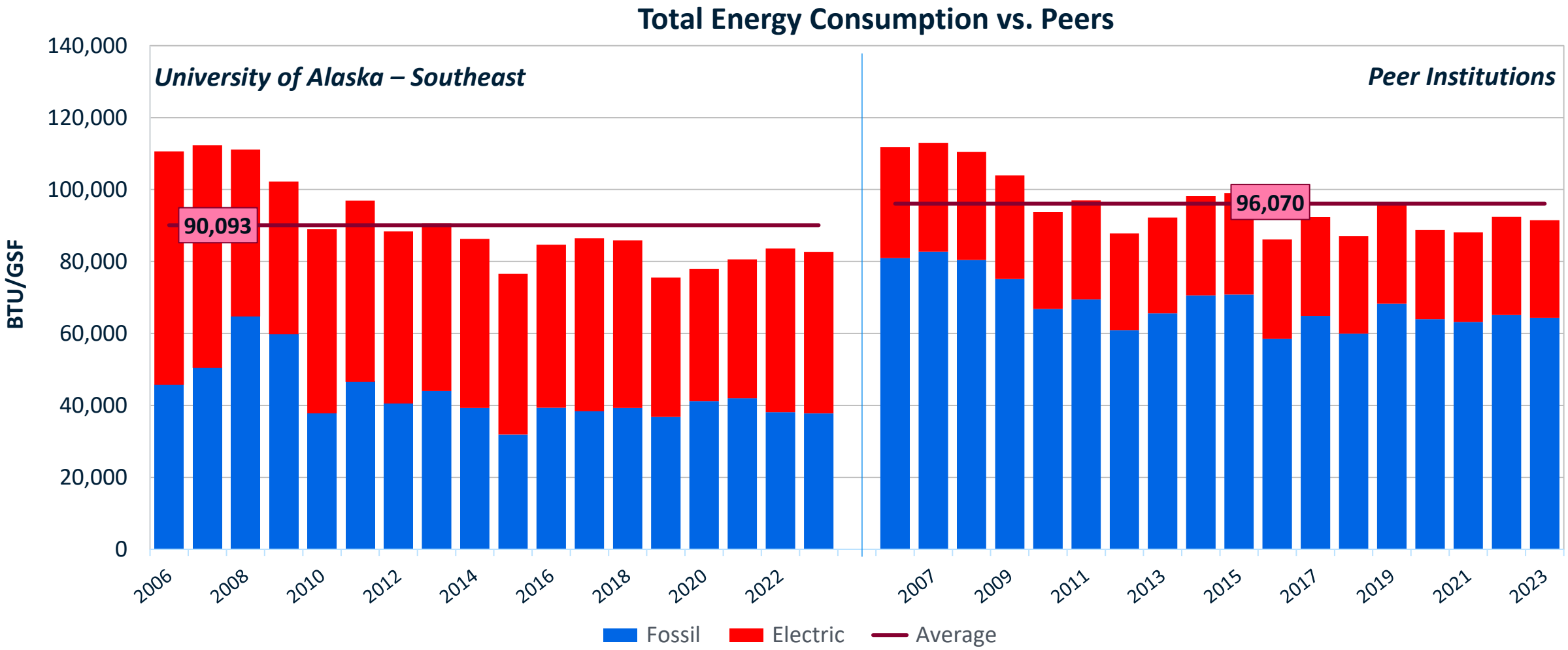
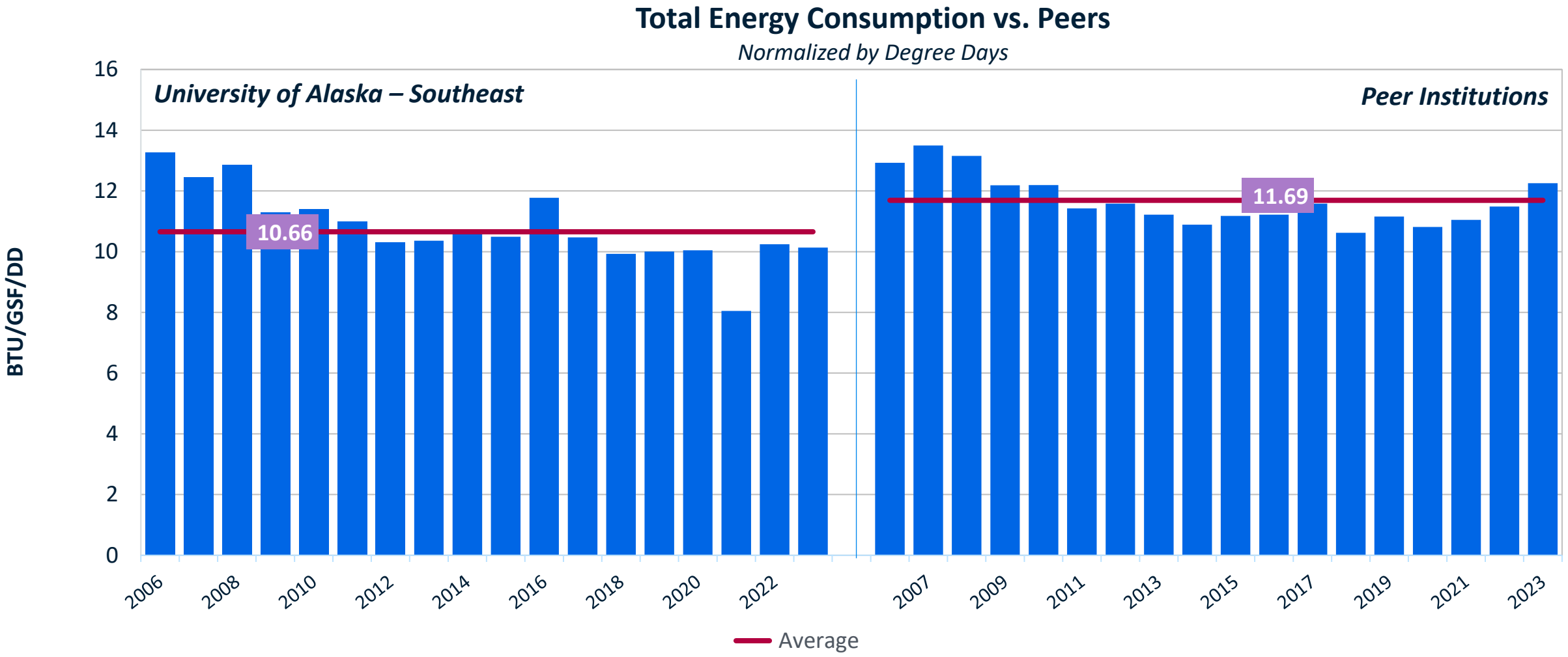
UAS has seen first consumption decrease since FY19, still well below peers



