



FY23 Facilities Benchmarking & Analysis

University of Alaska Anchorage

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University of Alaska Anchorage:

Anchorage Campus

Comprehensive Facilities Intelligence Solutions



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

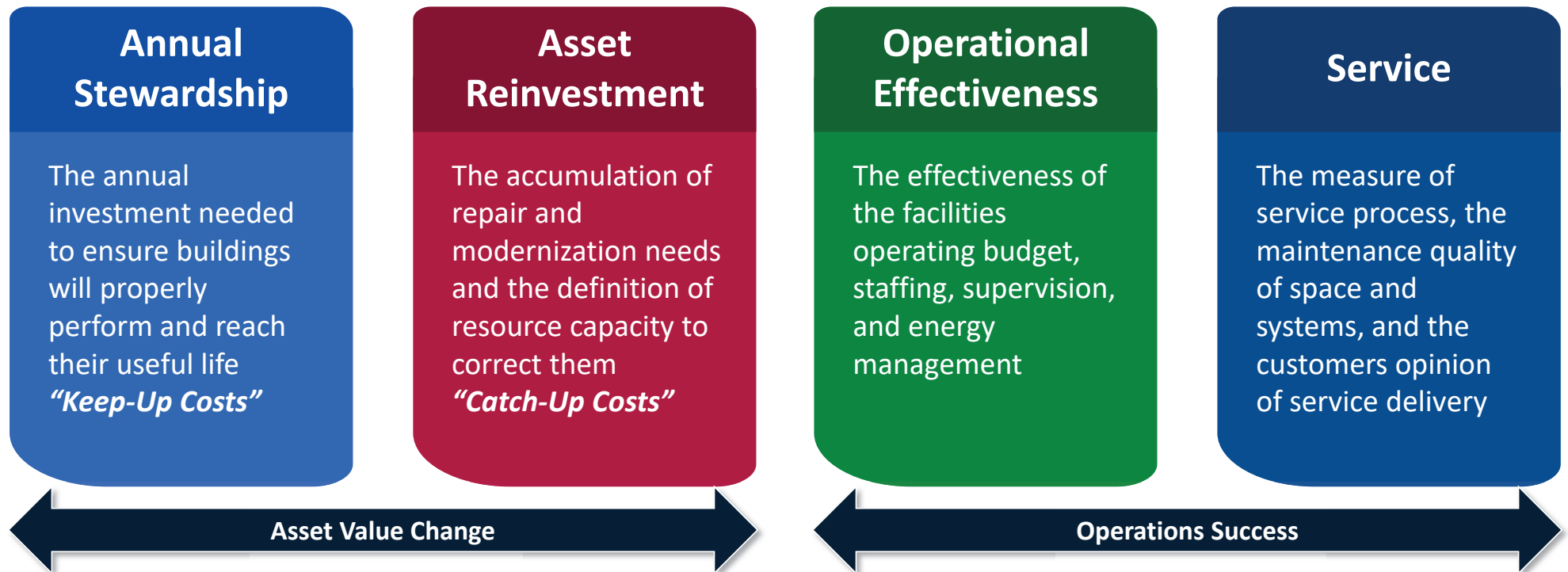


SUSTAINABILITY SOLUTIONS

Measure and improve environmental stewardship

A Vocabulary for Measurement

Facilities Measurement, Benchmarking & Analysis



University of Alaska – Anchorage Peer Institutions

Return on Physical Assets (ROPA+) includes all space at UAA totaling 3.32 Million GSF

Facilities Peer Institutions	Location
Portland State University	Portland, OR
The University of Maine	Orono, ME
University of Alaska Fairbanks	Fairbanks, AK
University of Iowa	Iowa City, IA
University of Missouri – Kansas City	Kansas City, MO
University of Missouri – St. Louis	St. Louis, MO
University of Southern Maine	Gorham, ME
West Chester University of PA	West Chester, PA



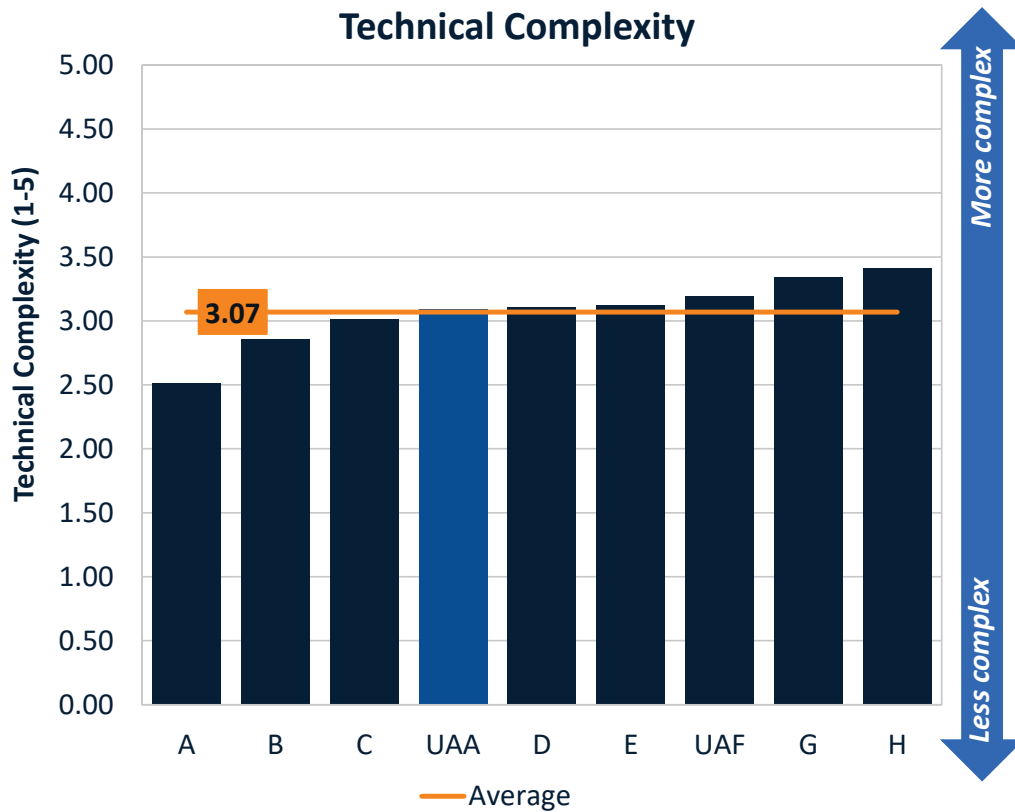
Comparative Considerations
 Size, technical complexity, region, geographic location, and setting are all factors included in the selection of peer institutions

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Space Profile

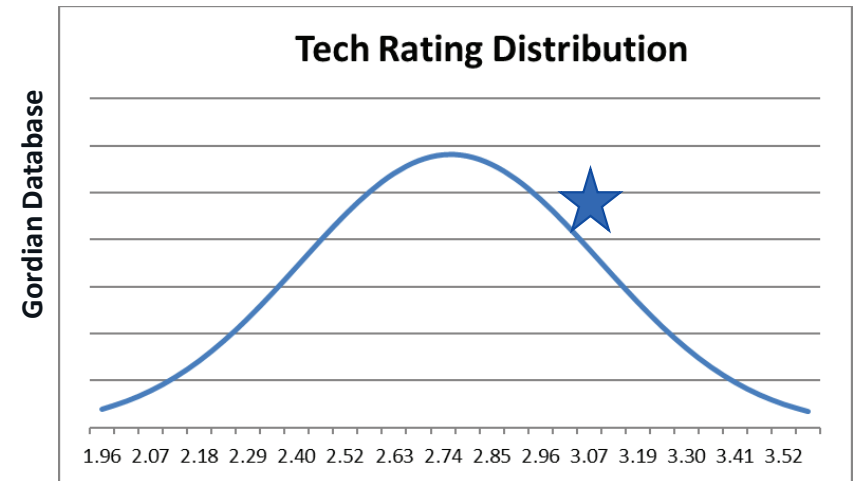
Anchorage Campus

Anchorage Complexity is Similar to Peers



Areas Impacted by Tech Rating

Energy Consumption	Maintenance Staffing	Replacement Values	Stewardship Targets	Operational Demand
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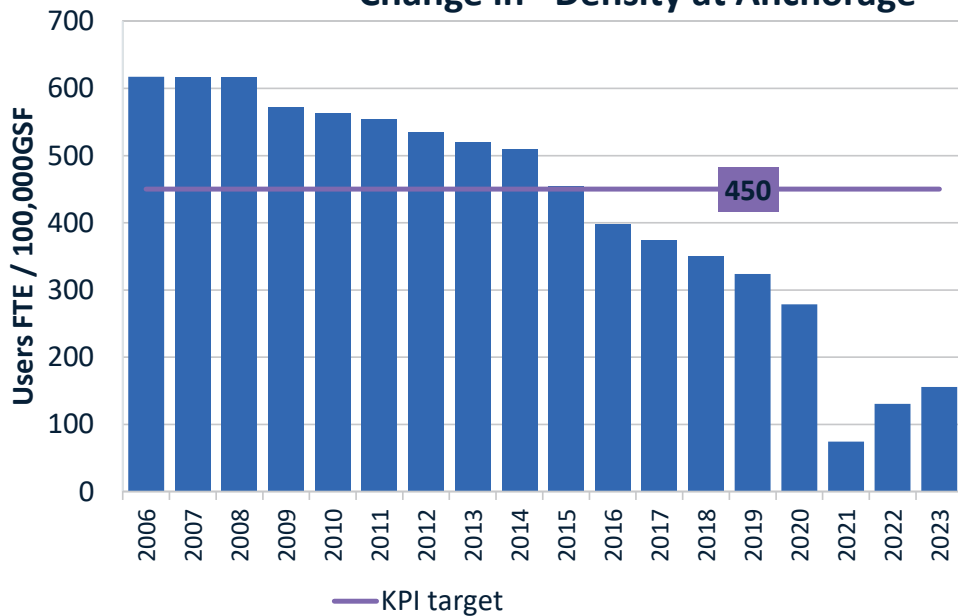


Institutions arranged by Technical Complexity

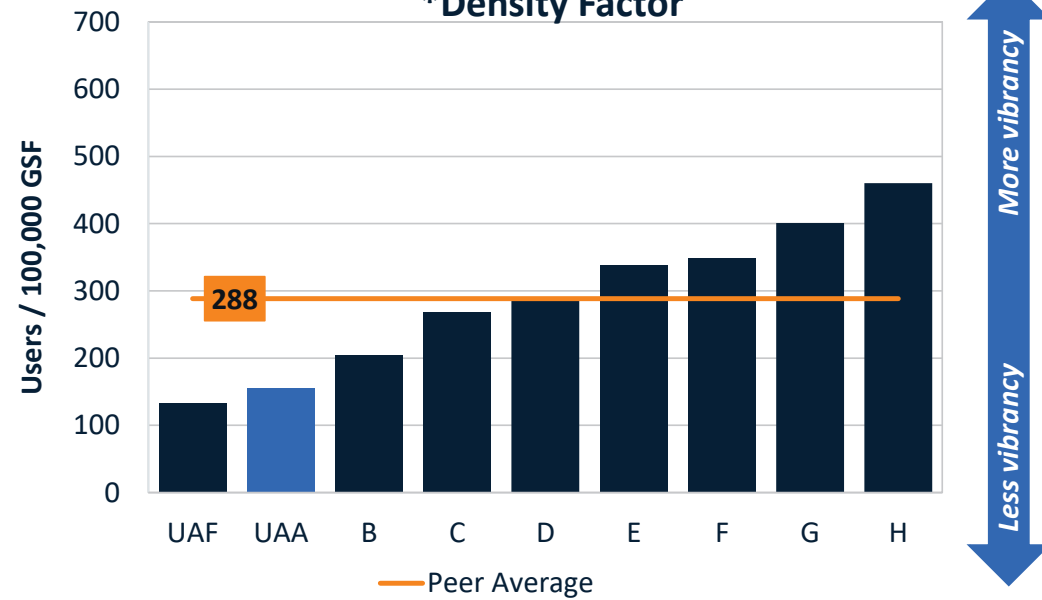
Density is Still Lower Overall But Trending Upward

Growing on-campus trend continues, yet density is still half of pre-pandemic levels

Change in *Density at Anchorage



*Density Factor



Areas Impacted by Density Factor

- Wear and Tear on Space
- Custodial Operations
- Energy Demand

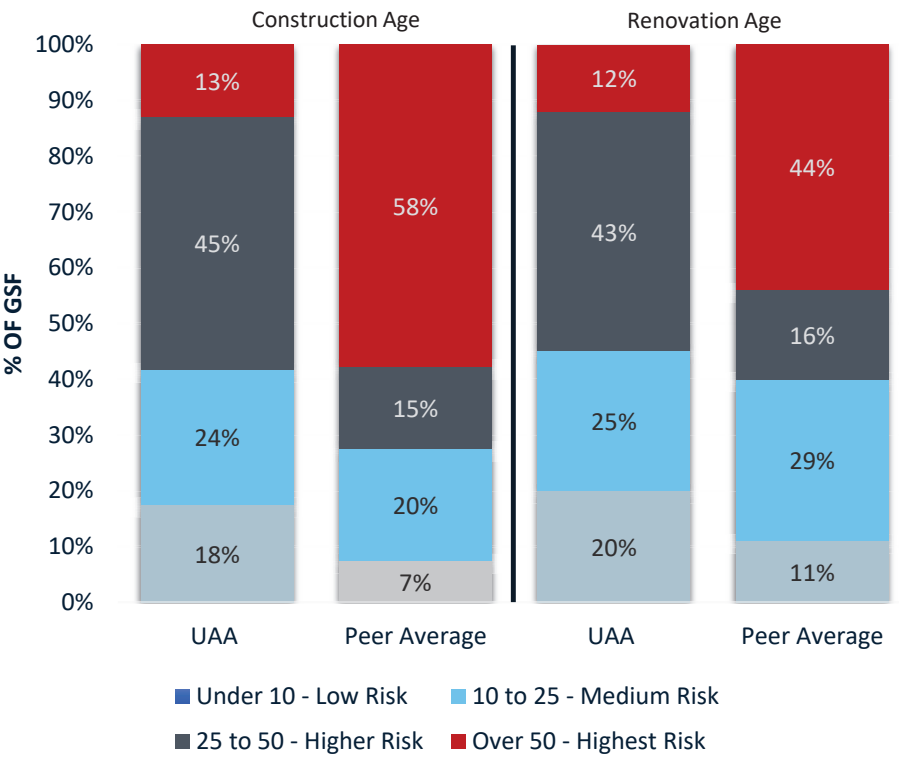
*Density is calculated using On-Campus Student FTEs, Faculty FTE, and Staff FTE

Institutions arranged by Density Factor

Recent Construction and Renovations Reduce Age

Peers have primarily reduced campus age through renovations, not construction

Campus Age by Category

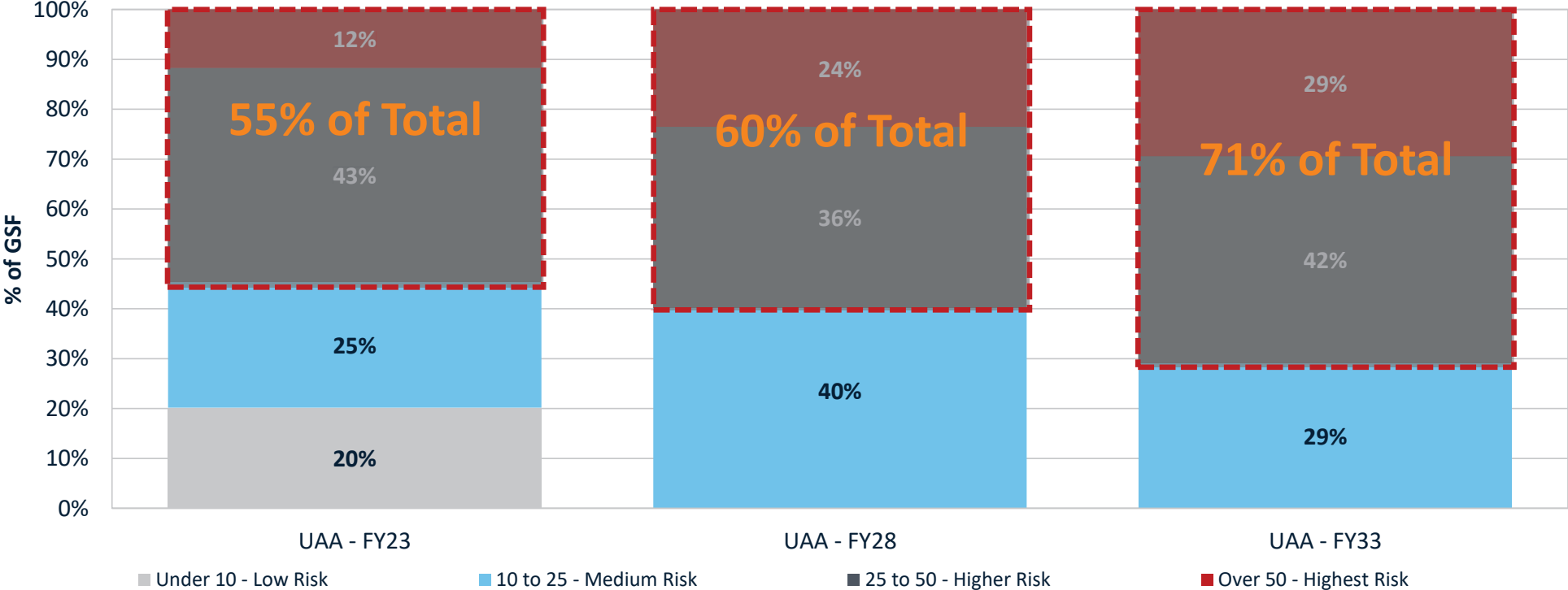


	Operational Demands:	Capital Risk:
Over 50	React as Needed: Issues in components past the end of their lifecycles will demand reactive maintenance.	Highest Risk: Life cycles of major components past due – end of building life cycle approaching.
25-50	Balance PM and Reactive Maintenance: Younger components 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.

Risk Exposure Projected to Increase

Space over 25 years old currently represents more than half of campus GSF

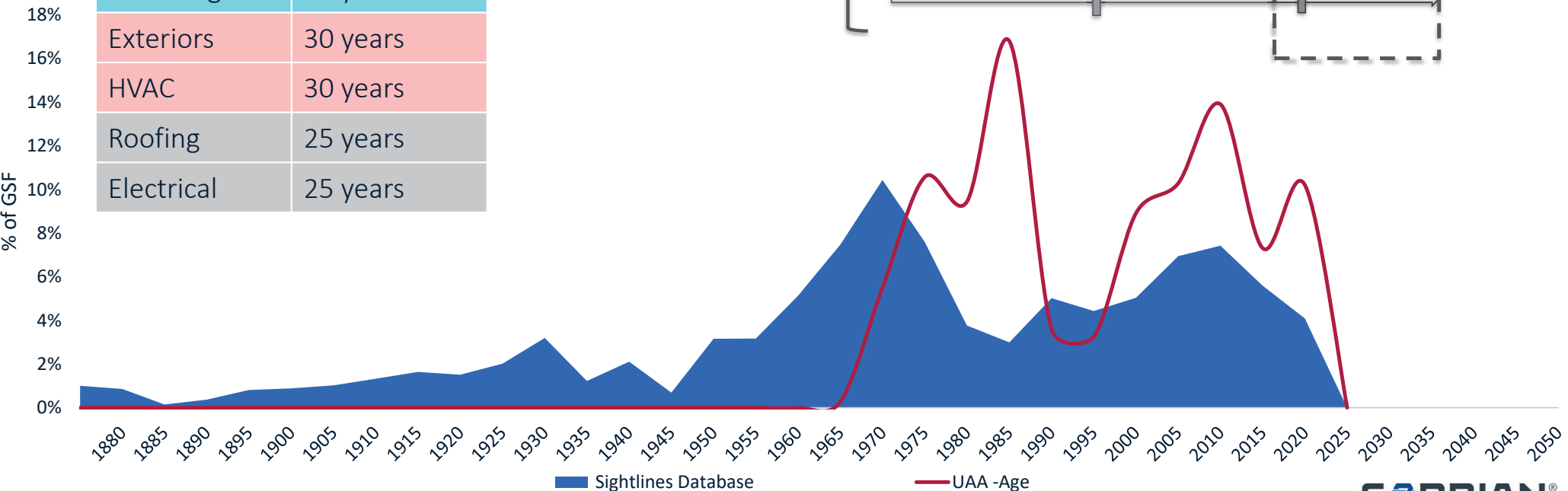
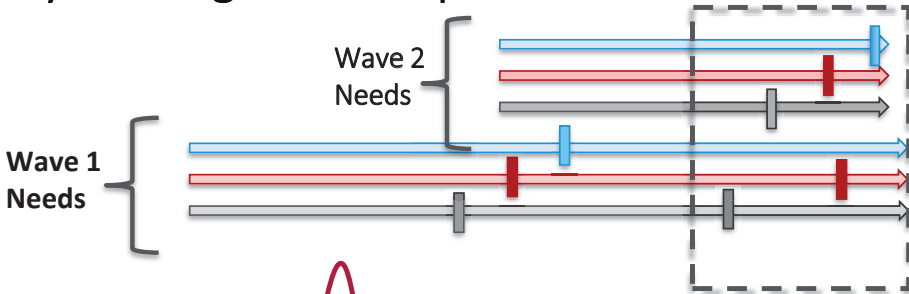
Campus Renovation Age by Category



UAA Has two Distinct Waves of Construction

As UAA facilities age, 1st and 2nd wave lifecycles begin to compete for resources

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

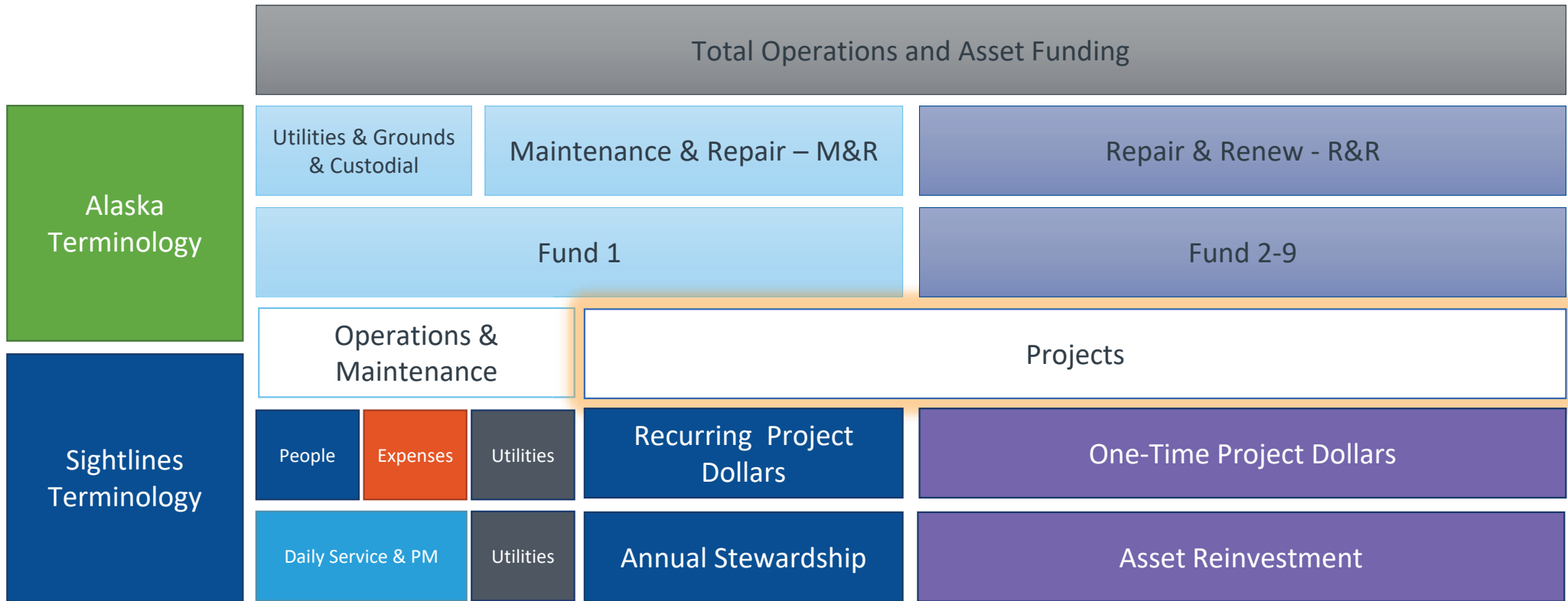




Capital Profile

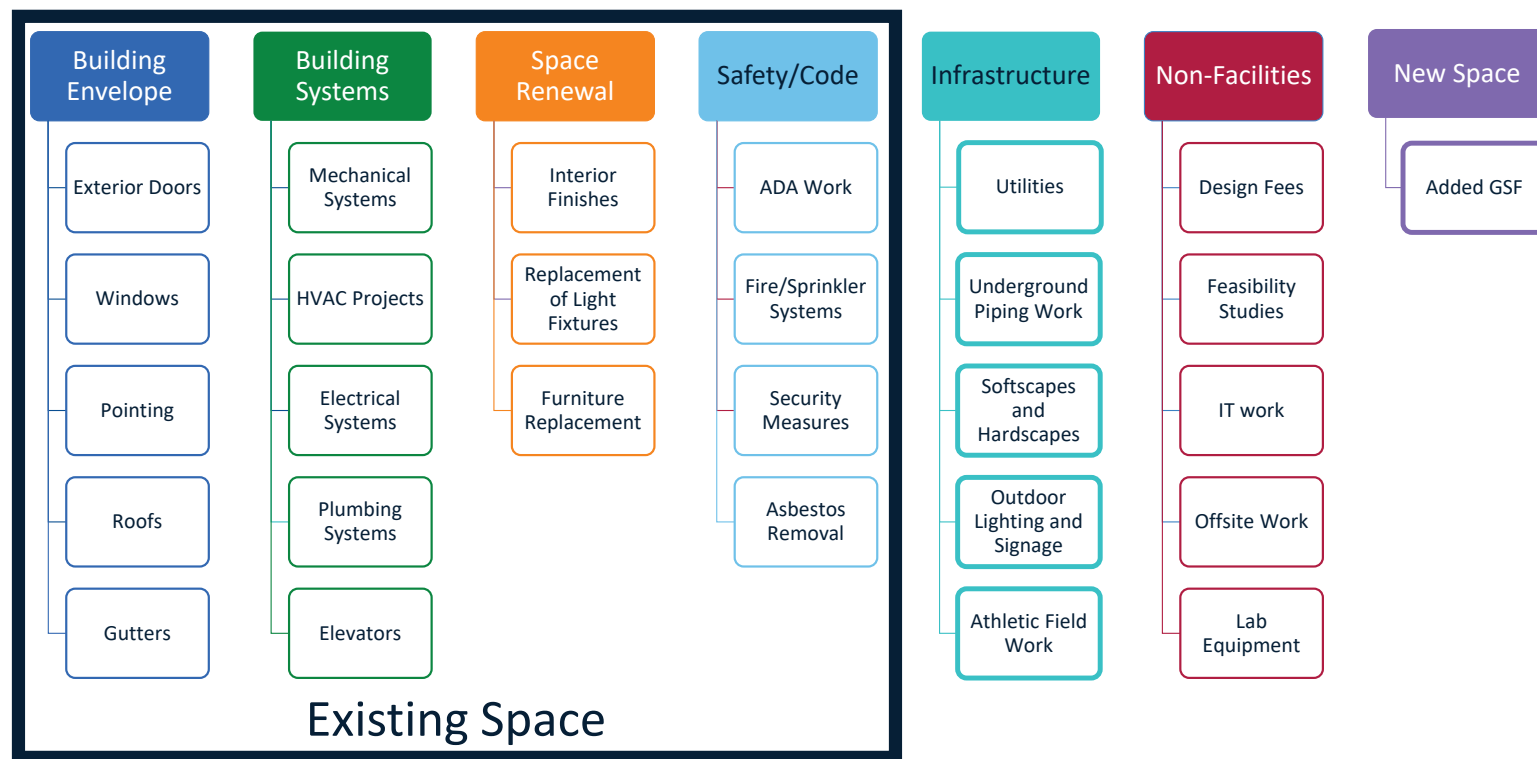
Anchorage Campus

Capital Funding Sources

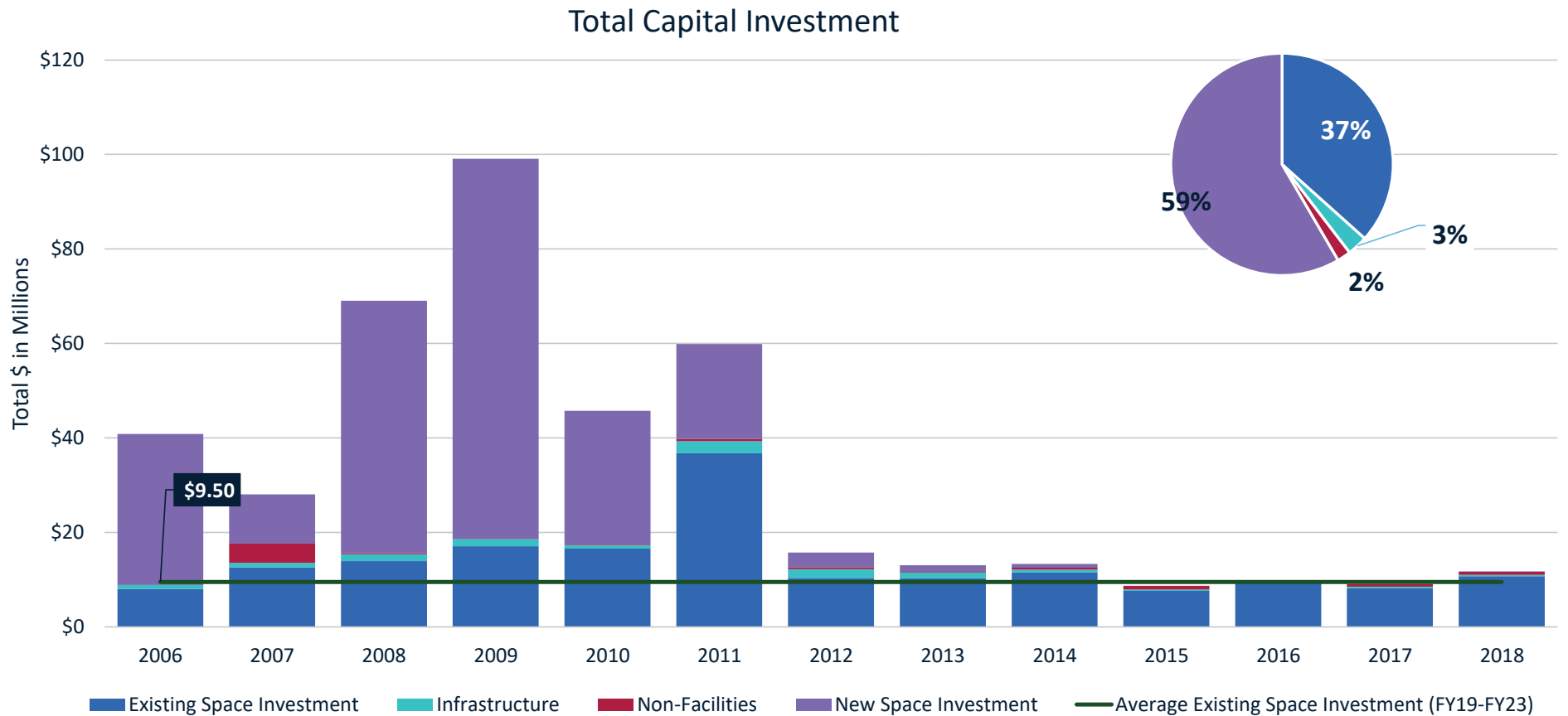


Sightlines Package Breakouts

Projects are classified by the category of need they are addressing on campus



UAA Should Invest More into Existing Space

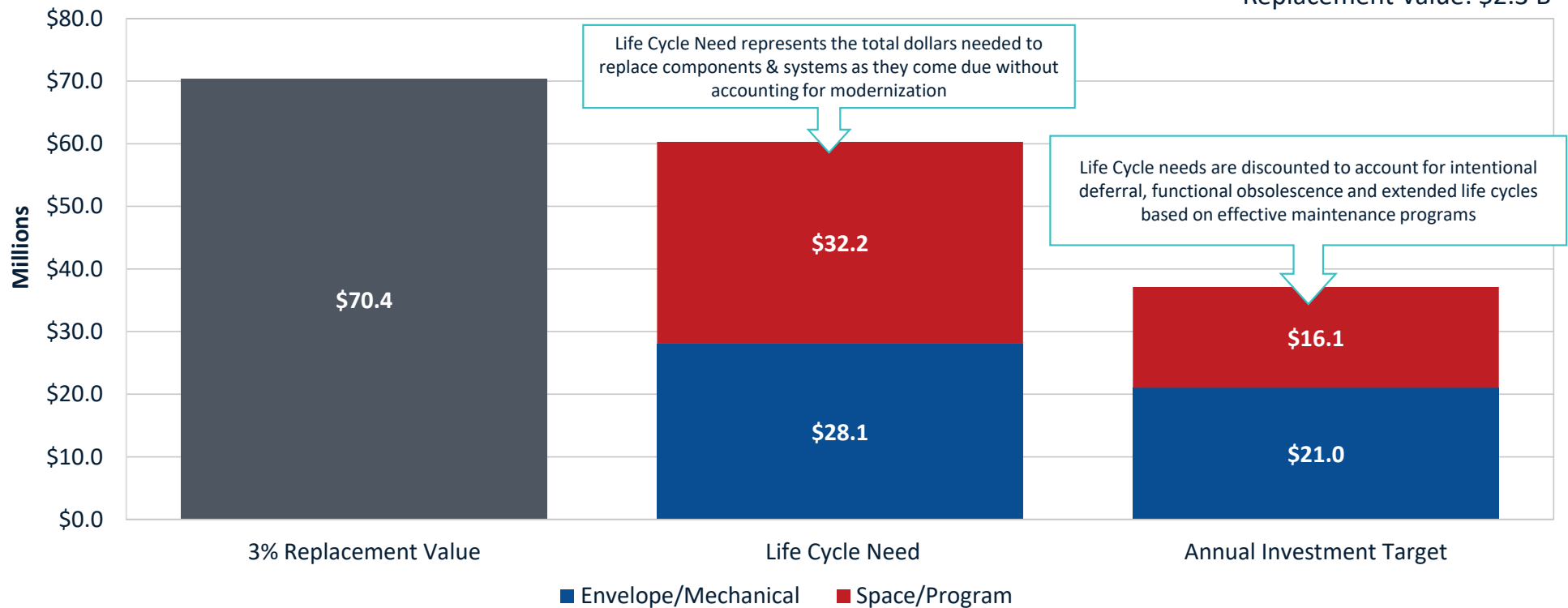


Annual Investment Target at UAA, Institution Wide

Annual Funding Target: \$37.1 M

FY23 Annual Investment Target

Replacement Value: \$2.3 B

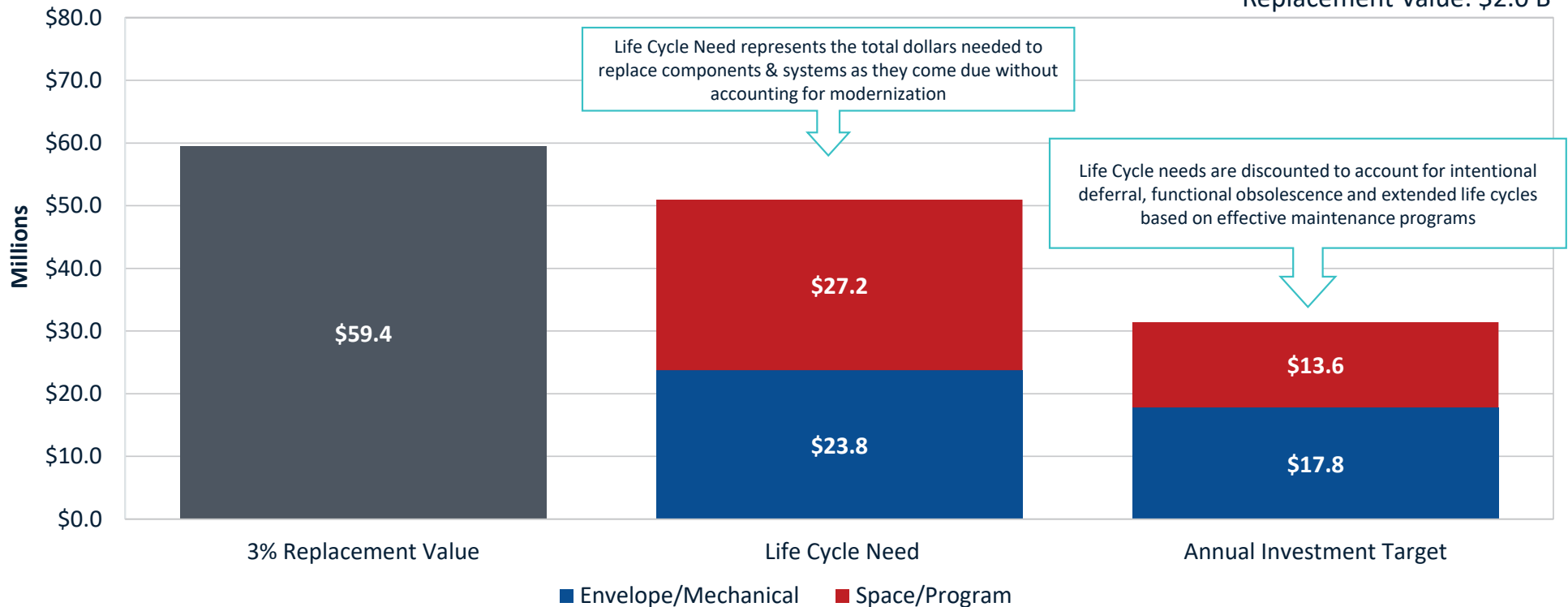


Annual Investment Target at Anchorage Campus

Annual Funding Target: \$31.4 M

FY23 Annual Investment Target

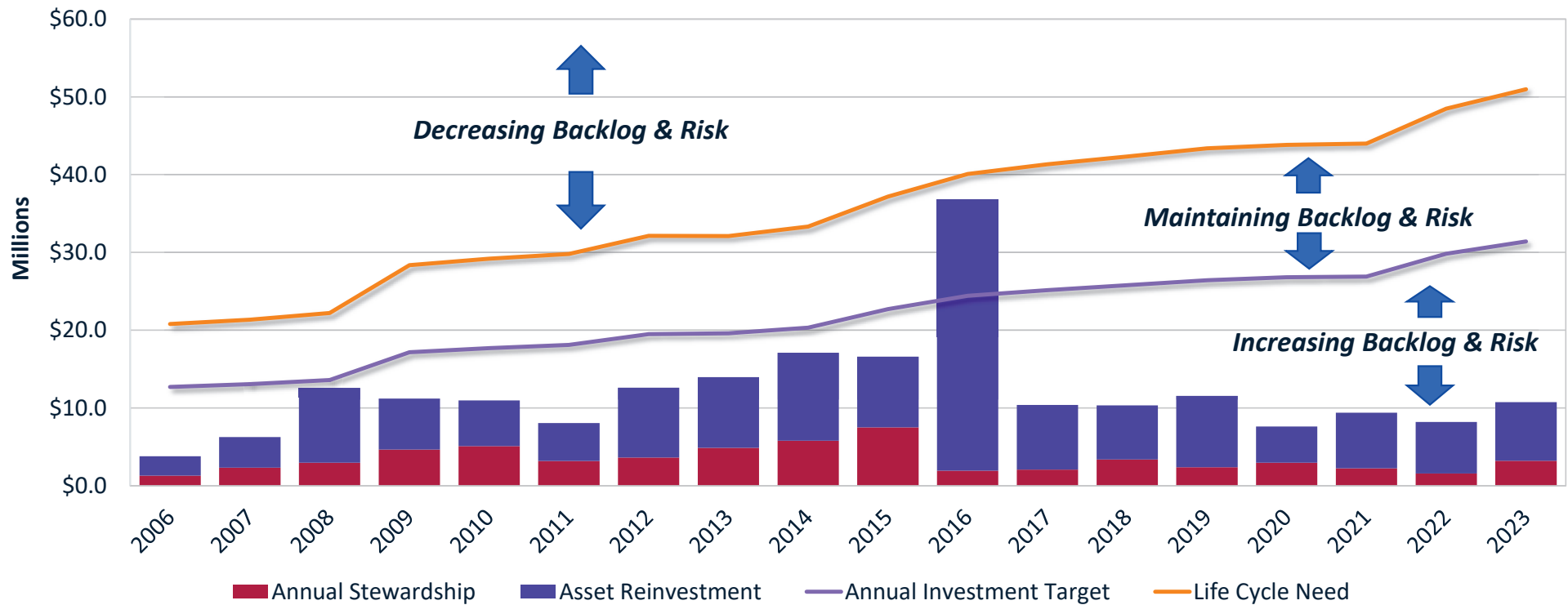
Replacement Value: \$2.0 B



Capital Spending Levels at Anchorage Don't Keep Up

In 18 years of captured data, the annual investment target has been missed 17 times

