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FY22 Facilities Benchmarking & Analysis Final Report

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

Vocabulary for Facilities Benchmarking & Analysis

Annual Stewardship

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

Asset Reinvestment

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

Operational Effectiveness

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

Service

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

Asset Value Change

Operations Success

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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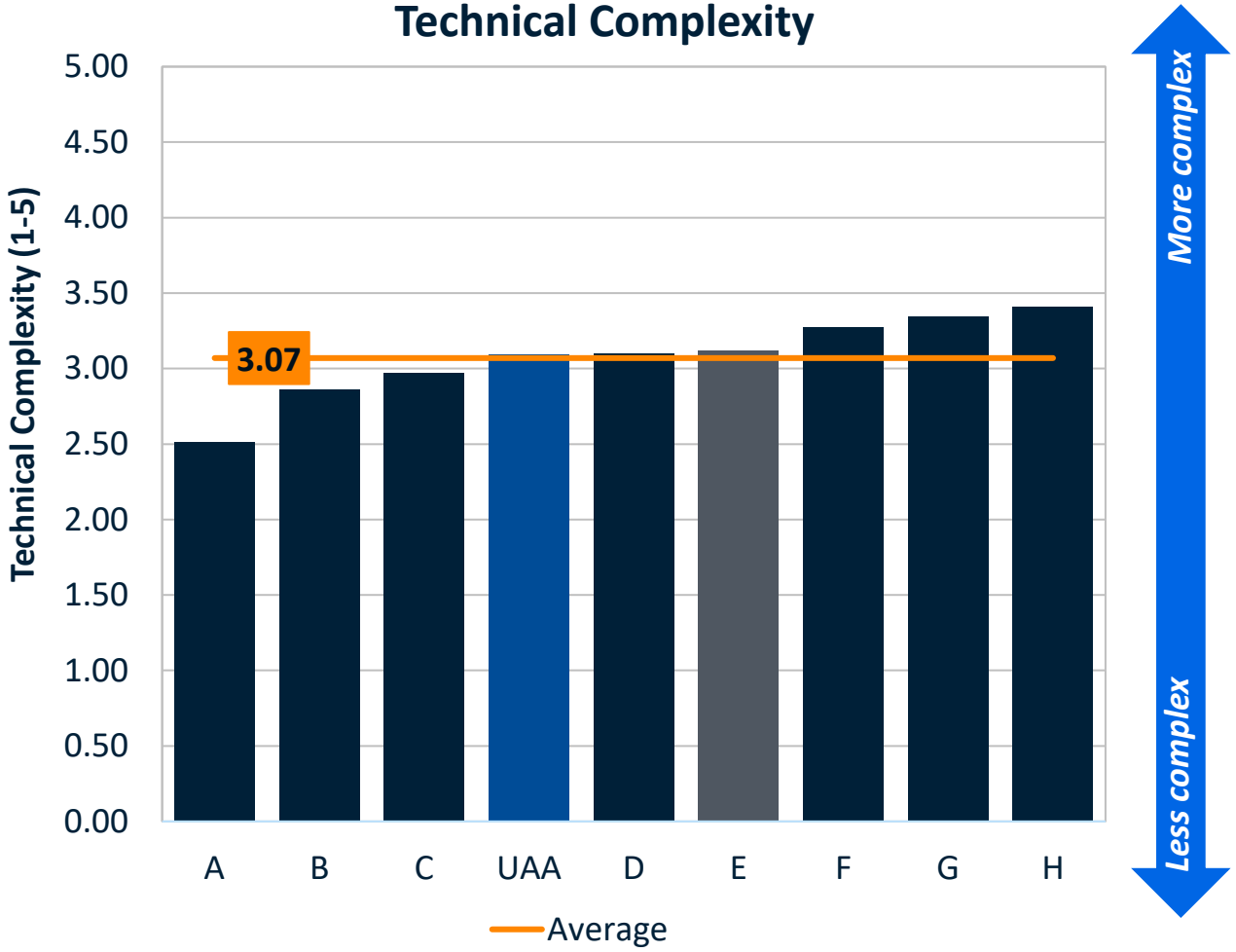
Space Profile

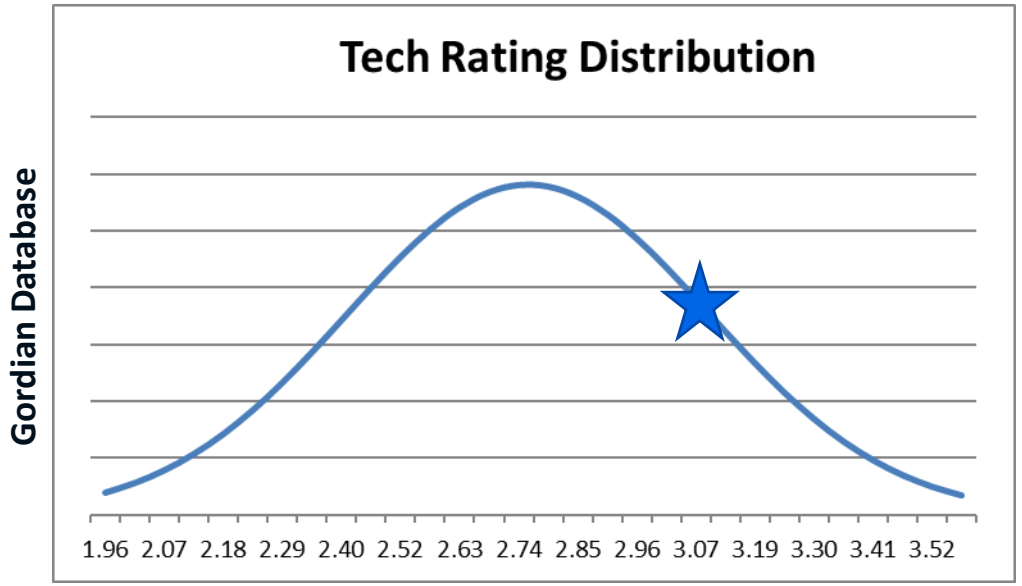
Anchorage Campus

Anchorage Complexity is Similar to Peers

Anchorage campus has a higher tech rating compared to overall database distribution