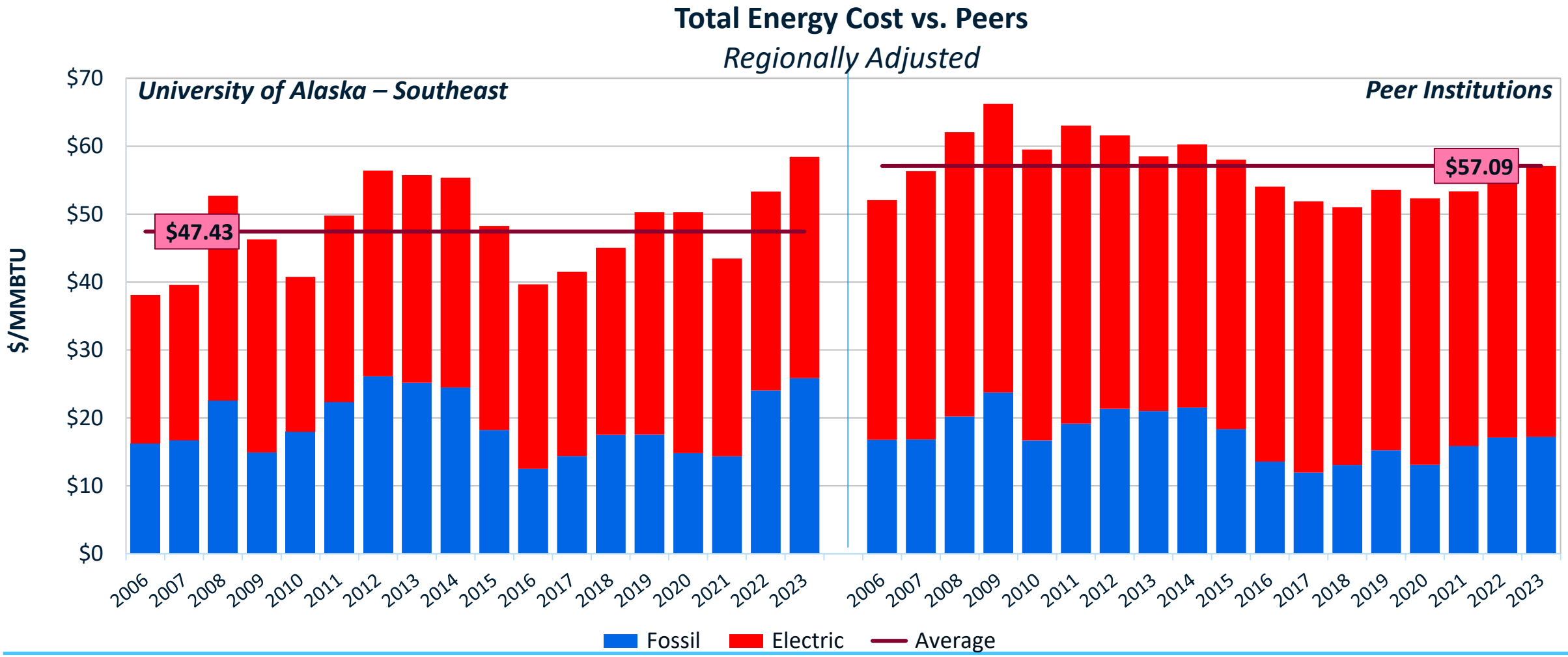
Total Energy Consumption

When normalizing by degree day, UAS' energy consumption remains below peers



Energy Expenses Fluctuate in Consistent Manner

UAS' total energy costs rose above peer average in FY23



Differences in Unit Costs are Growing vs. Peers

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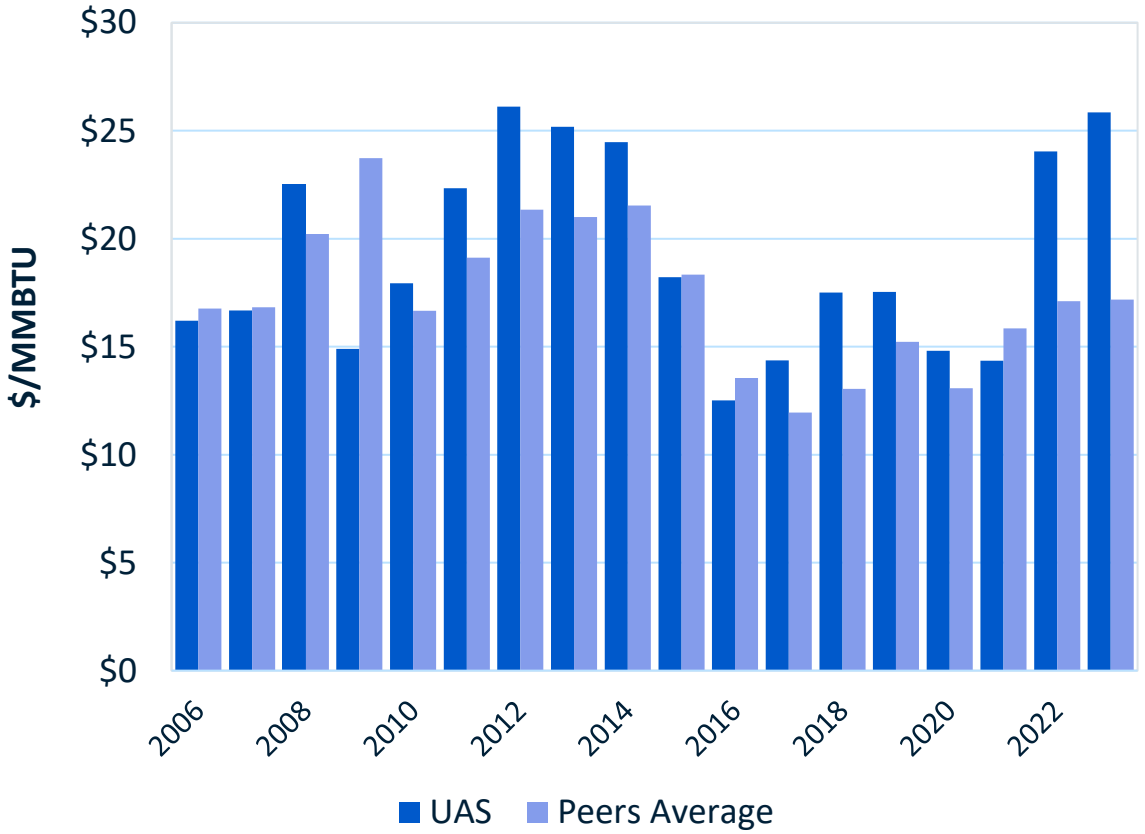
Fossil and electricity unit costs increased, driving total expenditures higher