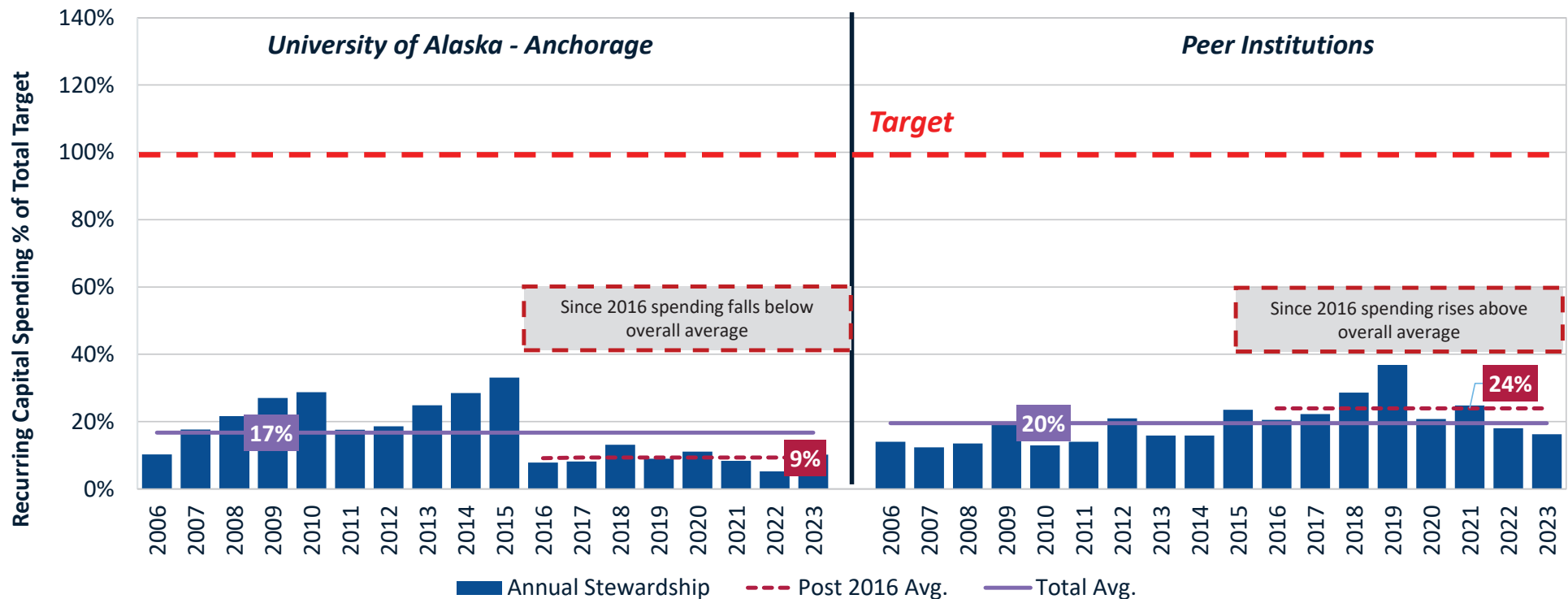
Total Capital Investment vs. Funding Target



Annual Stewardship has Diminished in Recent Years

AS funds have averaged 9% of target since 2016, Peers AS funding reaches 24% of target during same period

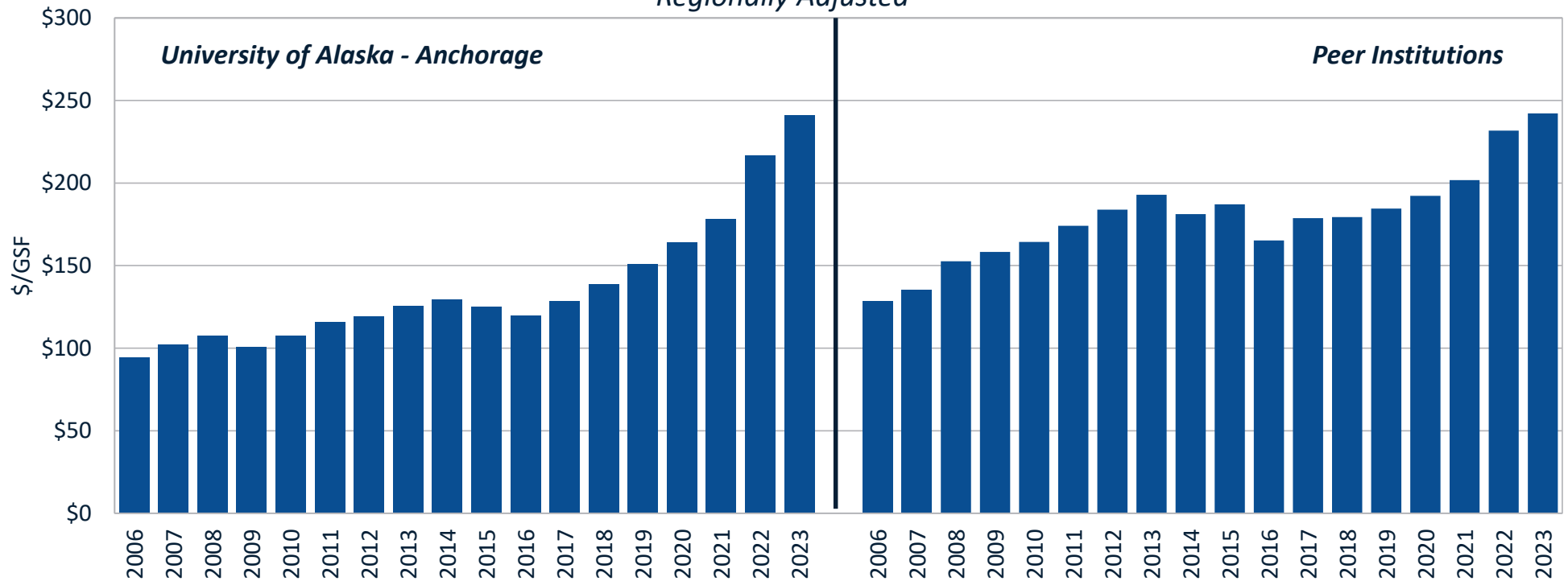
Total Recurring Capital Spending as a Percent of Funding Target



Total Need Grows as Funding Decreases

UAA has seen AR needs increase faster than peers since FY16 due to lack of investment

Total Asset Reinvestment Need \$/GSF
Regionally Adjusted

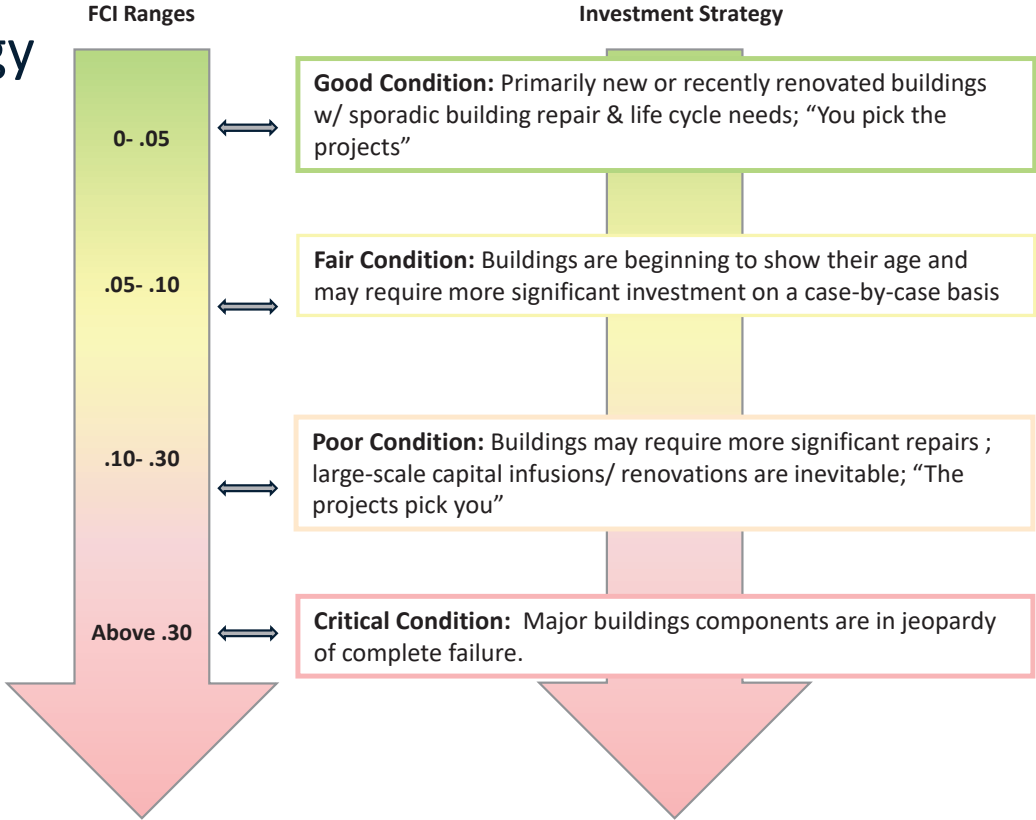


Facilities Condition Index

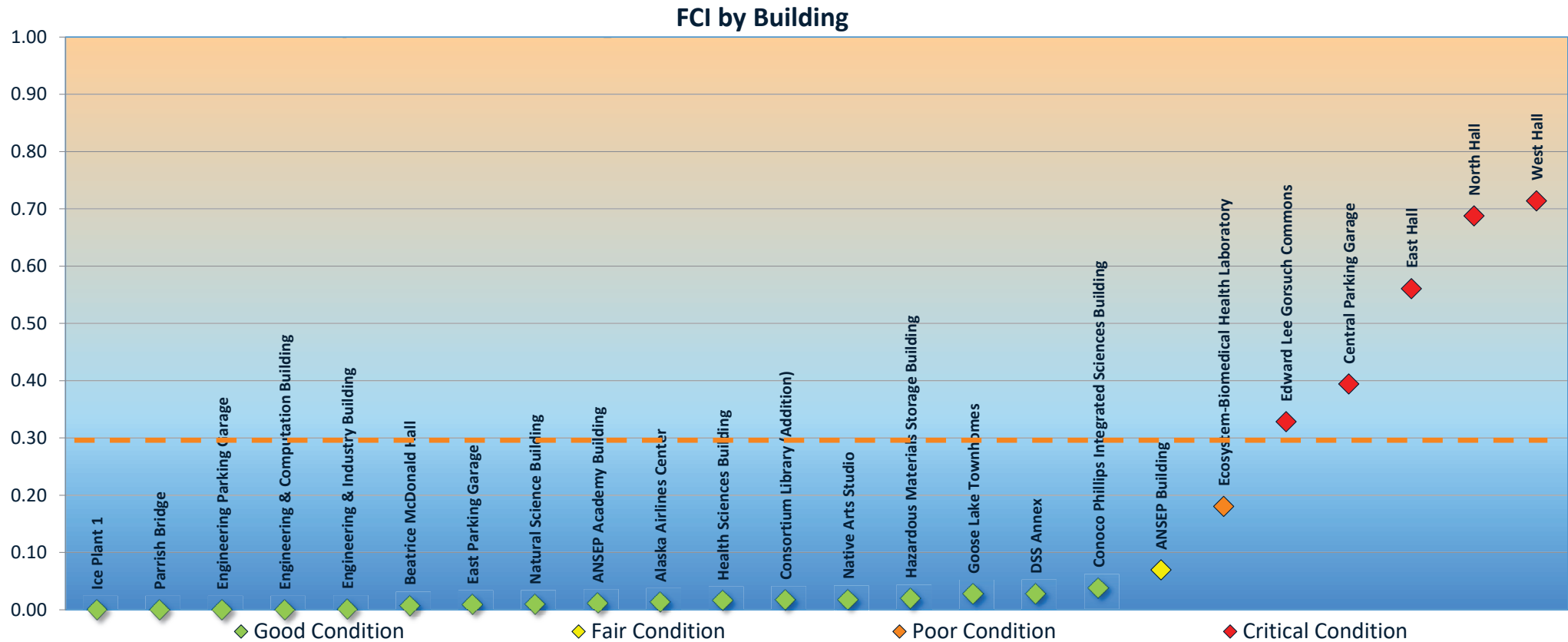
Condition based investment strategy

$$FCI = \frac{\text{Backlog}}{\text{Replacement Value}}$$

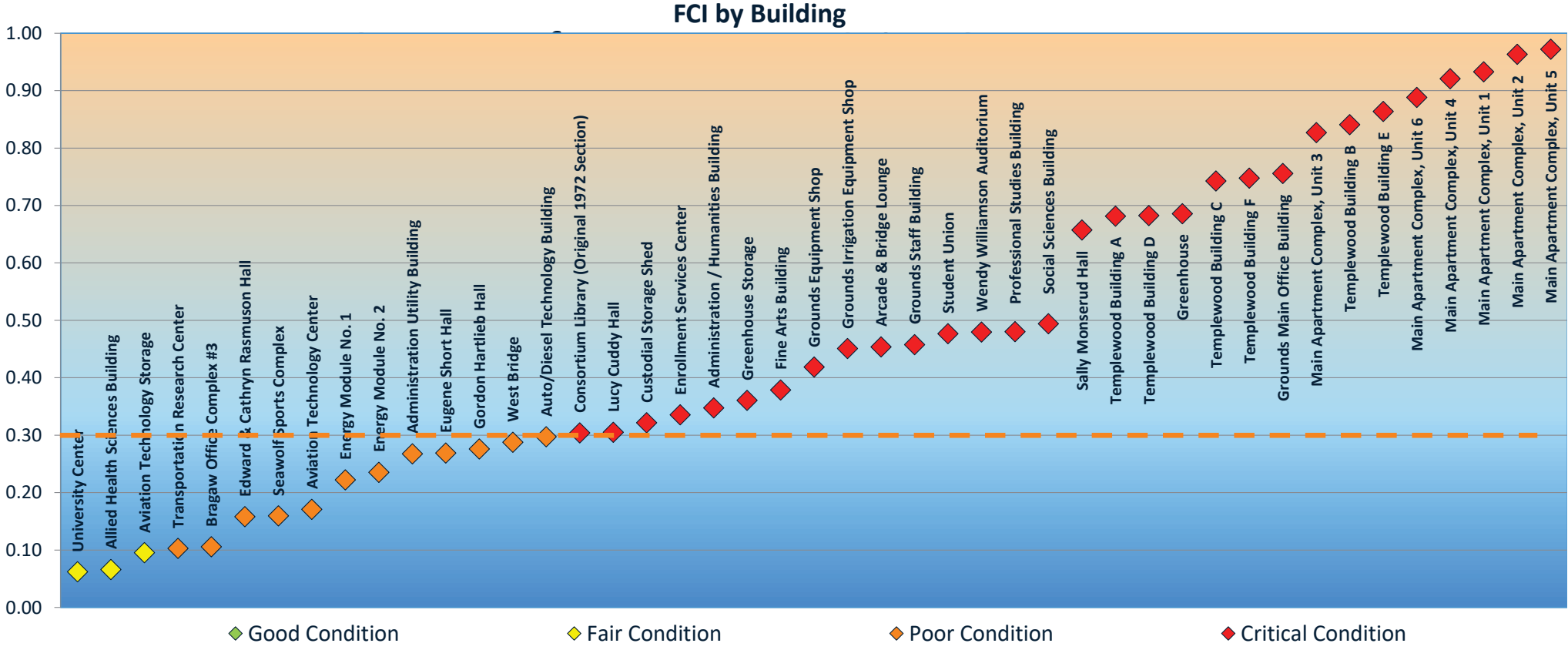
Campus leadership can use FCI categories for different buildings and portfolios, helping to balance capital investments across campus and prioritize project selection



Facilities Condition Index – Buildings Under 25 Years



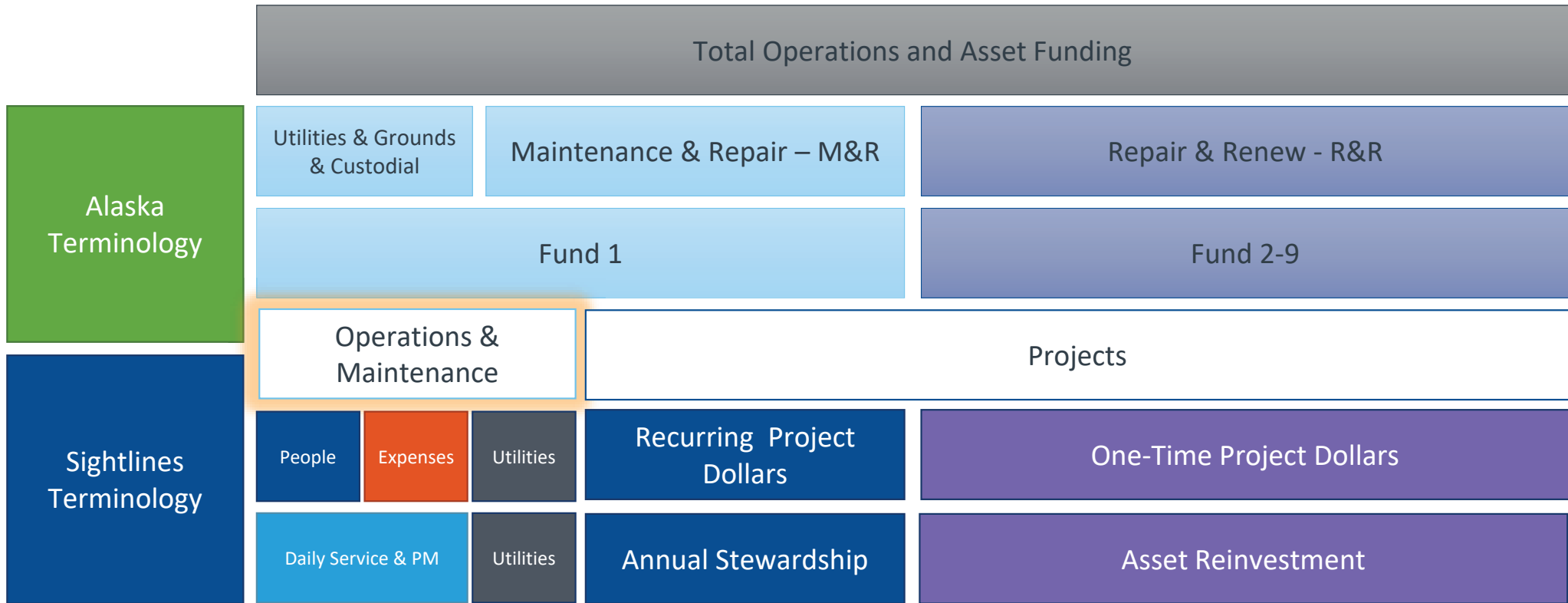
Facilities Condition Index – Buildings Over 25 Years





Operations Success:
Anchorage Campus

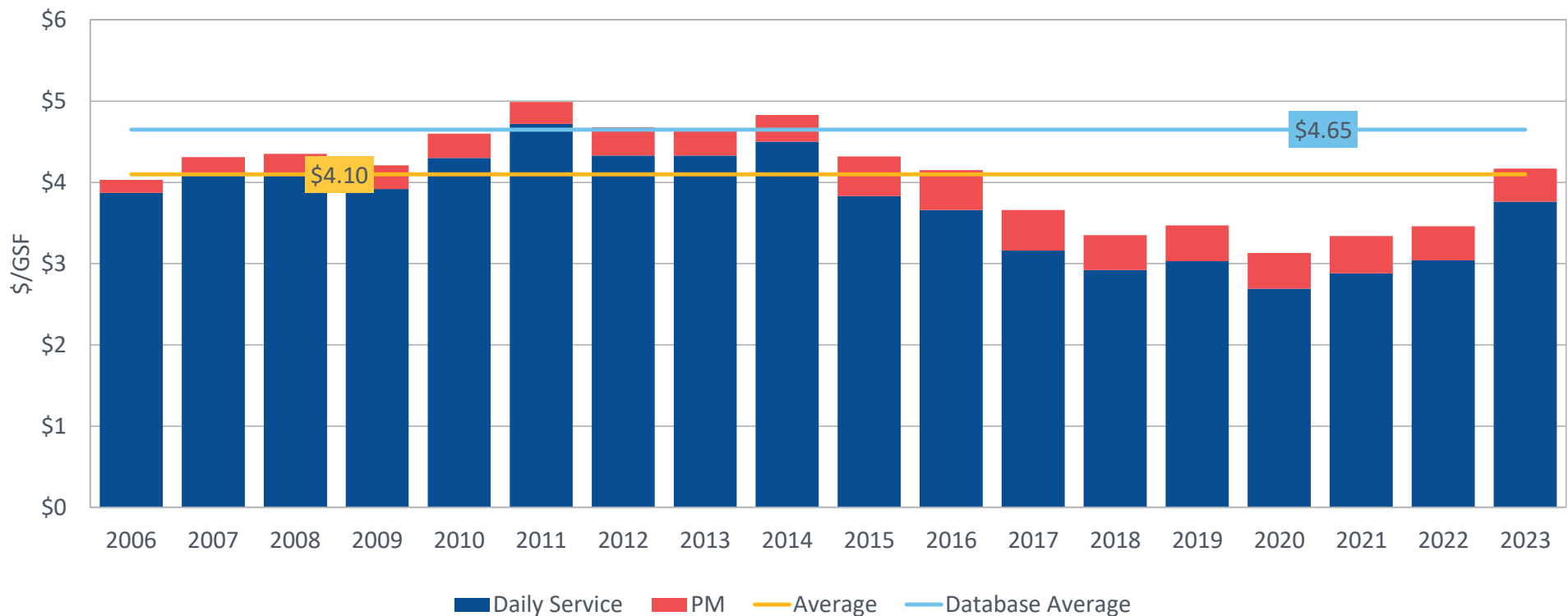
Capital Funding Sources



Facilities Operating Expenditures

Anchorage operates with significantly less resources than Gordian database

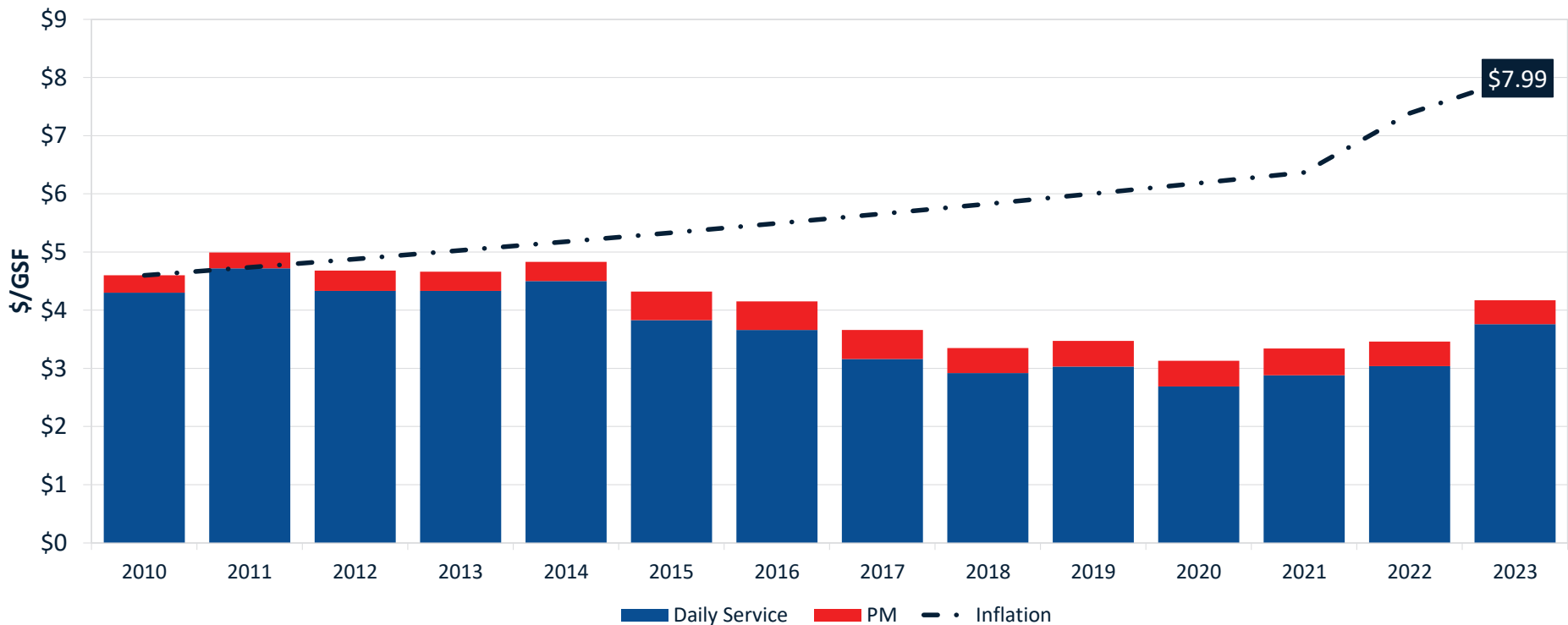
Facilities Operating Actuals



Daily Operating Resources Increase by 21% in FY23

UAA increase outpaces FY23 inflation of 8%, yet resources are still half of 2010 inflated values

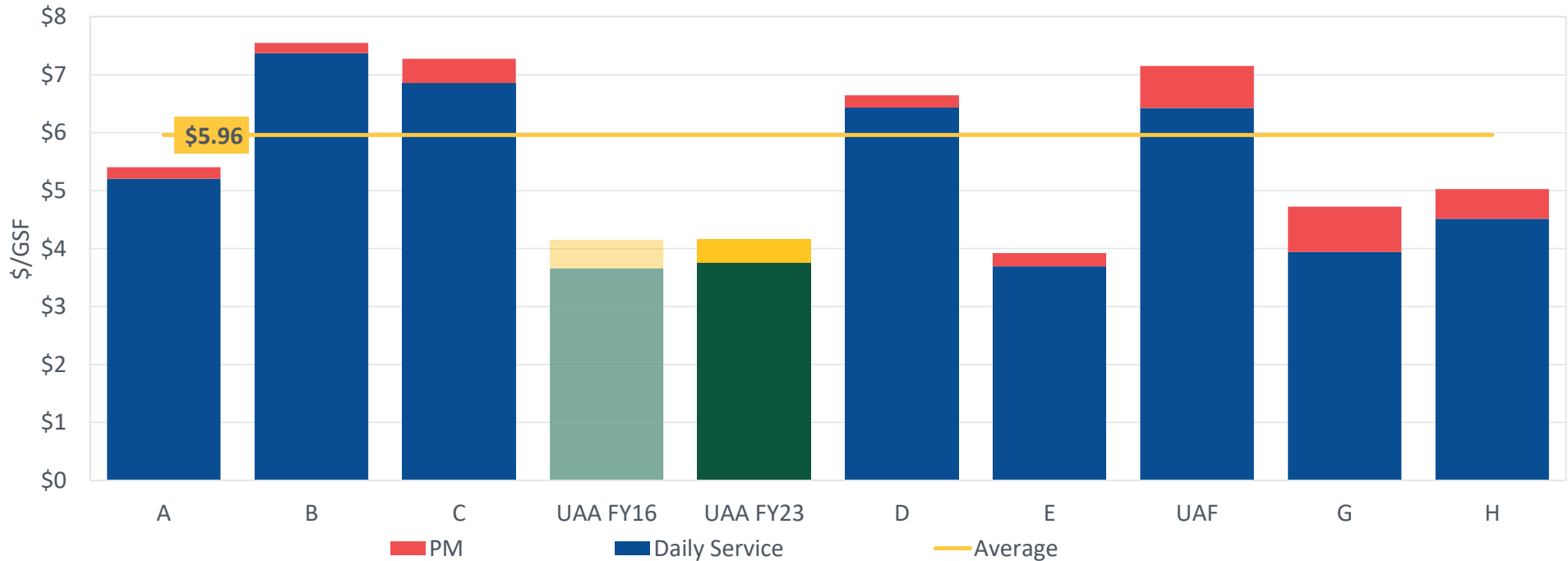
Facilities Operating Actuals



Facilities Operating Expenditures

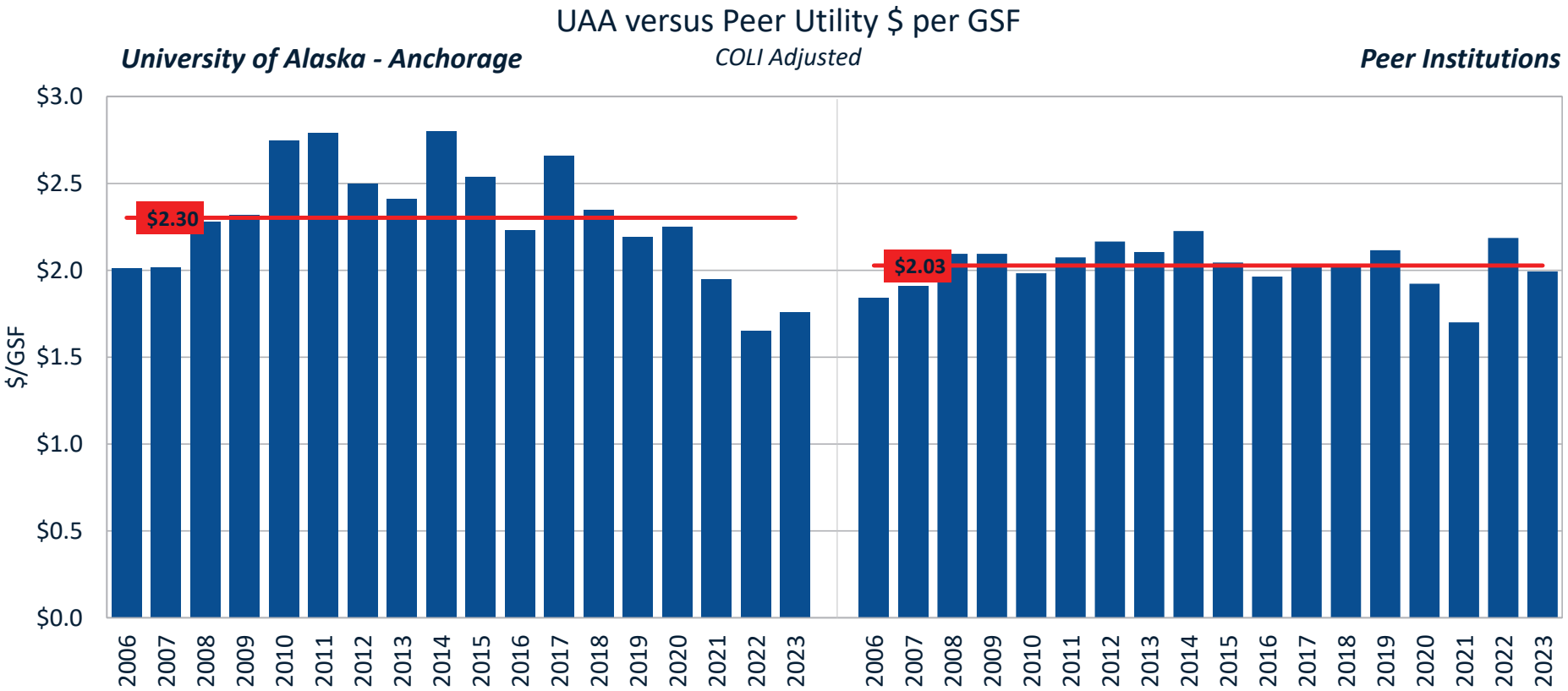
Daily Service & PM are nearly the same now as 7 years ago; 30% leaner than peer levels

Facilities Operating Actuals
COLI Adjusted



Utility Operating Expenditures Compared to Peers

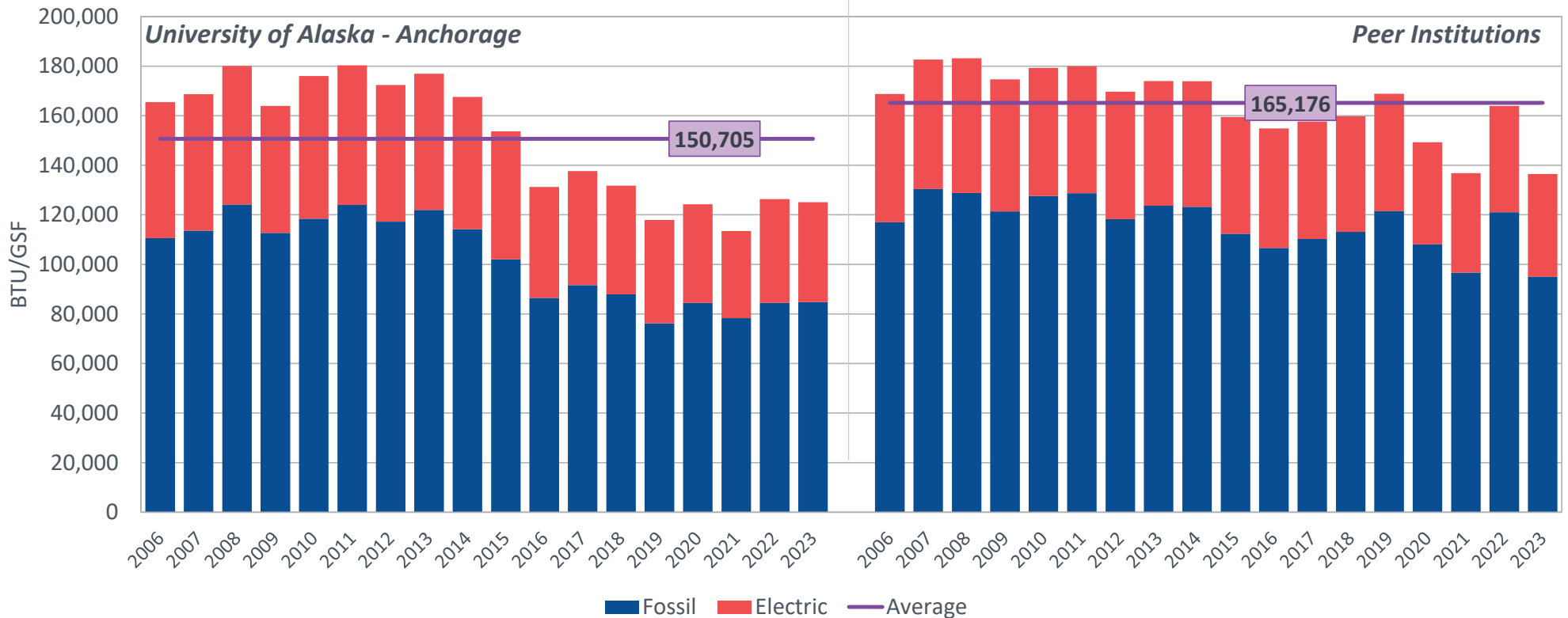
Anchorage has decreased operating utility expenditures and spends less than Peers