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

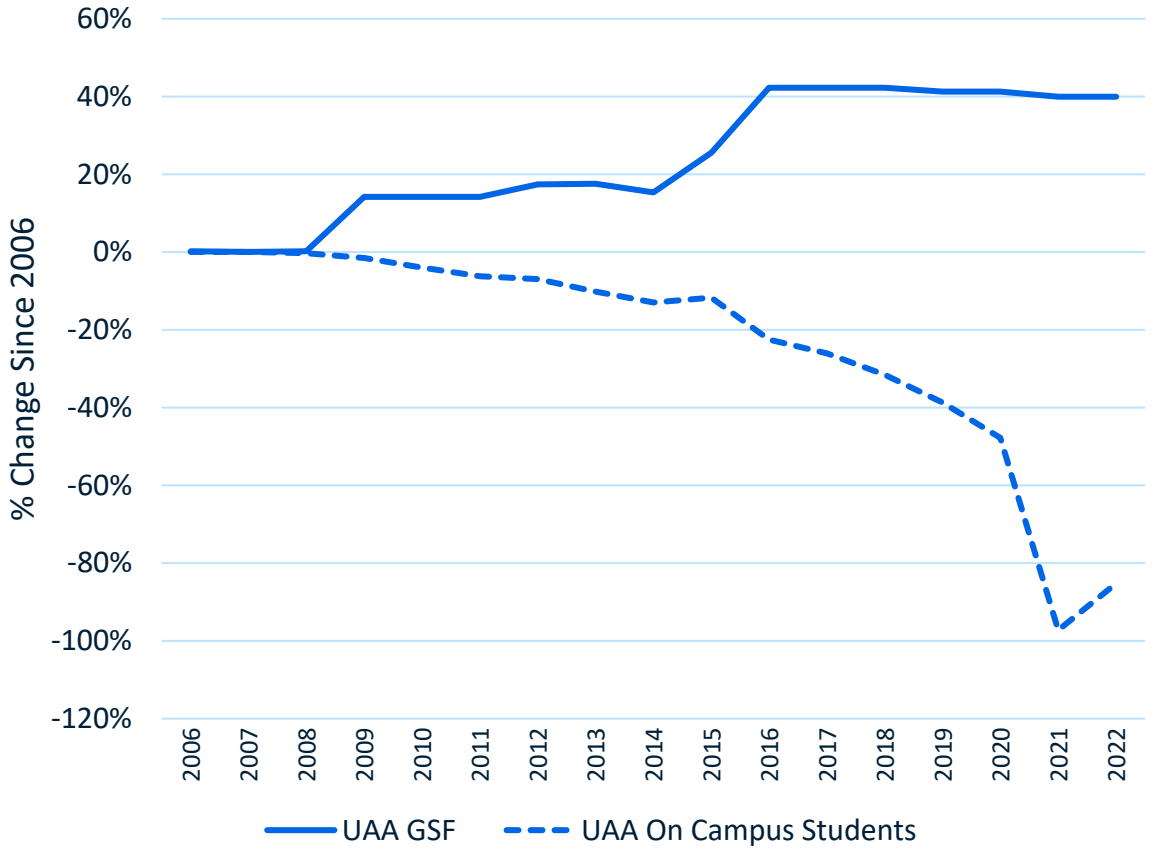


Institutions arranged by Technical Complexity

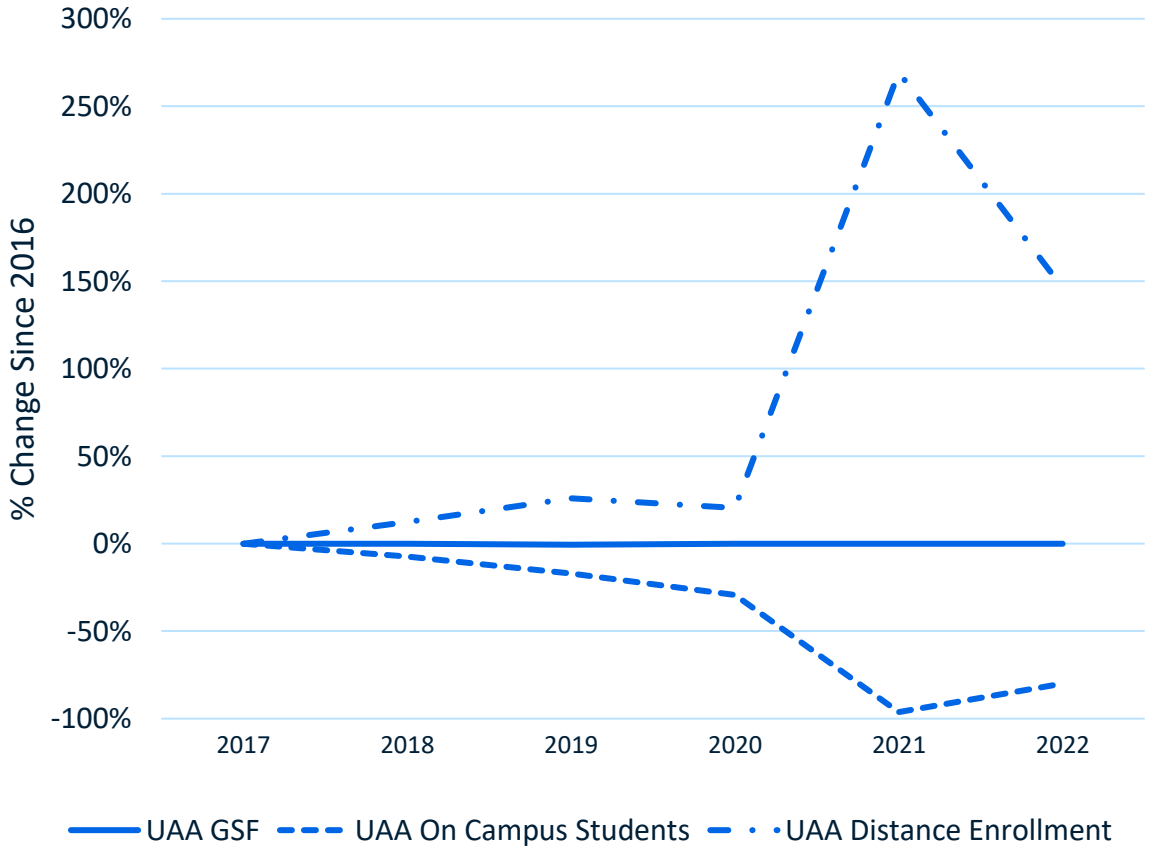
Enrollment has Continually Decreased Since 2006

On-campus enrollment increased by 82% from FY21, still below Pre-Pandemic levels by 76%

University of Alaska – Anchorage On Campus Enrollment



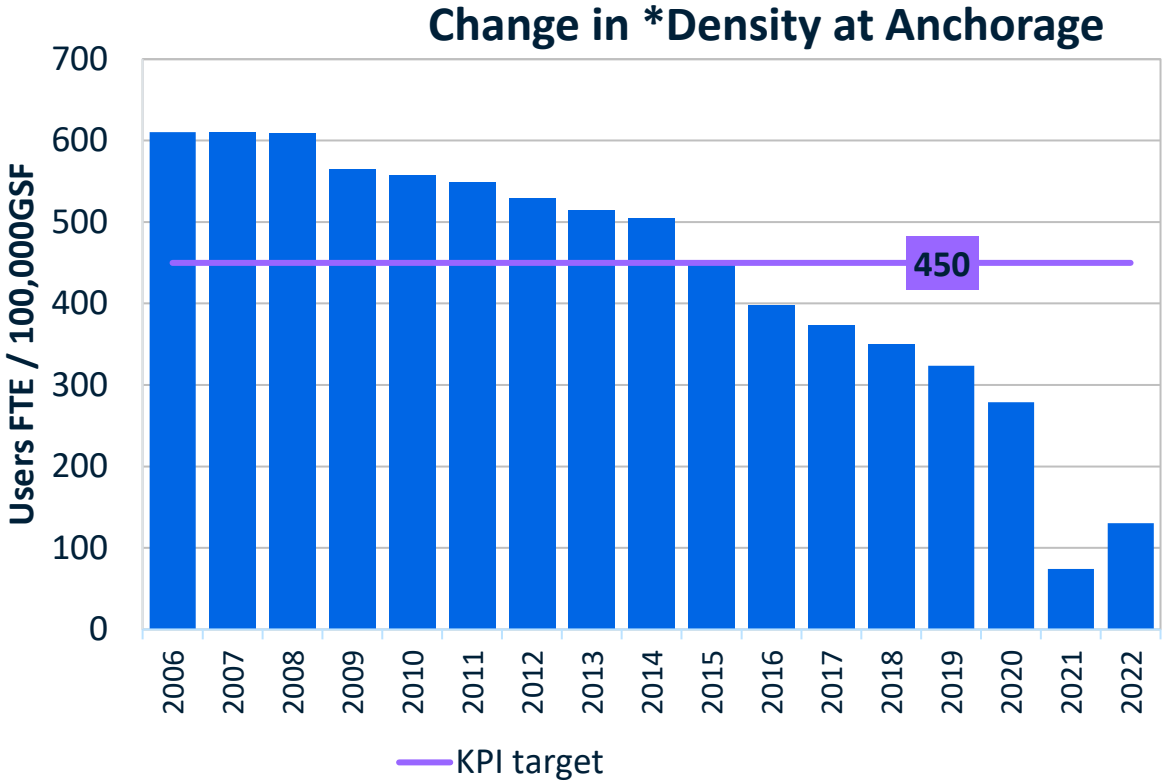
University of Alaska – Anchorage Change in Distance Enrollment

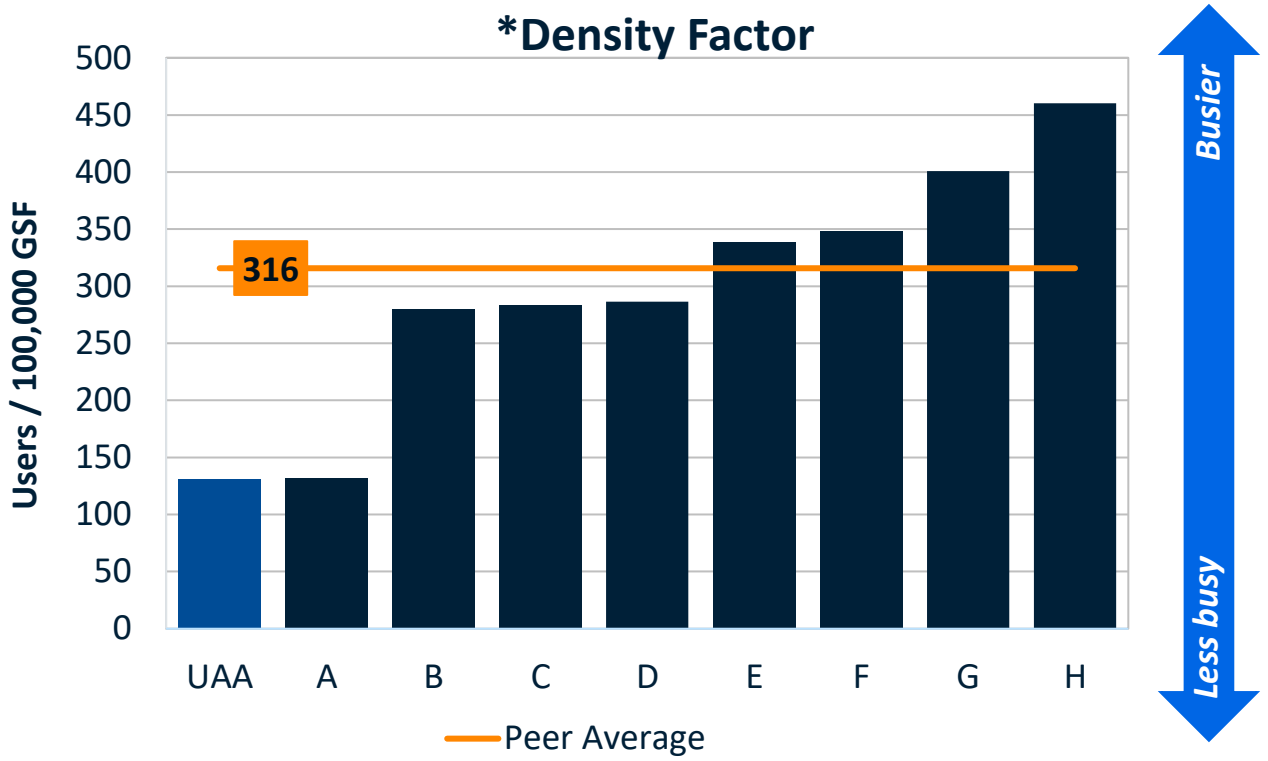


**Enrollment refers to on-campus students*

Minimal Student Presence Results in Density Decline

In FY22 students continued to favor distance delivery education





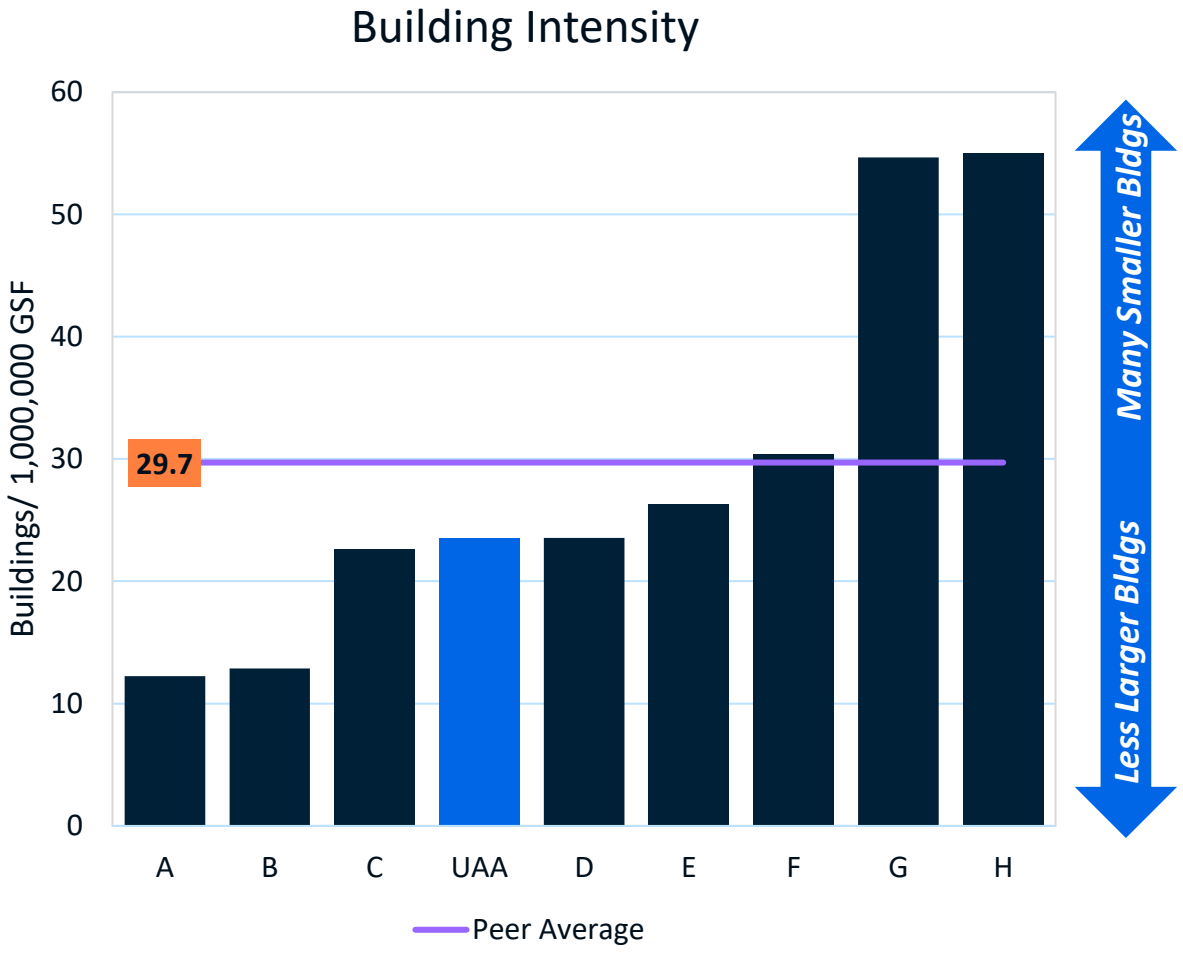
Areas Impacted by Density Factor		
Wear and Tear on Space	Custodial Operations	Energy Demand