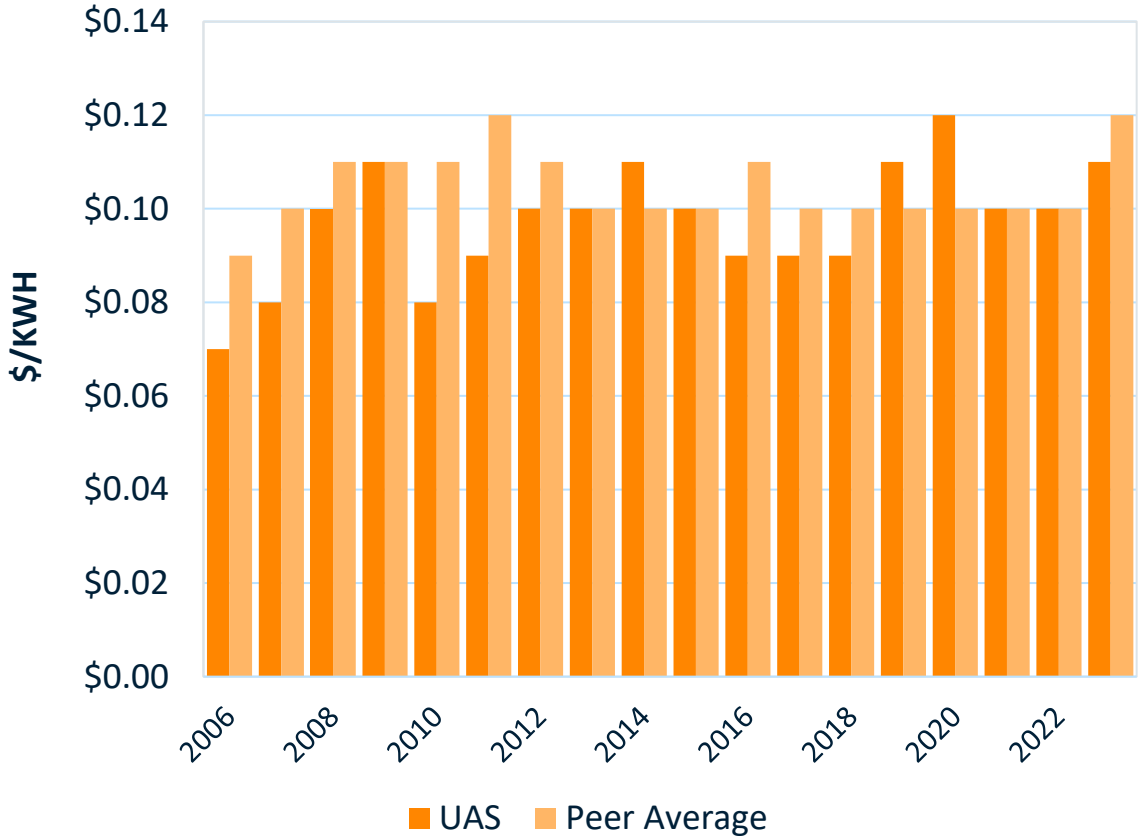
Fossil Fuel Unit Cost

Regionally Adjusted



Electric Unit Cost

Regionally Adjusted