Total Energy Consumption

Peers consume more fossil fuels than Anchorage as main differentiation

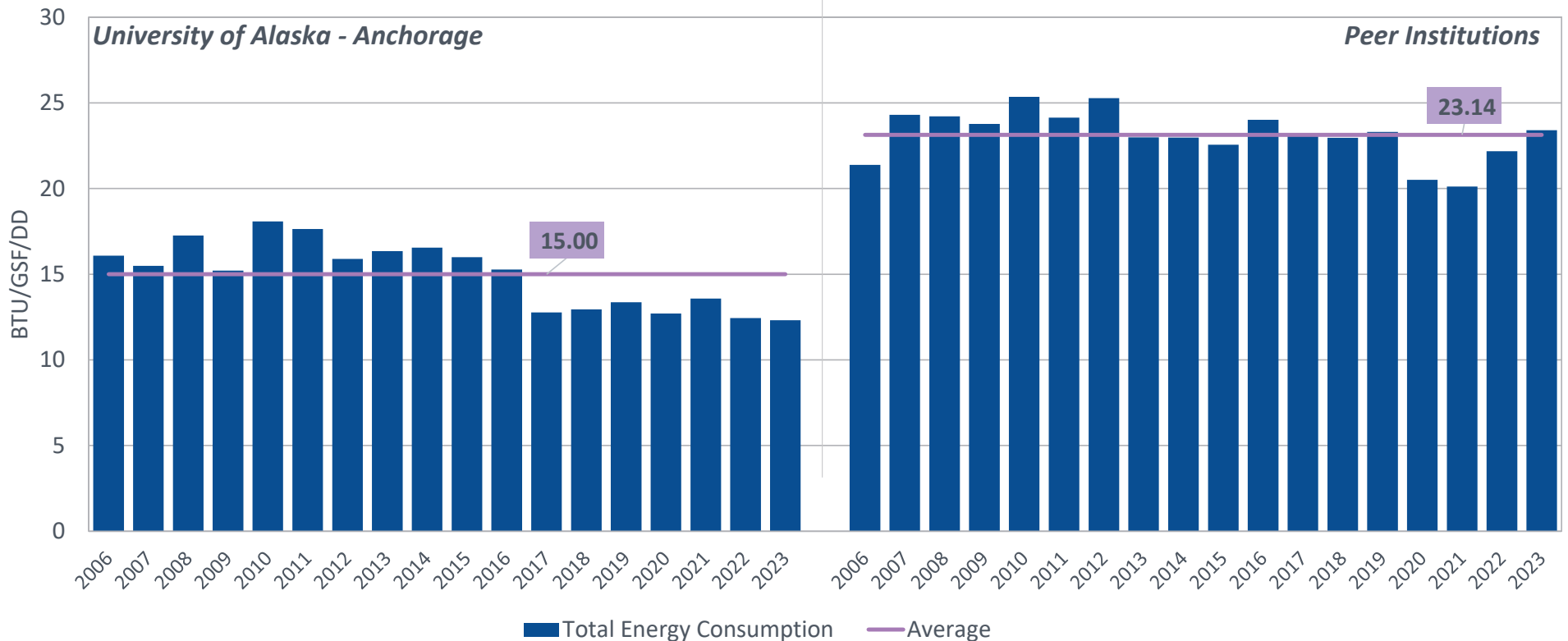
Total Energy Consumption vs. Peers



Total Energy Consumption by Degree Days

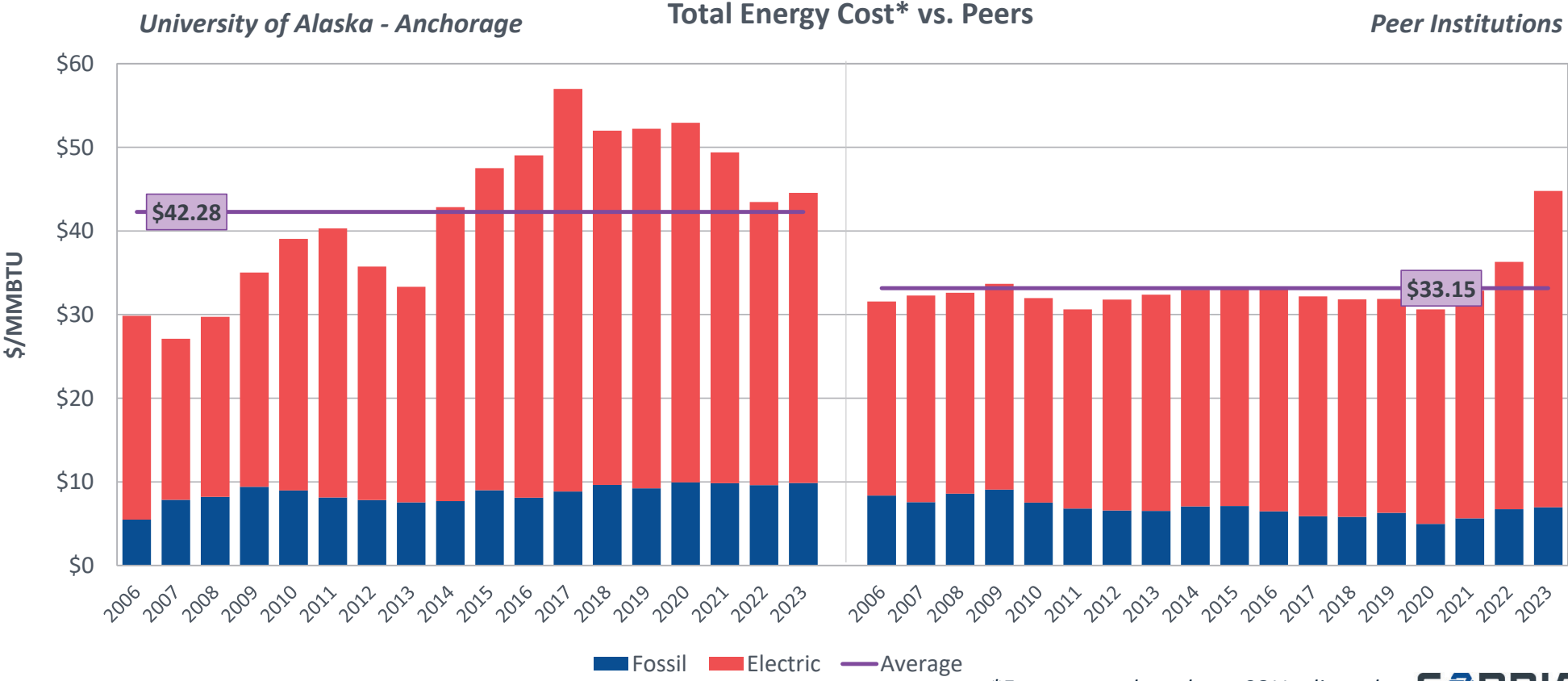
When accounting for regional differences UAA continues to outperform peers

Total Normalized Energy Consumption vs. Peers



UAA's Energy Costs Above Peers

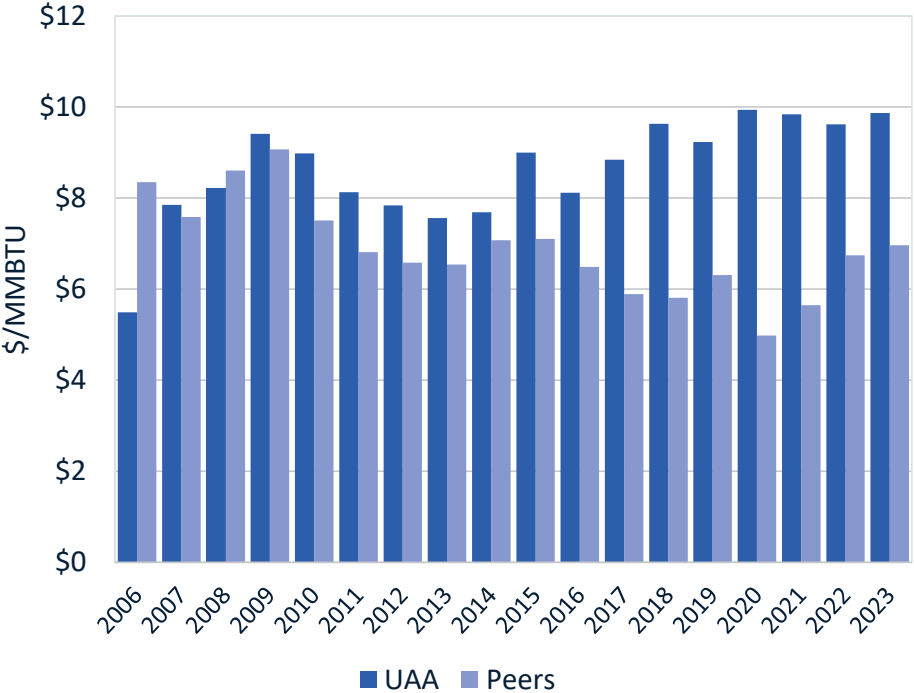
Peers saw sharp increases in commodity prices leading to higher costs than UAA



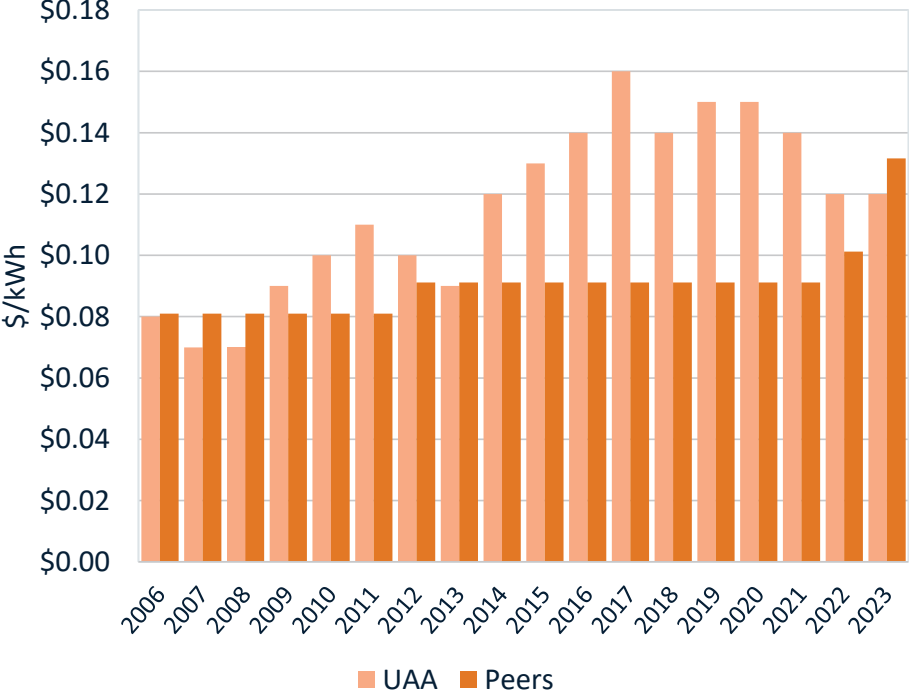
UAA Energy Costs are Normalizing to Peers

FY23 trend narrowed unit cost variance and shows UAA with better electric rates than peers

Fossil Fuel Unit Cost
COLI Adjusted



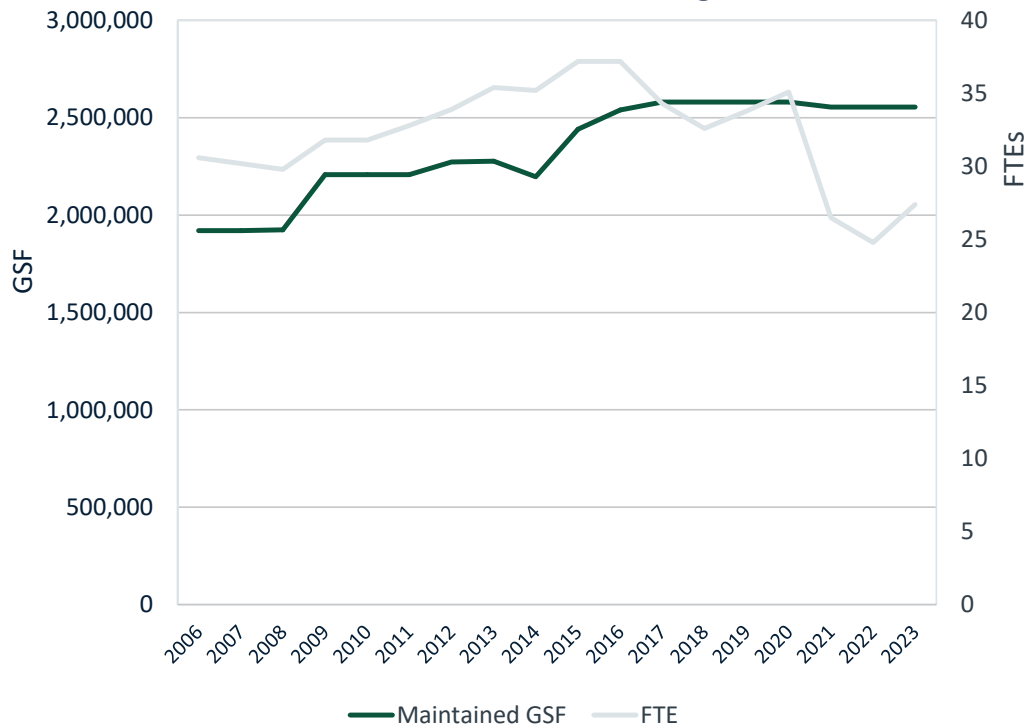
Electric Unit Cost
COLI adjusted



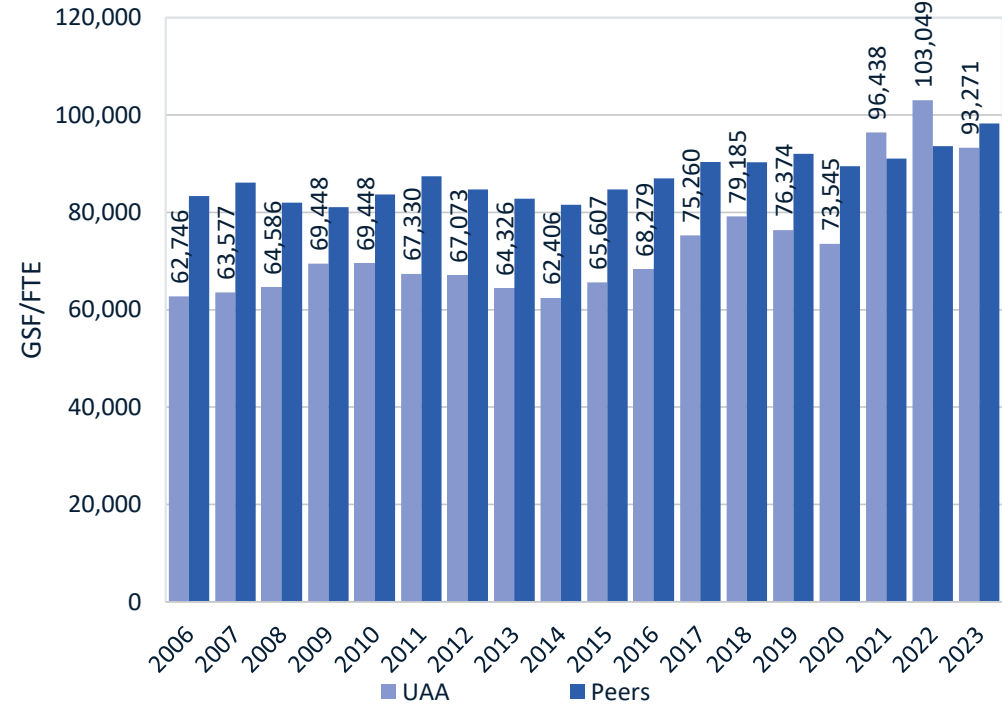
Maintenance Staffing Coverage

As maintenance positions were filled coverage ratios decreased from FY22 peak

Maintenance Staffing

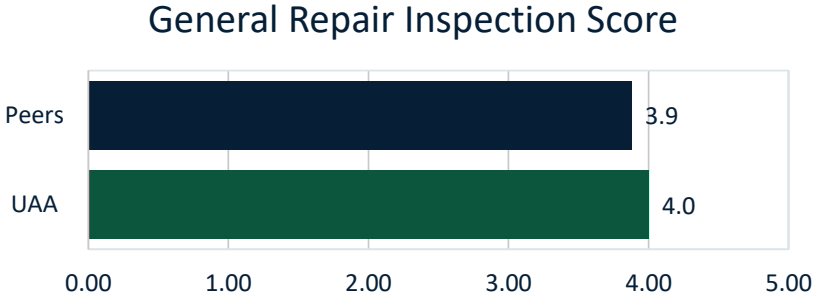
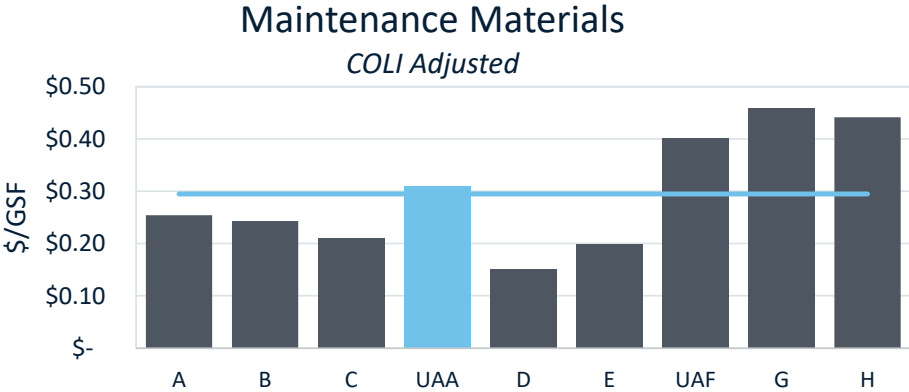
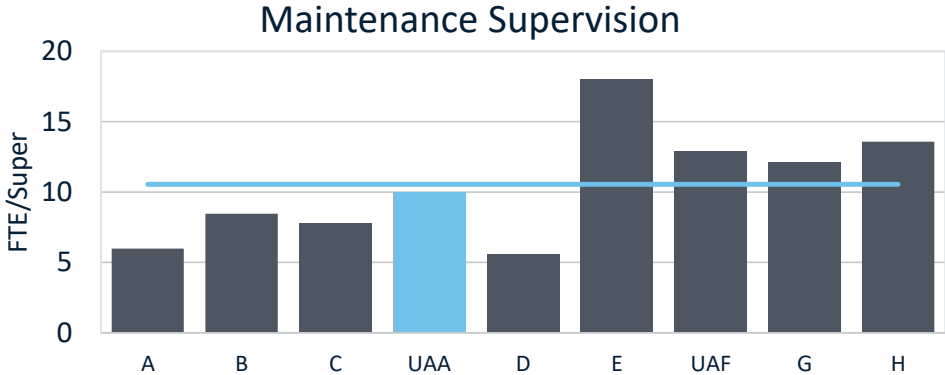
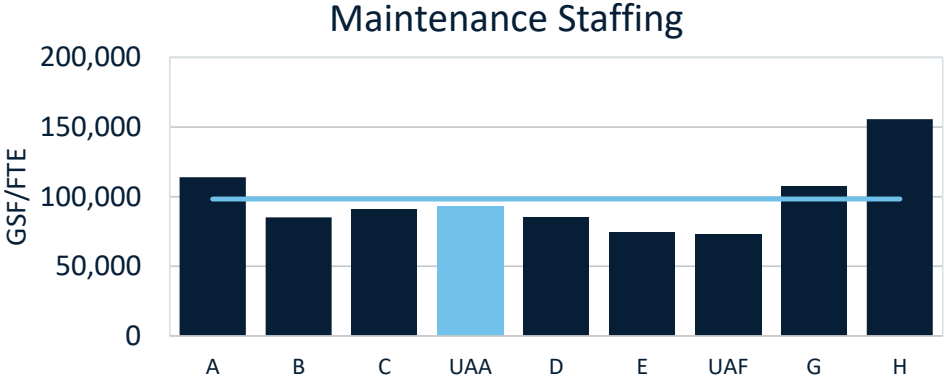


Maintenance Coverage



Maintenance Metrics

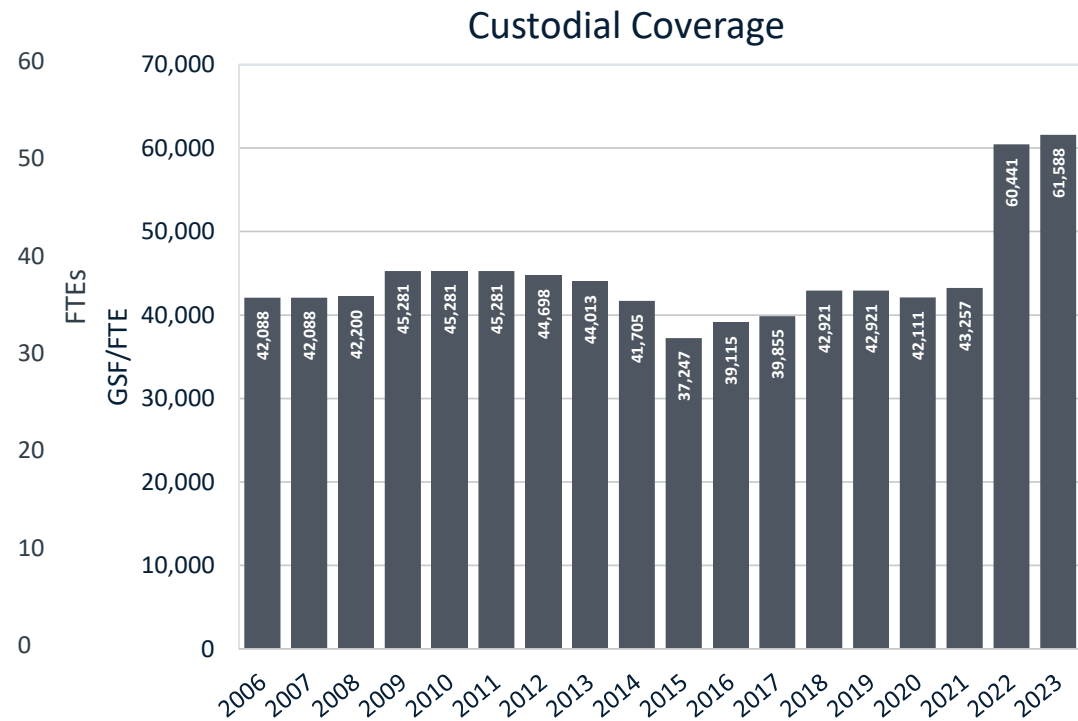
Anchorage has similar supervision, spends less on materials, covers more GSF than peers



Institutions arranged by Technical Complexity

Custodial Staffing Coverage

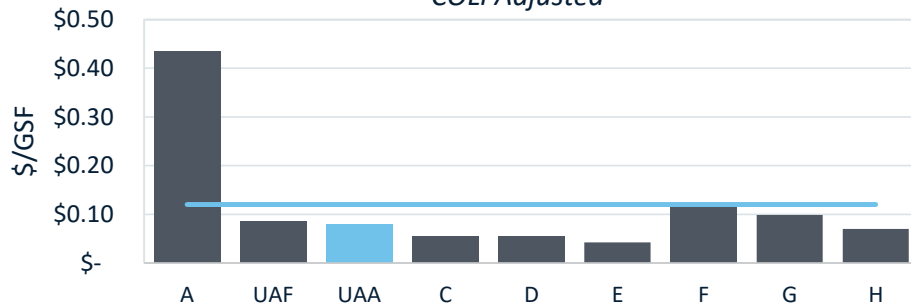
Custodial coverage rises with each FTE that is unreplaced or eliminated



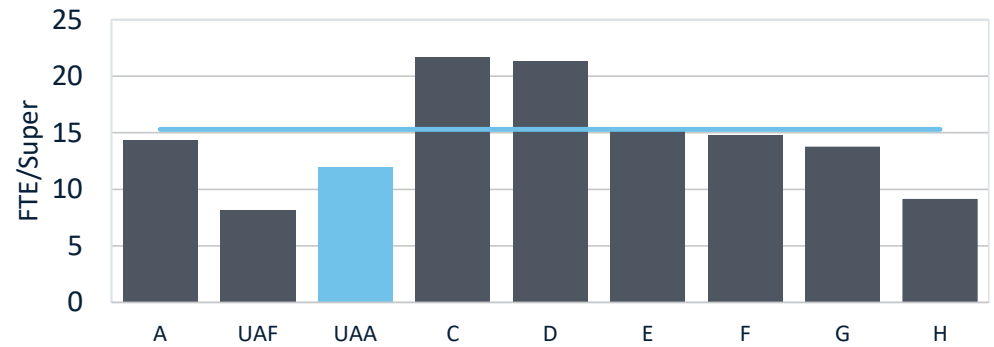
Custodial Metrics

Anchorage staff cover more GSF and are supervised at lower rates than peers

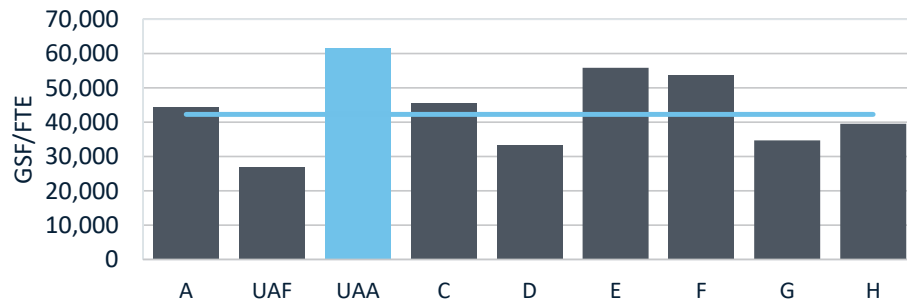
Custodial Materials
COLI Adjusted



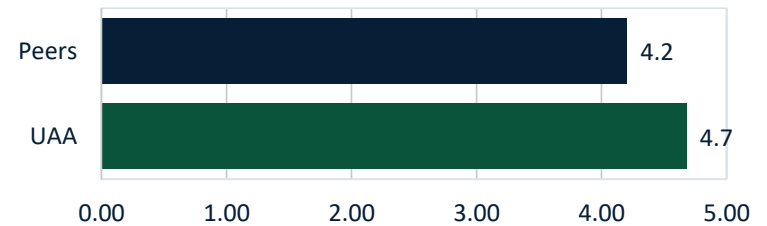
Custodial Supervision



Custodial Staffing

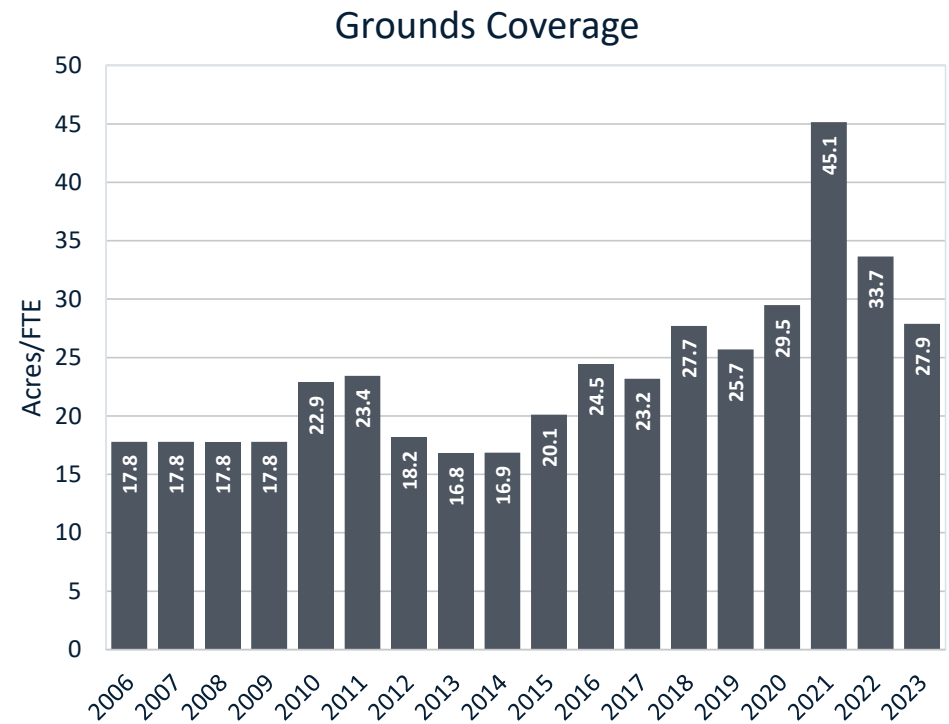
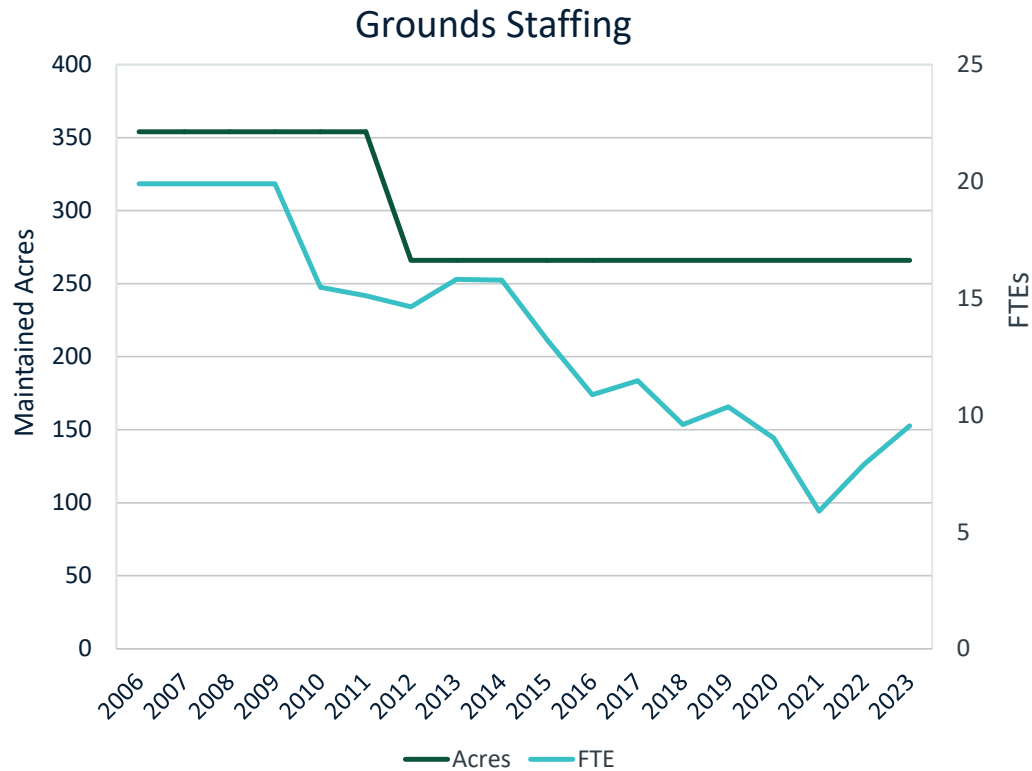


Cleanliness Inspection Score



Grounds Staffing Coverage

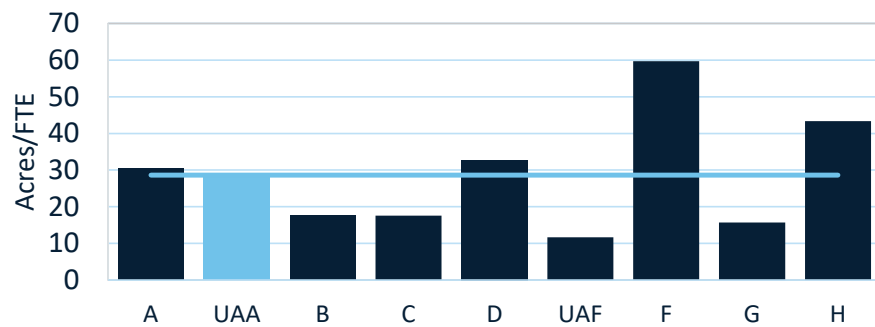
Coverage ratios continue to reduce to pre-pandemic levels



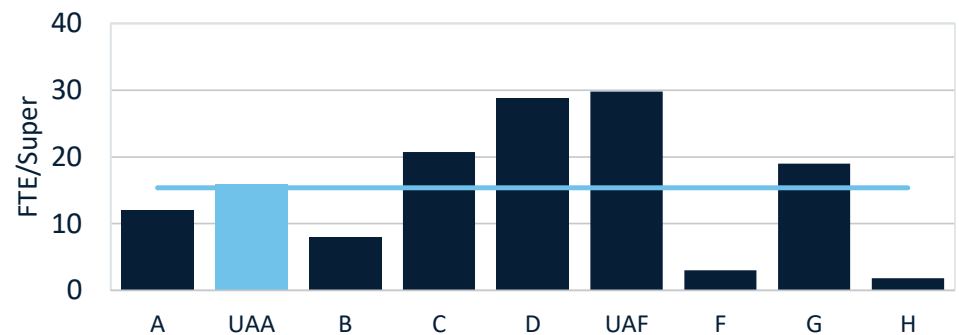
Grounds Metrics

As grounds department has grown from FY21, coverage is now similar to peers

Grounds Staffing

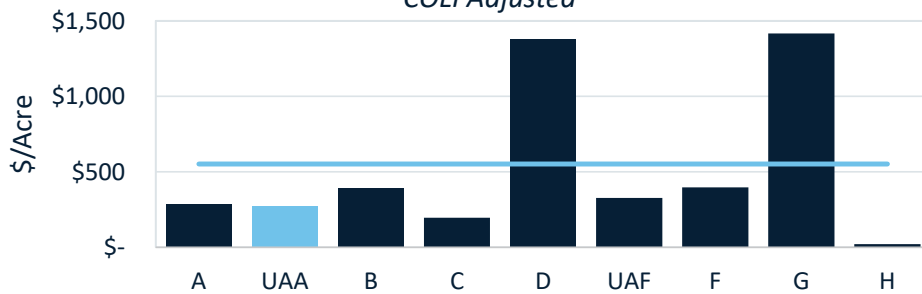


Grounds Supervision

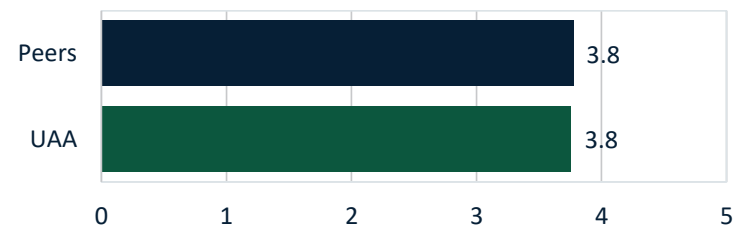


Grounds Materials

COLI Adjusted



Grounds Inspection Score



Institutions arranged by Grounds Intensity



FY22 Facilities Benchmarking & Analysis

University of Alaska Anchorage:
Community Campus Breakout

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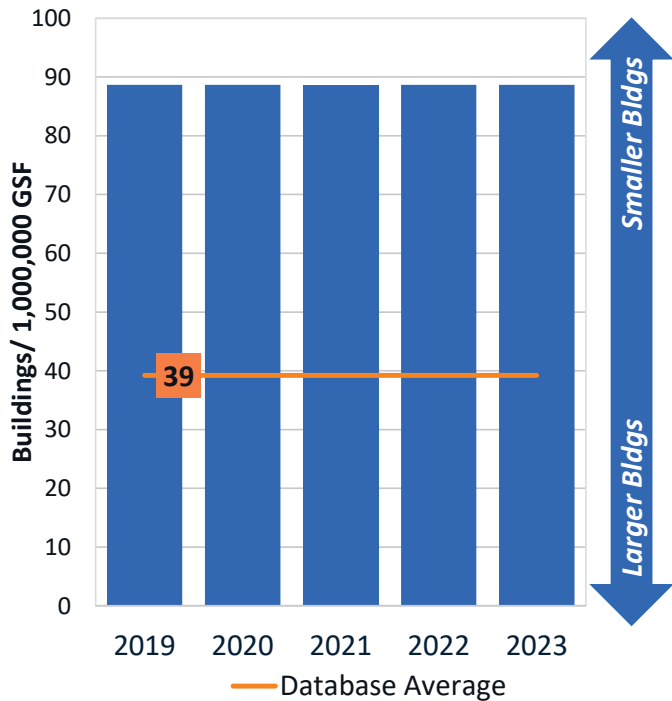
Space Profile:

Kenai Peninsula College

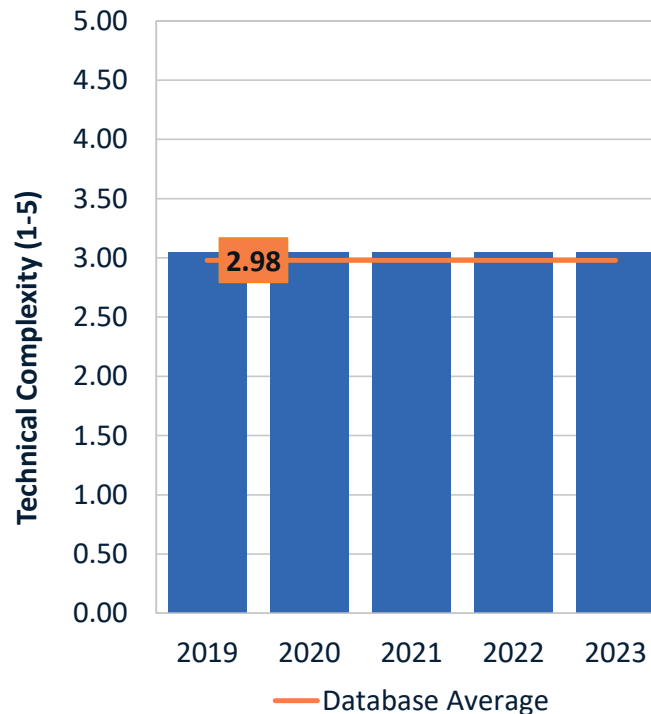
Qualifying Metrics – Building and Grounds Intensity

Kenai has higher building intensity, similar tech rating, and lower density than database

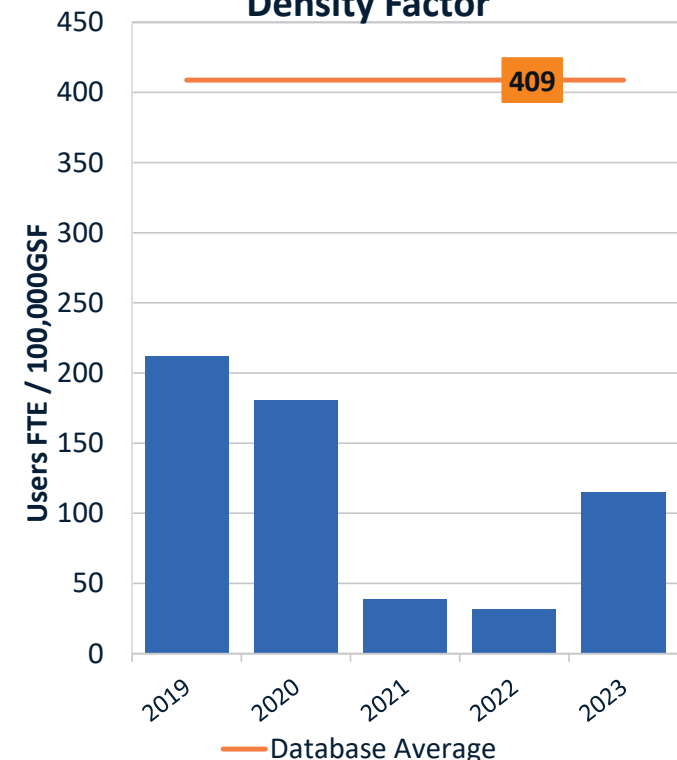
Building Intensity



Technical Complexity

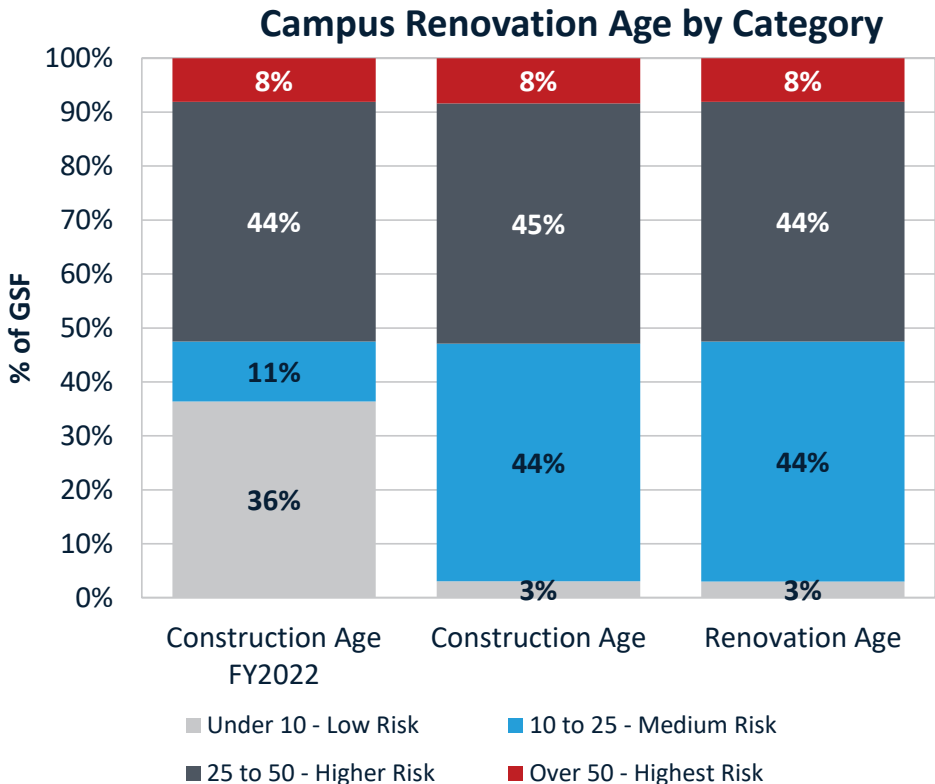


Density Factor



New Construction Shifts Age Categories at Kenai

Career Technical Education Center & Student Housing Complex enter the 10 to 25 category



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

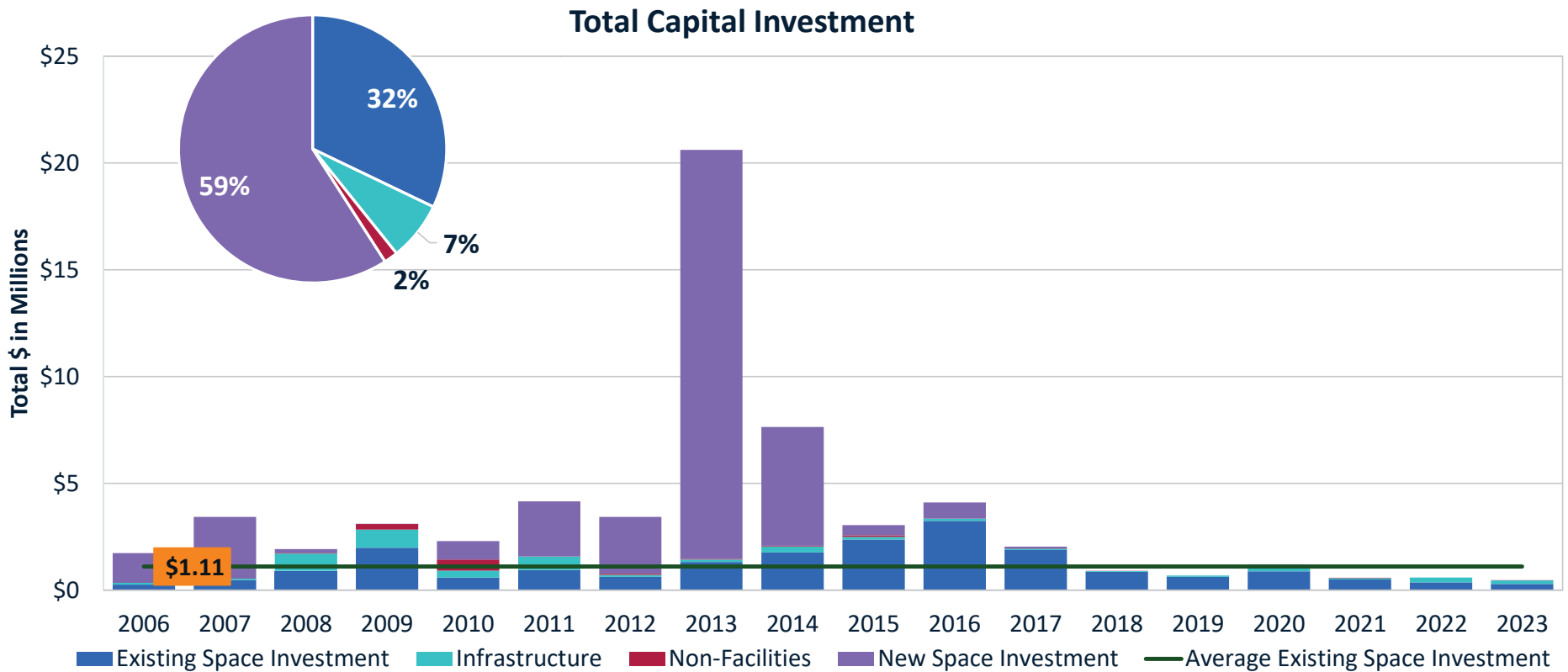
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Capital Profile:

Kenai Peninsula College

Capital Investment has focused on New Construction

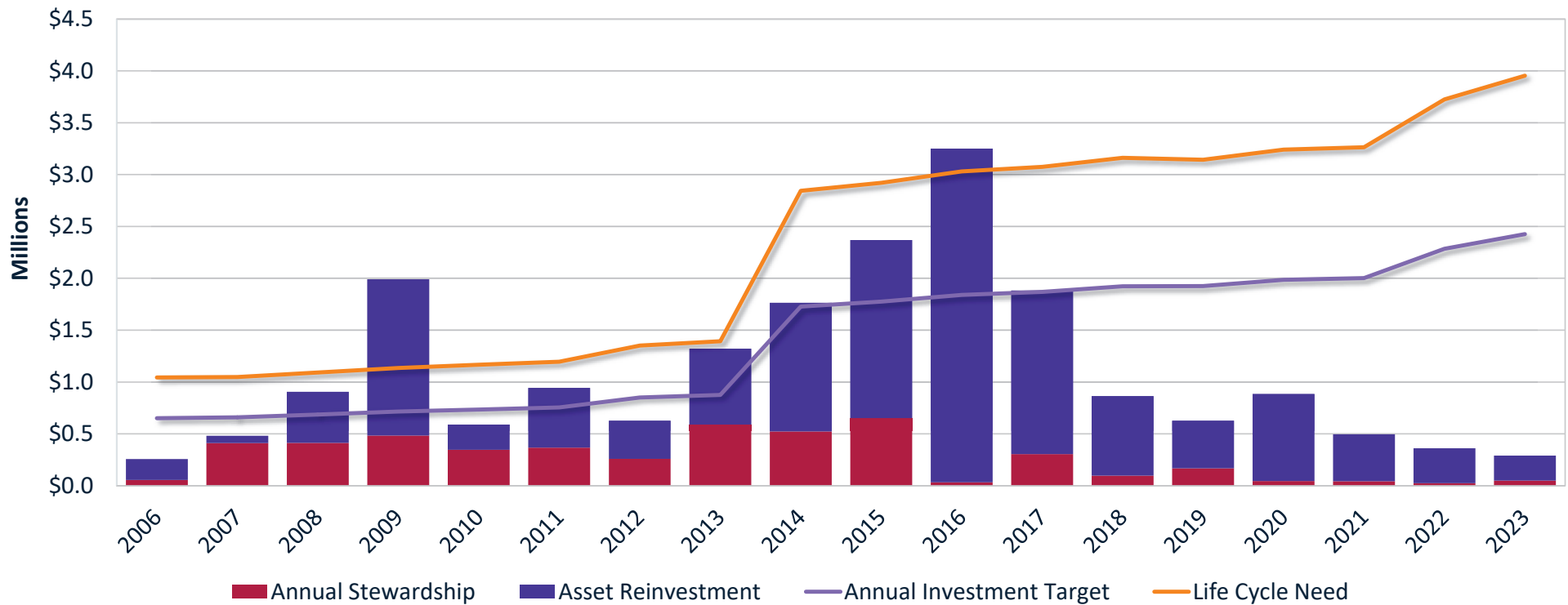
Kenai should increase capital investment in existing space to renovate older buildings



Capital Investment vs. Annual Investment Target

Kenai continues falling short of investment targets, spending only 7% to the FY23 target

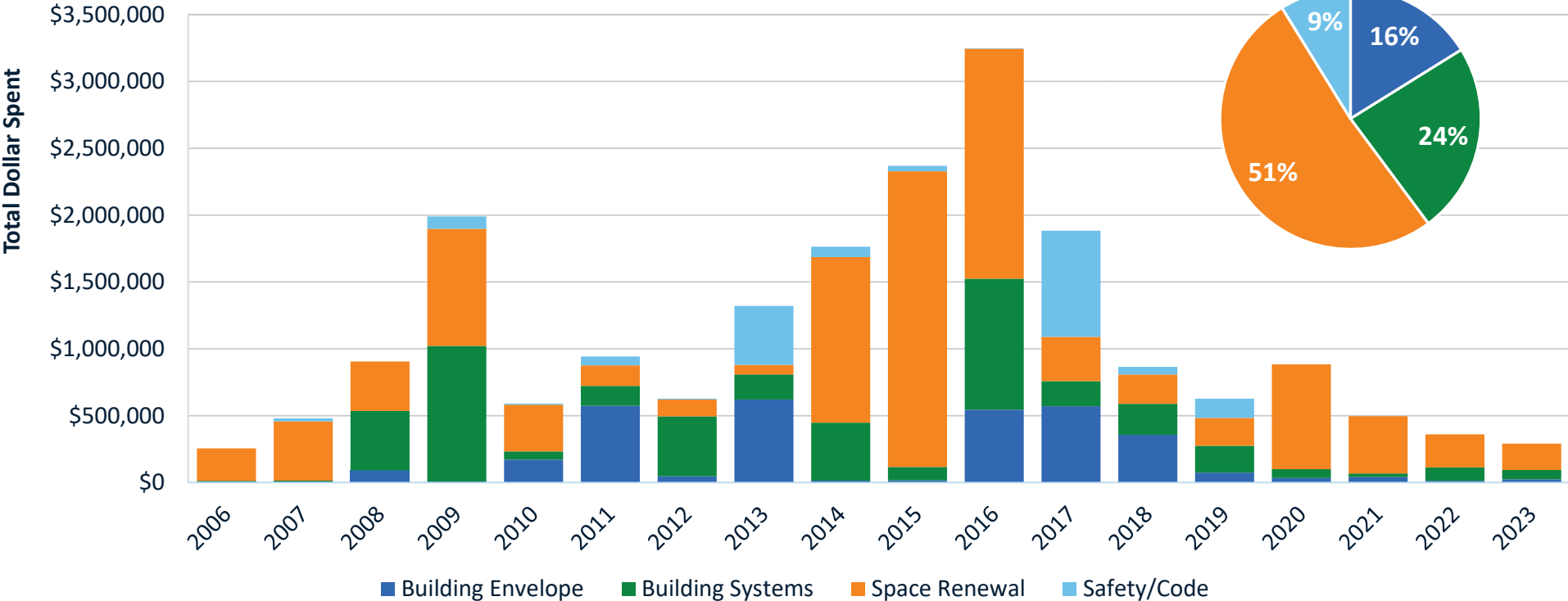
Total Capital Investment vs. Funding Target



Existing Space Investment Breakout

KPC should shift investment away from space renewal towards building systems

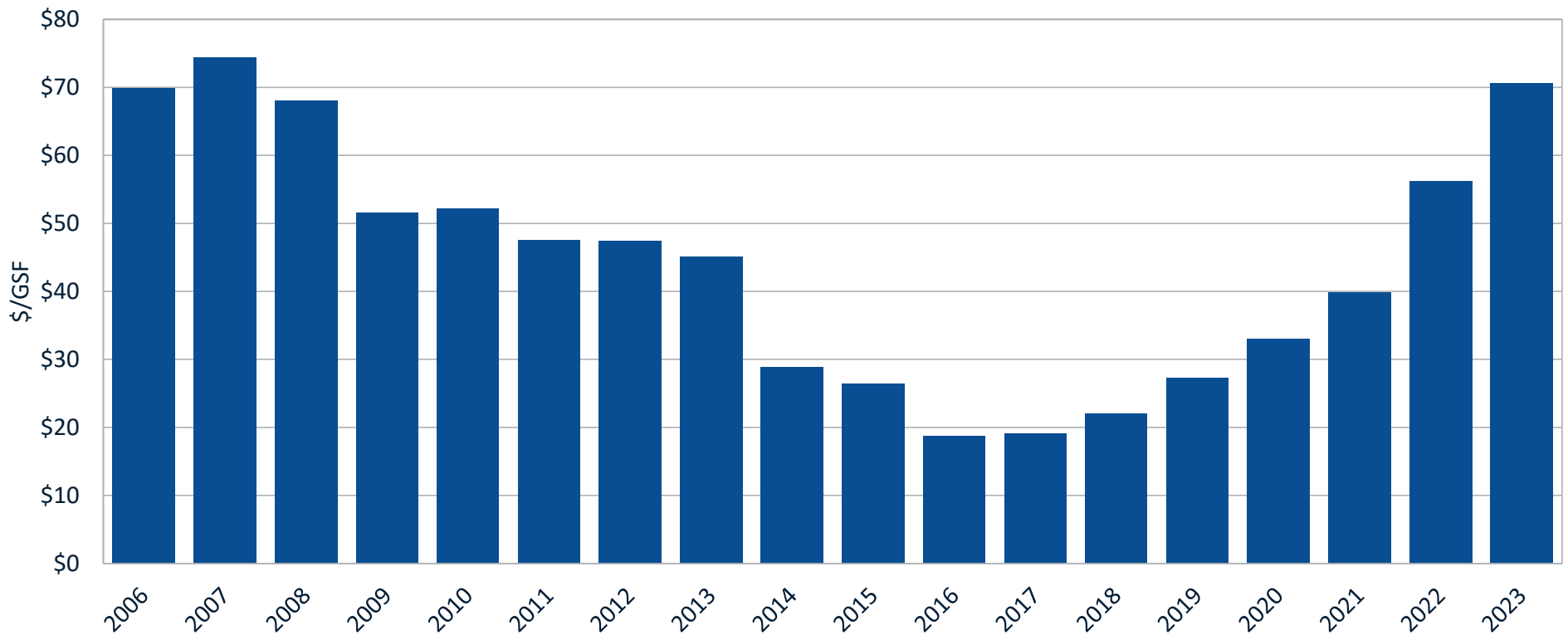
Existing Space Capital Breakout



Asset Reinvestment Need Similar to 2006

AR need increases overtime as capital targets have been missed

Total Asset Reinvestment Need \$/GSF



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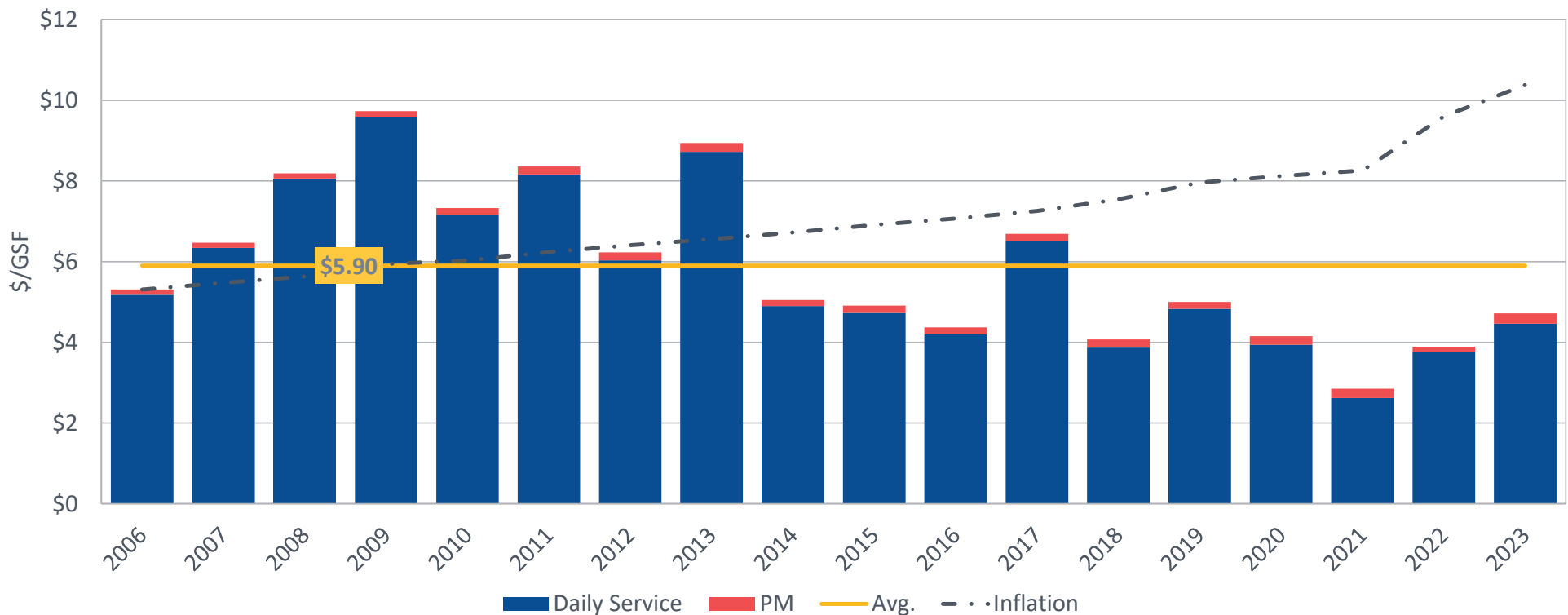
Operations Success:

Kenai Peninsula College

Facilities Operating Expenditures

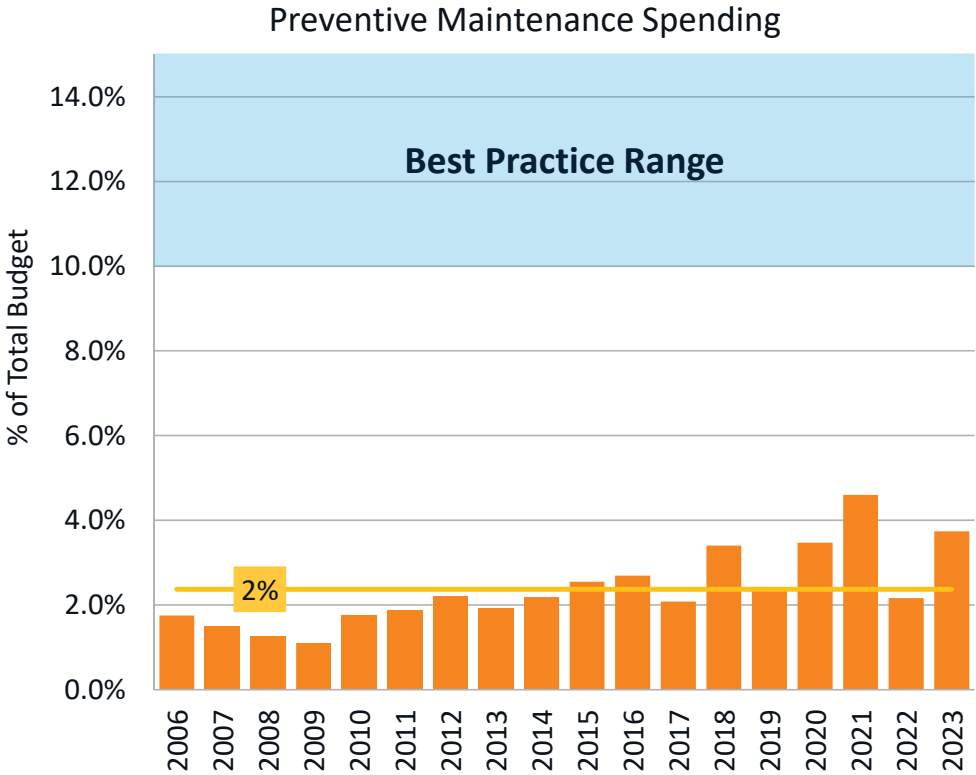
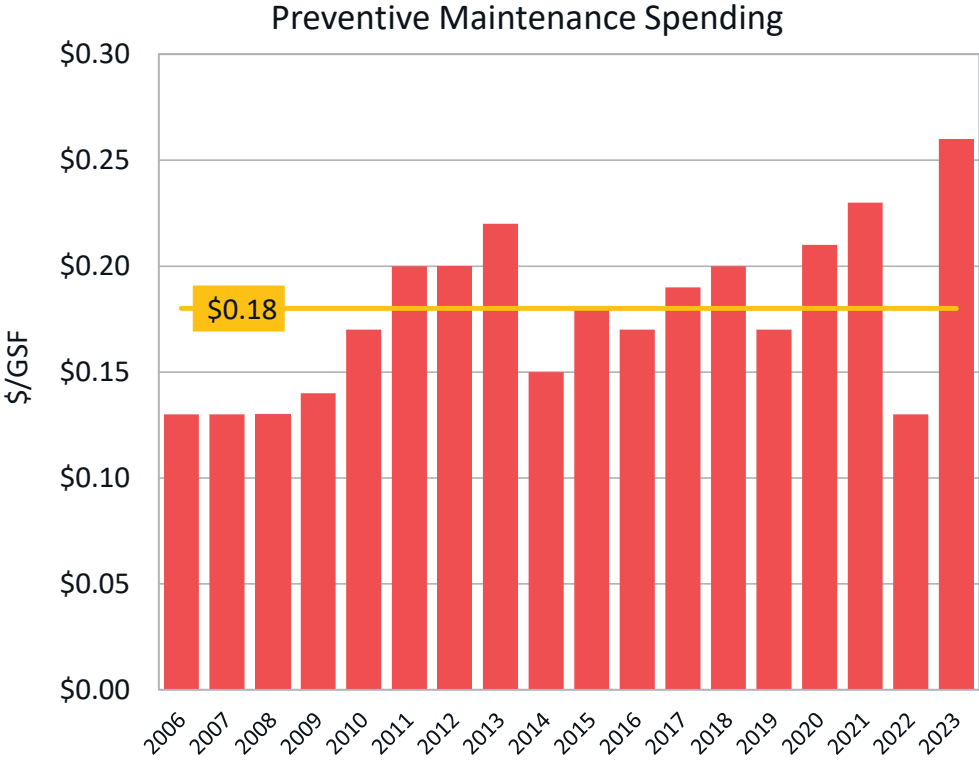
Kenai \$/GSF spending in 2023 is 45% of inflated operating expenditures, up 5% from FY22

Facilities Operating Actuals



PM Growth Rebounds To Higher Spending Range

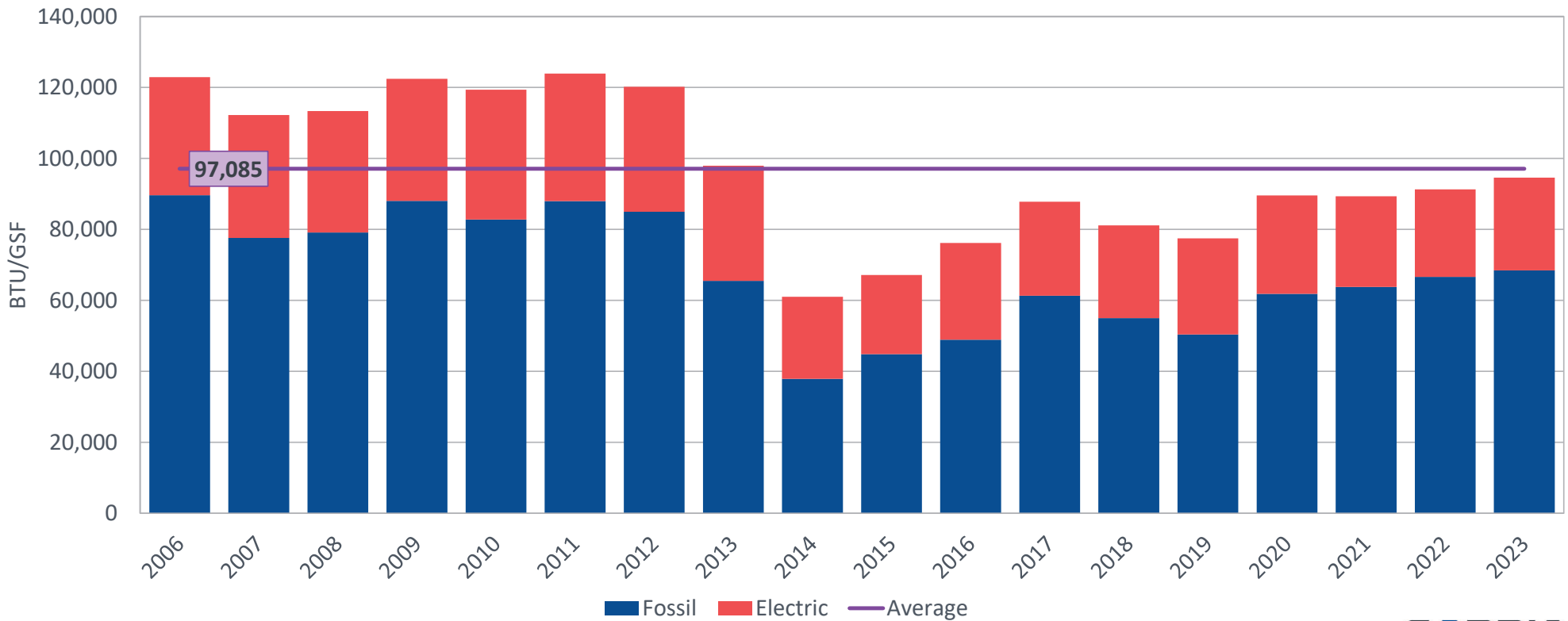
KPC's increase in PM is paramount as space shifts to higher age categories



Total Energy Consumption

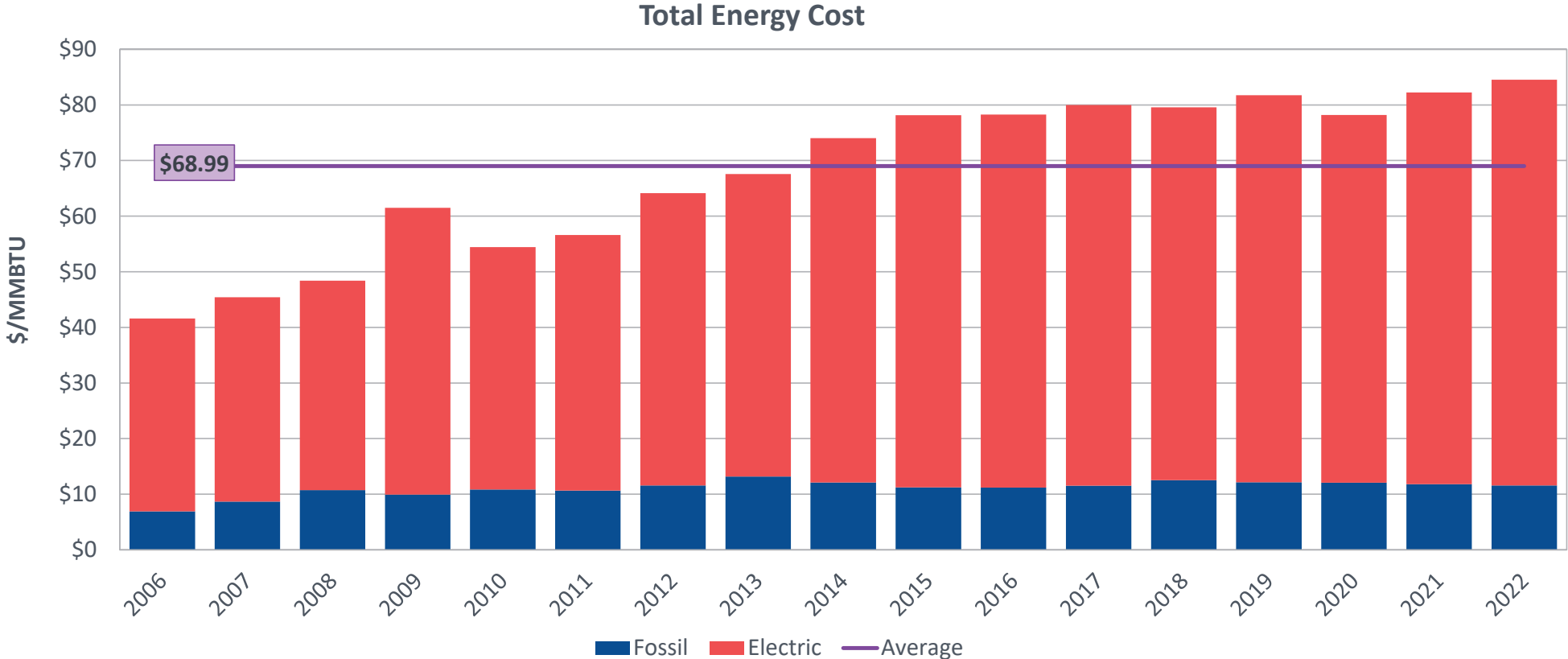
Current consumption set to eclipse total average weighted by early years of data reported

UAA- Kenai Peninsula College Total Energy Consumption



Energy Expenses are Increasing Over Time

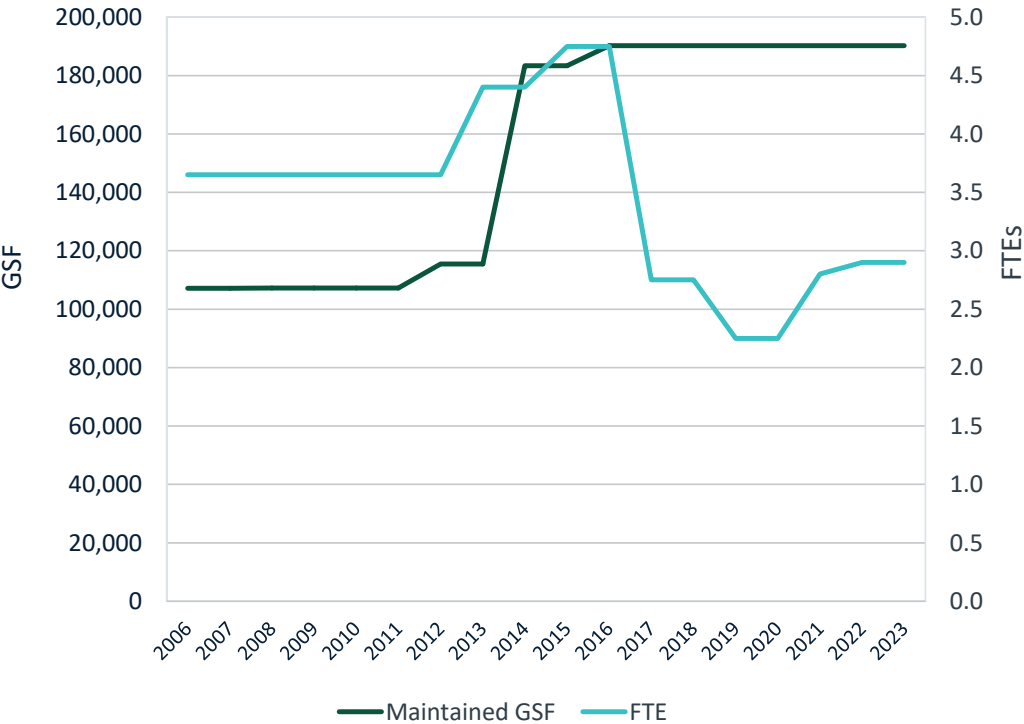
Electric unit costs have steadily continued to increase throughout analysis