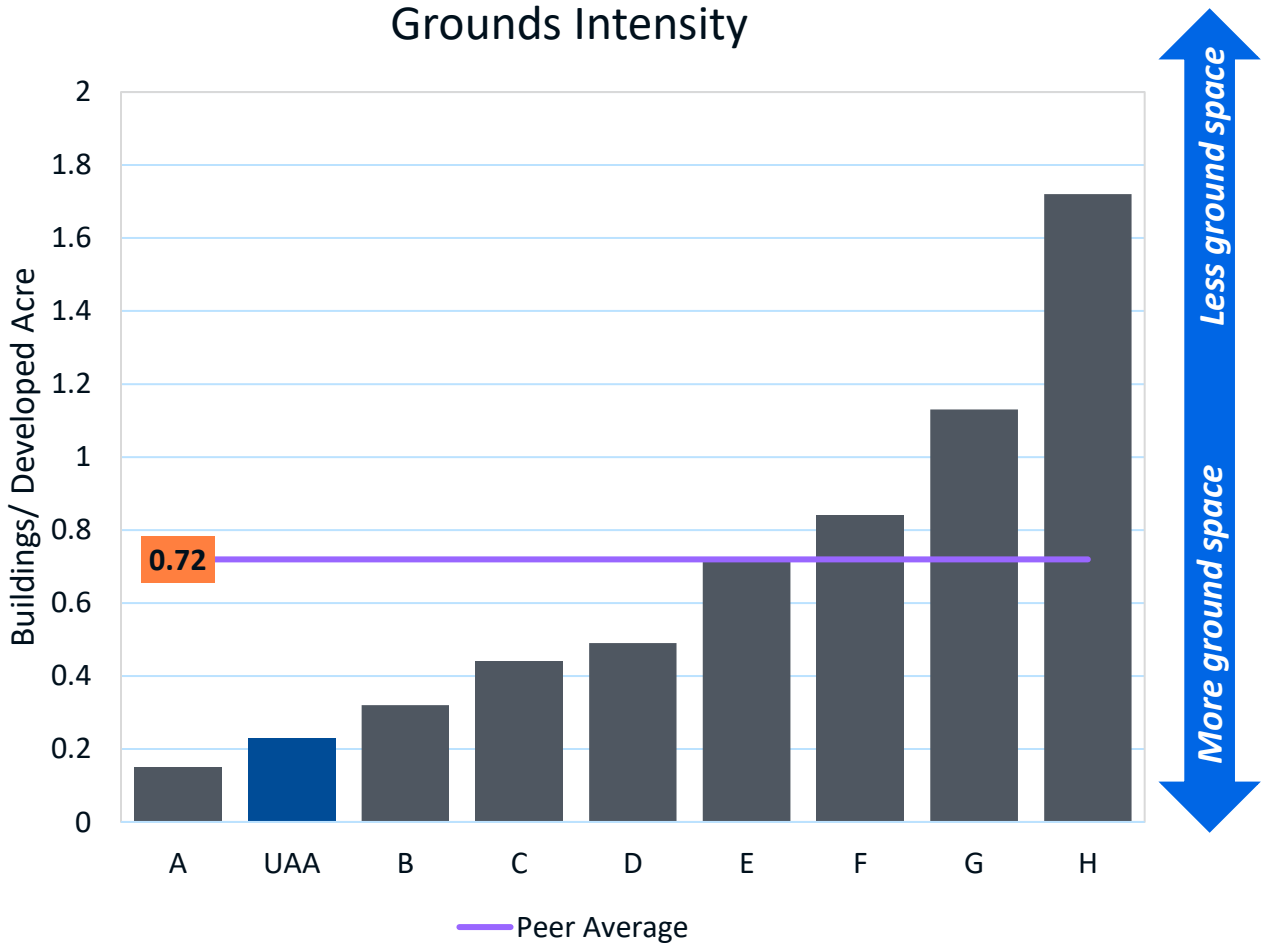
**Density is calculated using On-Campus Student FTEs, Faculty FTE, and Staff FTE*

Institutions arranged by Density Factor

Qualifying Metrics – Building and Grounds Intensity

Anchorage has larger buildings and fewer buildings per acre than peers

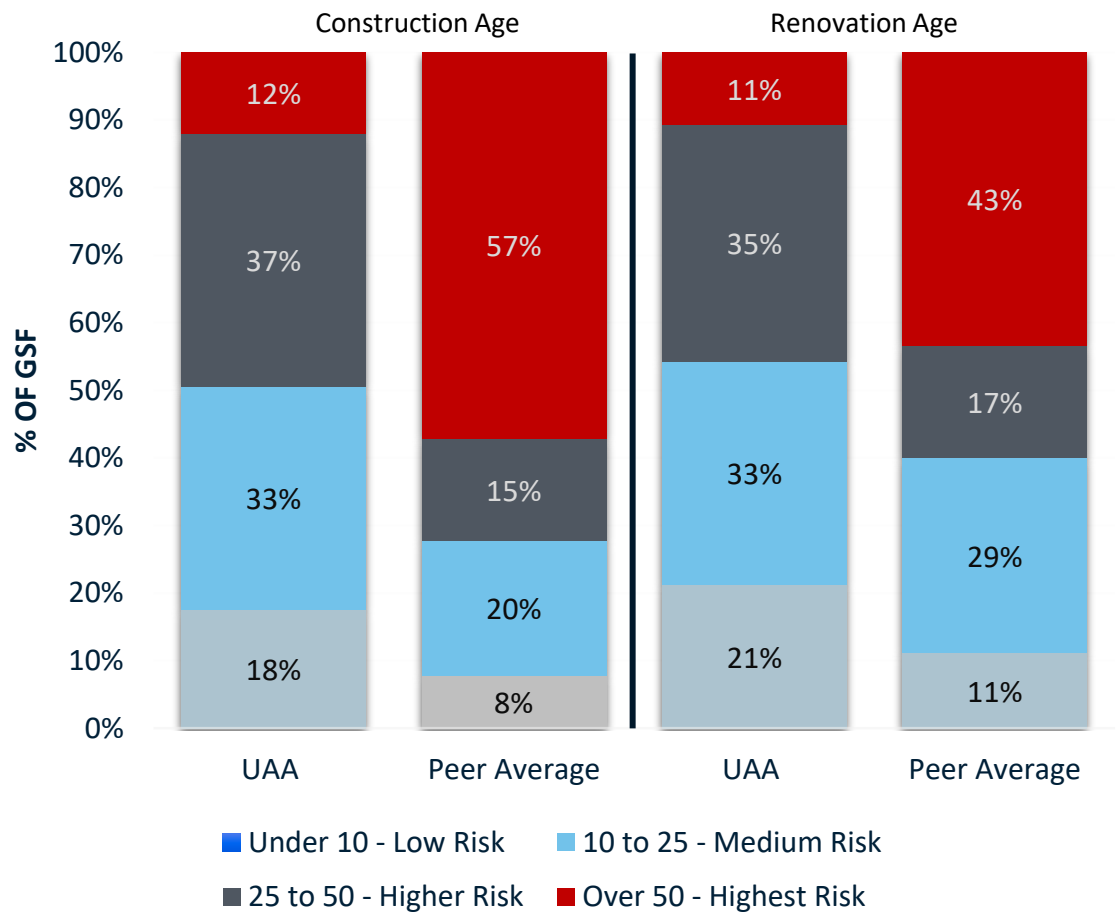




Recent Construction and Renovations Reduce Age

Peers have primarily reduced campus age through renovations, not construction

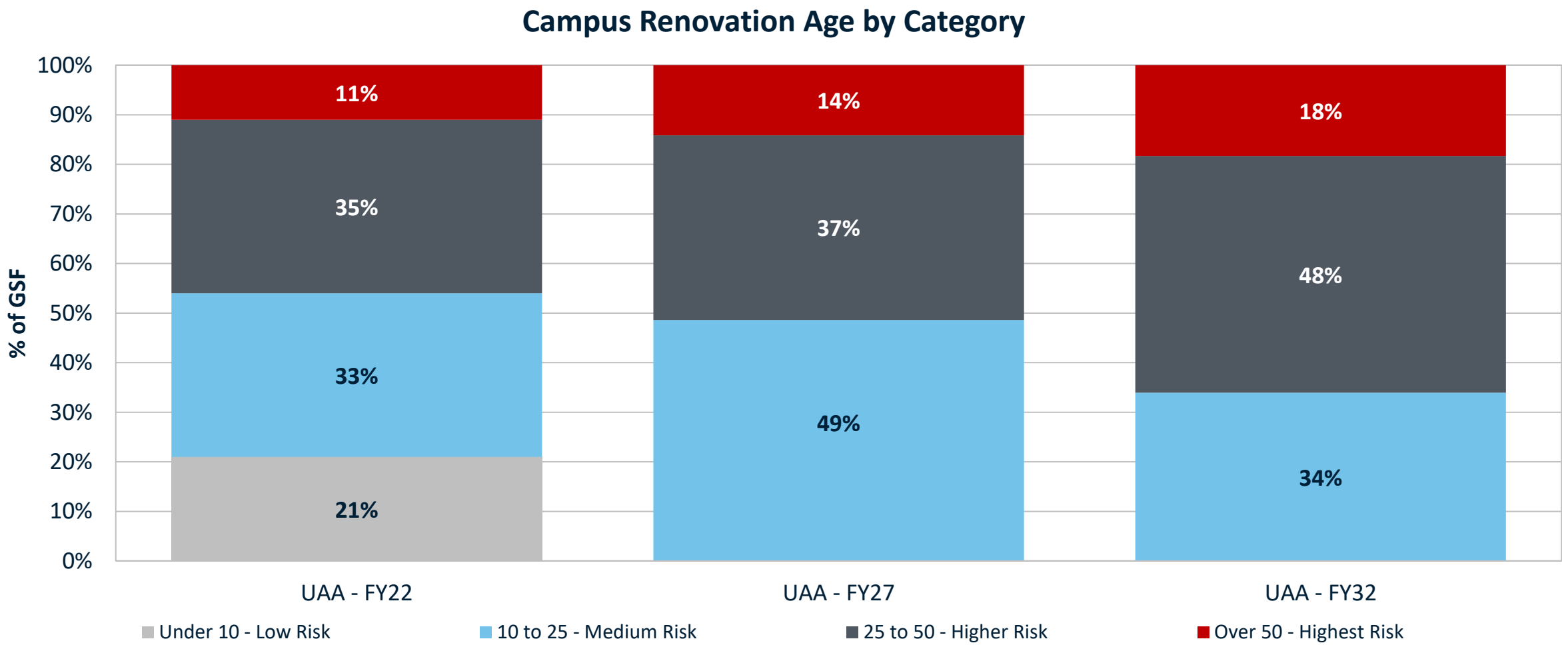
Campus Age by Category



	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.