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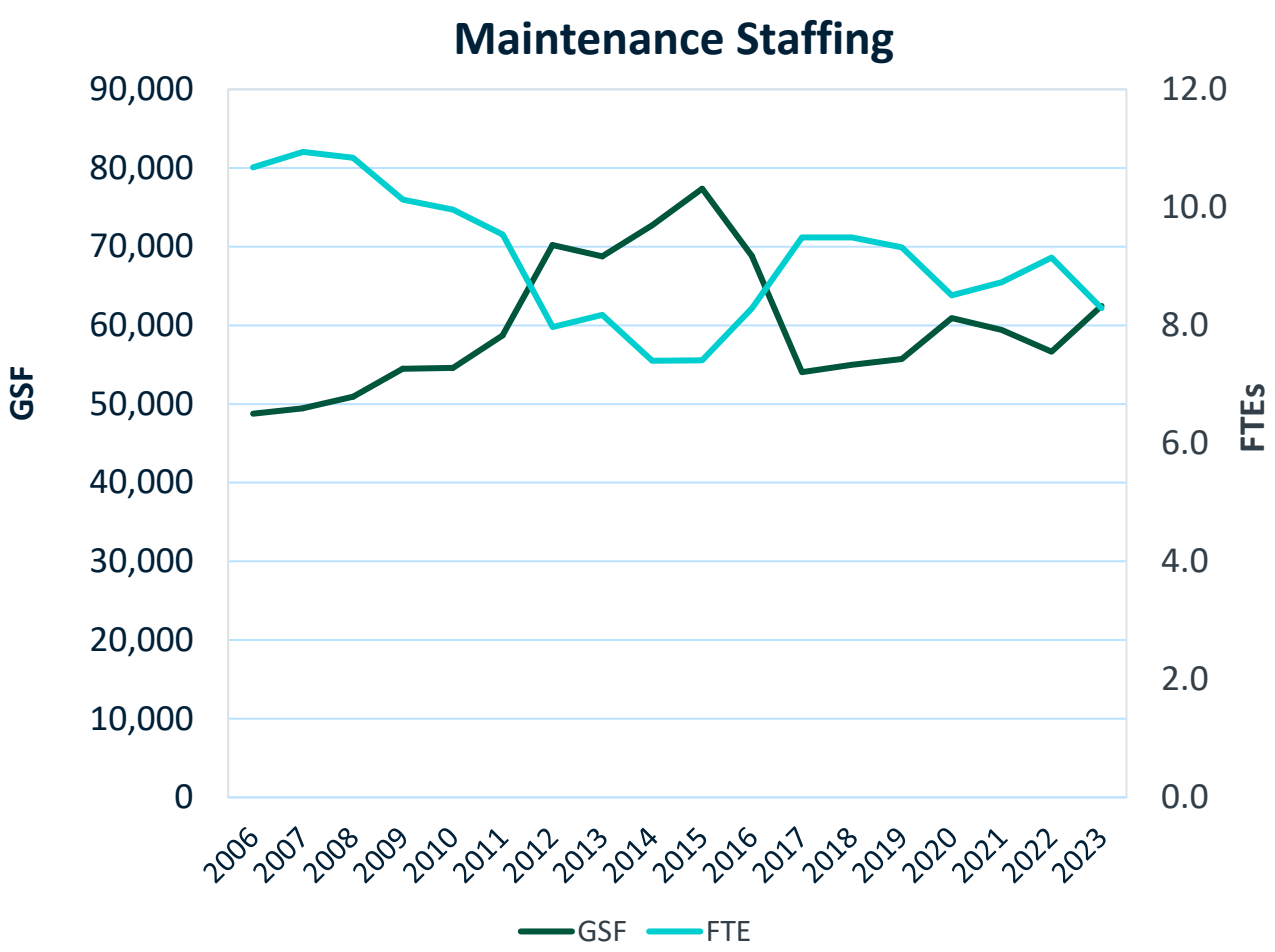
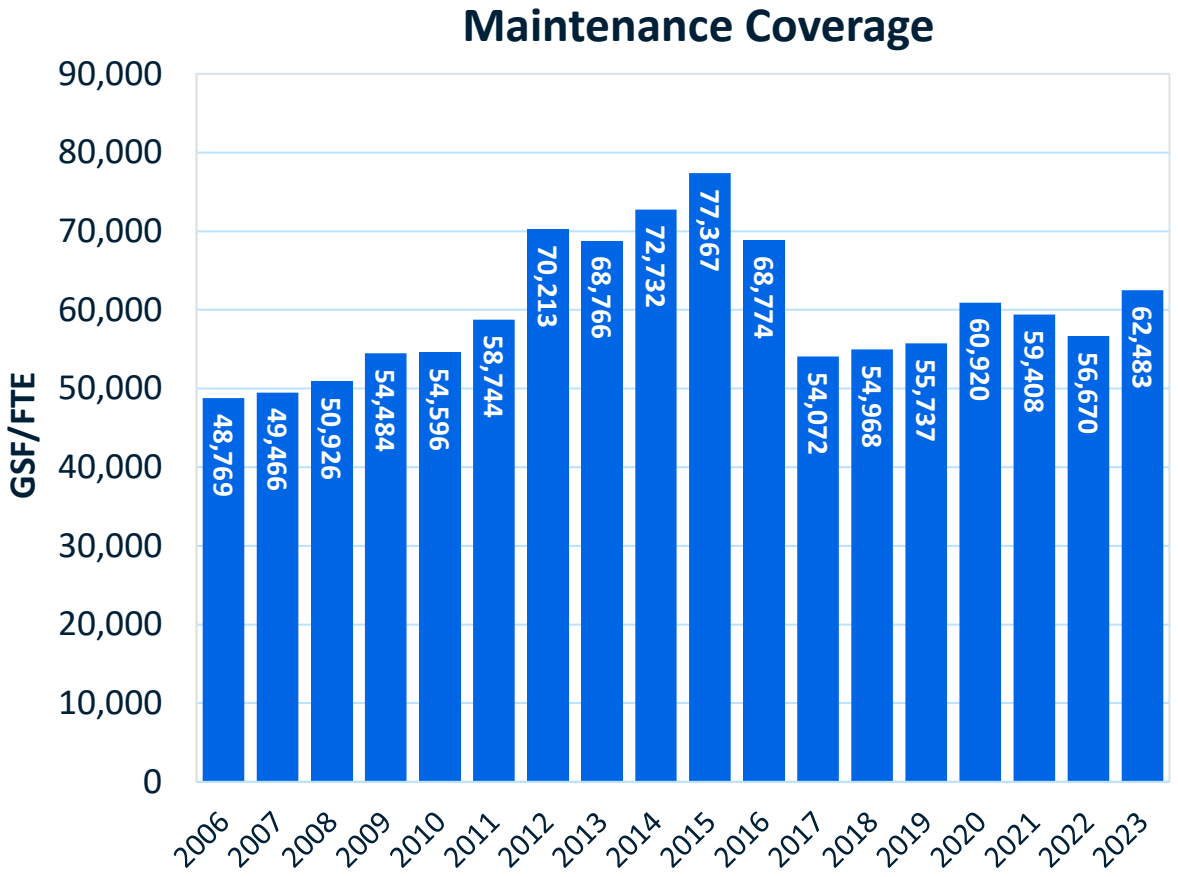
Maintenance Staffing Coverage