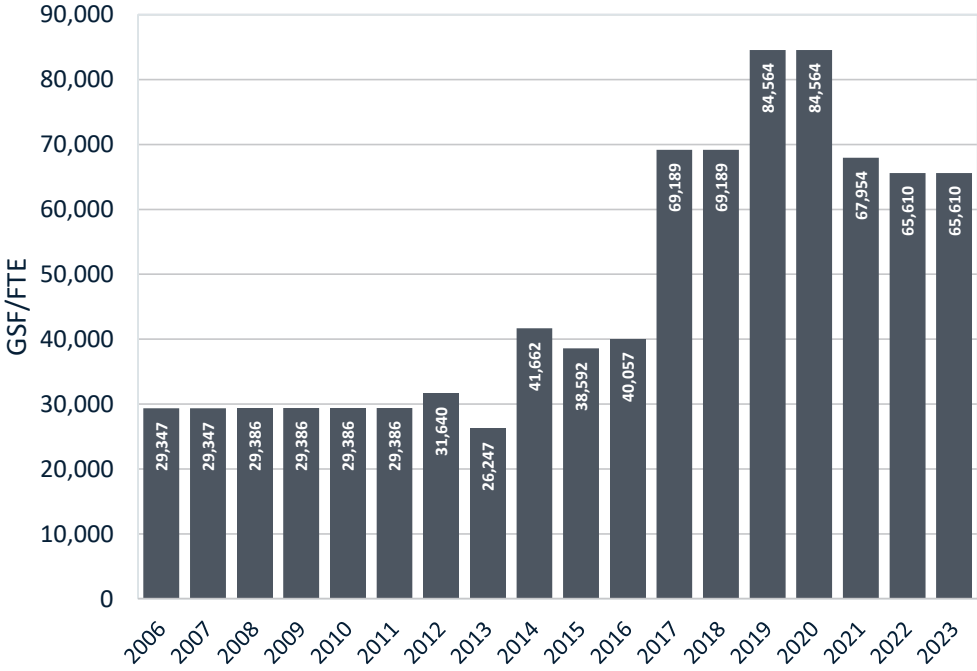
Maintenance Staffing Coverage

KPC trend in reduction of space per FTE continues for the last 5 years

Maintenance Staffing



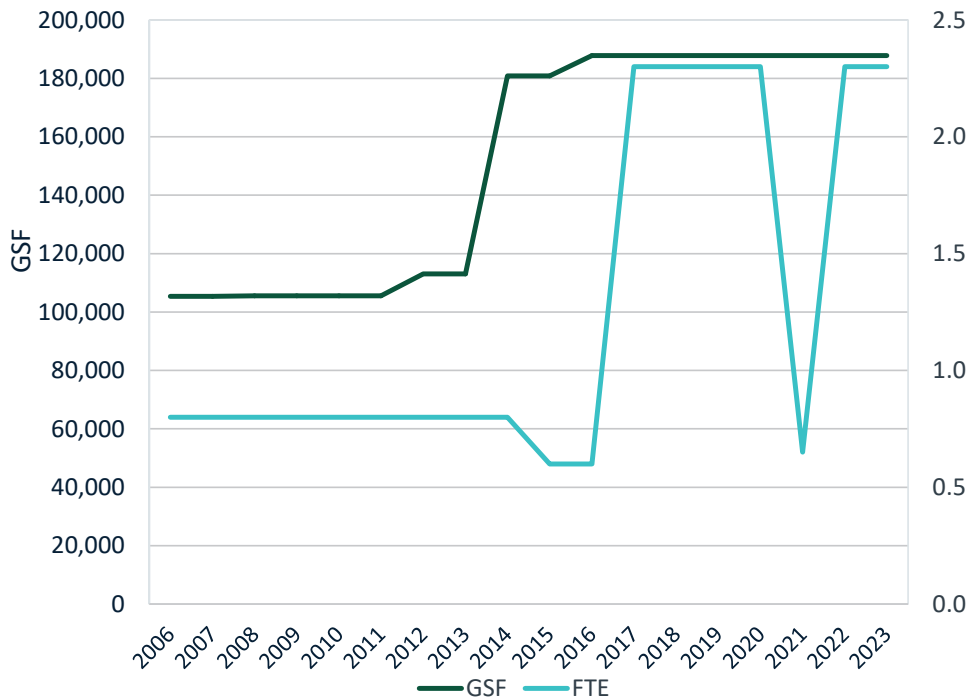
Maintenance Coverage



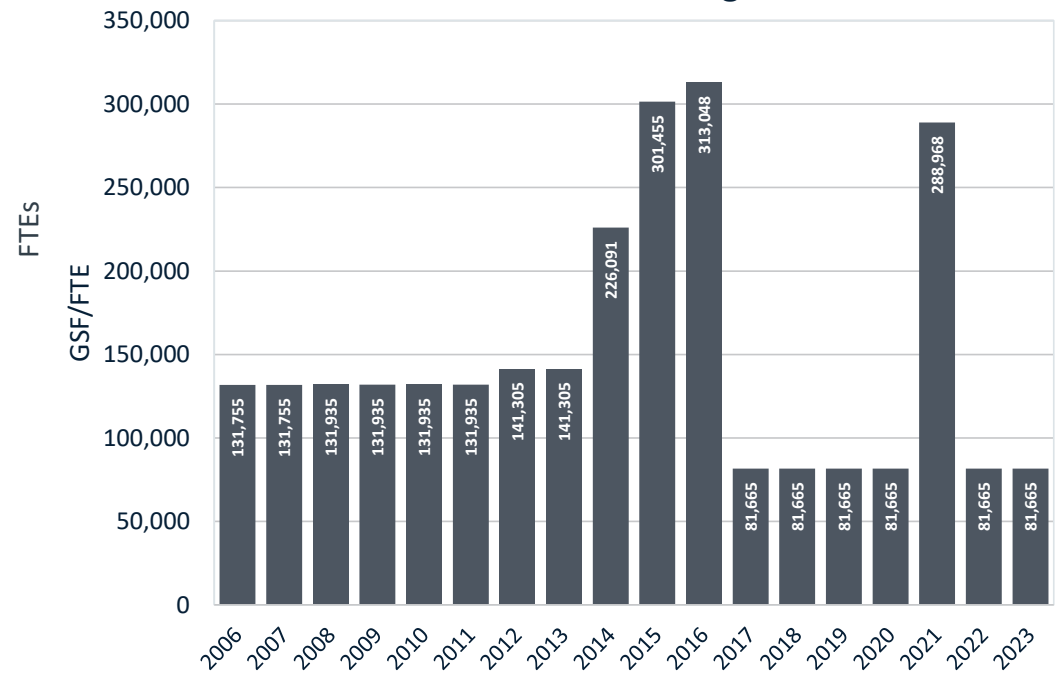
Custodial Staffing Coverage

Increases in FTE result in a return to historic coverage levels

Custodial Staffing

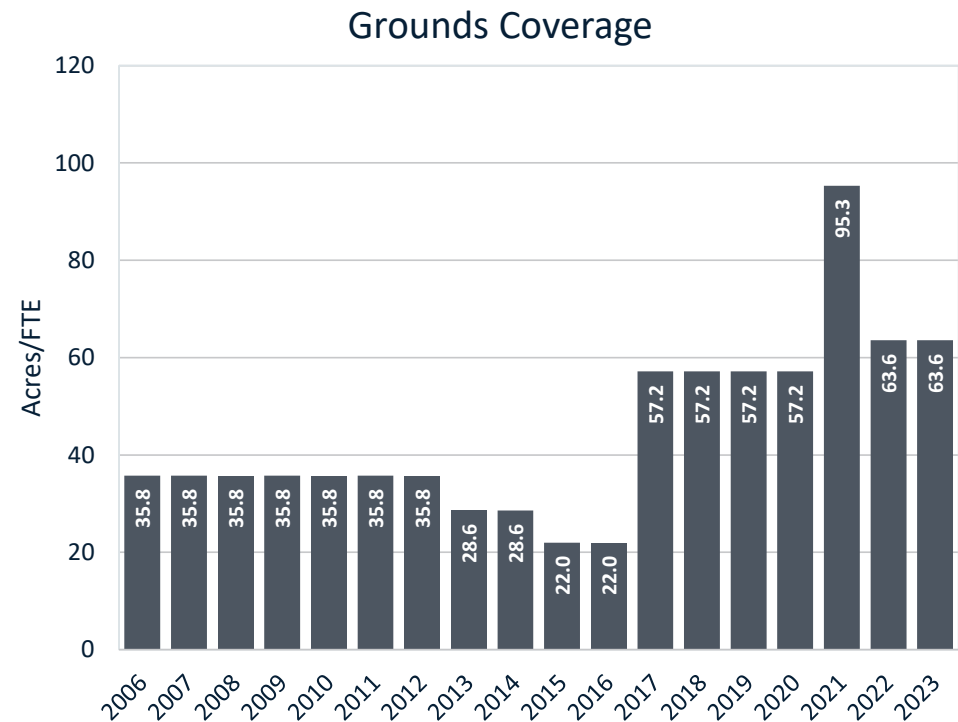
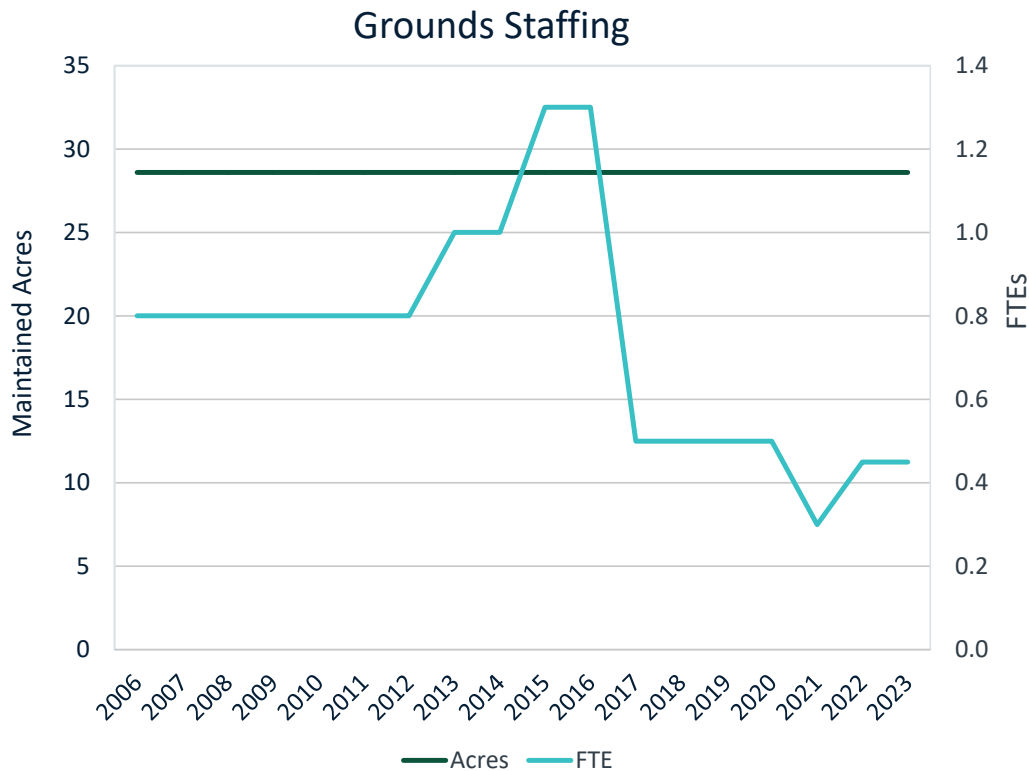


Custodial Coverage



Grounds Staffing Coverage

Minor fluctuations to grounds FTE's have dramatic effect on coverage ratios at KPC



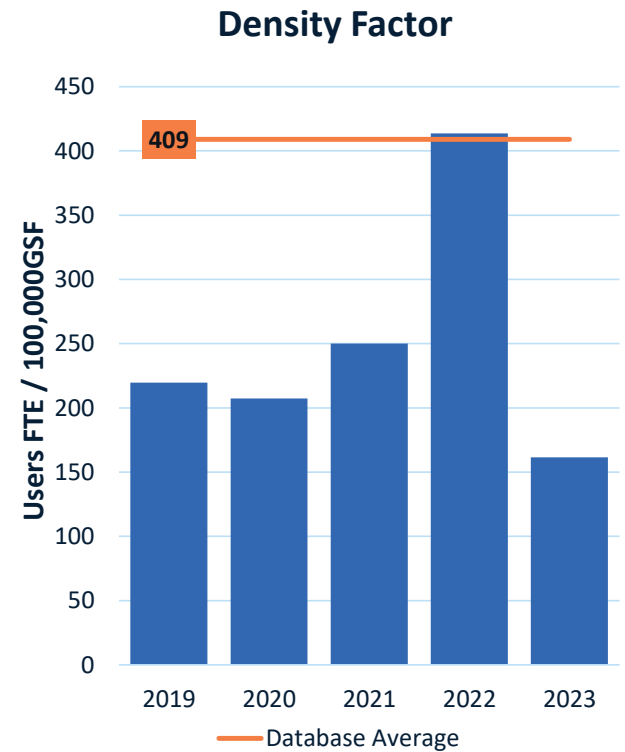
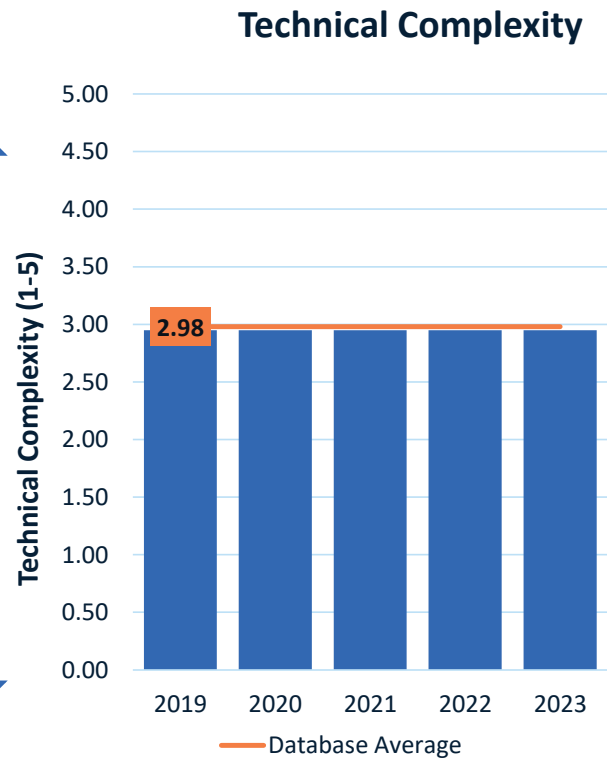
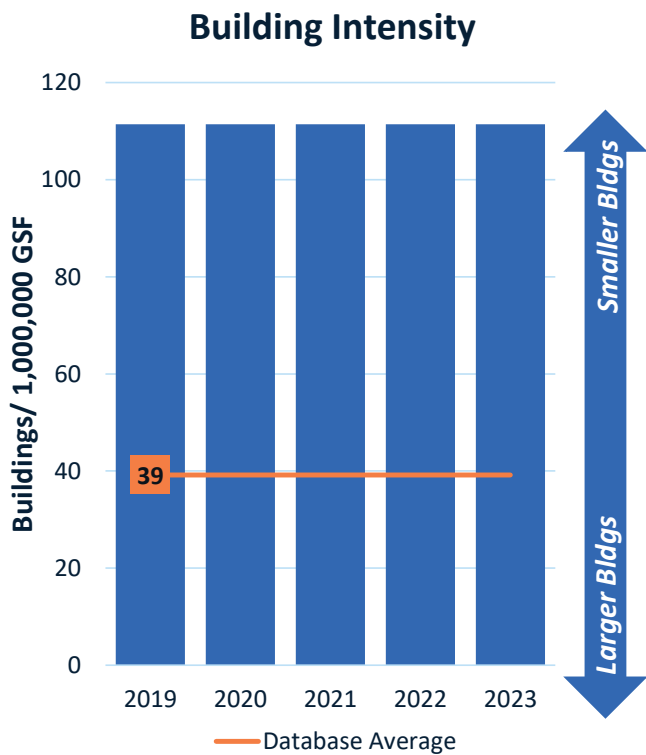
GARDIAN[®]

Space Profile:

Kodiak College

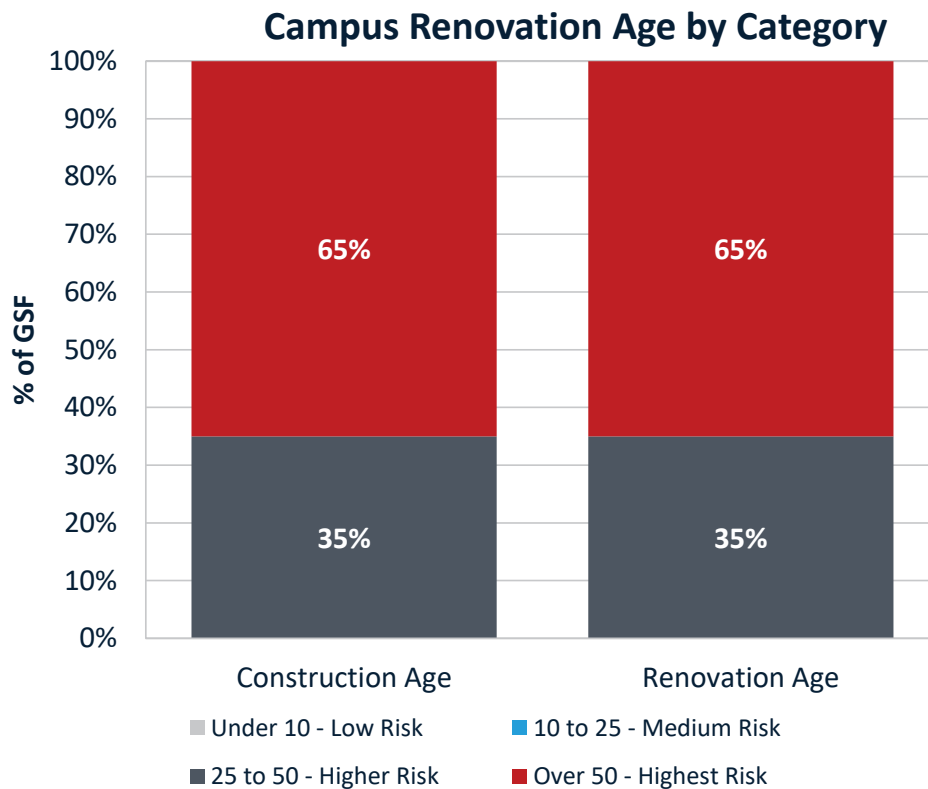
Qualifying Metrics – Building Demographics

Kodiak is more intense, denser, and slightly less technically complex than database



Aging Campus Puts Buildings At Risk

An older campus will cause operational strain and demand significant capital investment



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

GARDIAN[®]

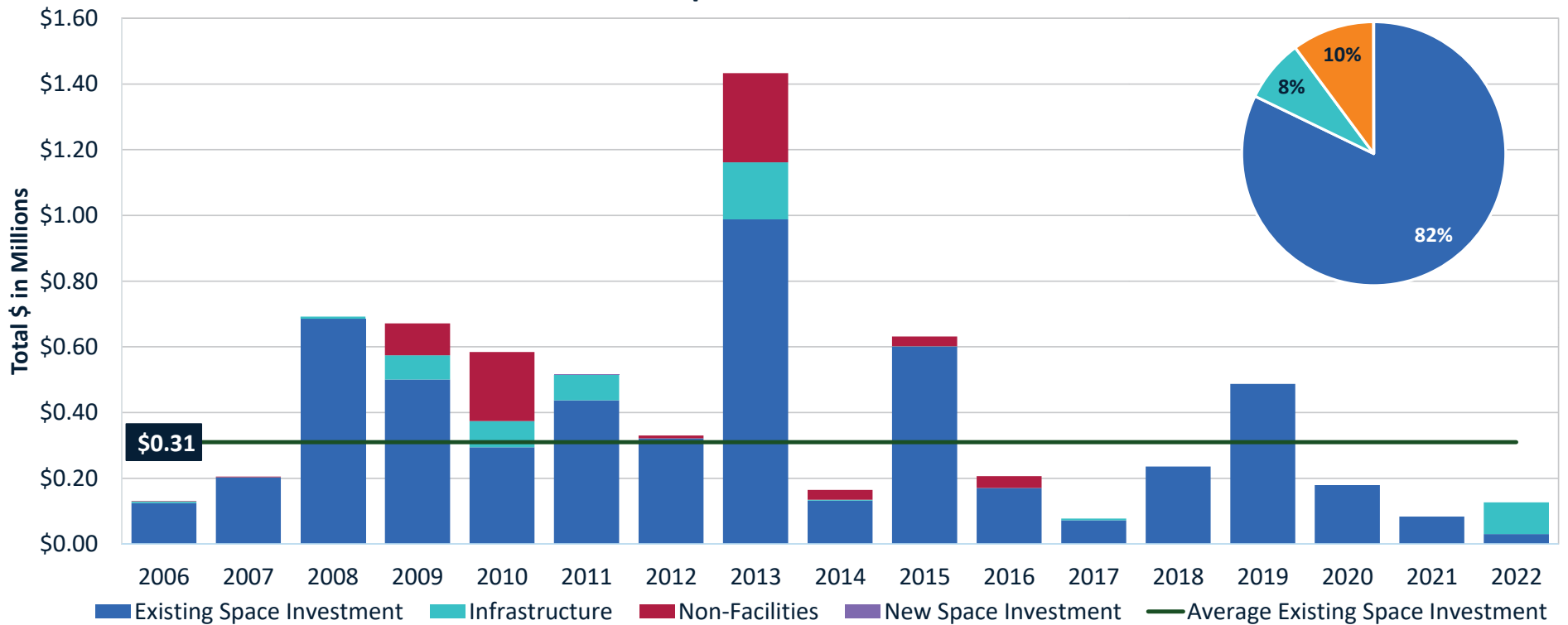
Capital Profile:

Kodiak College

Focusing Investments on Aging Campus

Kodiak sets example for community campuses as investment has focused on existing space

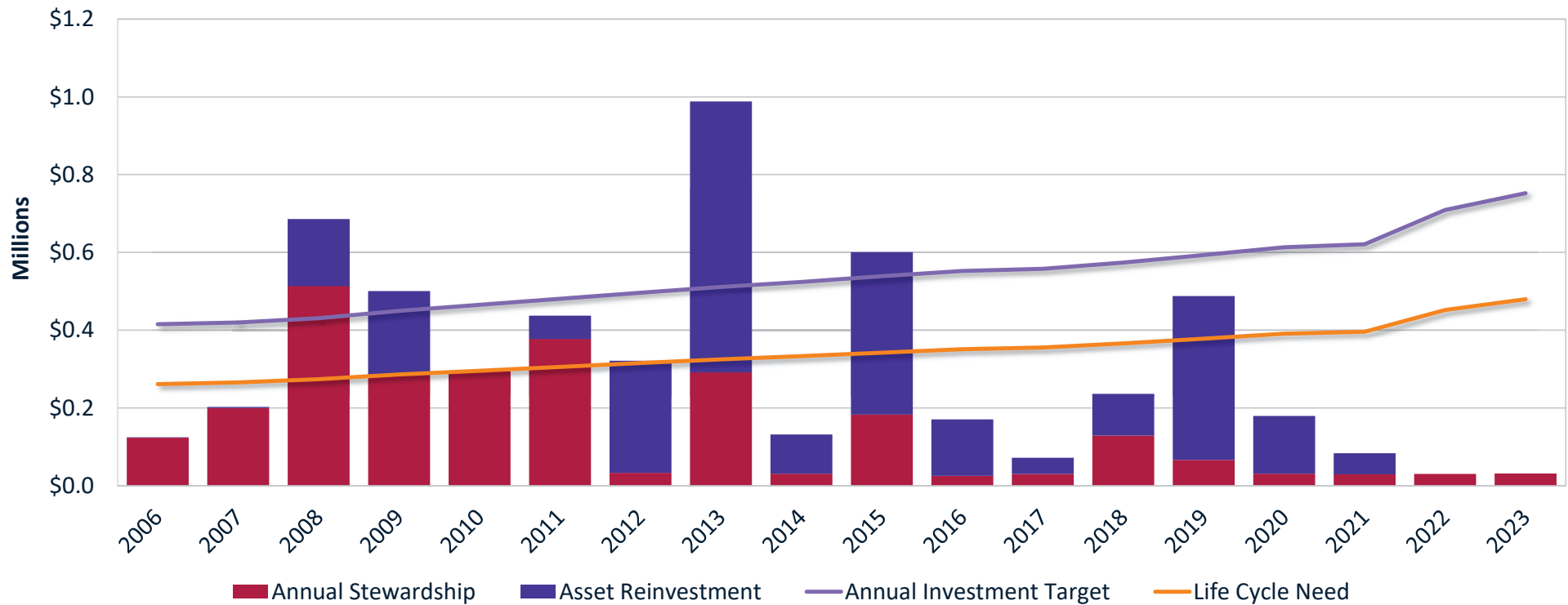
Total Capital Investment



Capital Investment vs. Annual Investment Target

Kodiak's lack of recurring capital dollars results in dependence on one-time capital funding

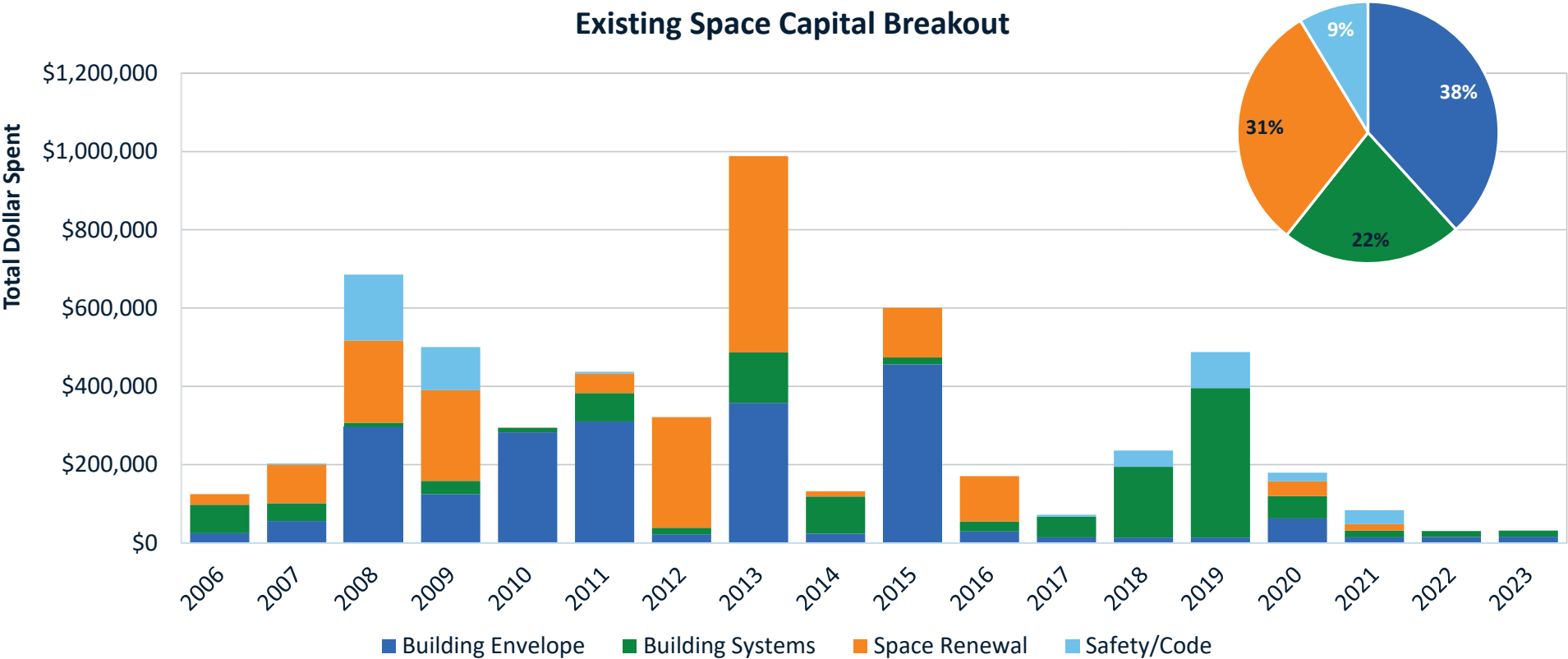
Total Capital Investment vs. Funding Target



Existing Space Investment Breakout

Kodiak has maximized investment by investing 60% of funds into envelope and systems

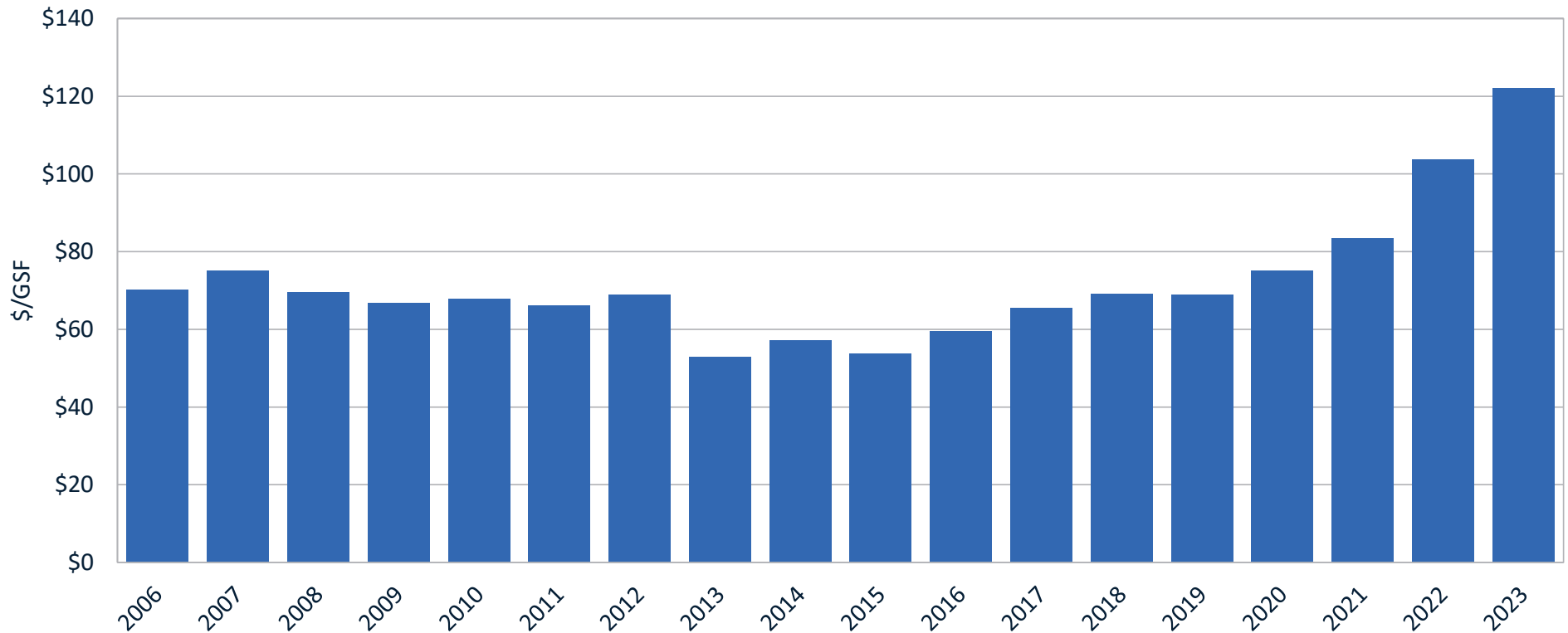
Existing Space Capital Breakout



Asset Reinvestment Need has Doubled Since 2015

Asset Reinvestment Need continues to increase as capital investments have decreased

Total Asset Reinvestment Need \$/GSF



GARDIAN[®]

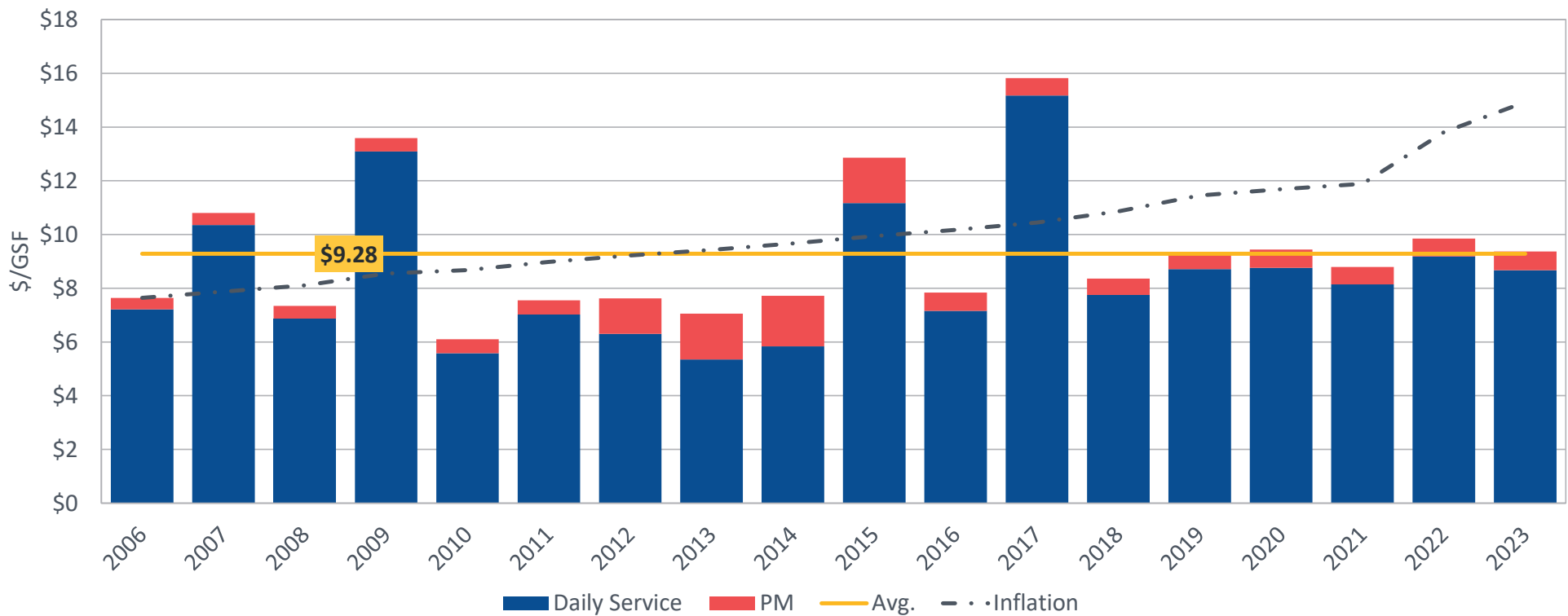
Operations Success:

Kodiak College

Facilities Operating Expenditures

Kodiak's operating expenditures have been similar for six years

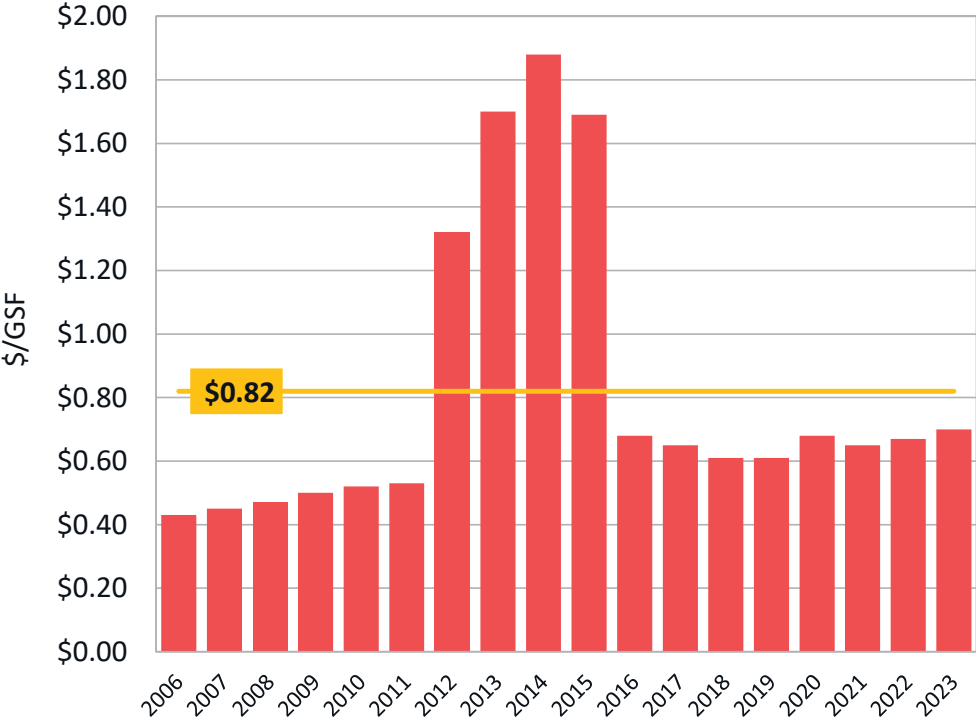
Facilities Operating Actuals



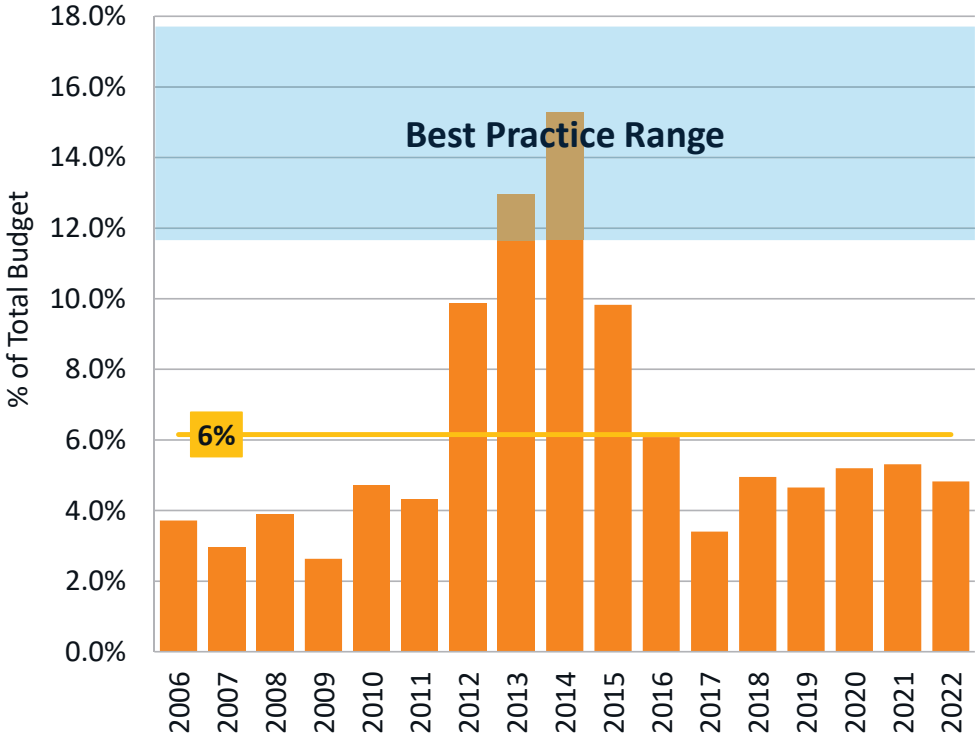
PM Spending Below Best Practice Range

Ensure campus is stewarded by directing PM resources toward expensive & valuable assets