UAA Will See Dramatic Campus Shifts in 5, 10 years

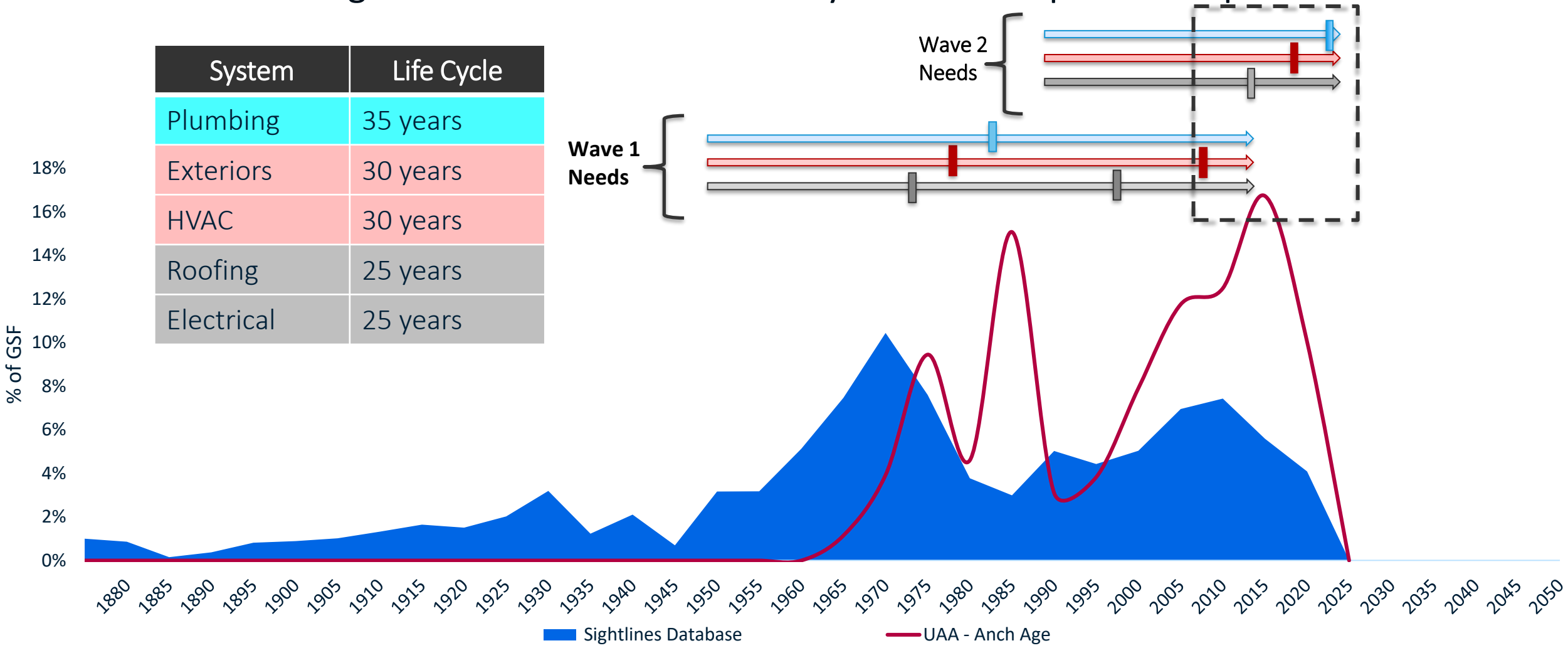
In five years, 51% of campus will be over 25 years of age, causing capital & operational strain



UAA Has two Distinct Waves of Construction

As UAA facilities age 1st wave and 2nd wave lifecycles will compete for capital resources

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



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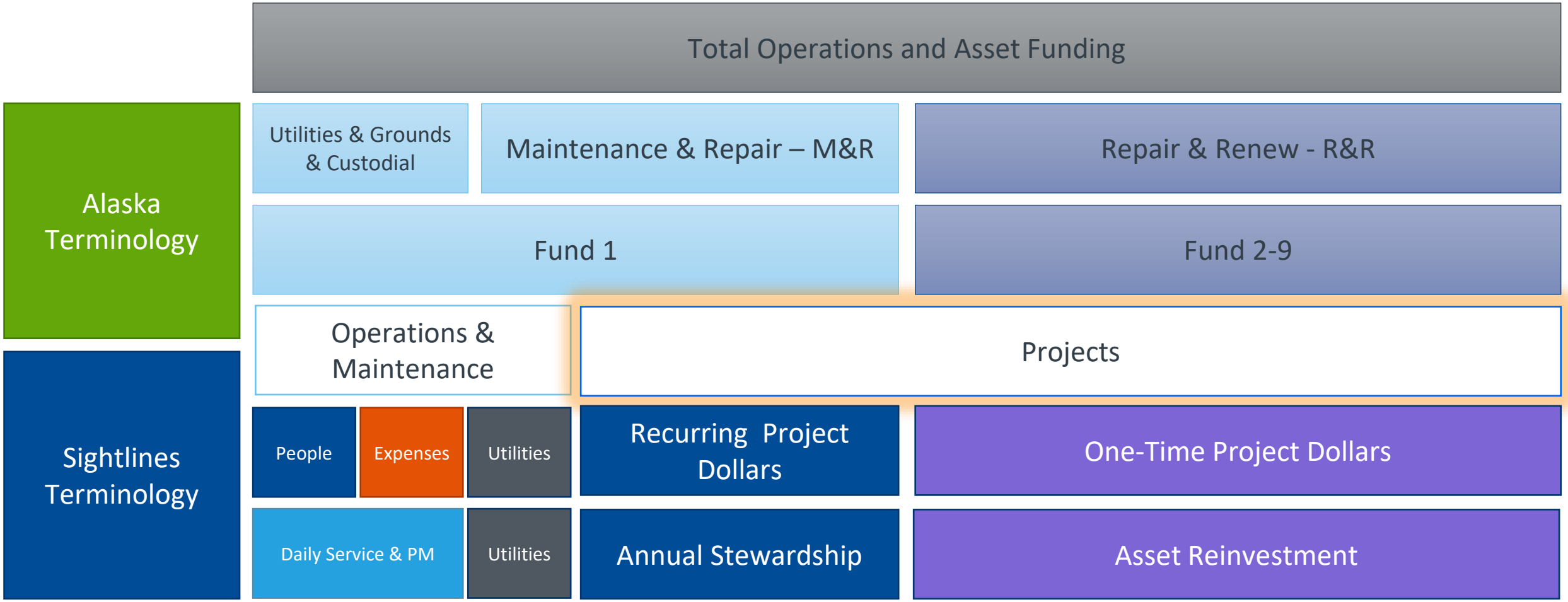
Capital Profile