UNIVERSITY of ALASKA SOUTHEAST

Coverage ratios increased from FY22, due to attrition in staffing





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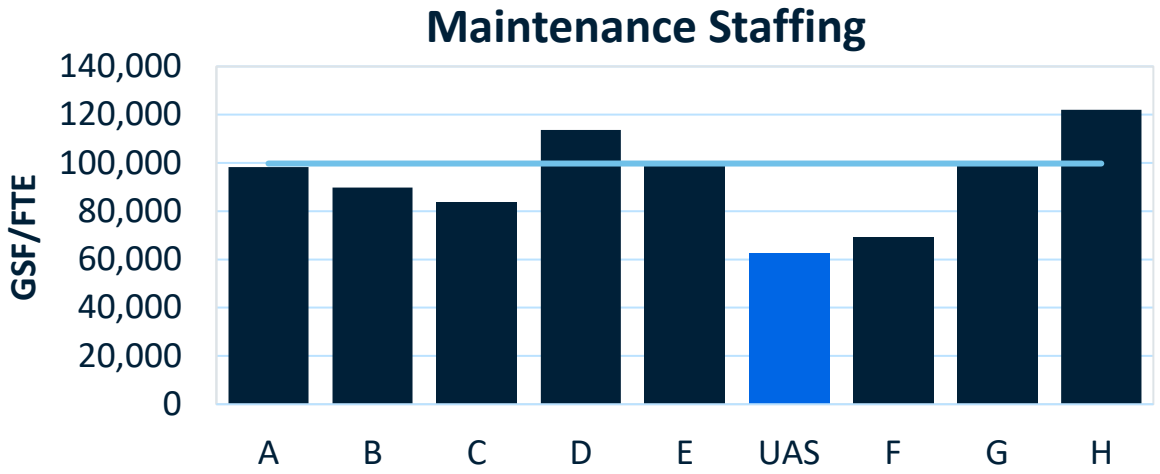
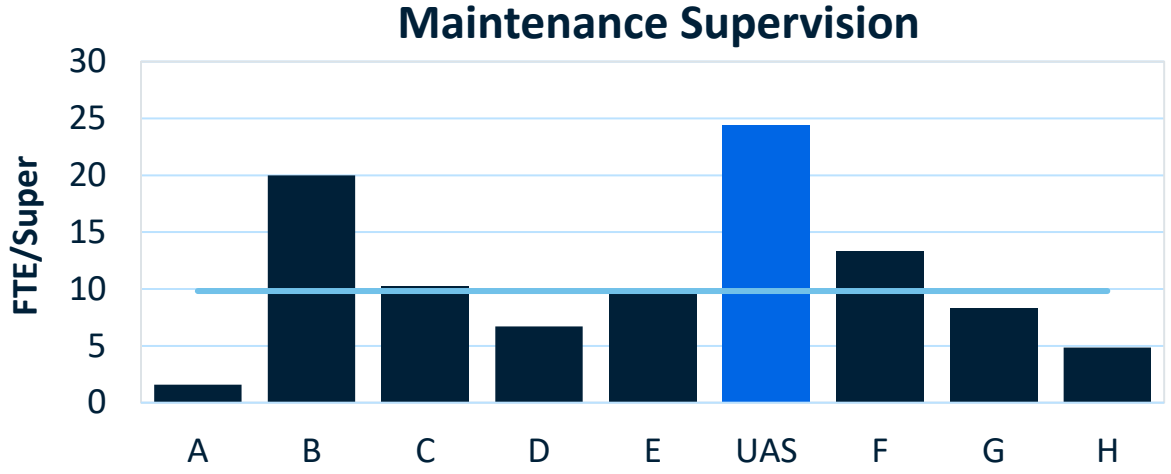
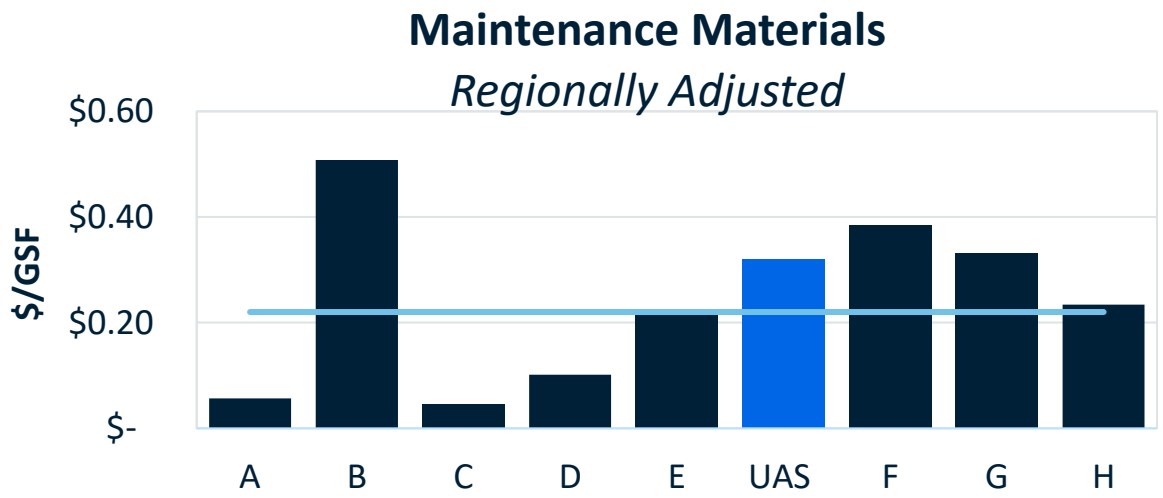
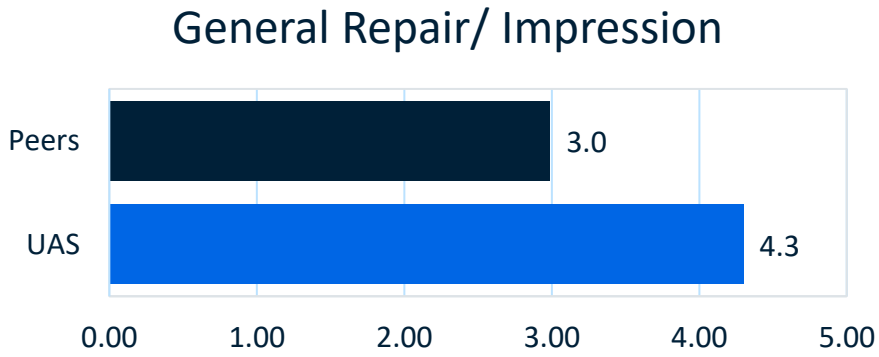
Maintenance Metrics