Preventive Maintenance Spending



Preventive Maintenance Spending

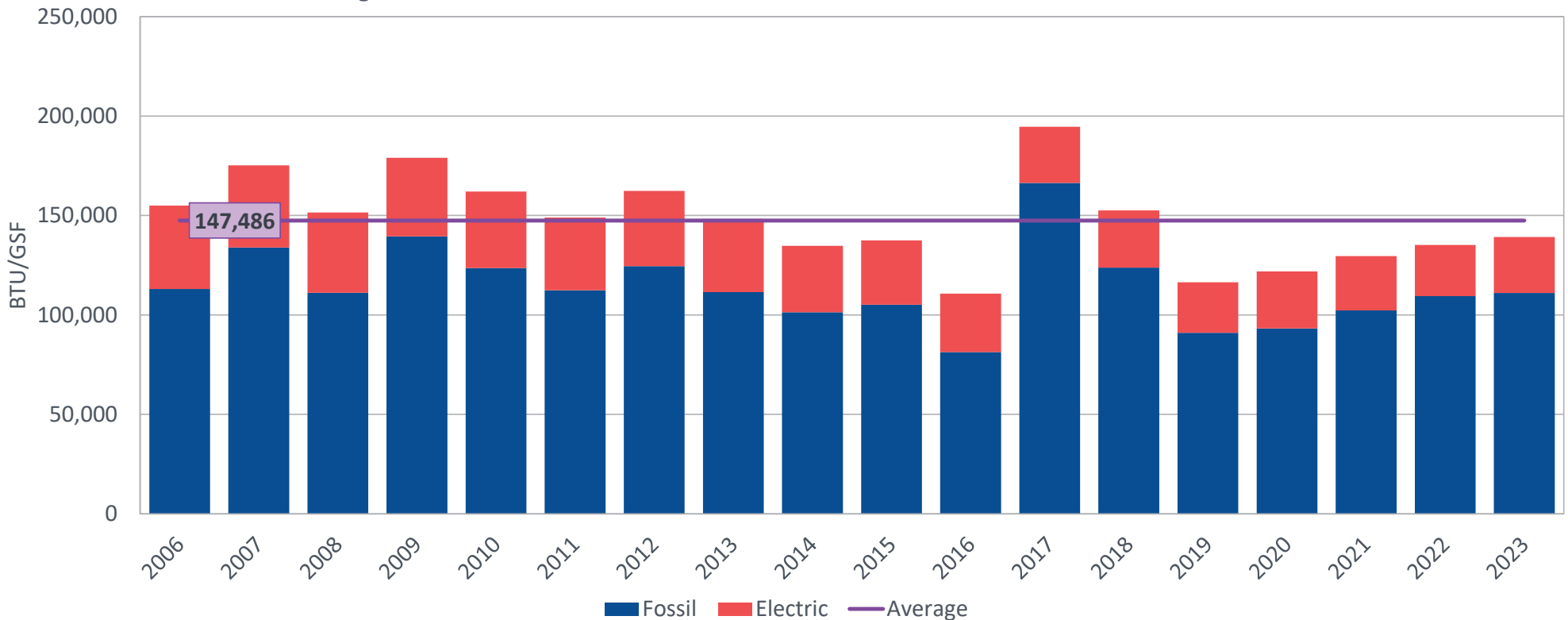


Total Energy Consumption

Kodiak energy consumption has been on the rise over the last 5 years

UAA- Kodiak College

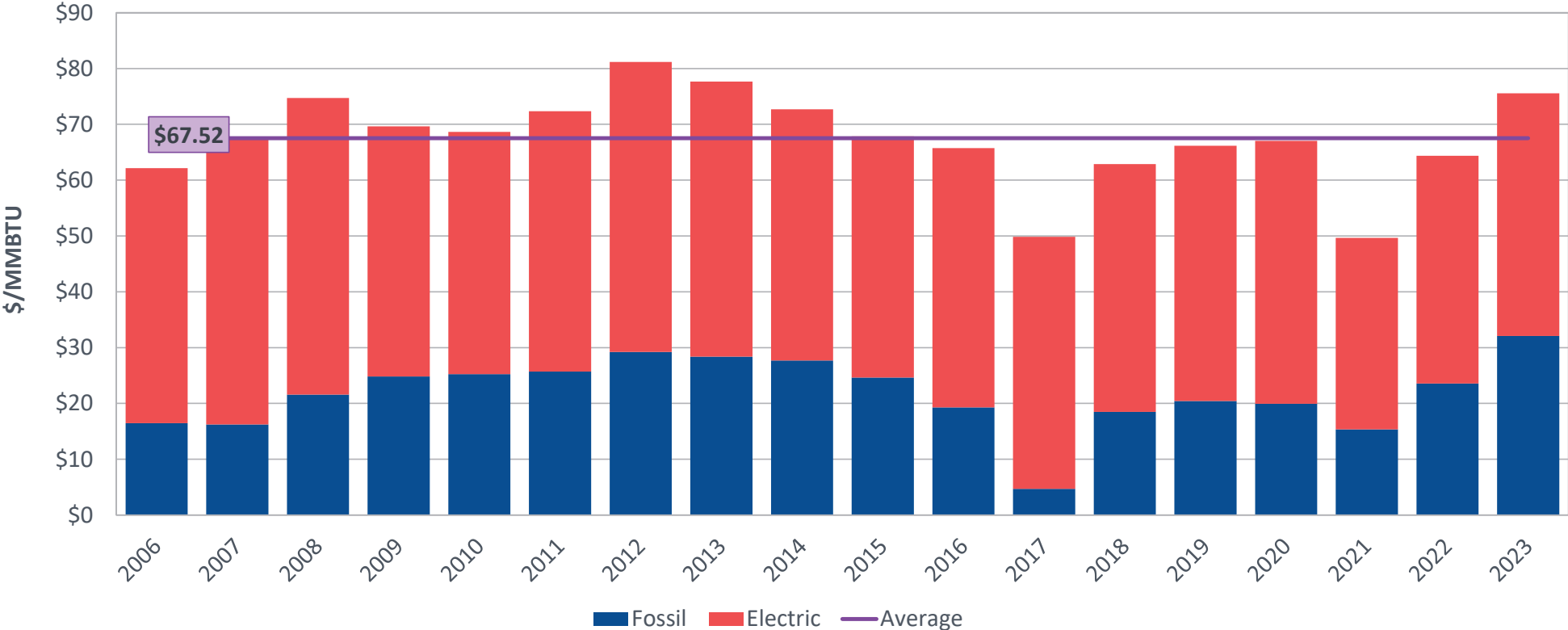
Total Energy Consumption



Energy Expenses are Increasing Over Time

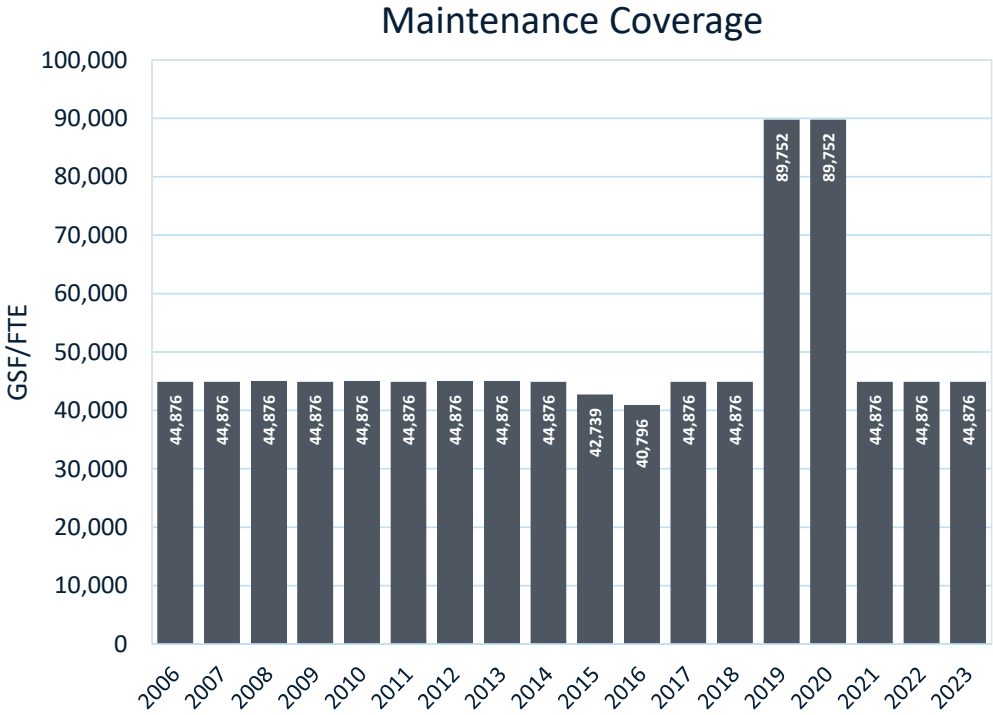
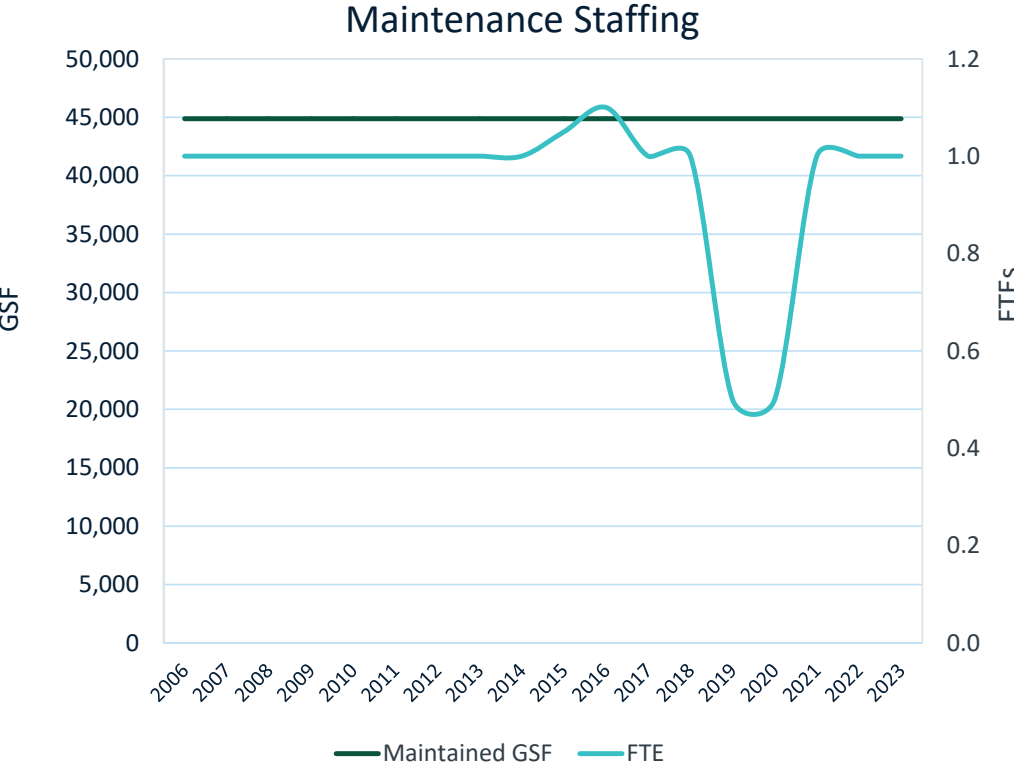
FY23 unit costs have risen to near historic highs per MMBTU

Total Energy Cost



Maintenance Staffing Coverage

Despite 2019 – 2020, staffing coverage remains consistent



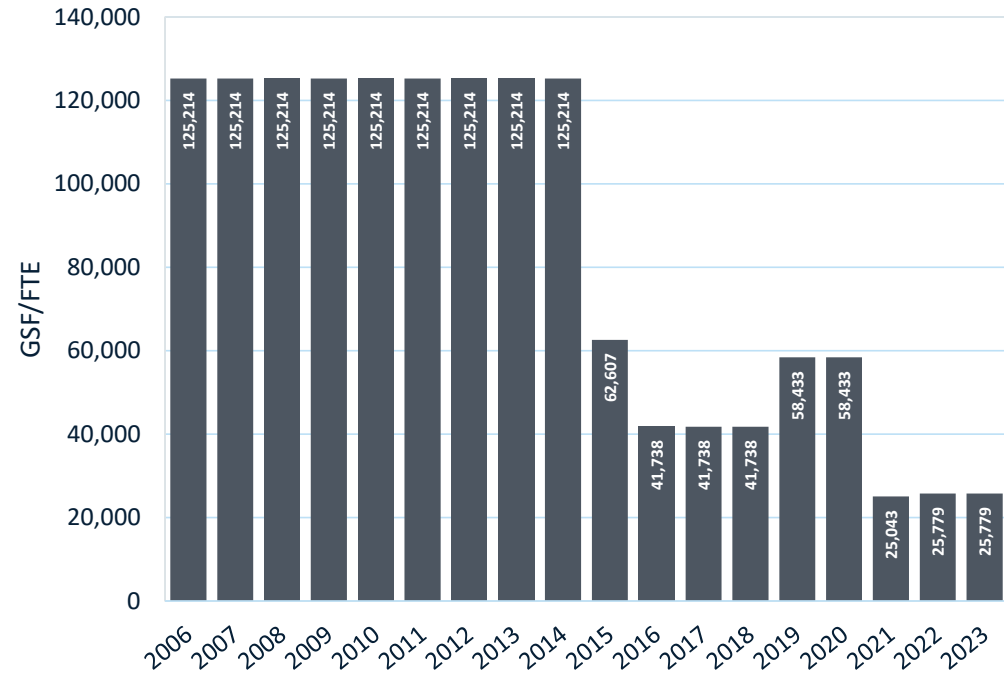
Custodial Staffing Coverage

Coverage ratios remain consistent in FY23

Custodial Staffing

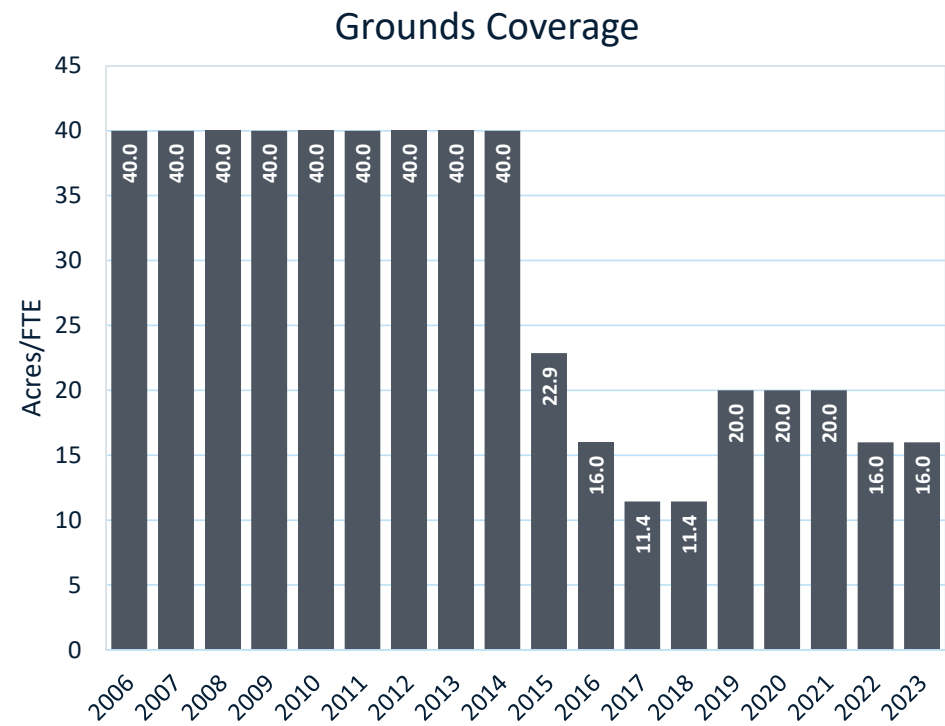
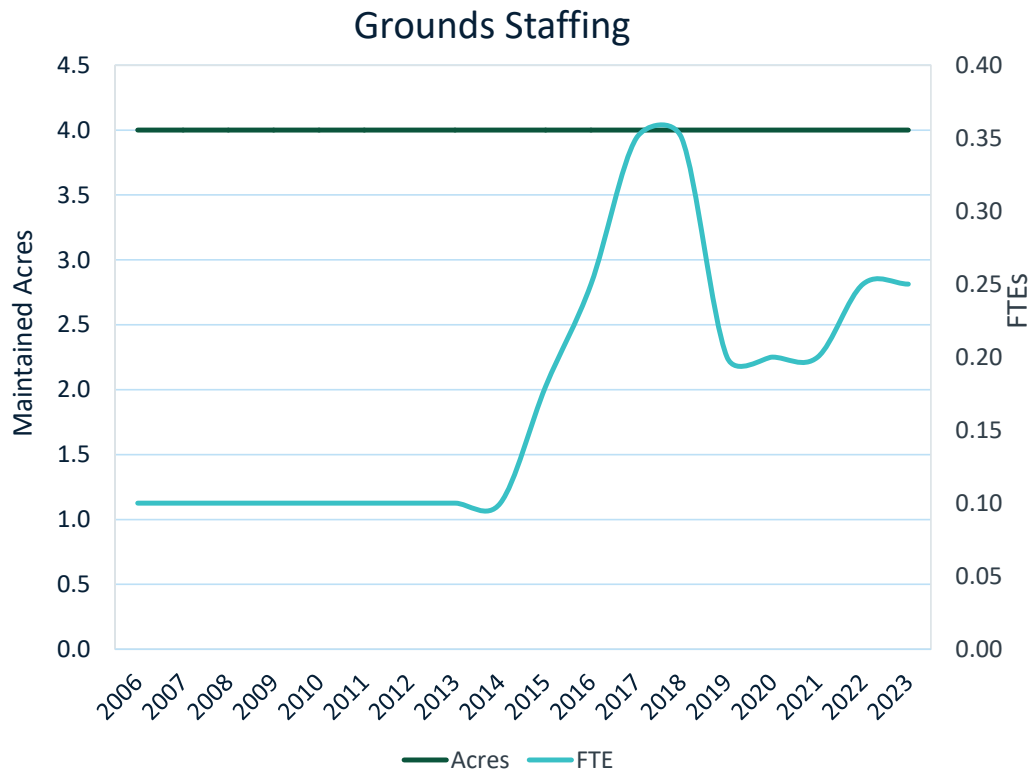


Custodial Coverage



Grounds Staffing Coverage

Coverage ratios remain consistent in FY23



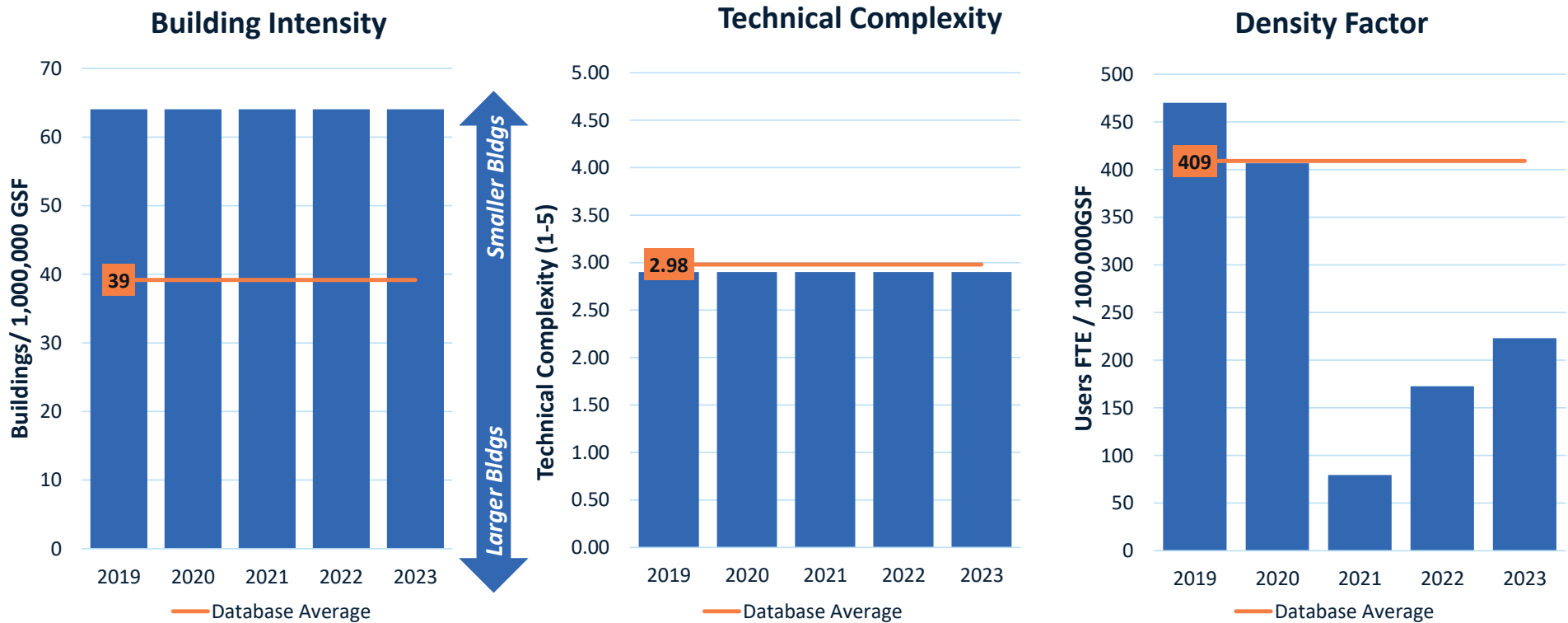
GARDIAN[®]

Space Profile

Mat-Su College

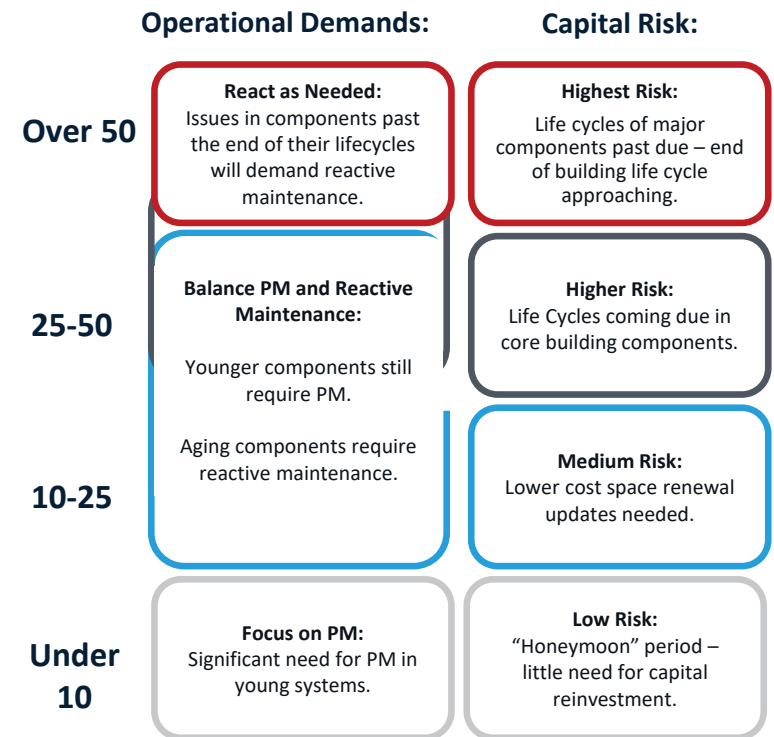
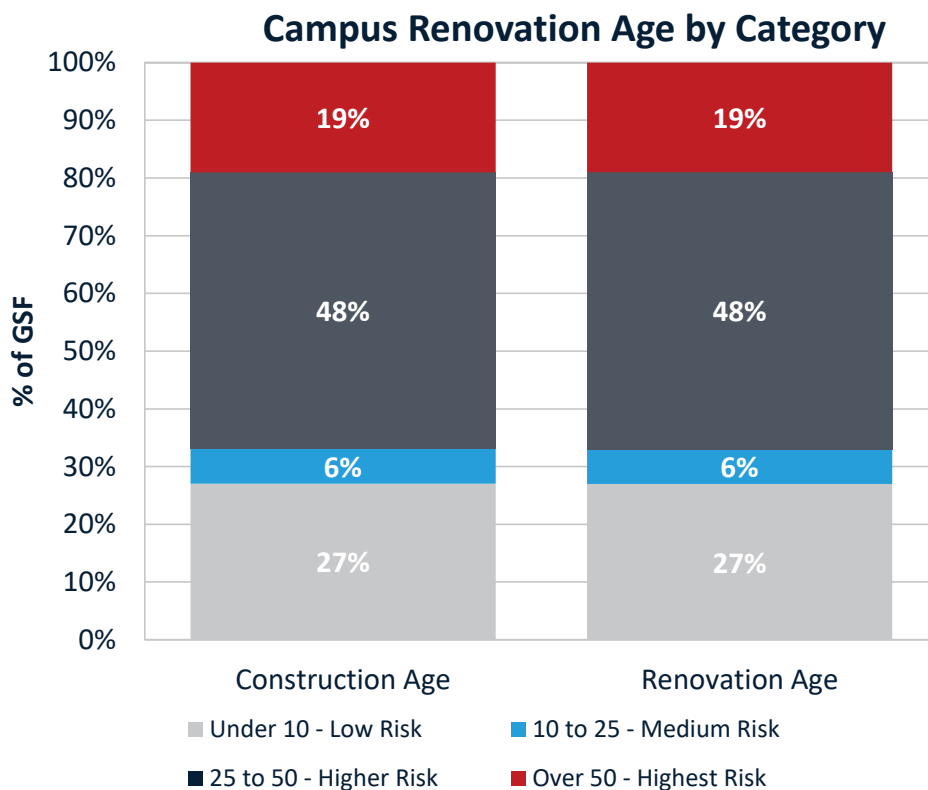
Qualifying Metrics – Building Demographics

Mat-Su is more intense, less dense, and slightly less technically complex than database



Aging Campus Puts Buildings At Risk

67% of Mat-Su campus is older than 25 years, carrying above average risk





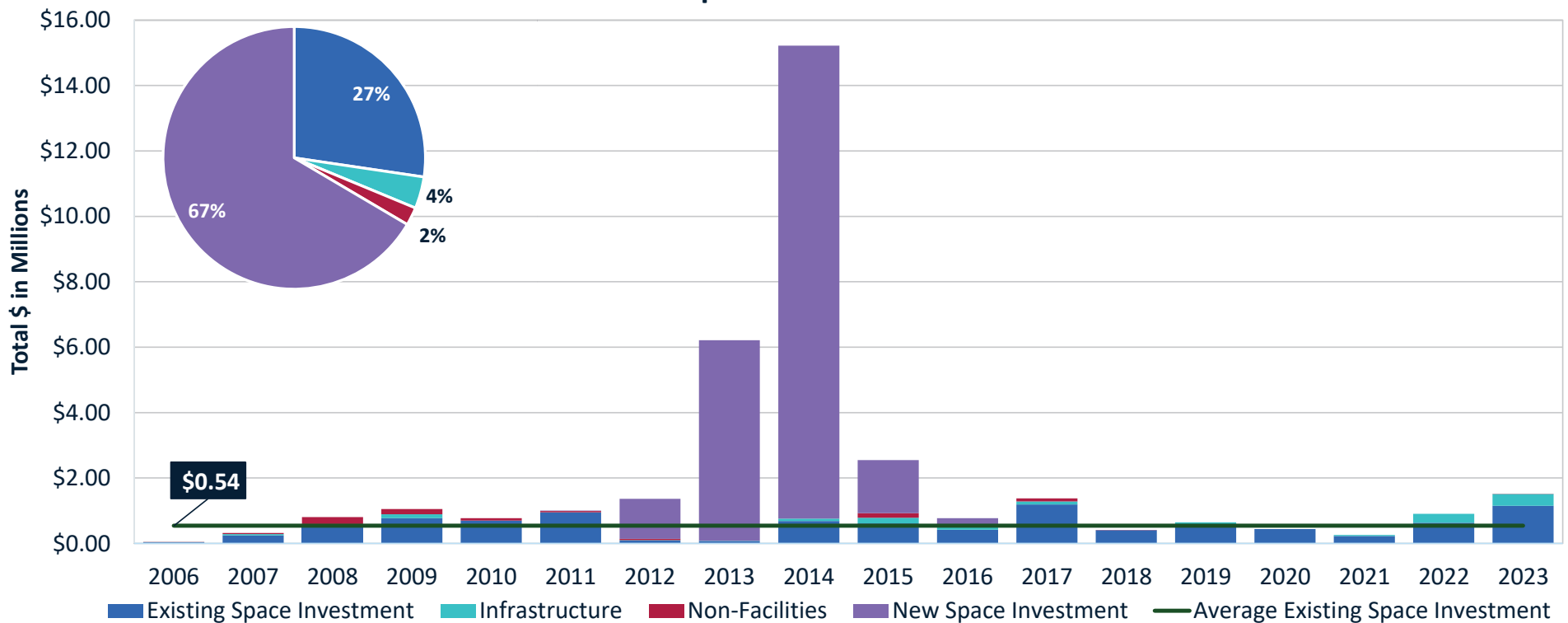
Capital Profile:

Mat-Su College

Focusing Investments on Aging Campus

Older space should be managed by increasing future investment into existing space

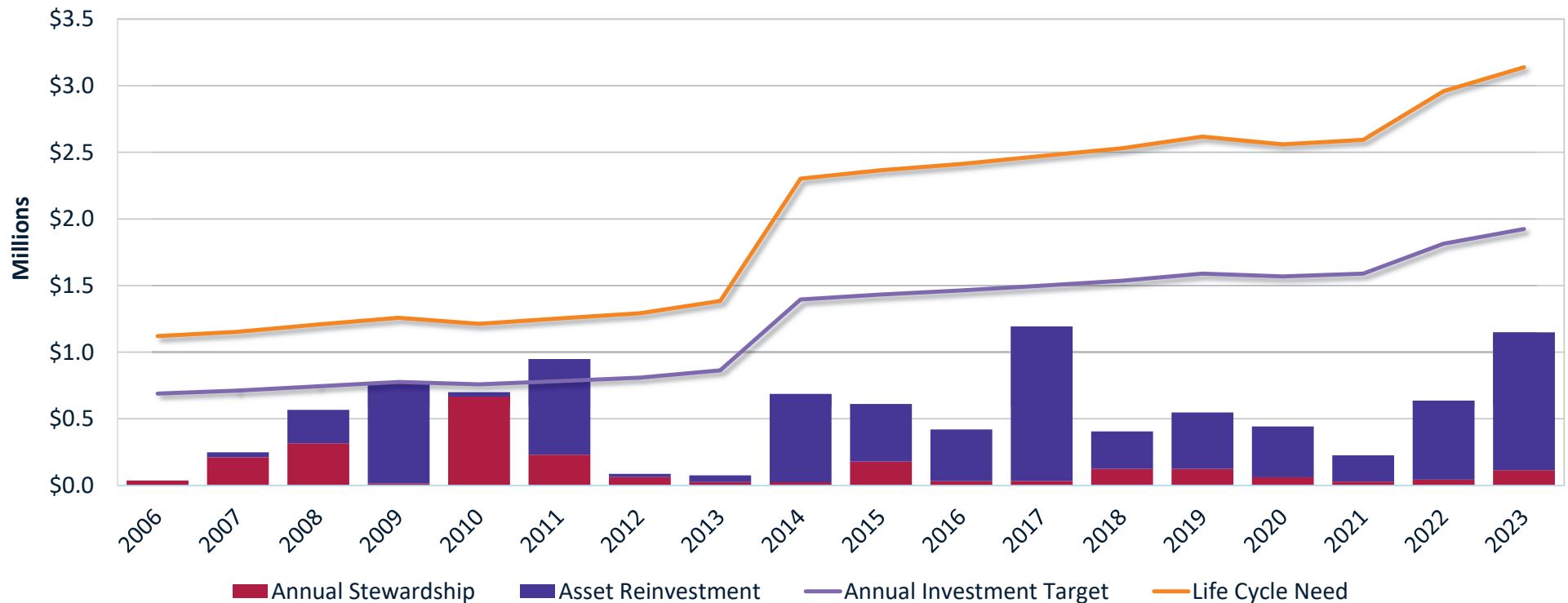
Total Capital Investment



Capital Investment vs. Annual Investment Target

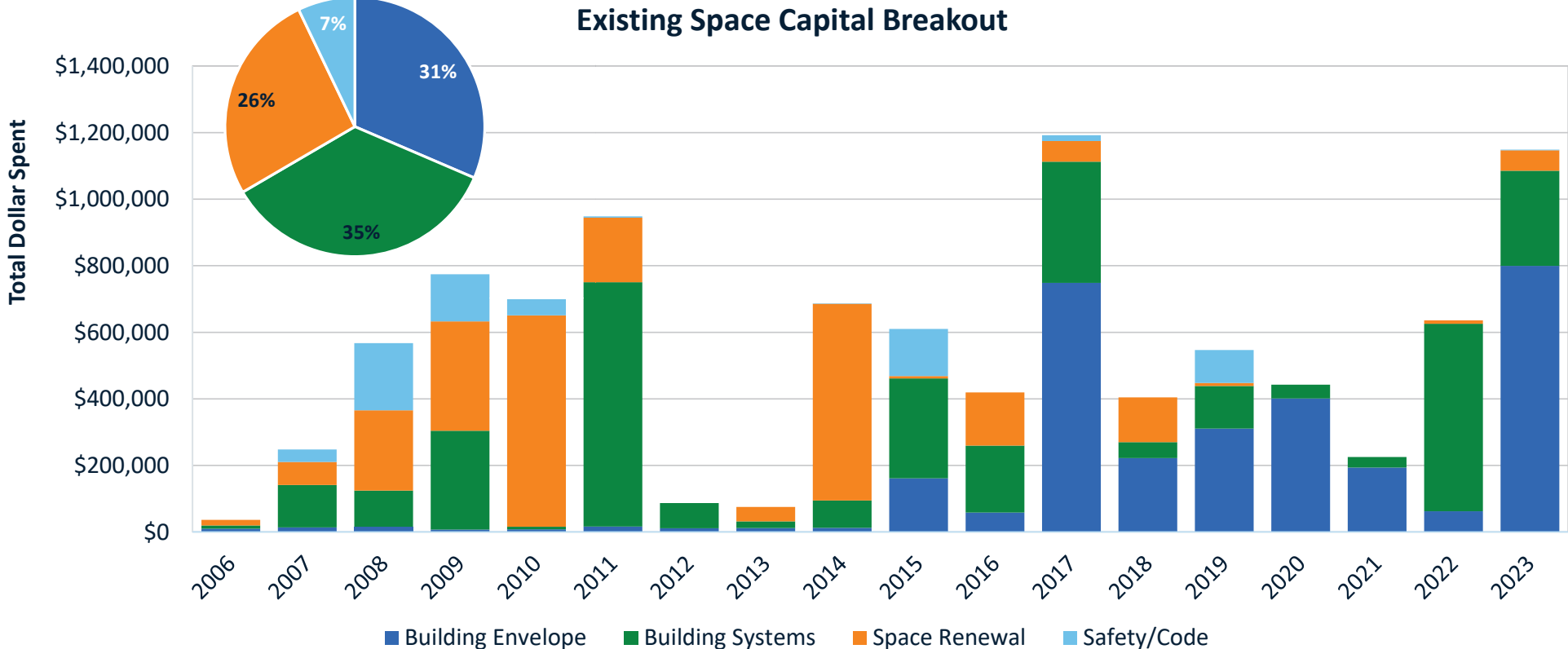
Mat-Su continues to miss target further increasing backlog and operational strain