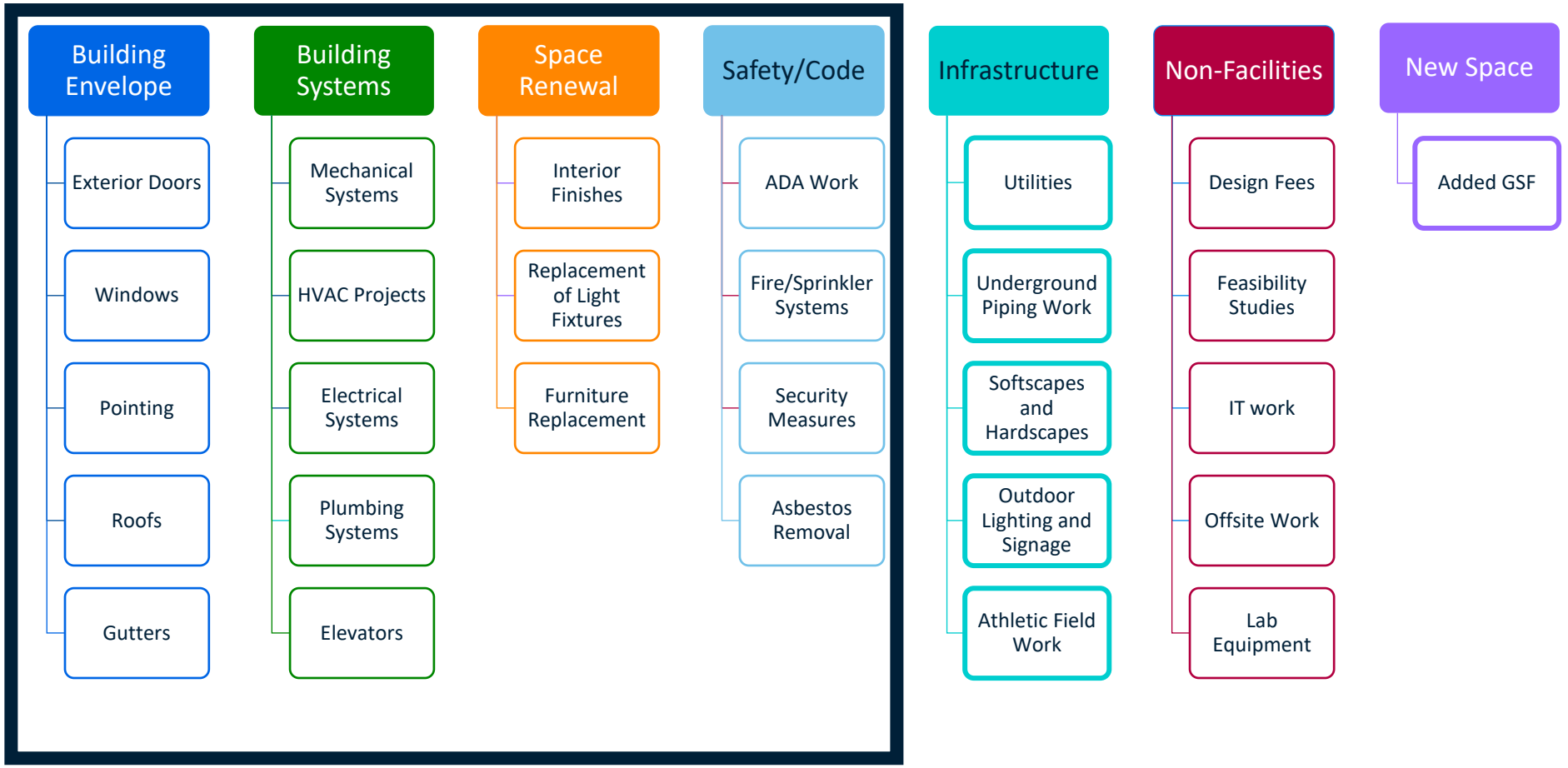
Anchorage Campus

Capital Funding Sources



Sightlines Package Breakouts

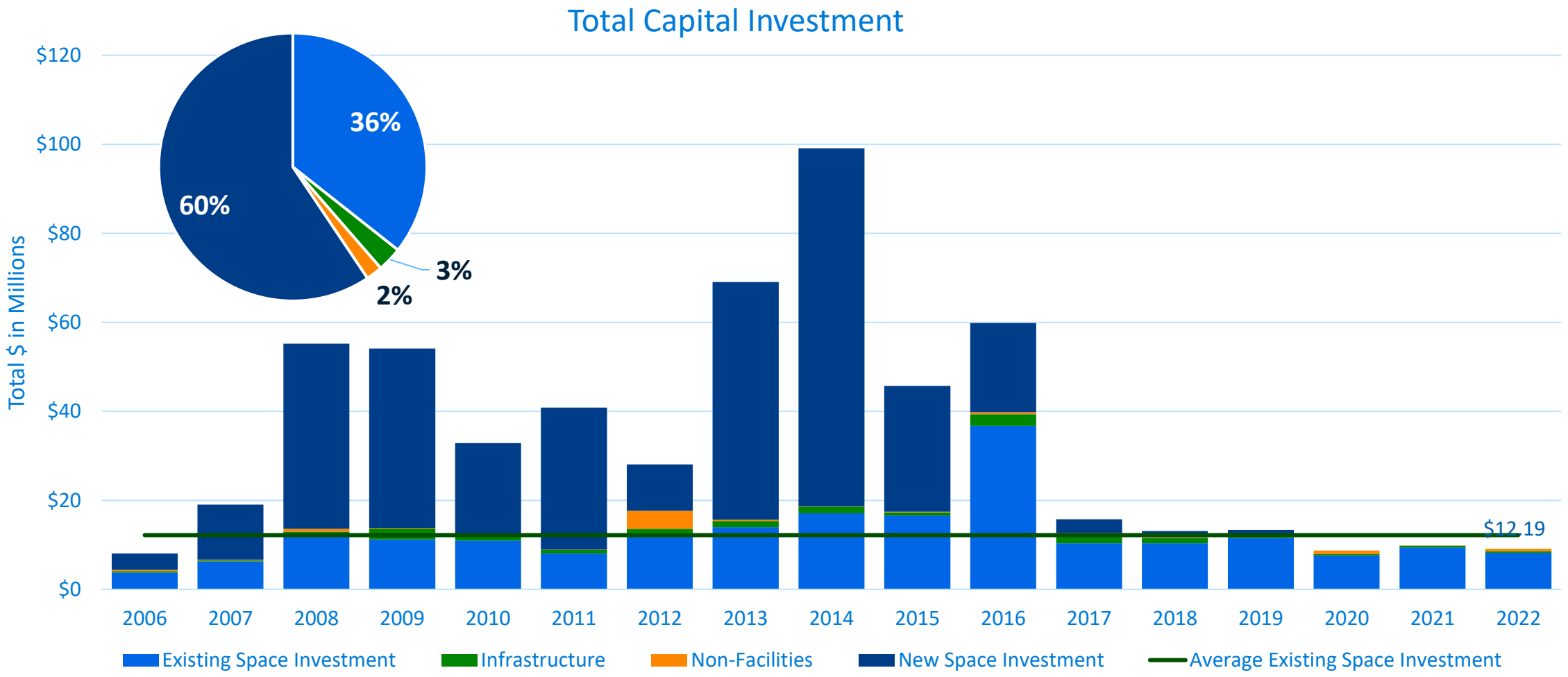
Projects are classified by the category of need they are addressing on campus



Existing Space

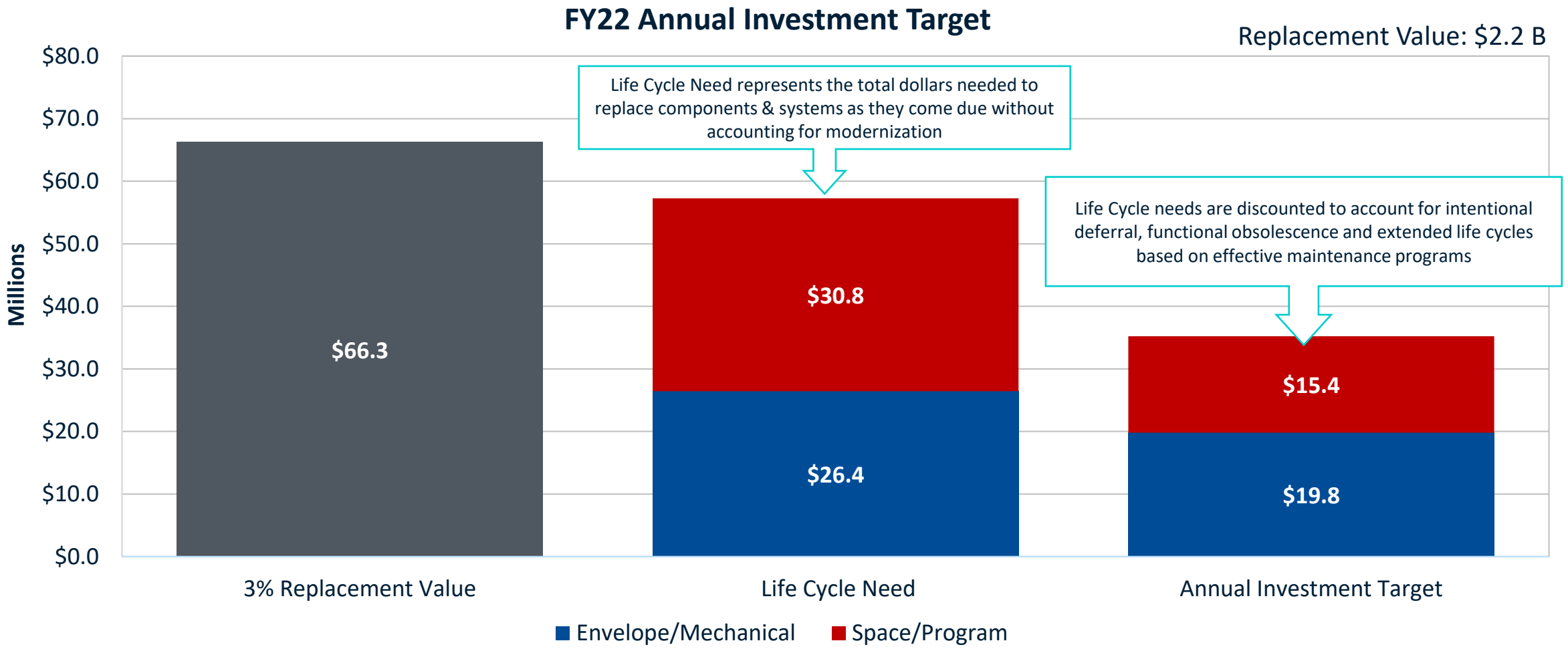
UAA Should Focus Capital Investment into Existing Space

Investments into New Space have caused deferral of assets in existing buildings



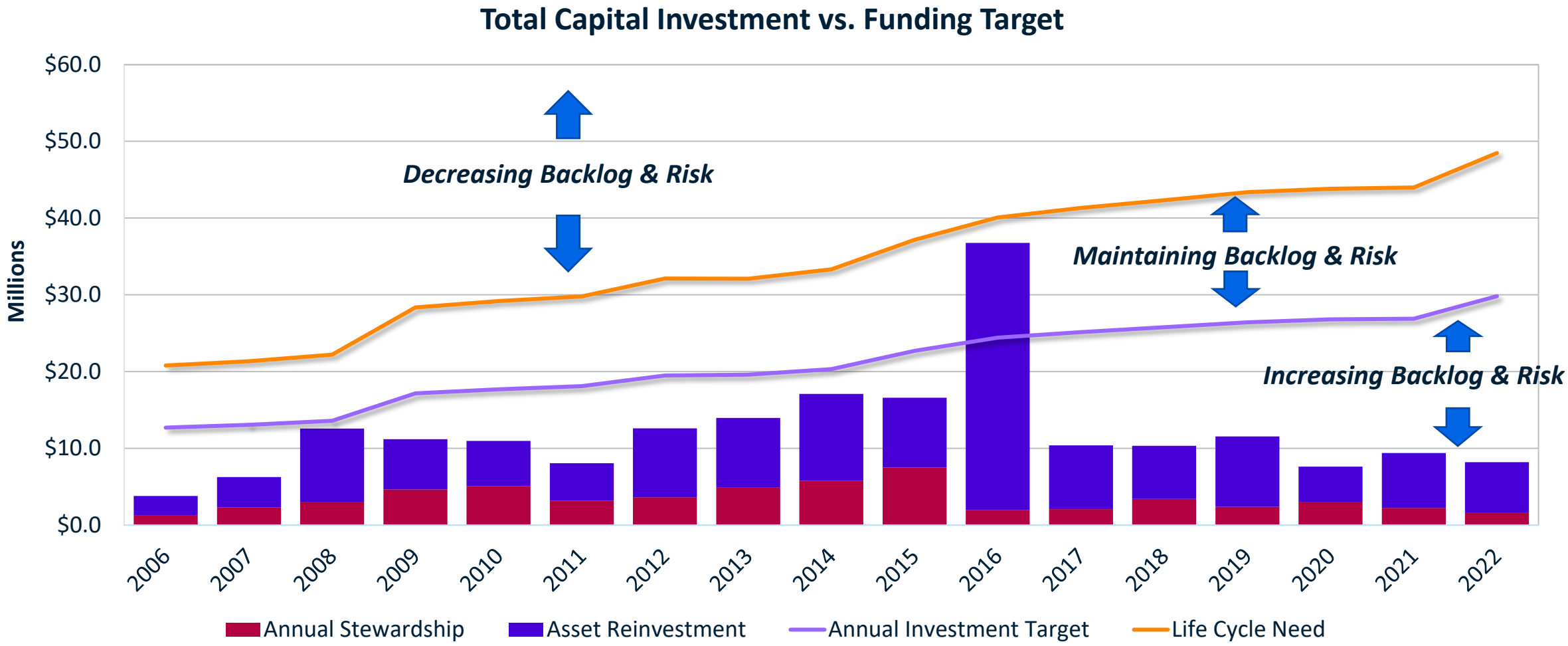
Annual Investment Target At UAA, Institution Wide