UAS has fewer maintenance supervisors, but more staff and material spend









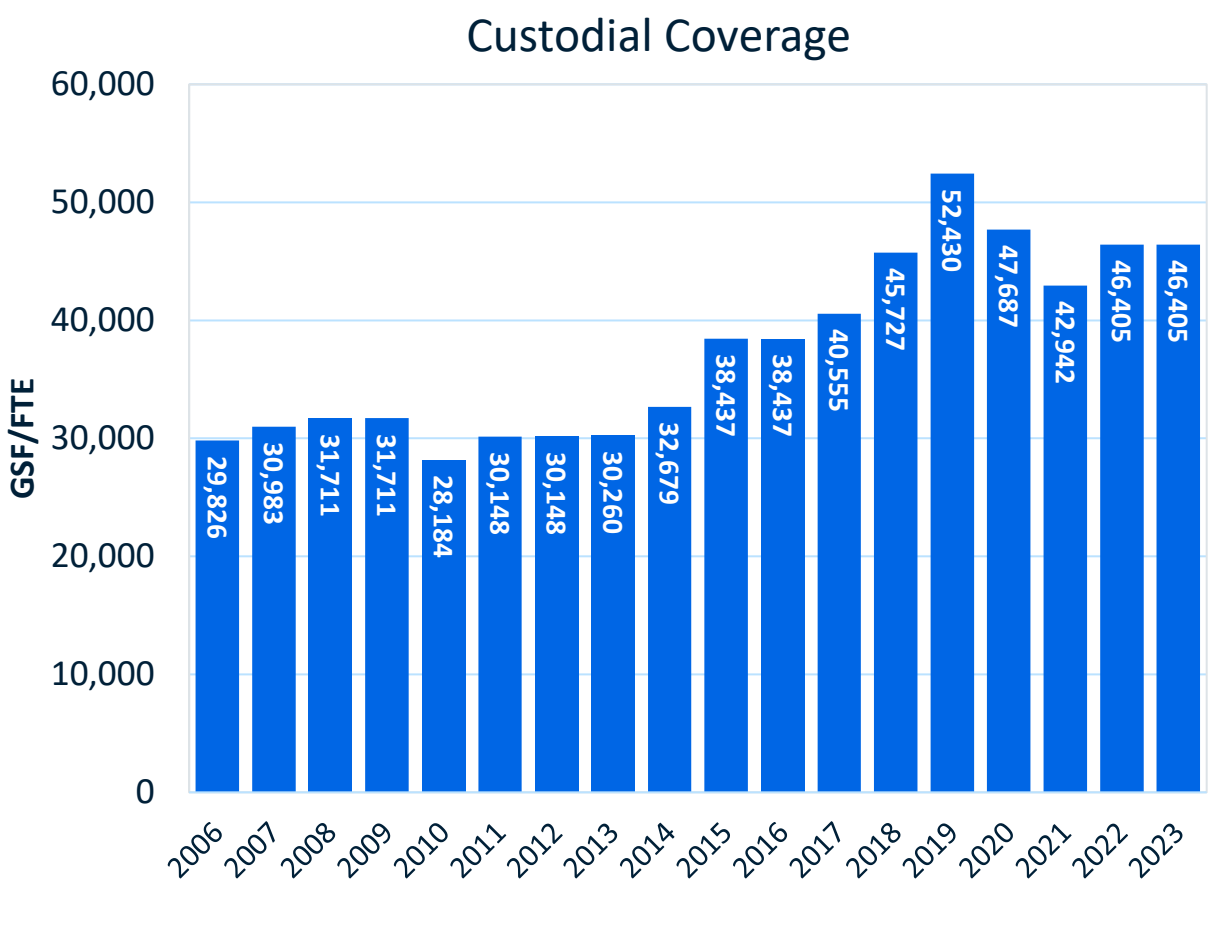
Peer Average

Institutions arranged by Technical Complexity

Custodial Staffing Coverage

UNIVERSITY of ALASKA SOUTHEAST

Custodial staff coverage has returned to FY18 levels



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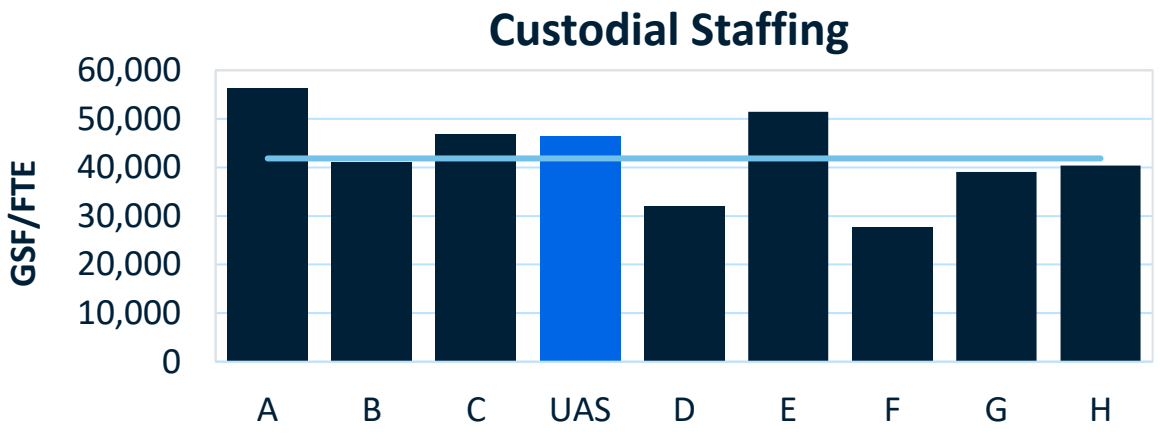
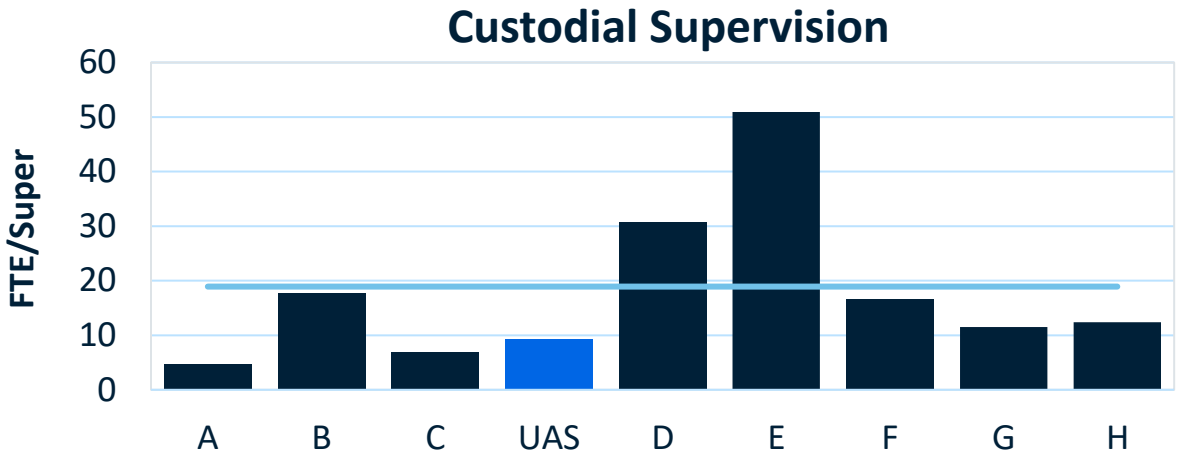
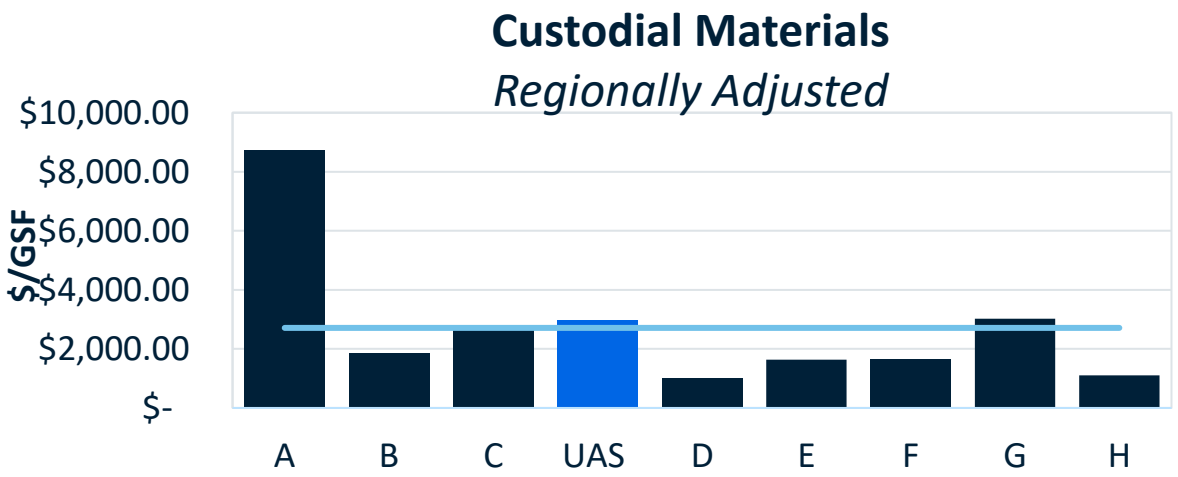
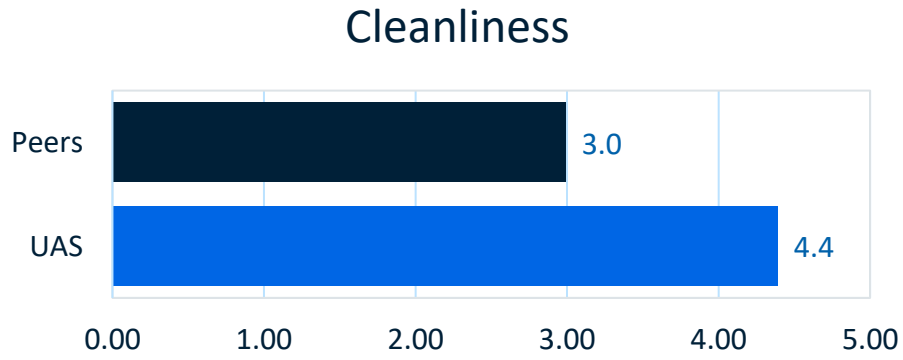
Custodial Metrics