Total Capital Investment vs. Funding Target



Existing Space Investment Breakout

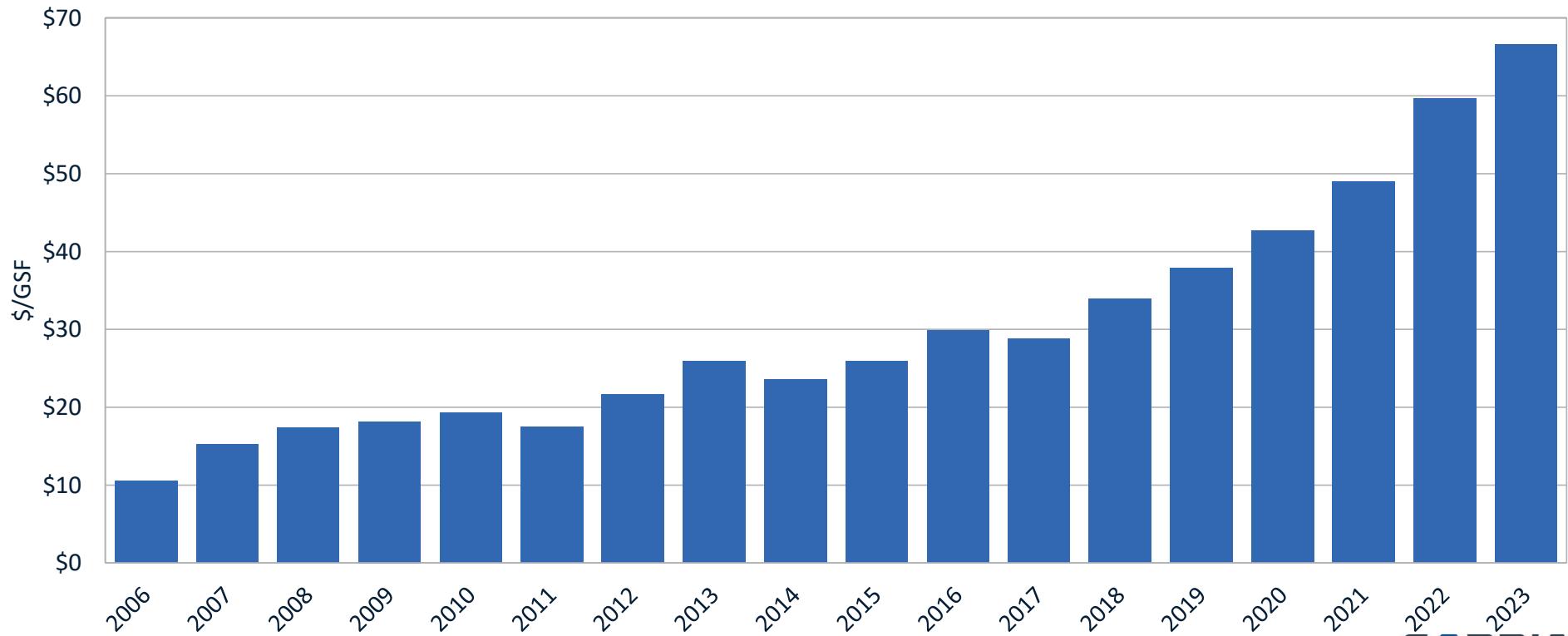
Mat-Su highlights excellent project selection, 76% of funds directed to systems and envelope



Asset Reinvestment Need has Increased since 2015

Asset Reinvestment Need continues to increase as capital targets have been missed

Total Asset Reinvestment Need \$/GSF



GARDIAN[®]

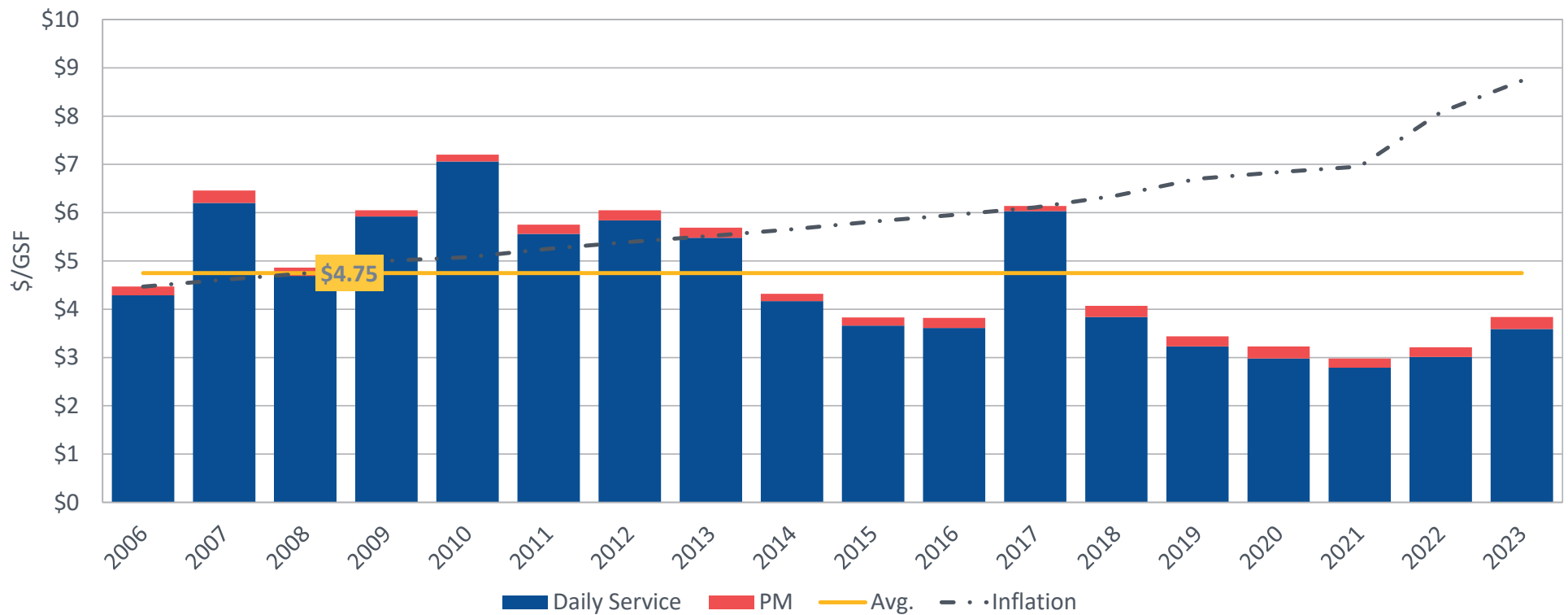
Operations Success:

Mat-Su College

Facilities Operating Expenditures

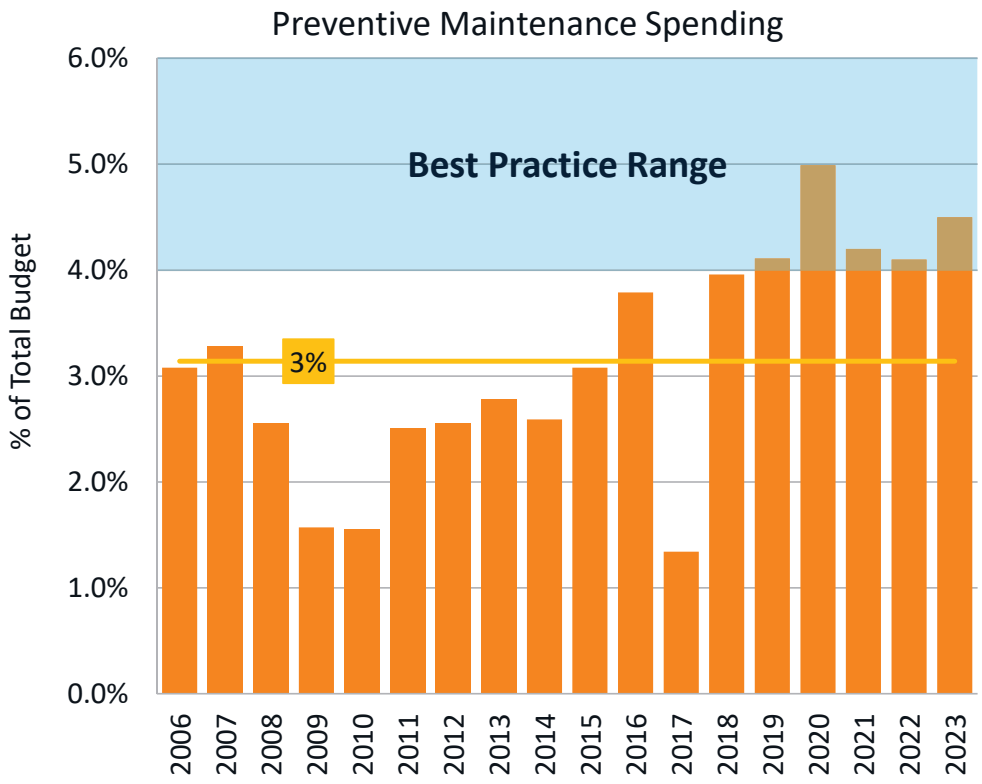
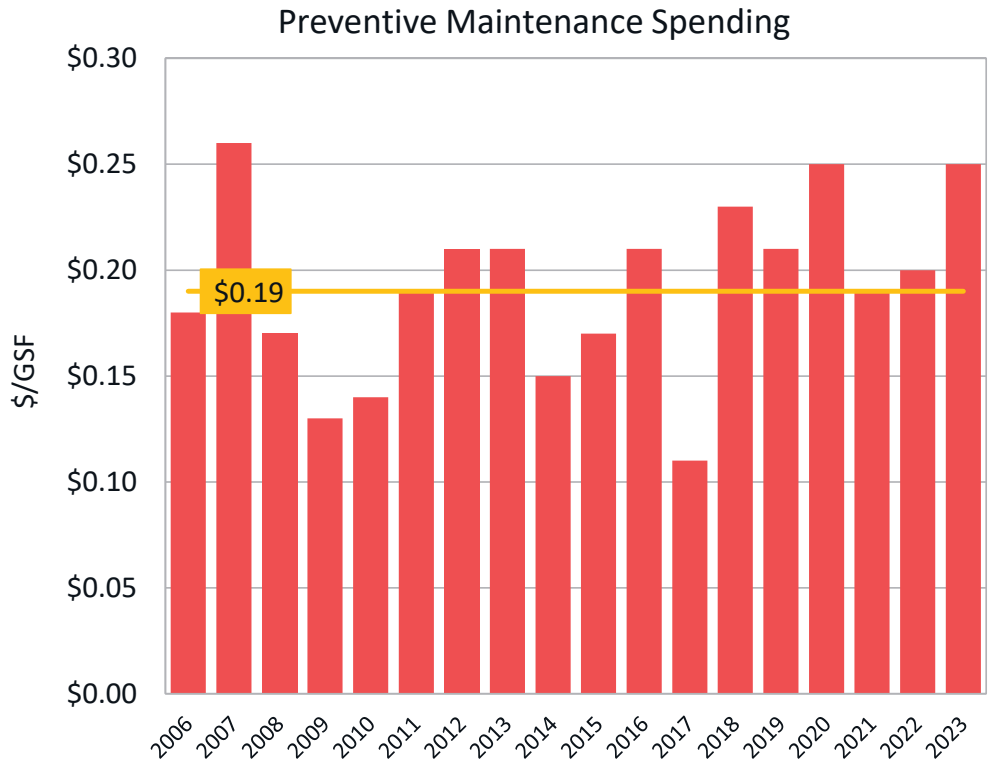
Mat-Su delivers its daily operations at a far leaner rate than FY06 levels inflated longitudinally

Facilities Operating Actuals



PM Spending Remains within Best Practice Range

PM spending continues an upward trajectory, living in the best practice range for 5 years

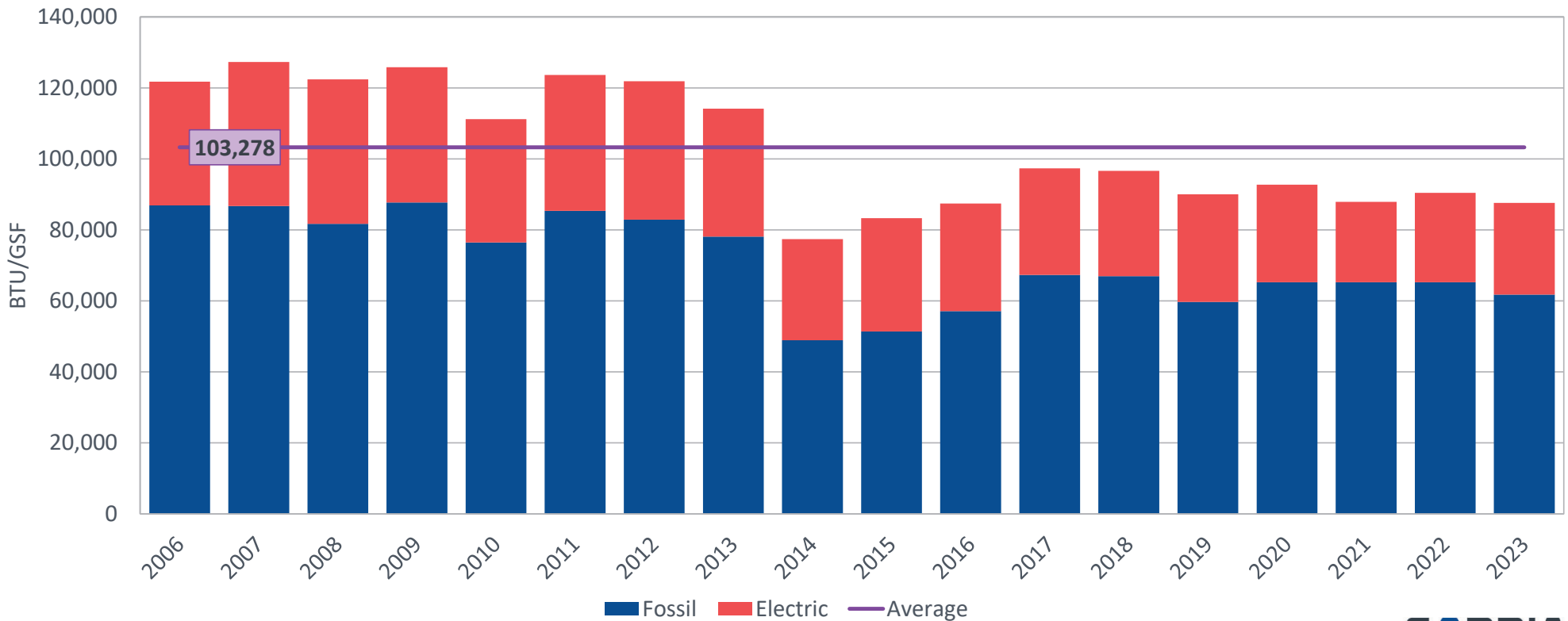


Total Energy Consumption

Mat-Su consumption remains consistent and below average since 2014

UAA- Mat-Su College

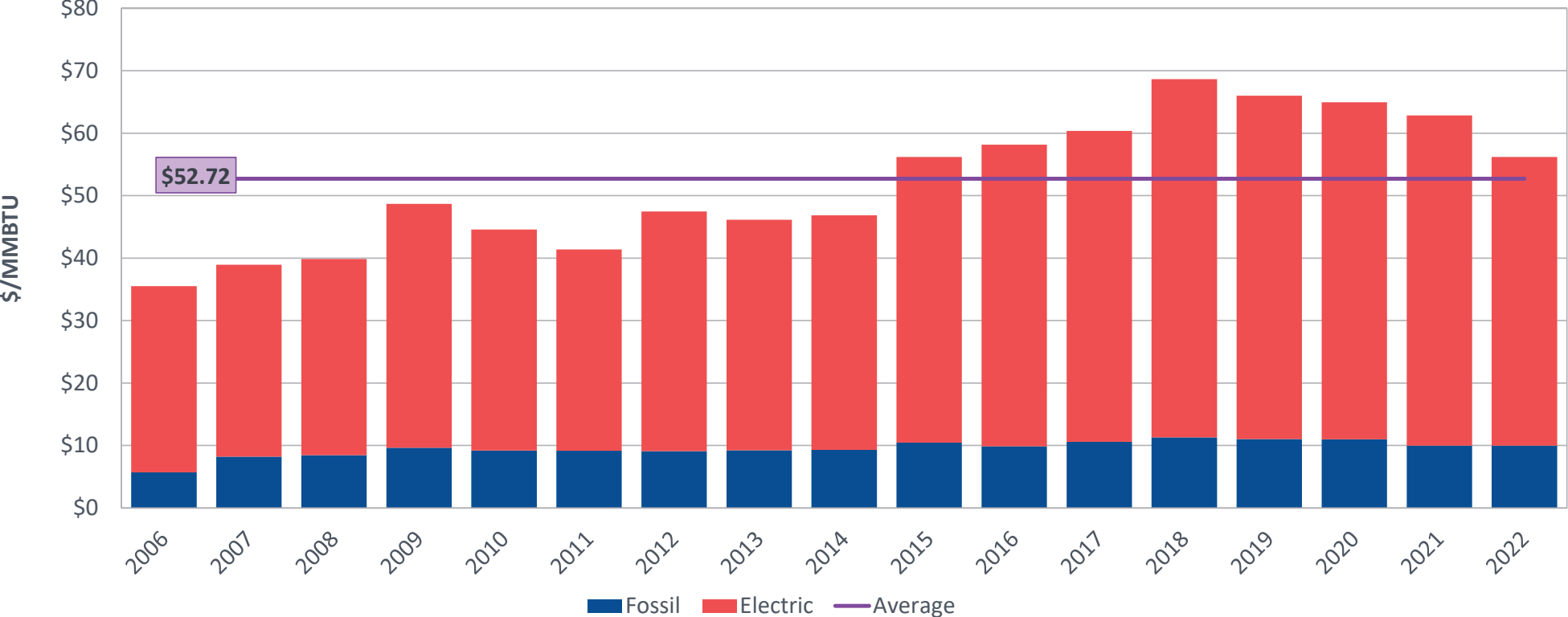
Total Energy Consumption



Energy Expenses are Increasing Over Time

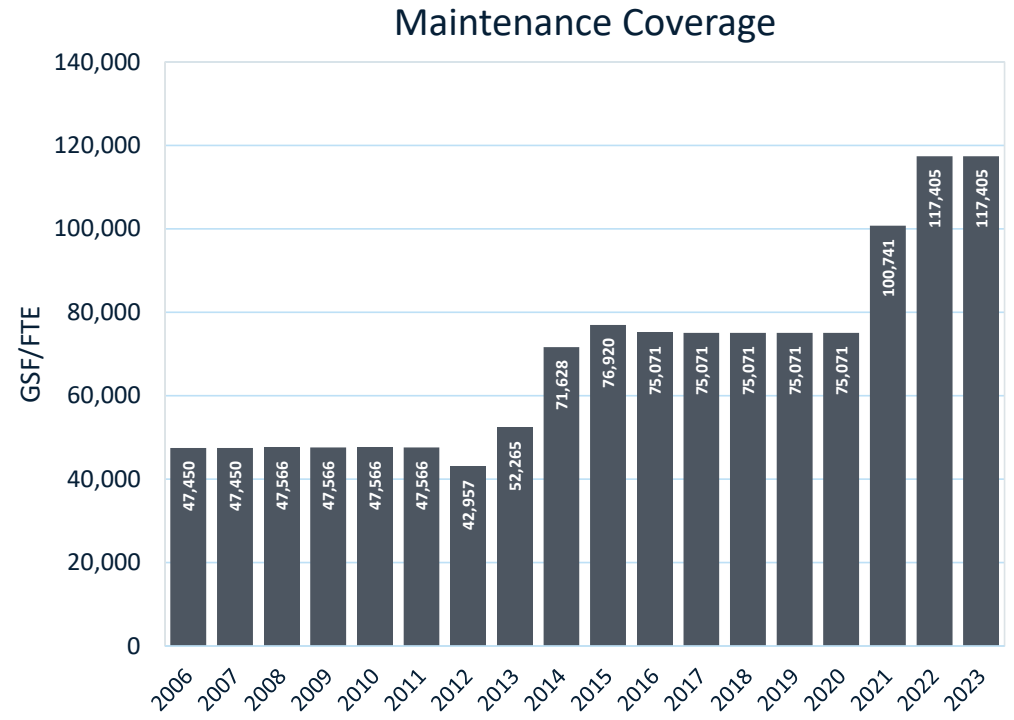
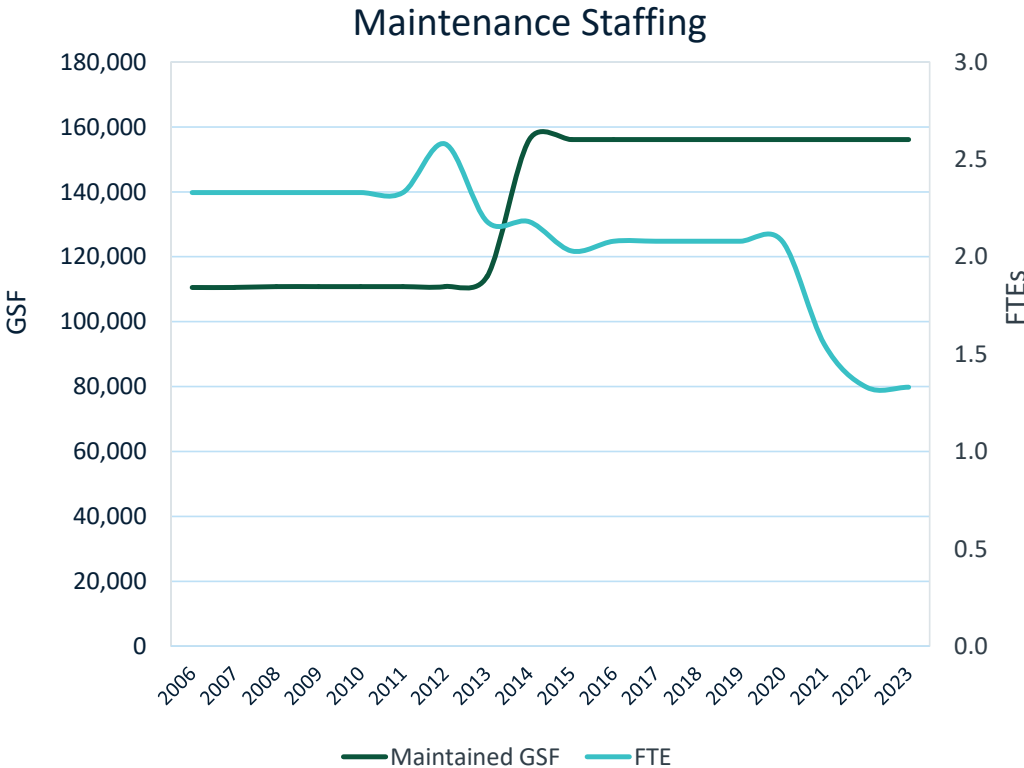
Despite “flatness” in consumption, costs increase largely driven by electric rates

Total Energy Cost



Maintenance Staffing Coverage

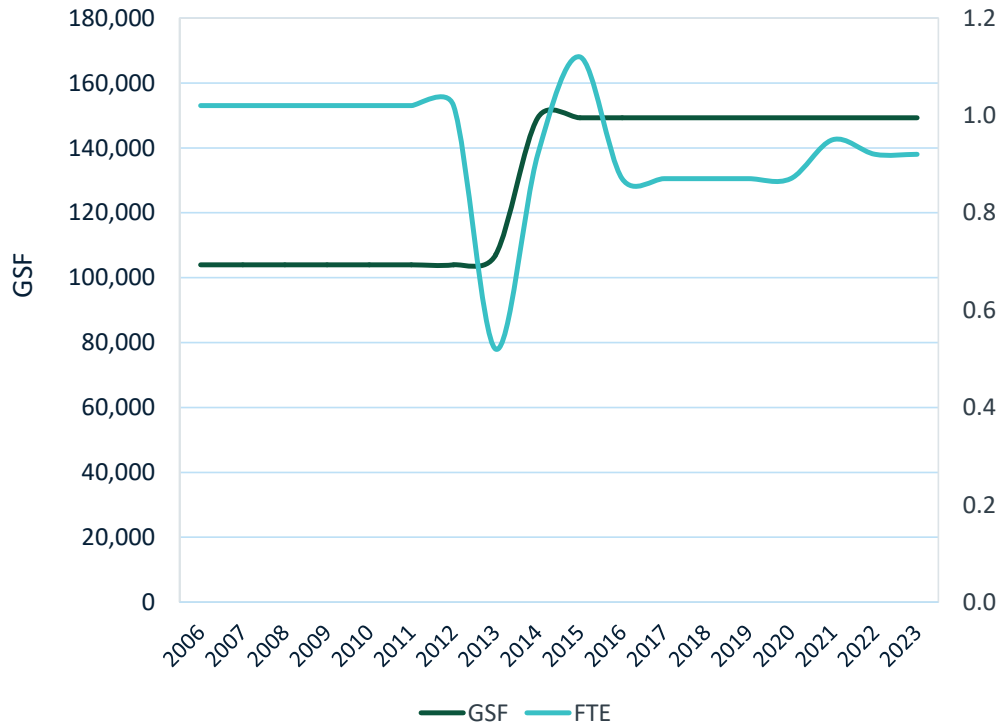
Drops in FTE lead to increasing coverage ratios and operational strain



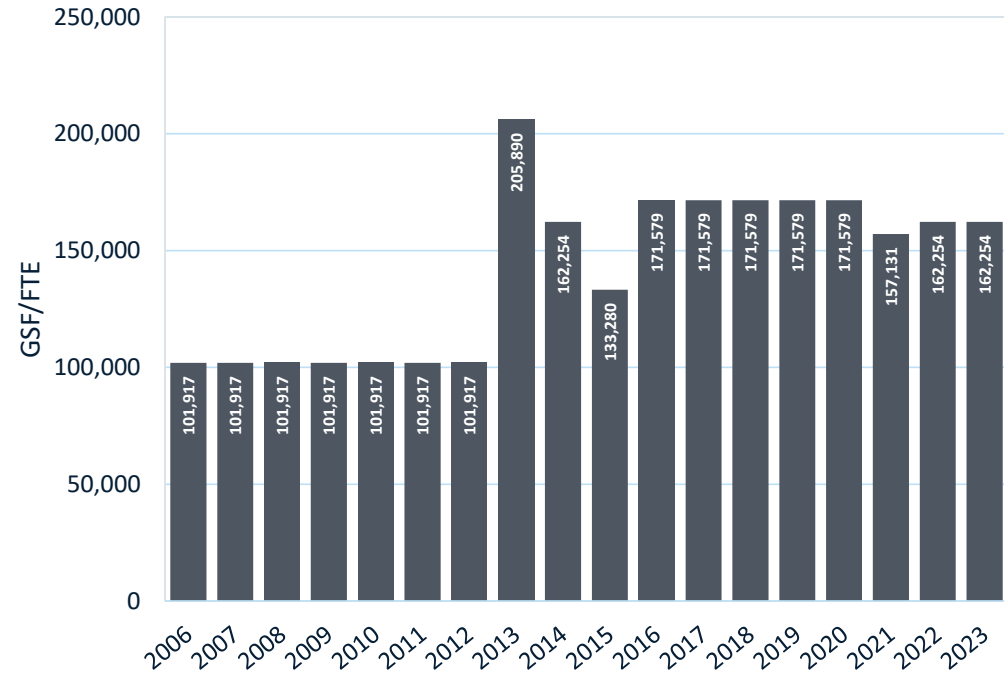
Custodial Staffing Coverage

Custodial FTE's have decreased, but ratios are minimally impacted

Custodial Staffing

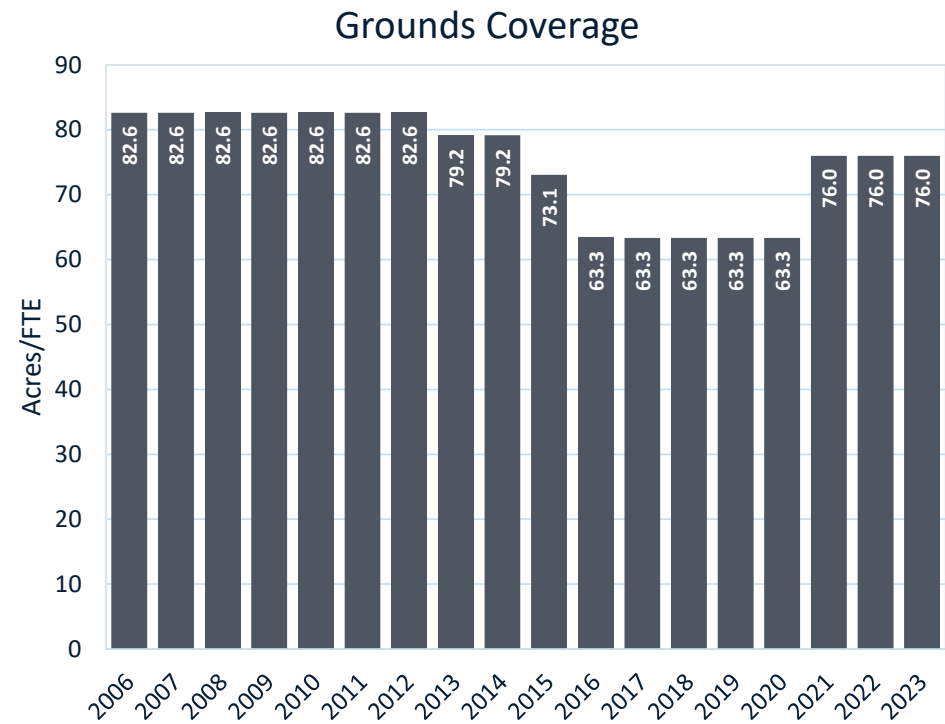
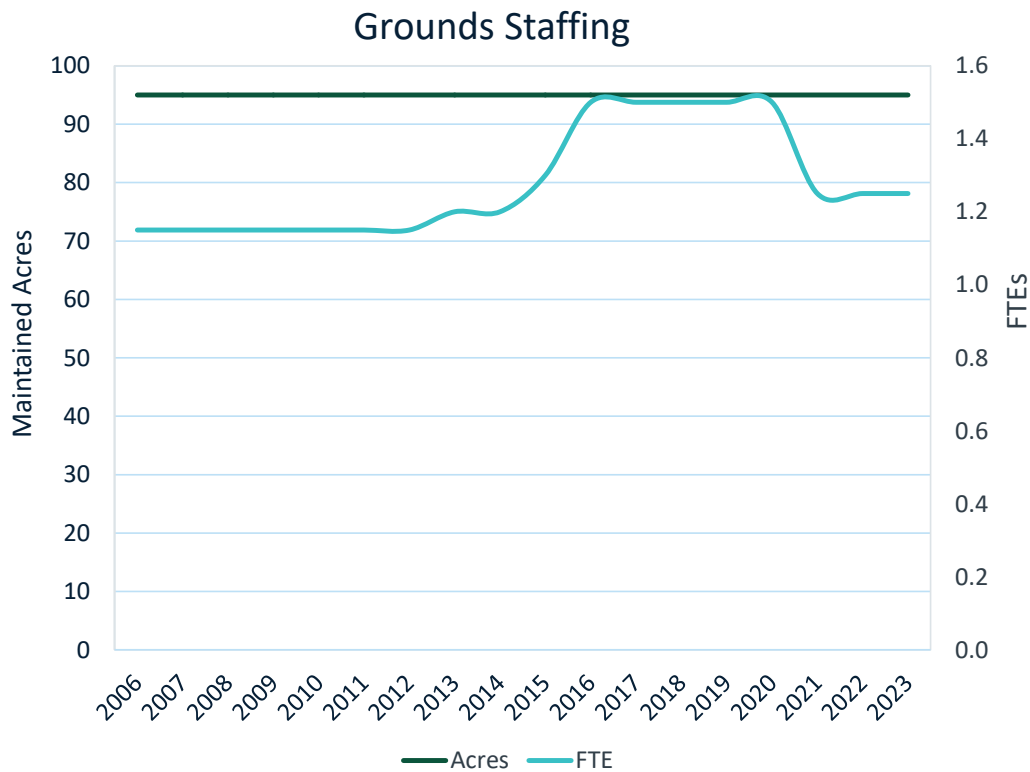


Custodial Coverage



Grounds Staffing Coverage

Grounds coverage increasing to 2012 levels



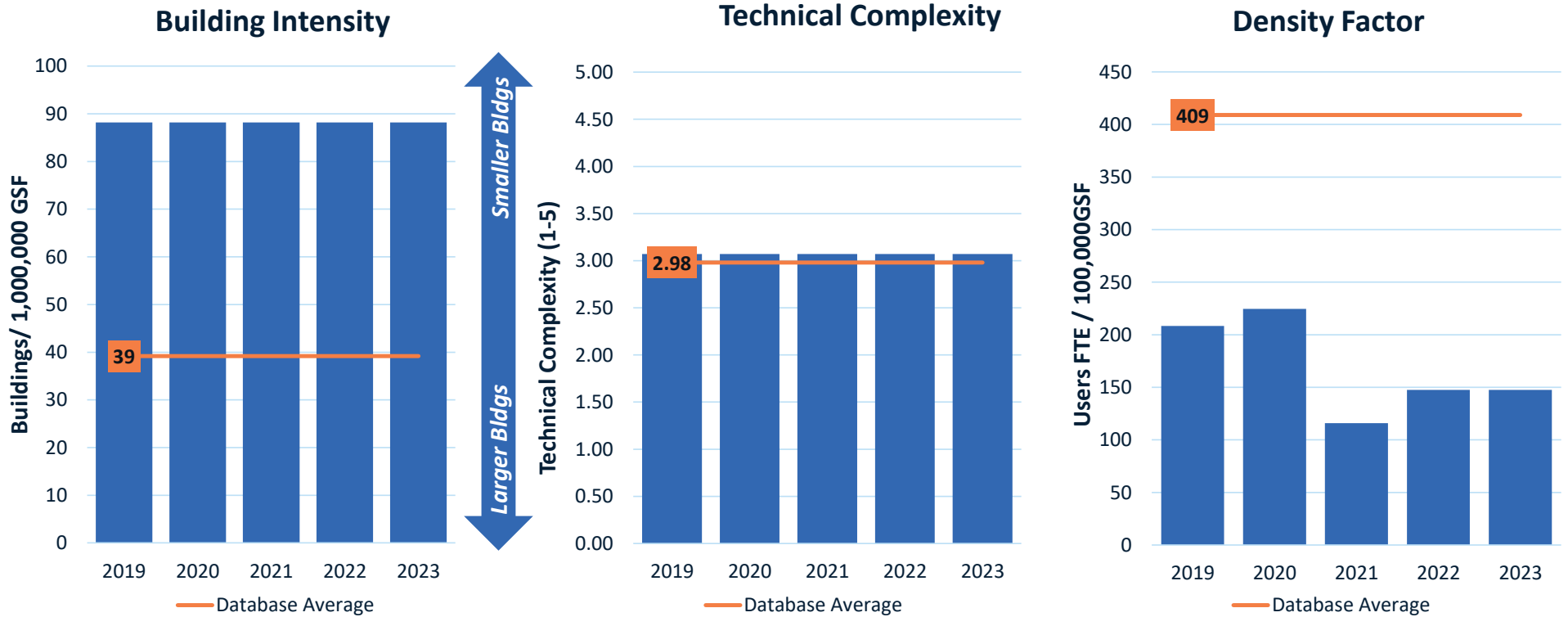
GARDIAN[®]

Space Profile:

Prince William Sound Community College

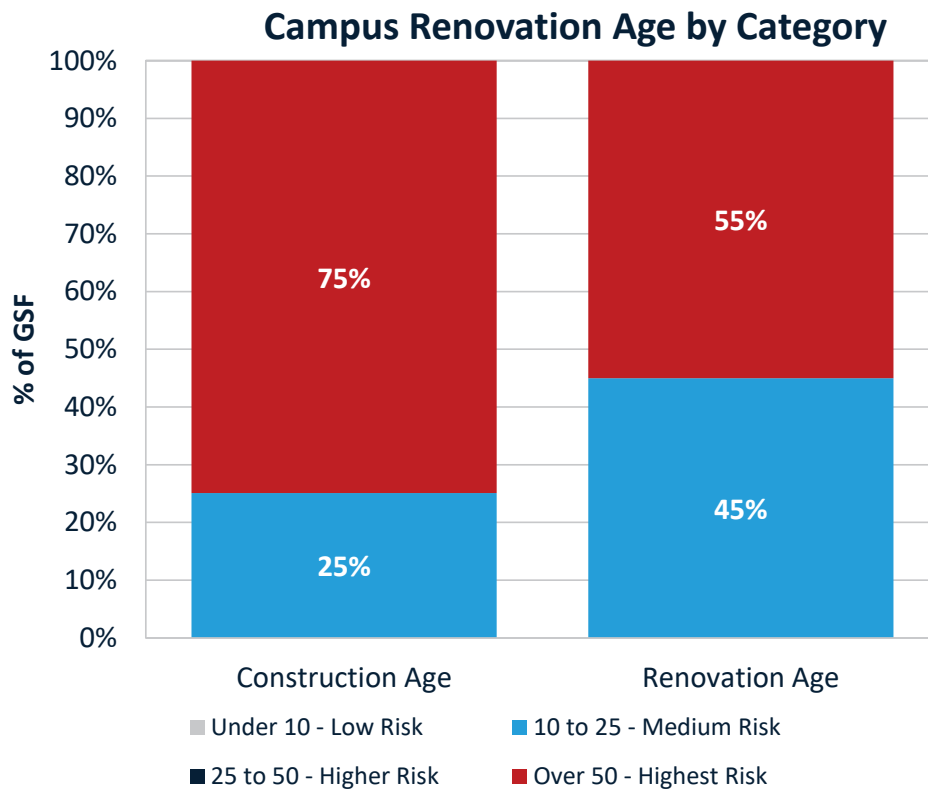
Qualifying Metrics – Building Demographics

PWSCC campus more intense, less dense, and slightly more complex than database



Aging Campus Puts Buildings At Risk

Renovations have reduced capital risk, operational strain, and a more balanced age profile