Annual Funding Target: $35.2 M



Capital Investment Falls Short of Target at Anchorage

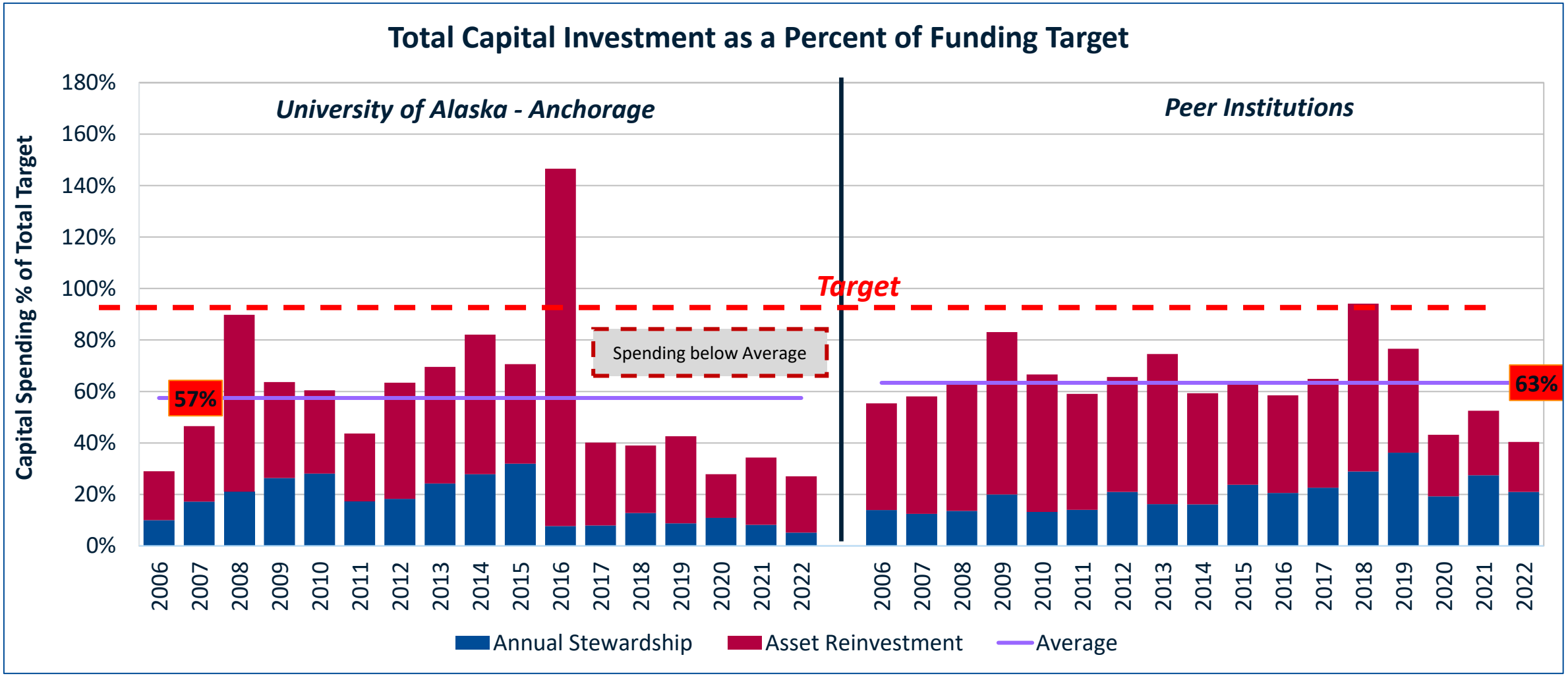
Capital investment should be increased to reduce backlog and operational strain



Fund 1 Projects: Annual Stewardship
Funds 2-9 Projects : Asset Reinvestment

Annual Stewardship has Diminished in Recent Years

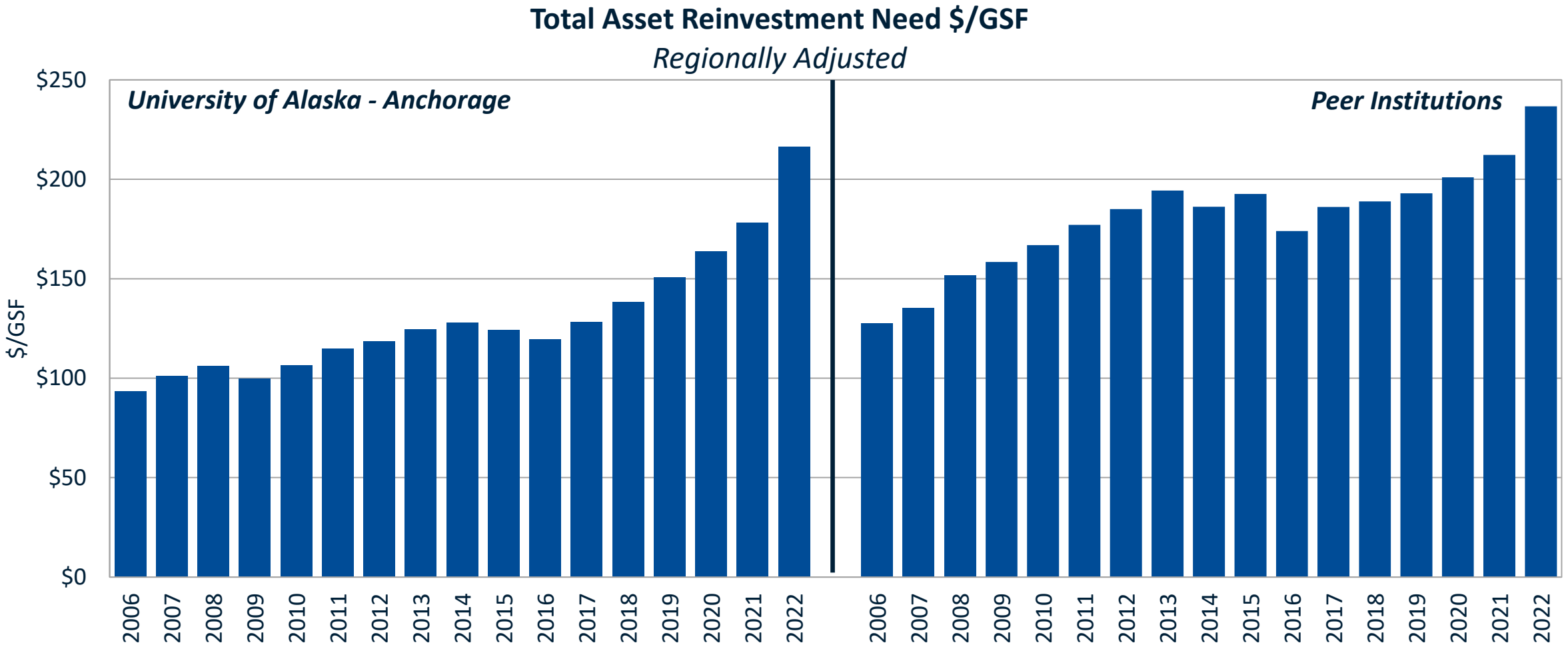
Since FY17 Anchorage spending has averaged to 35% of target, peers 62%



Fund 1 Projects: Annual Stewardship
Funds 2-9 Projects : Asset Reinvestment

Total Need Grows as Funding Decreases

UAA has seen AR increase at a faster rate than peers since FY16 due to lack of investment