UAS has more custodial supervisors, but custodial staff is responsible for more GSF









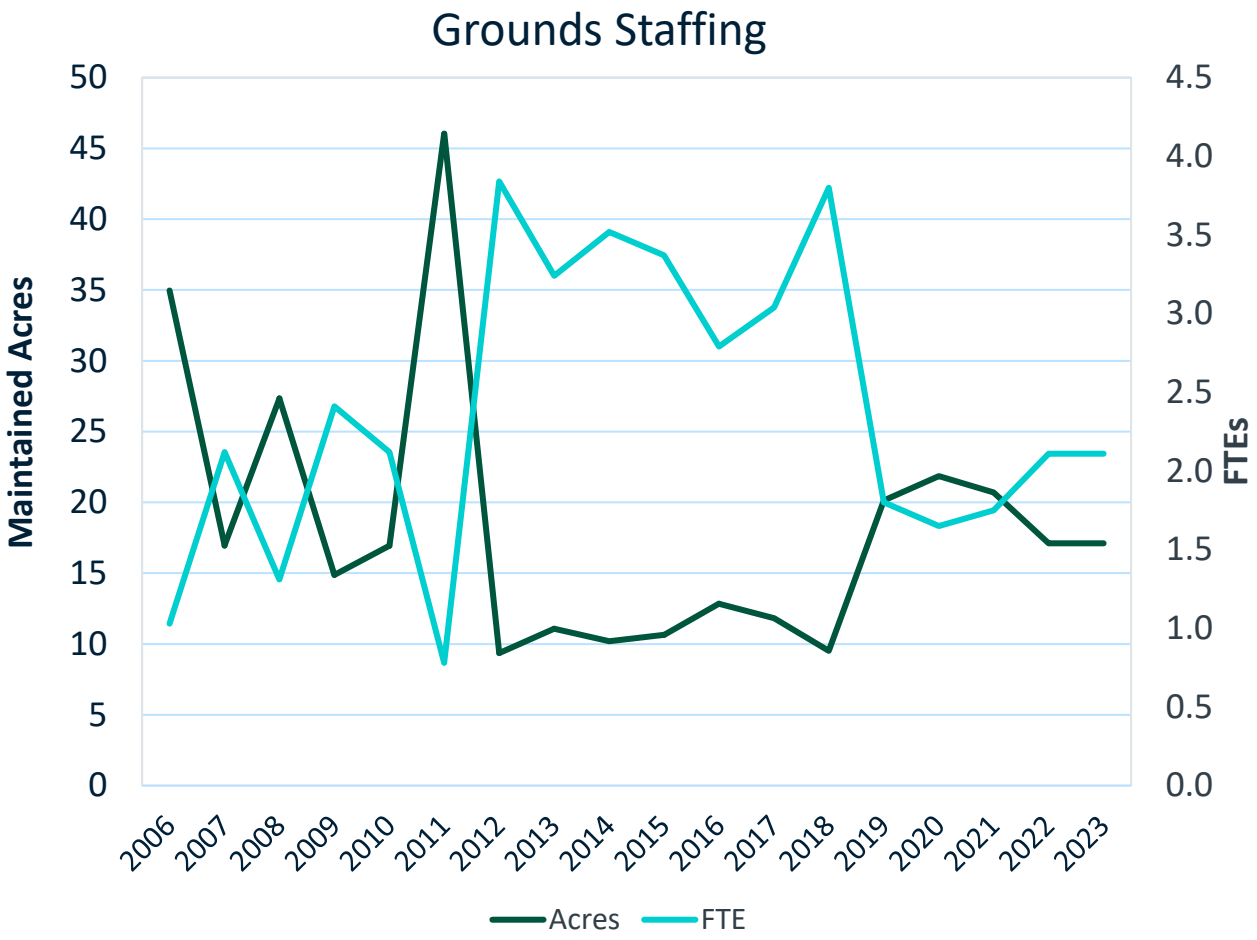
Peer Average

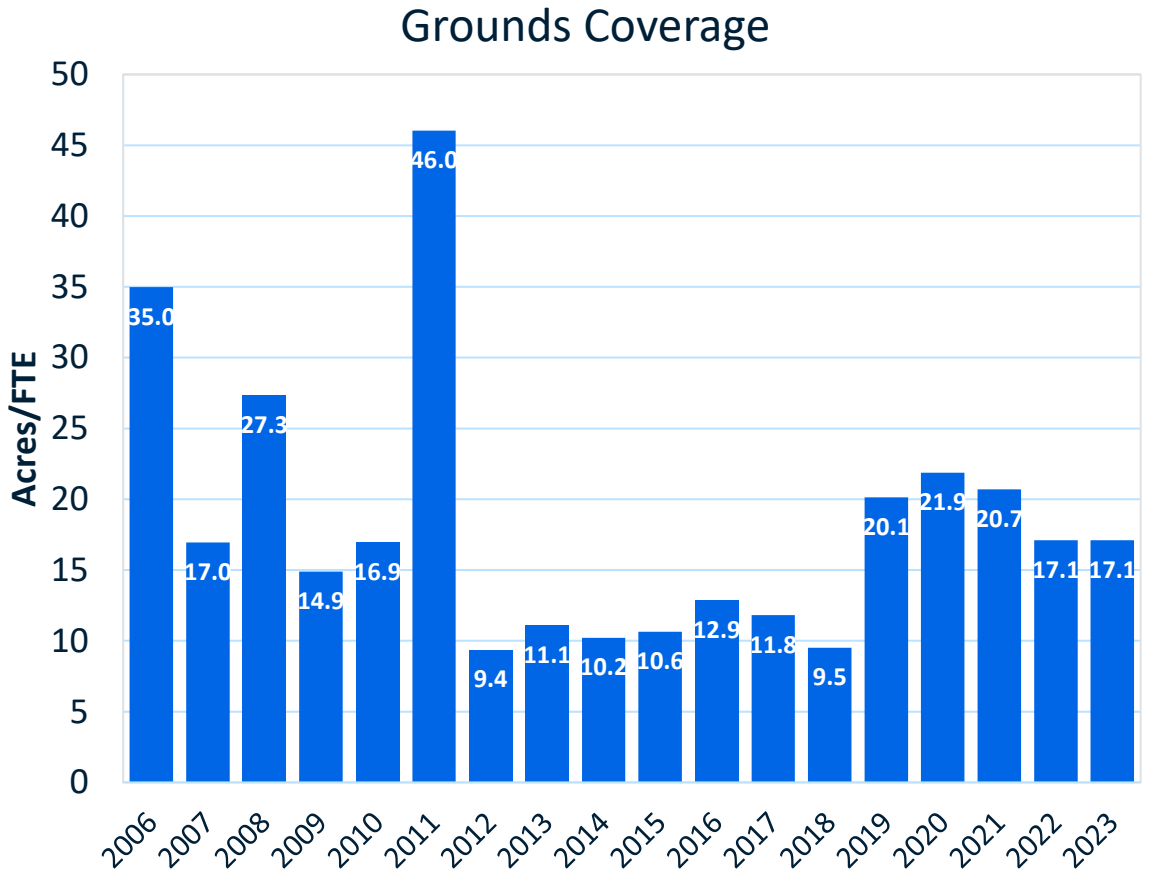
Institutions arranged by Density Rating

Grounds Staffing Coverage

UNIVERSITY of ALASKA SOUTHEAST

Grounds staffing fluctuates with loss or gain of temporary employees