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

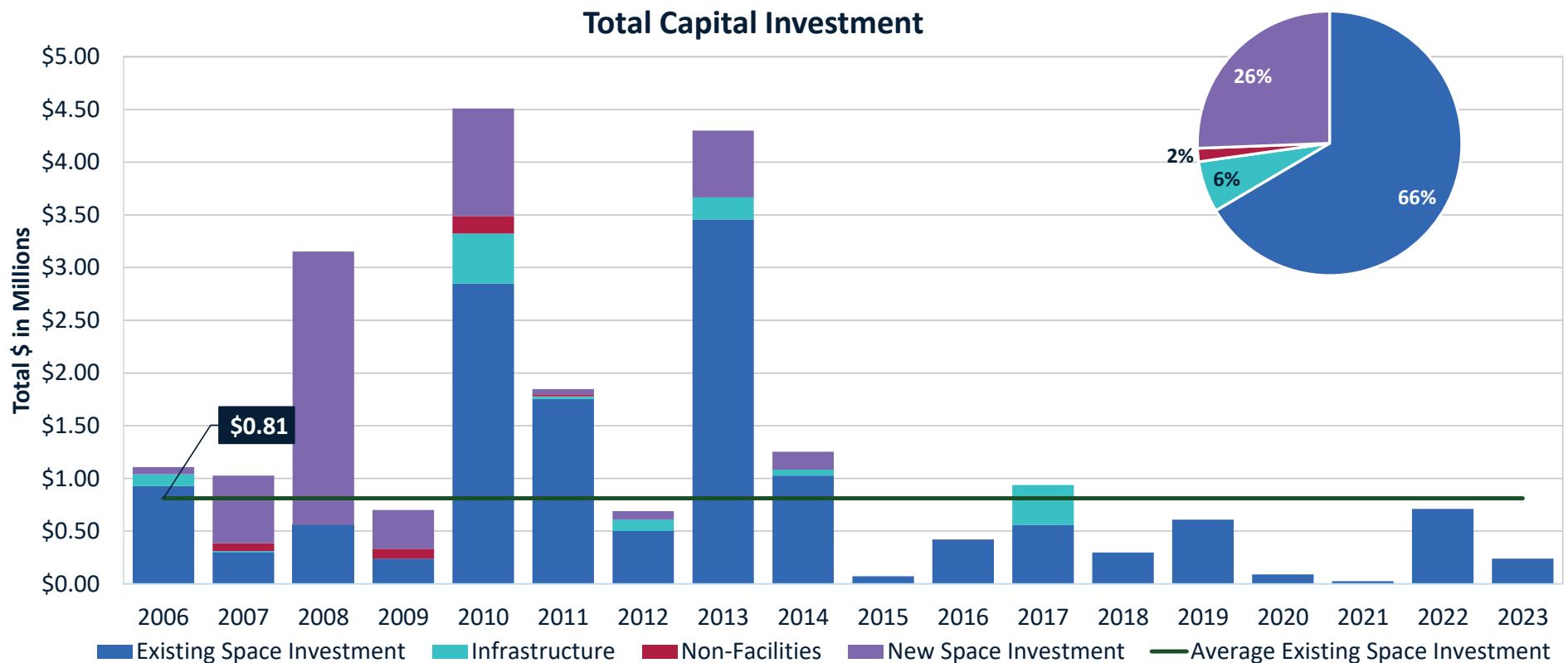


Capital Profile:

Prince William Sound Community College

Focusing Investments on Aging Campus

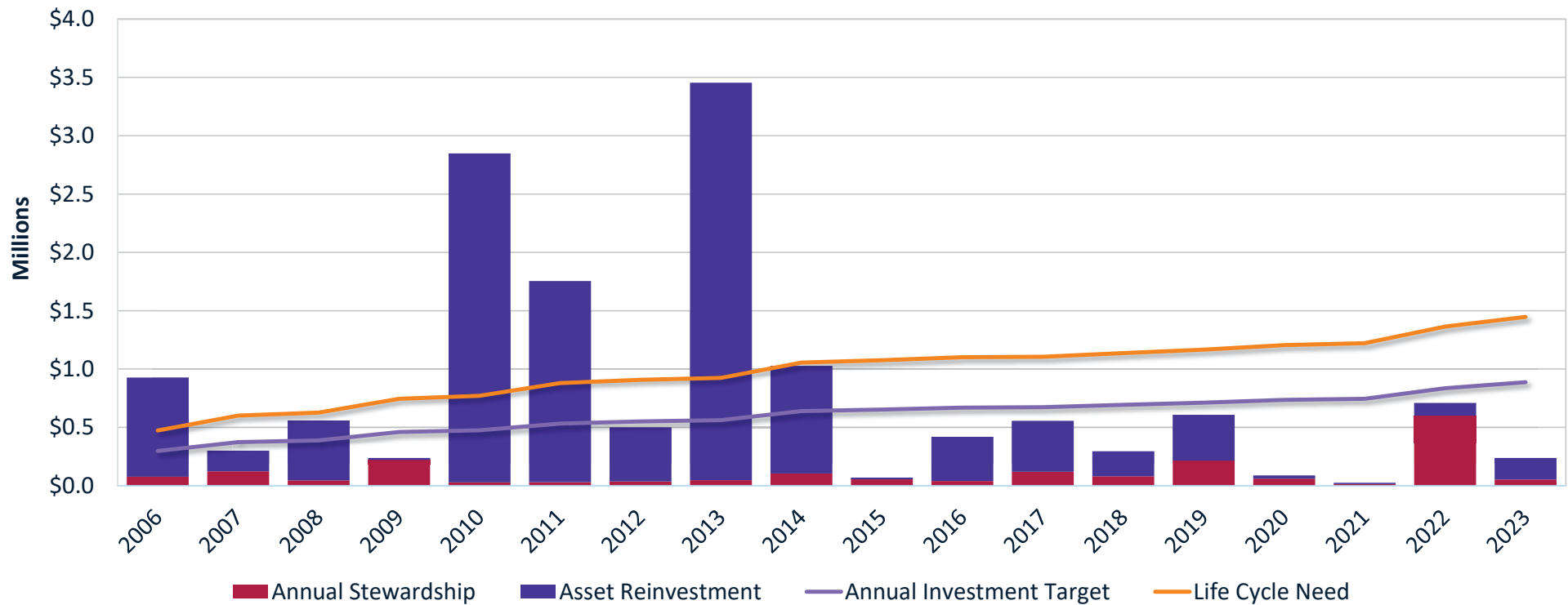
Capital investments at PWSCC smartly focused into existing space



Capital Investment vs. Annual Investment Target

PWSCC continues to miss target, further increasing asset reinvestment need

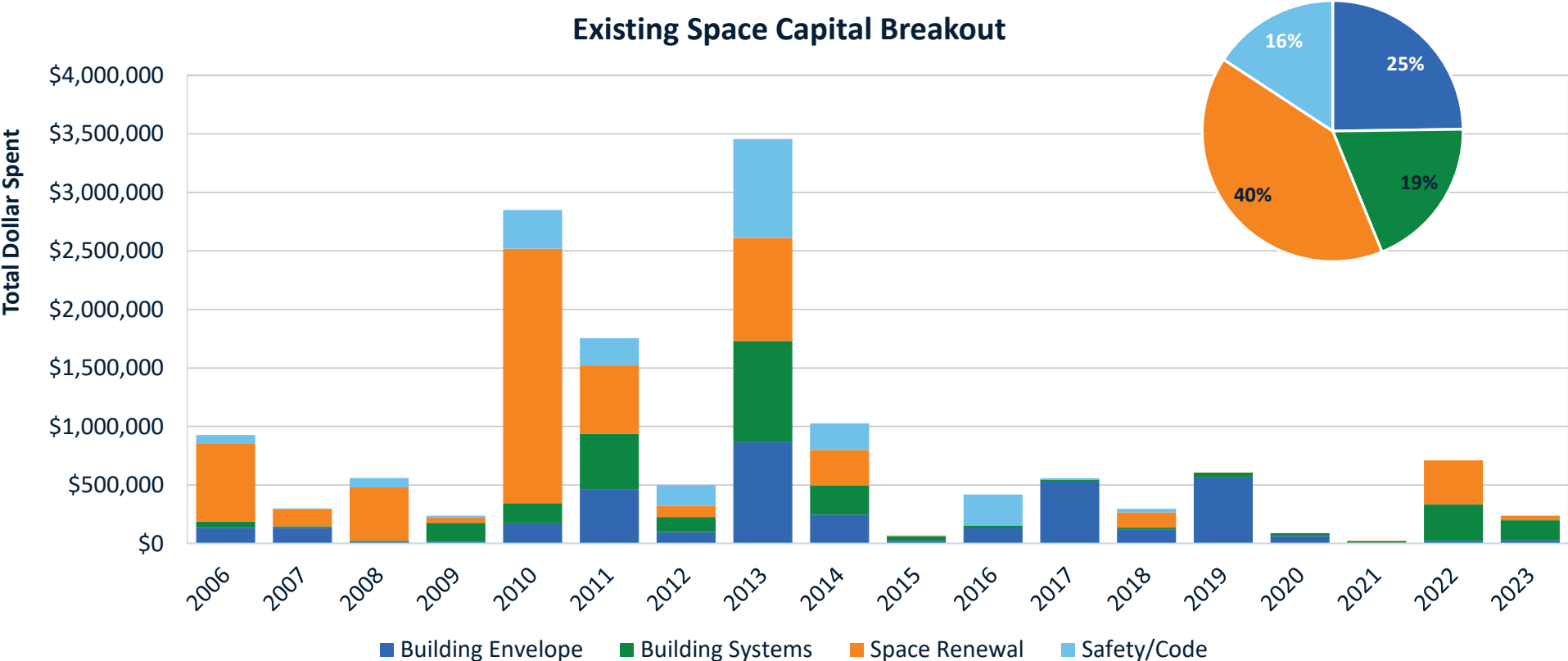
Total Capital Investment vs. Funding Target



Existing Space Investment Breakout

60% of spending went toward systems, envelope & safety projects combating age

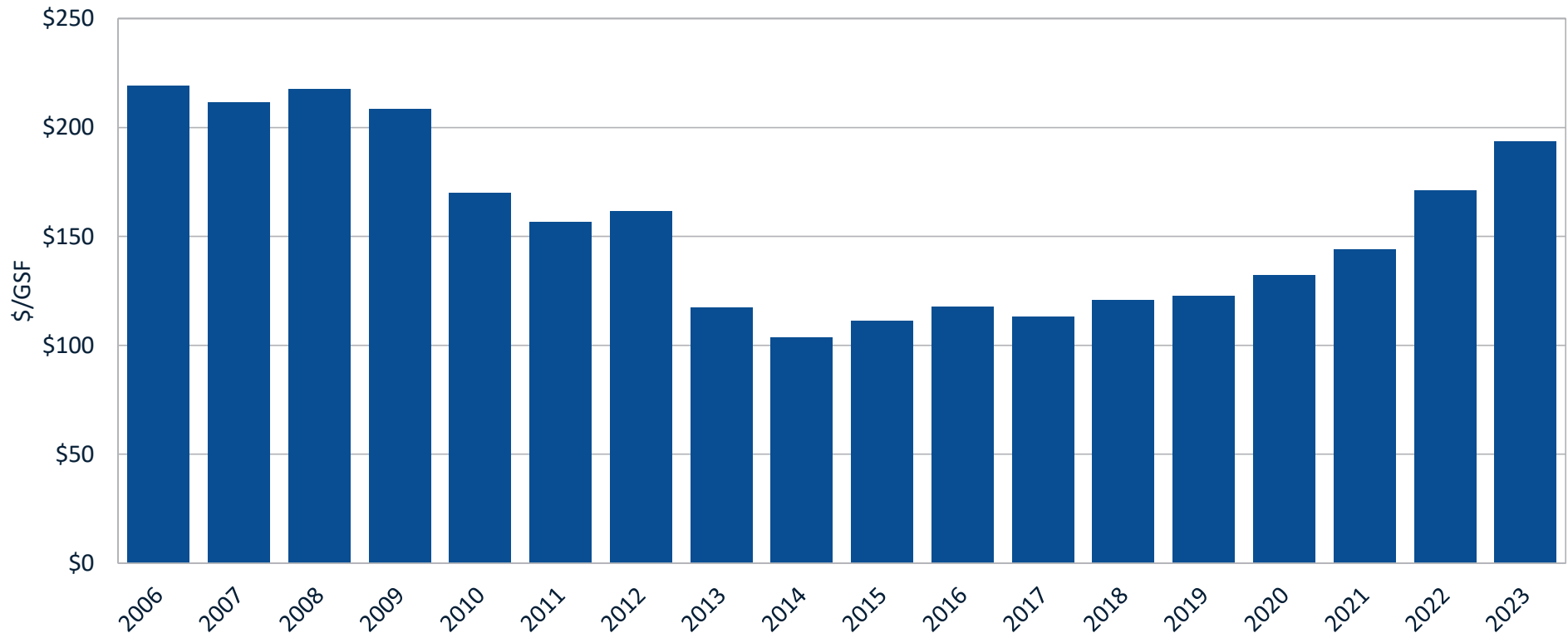
Existing Space Capital Breakout



Asset Reinvestment Need has Increased since 2014

Asset Reinvestment Need continues to increase with multiple years of missed targets

Total Asset Reinvestment Need \$/GSF



GARDIAN[®]

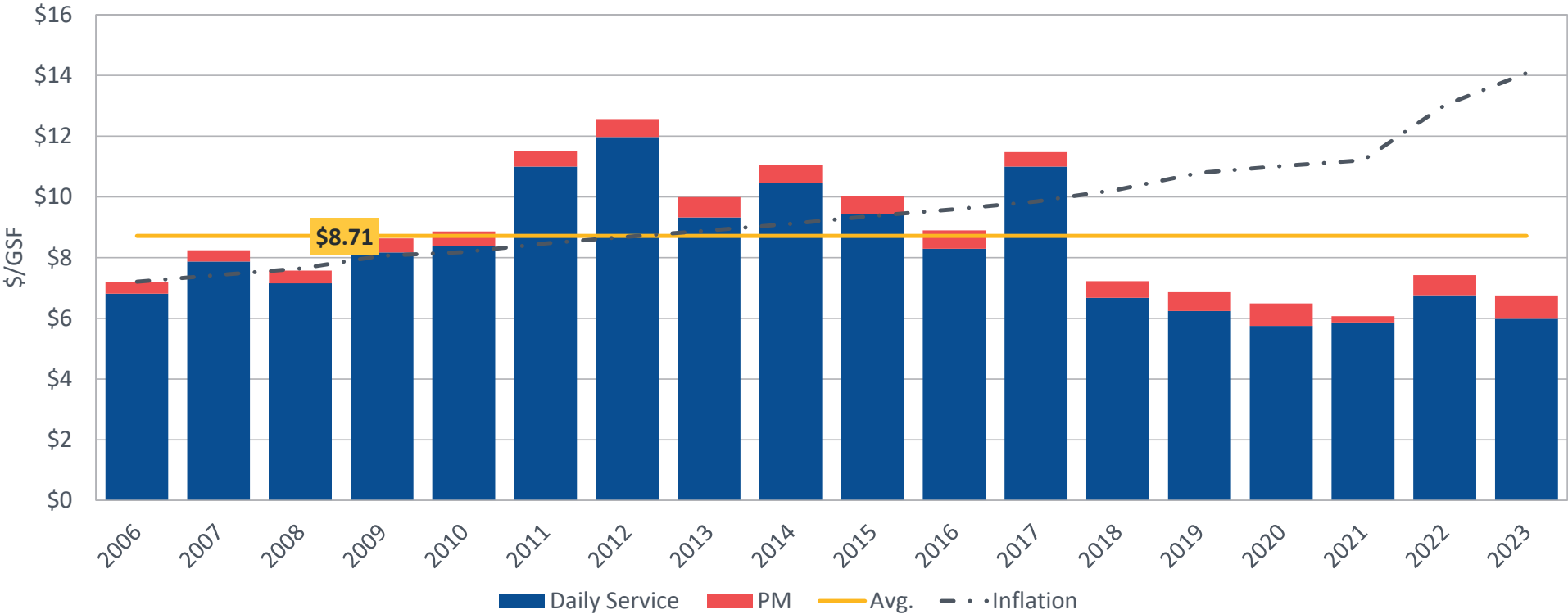
Operations Success:

Prince William Sound Community College

PWSCC Facilities Operating Expenditures

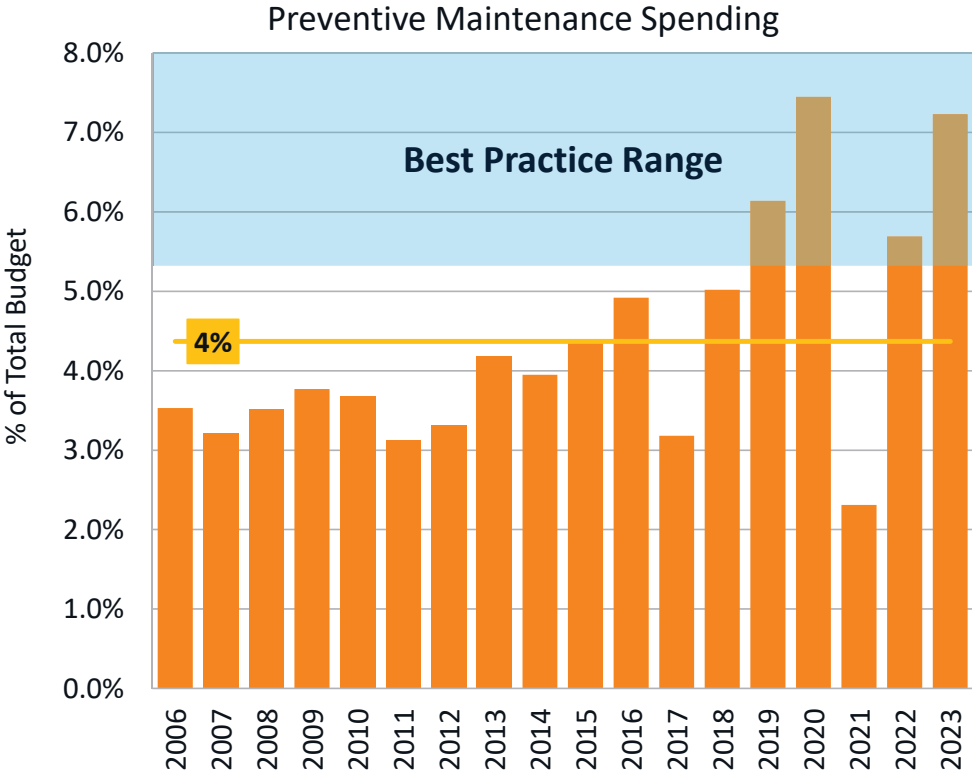
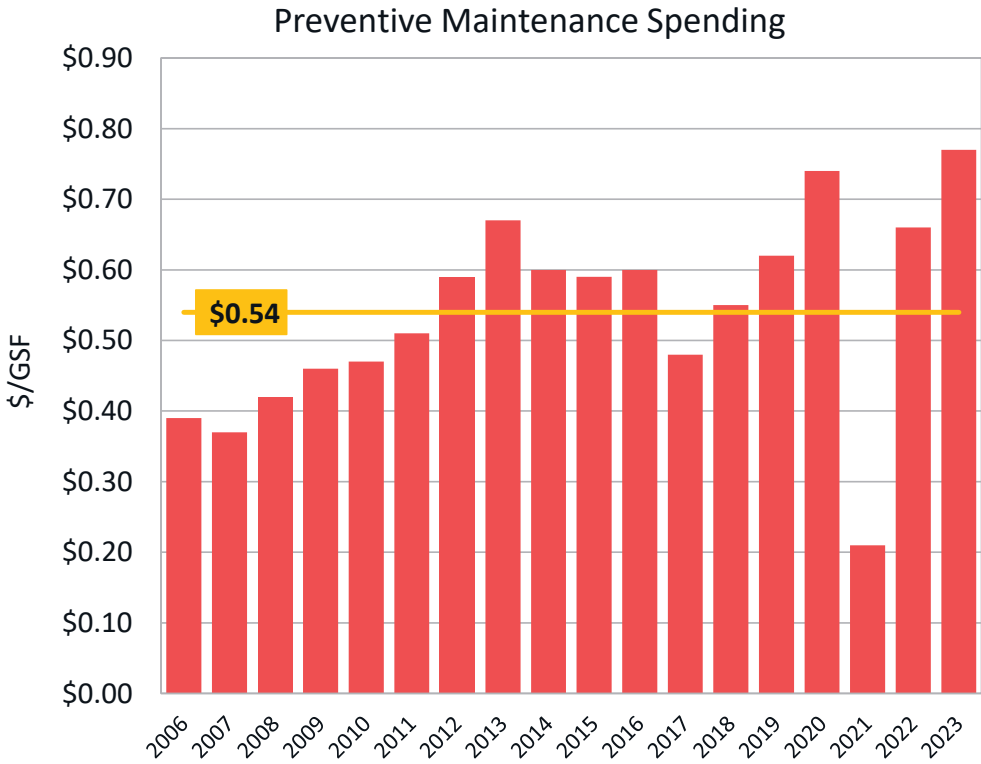
FY23 operating expenditures decreased by 9%, compounding an 8% inflation rate increase

Facilities Operating Actuals



PWSCC PM is within Recommended Spending Range

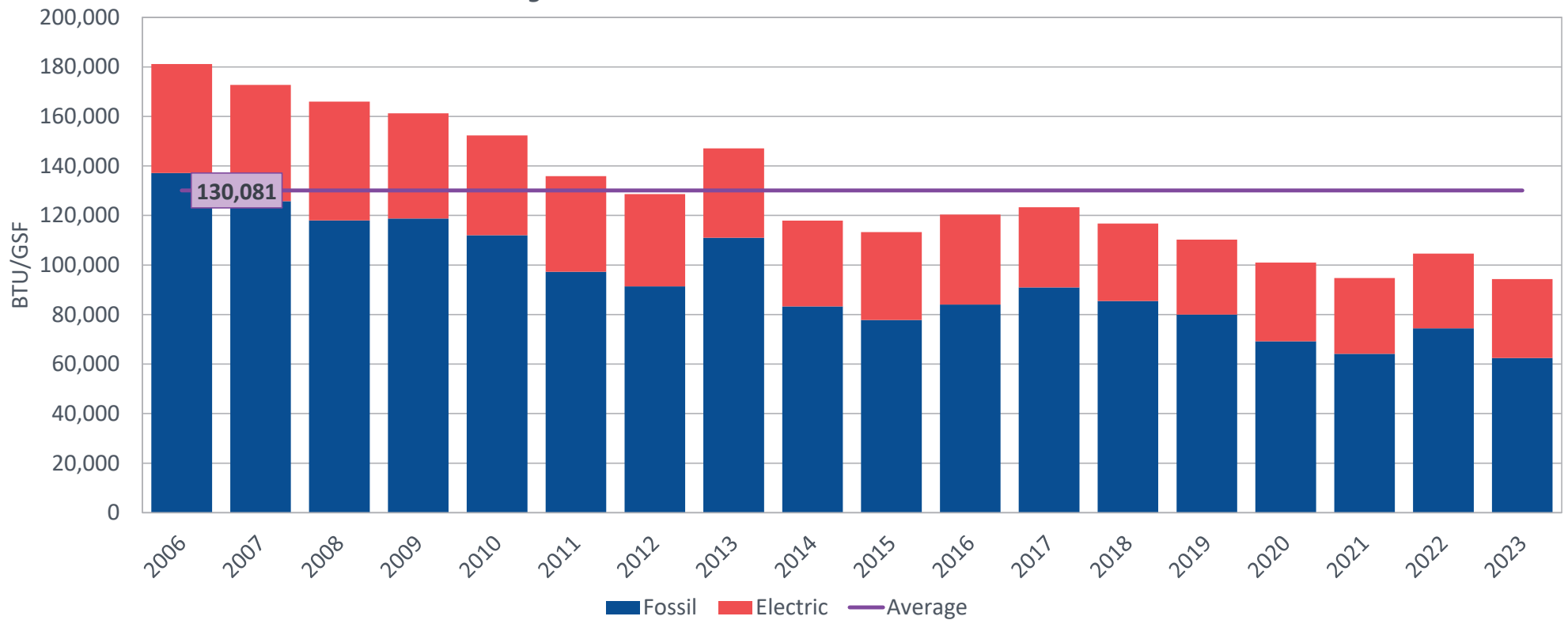
UAA's FY23 PM spending has reached a historic high per square foot, increasing by 97%



Total Energy Consumption

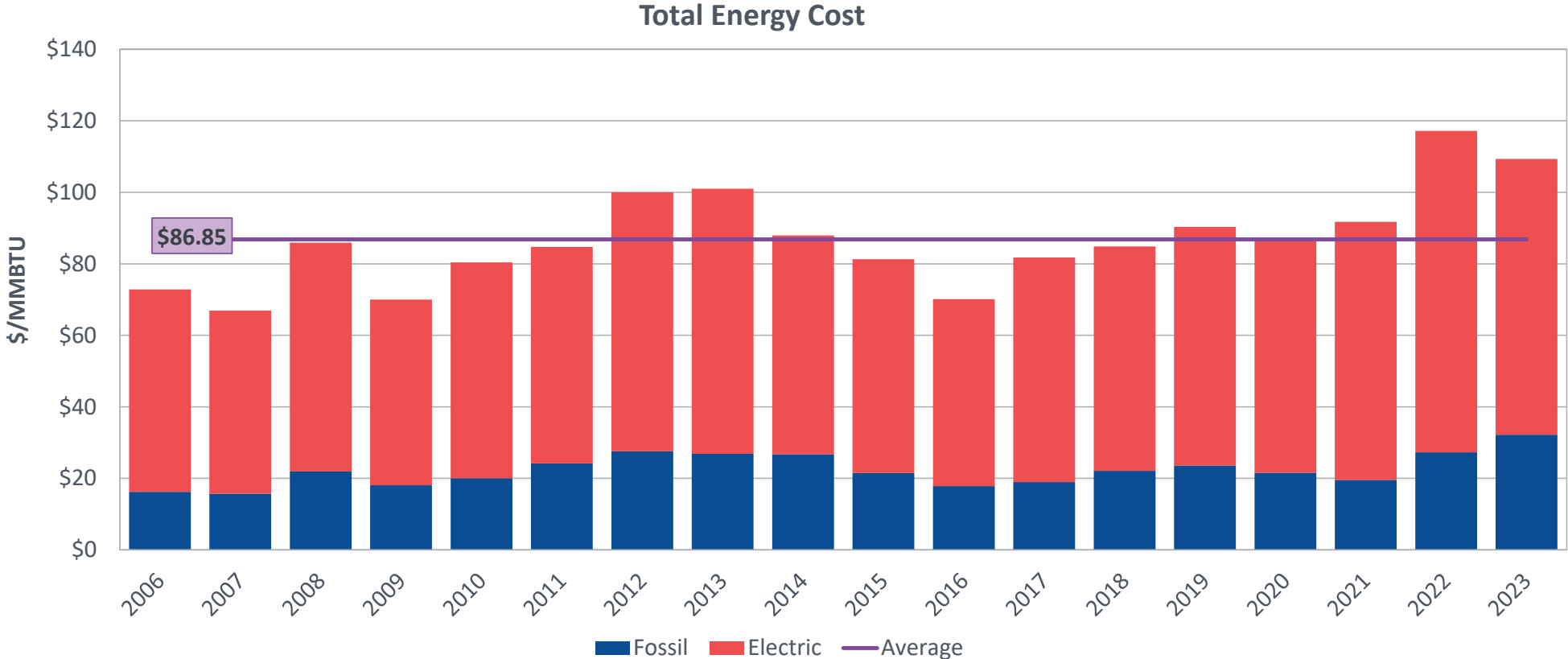
Normalized consumption at an all-time low and decreased by 48% from FY16 levels

UAA- Prince William Sound College Total Energy Consumption



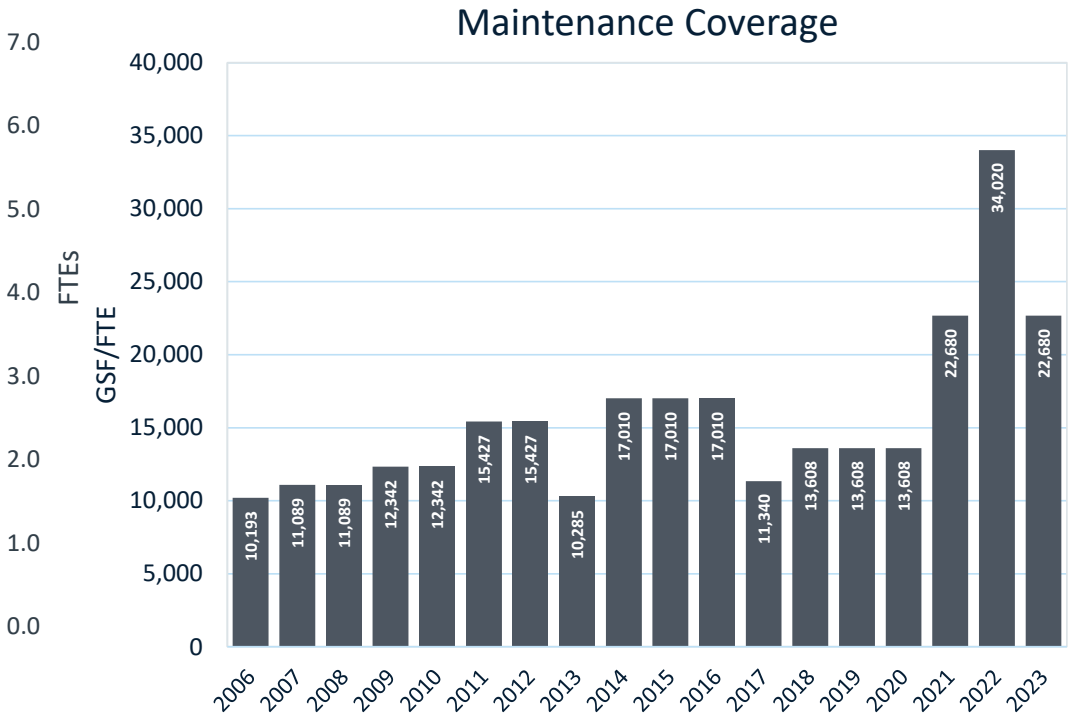
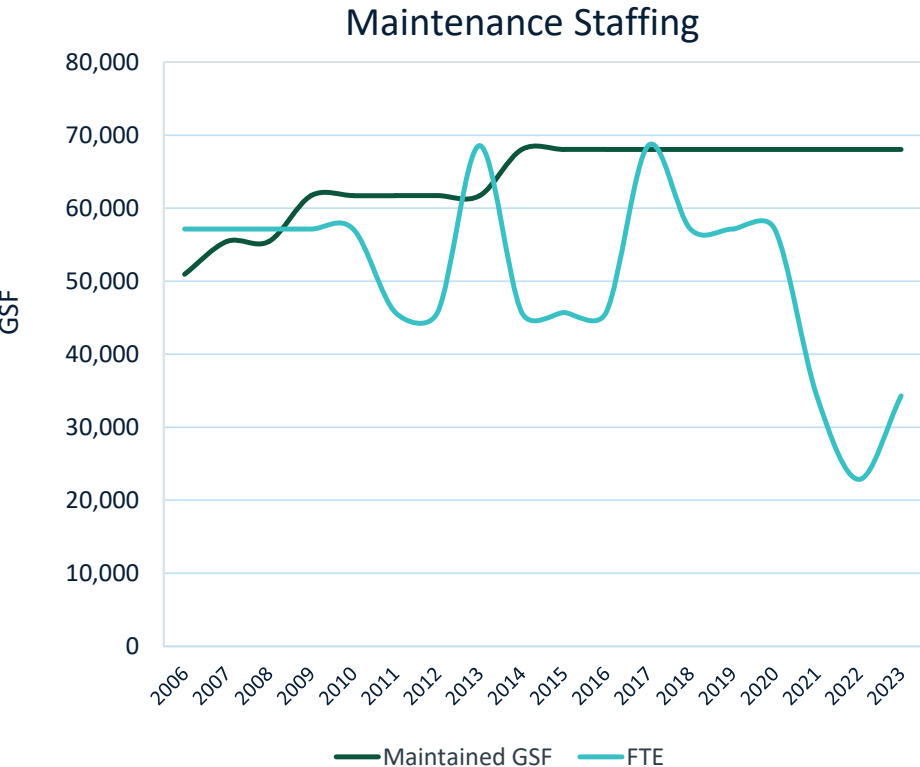
Energy Expenses are Increasing Over Time

Over 17 years of utility commodity data collected, unit costs have risen by 50%



Maintenance Staffing Coverage

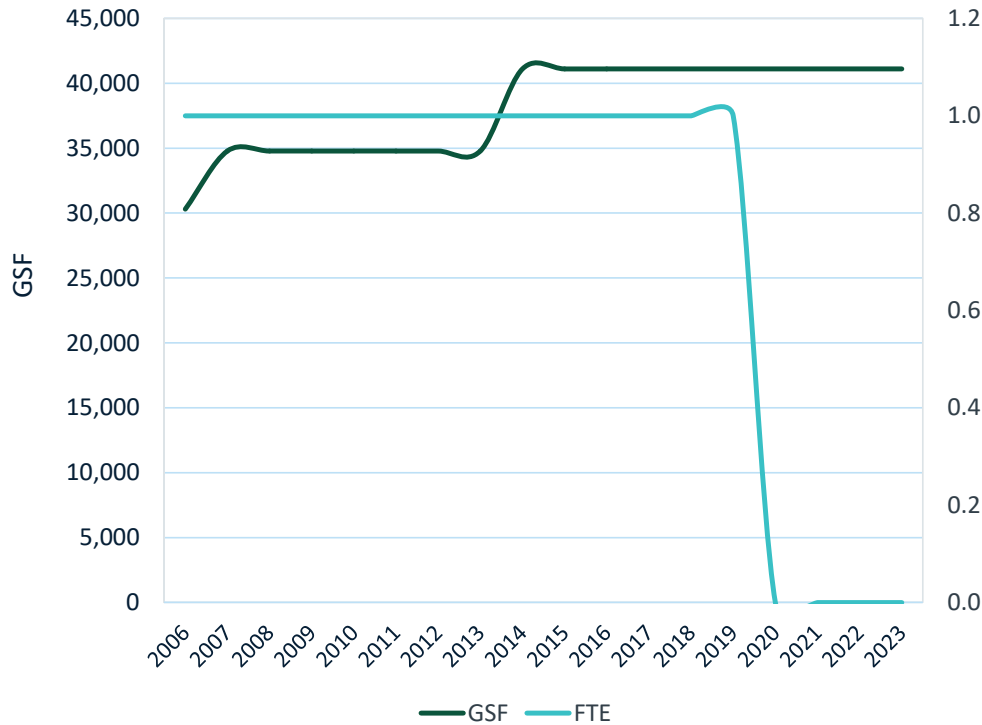
Coverage ratio has returned to FY21 levels



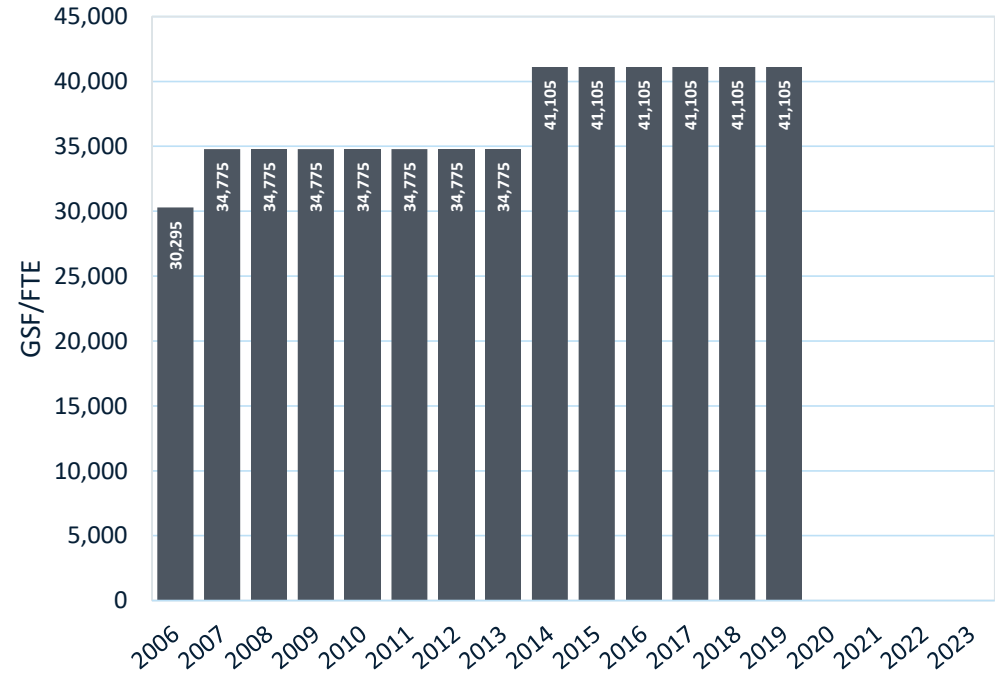
Custodial Staffing Coverage

No dedicated full-time custodian at PWSCC

Custodial Staffing



Custodial Coverage



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Questions & Discussion