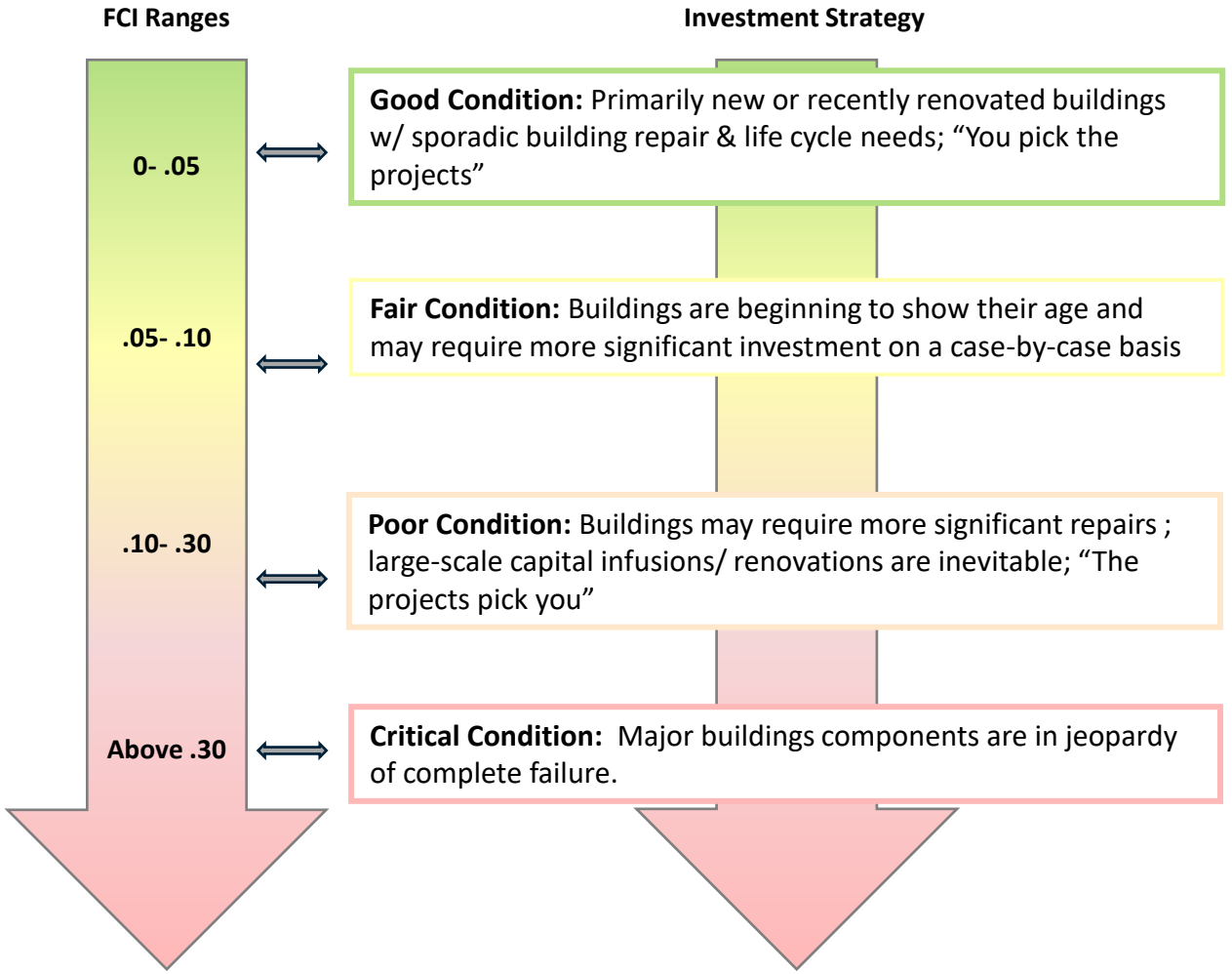


Facilities Condition Index

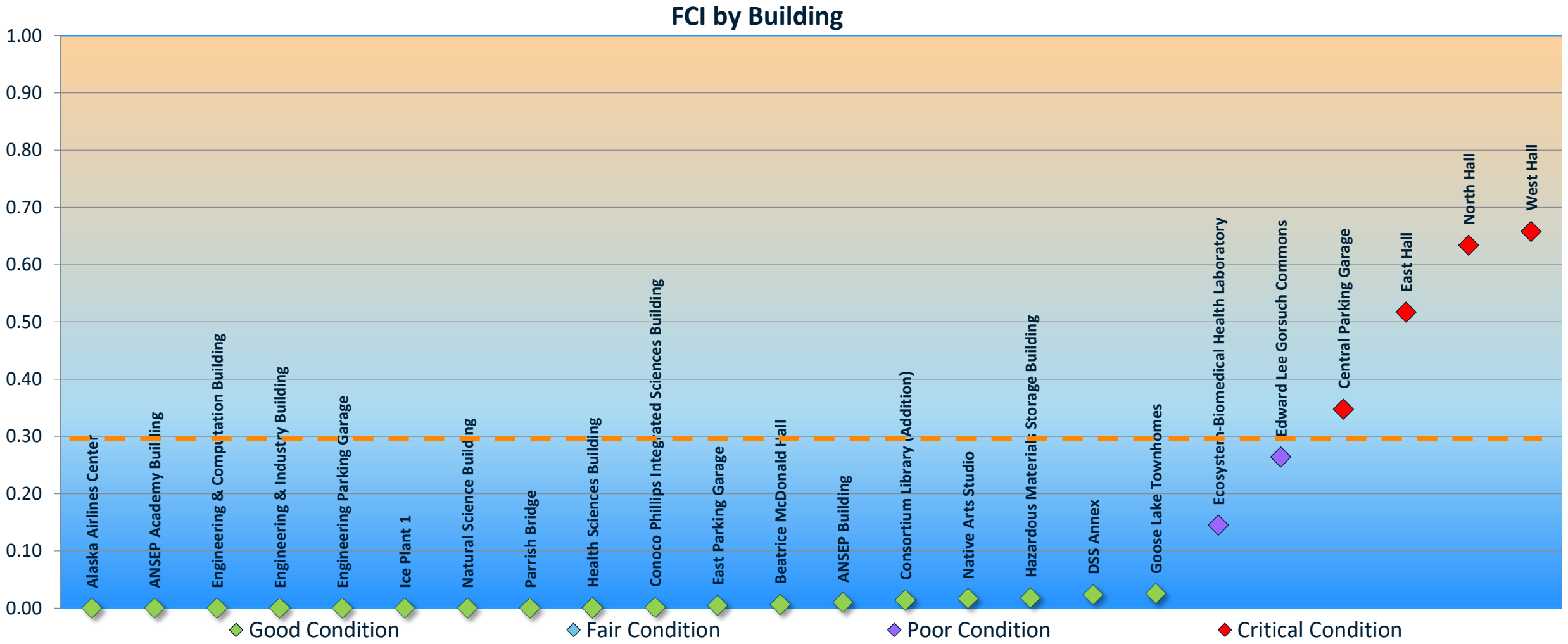
Condition based investment strategy

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

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



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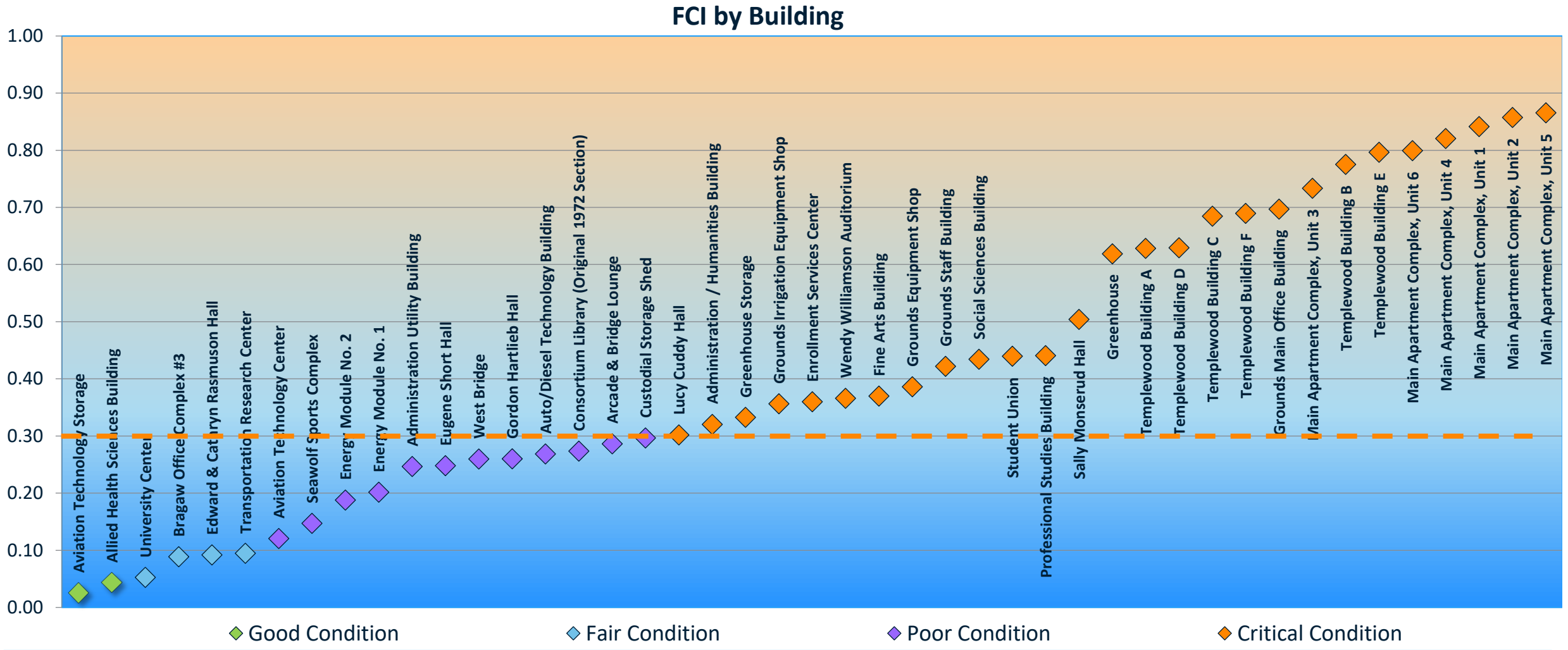
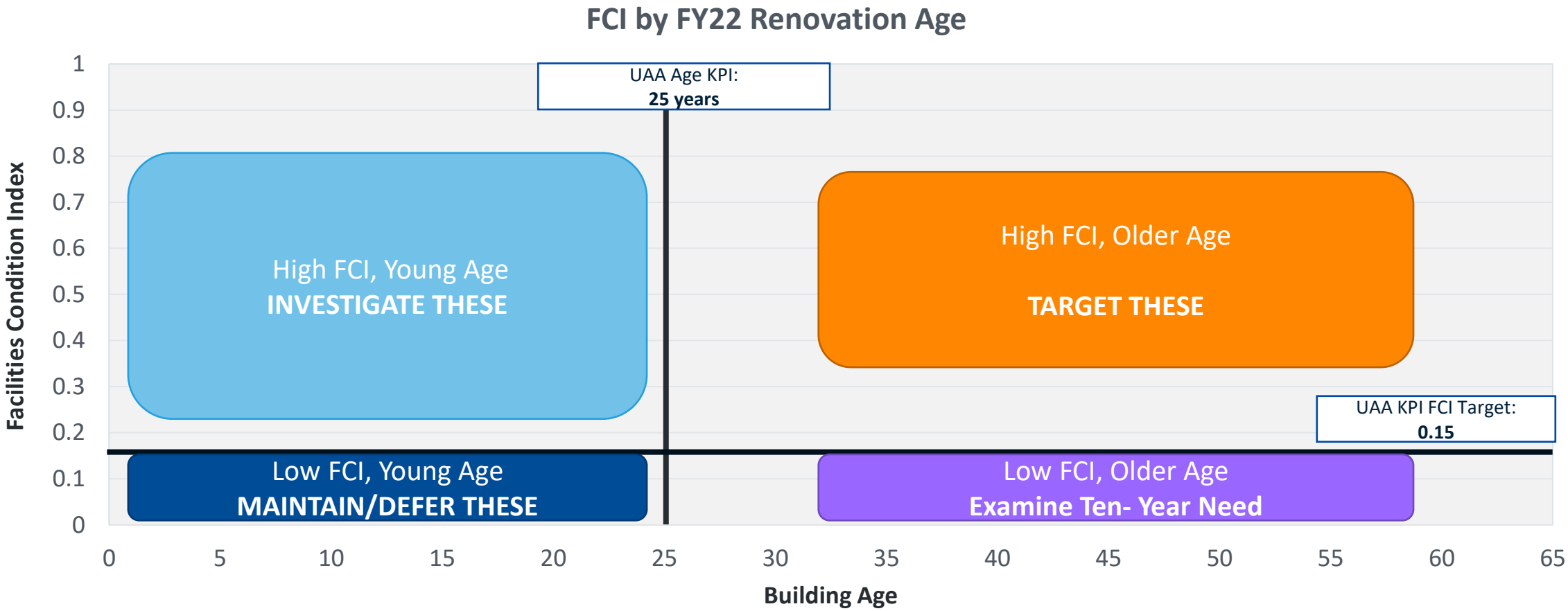