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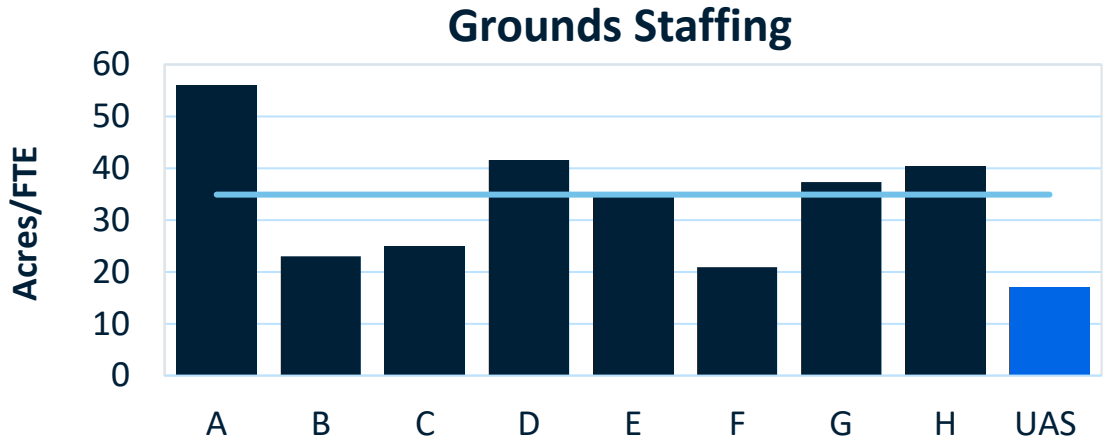
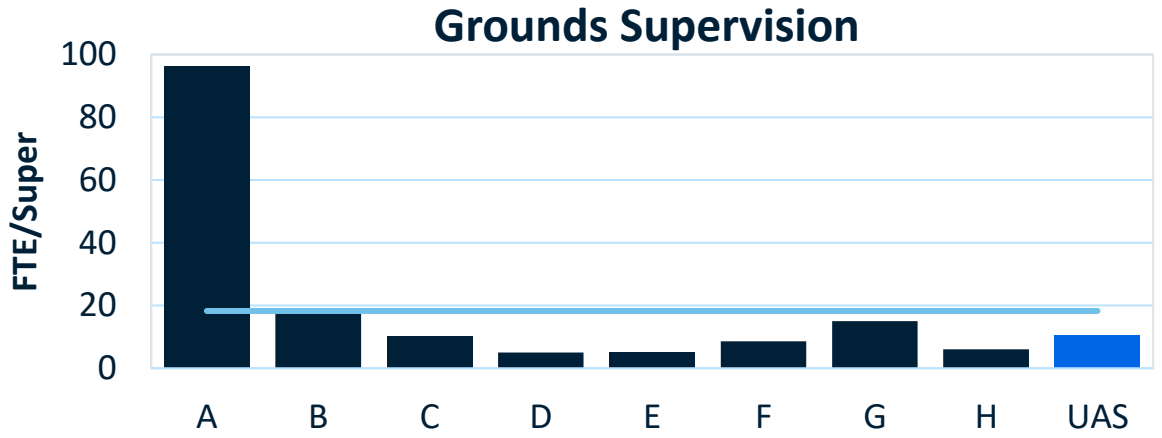
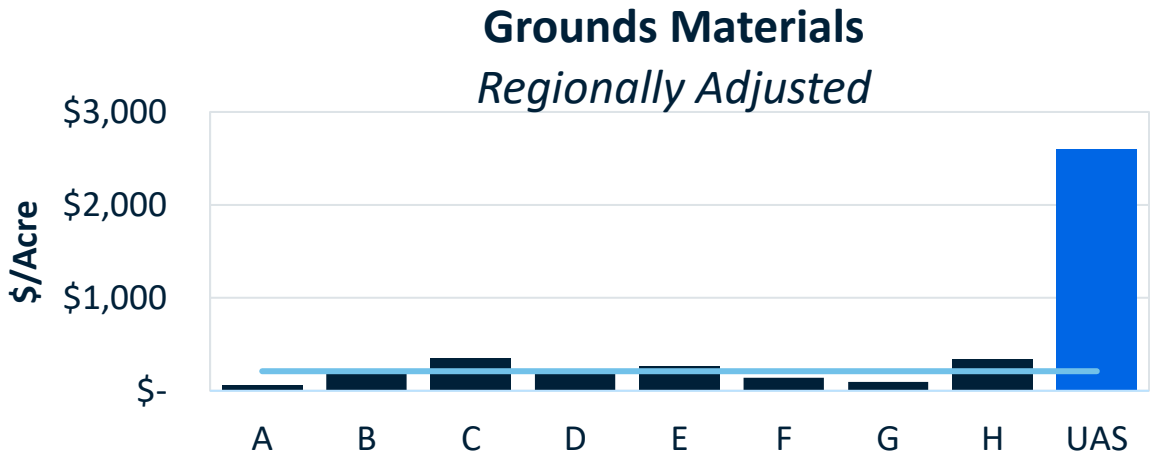
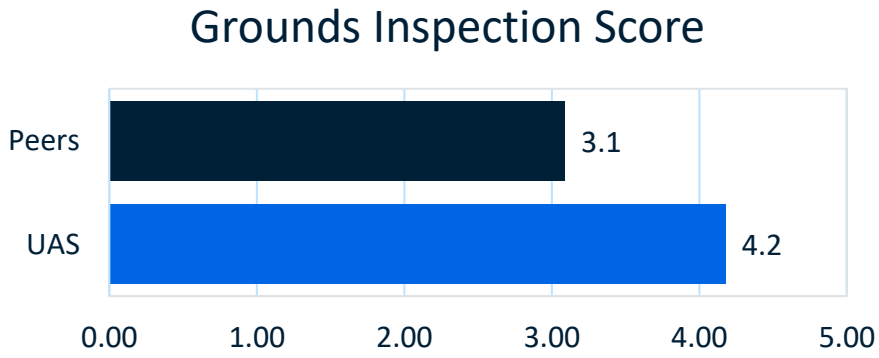
Grounds Metrics

UAS has the highest grounds intensity, which correlates with lower rates of coverage









Peer Average

Institutions arranged by Grounds Intensity

GORDIAN®
Building knowledge

Questions & Discussion