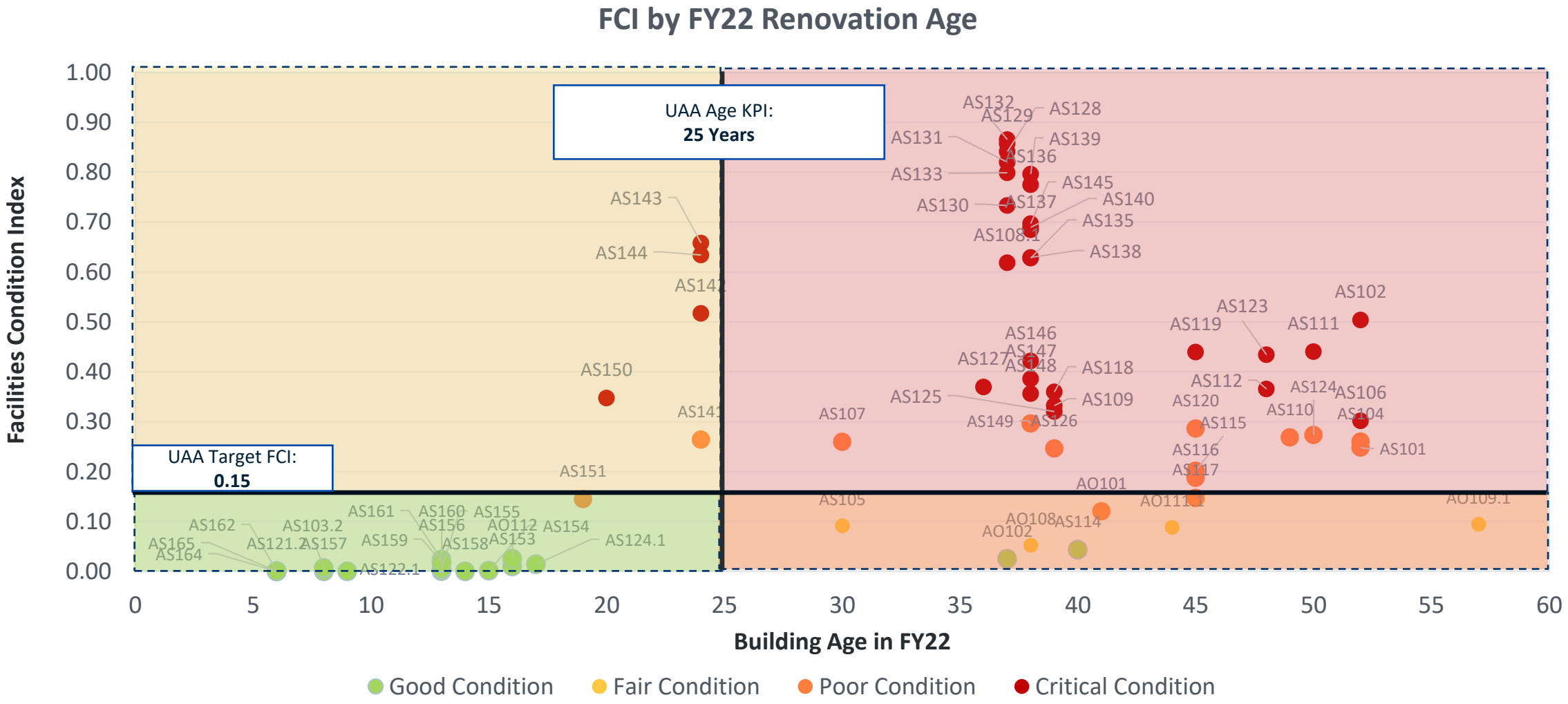
KPI Impact- Analyzing Age and Building Condition

Identifying costly buildings can help focus future capital investment



KPI Impact- Analyzing Age and Building Condition

Identifying older, high need buildings, can help shape investment strategy



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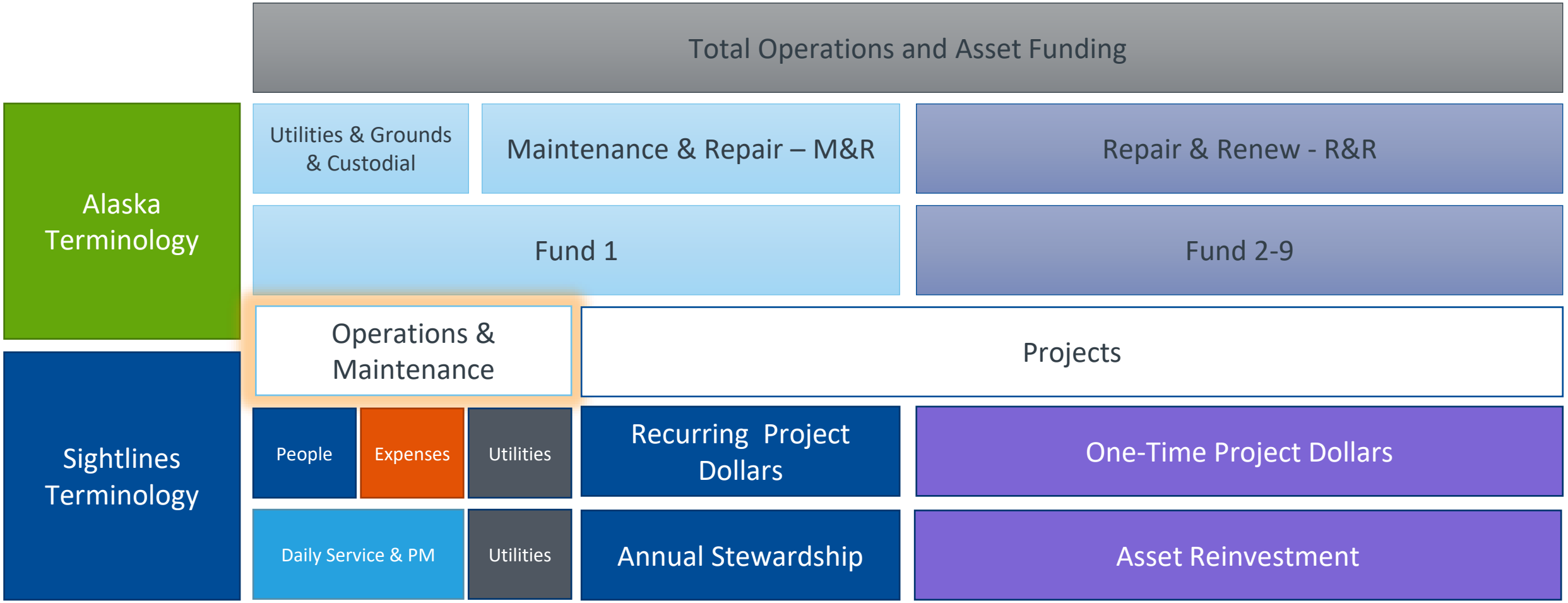
Operations Success:

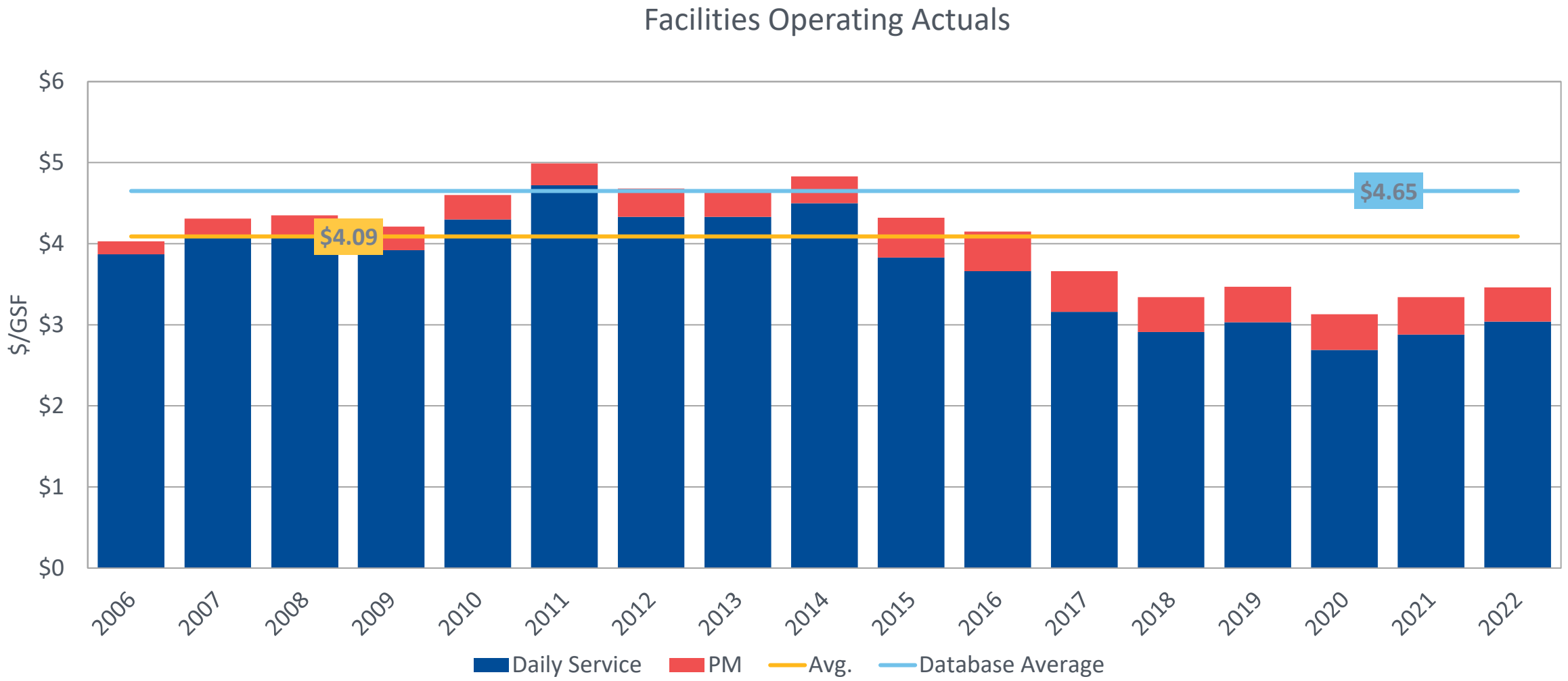
Anchorage Campus

Capital Funding Sources



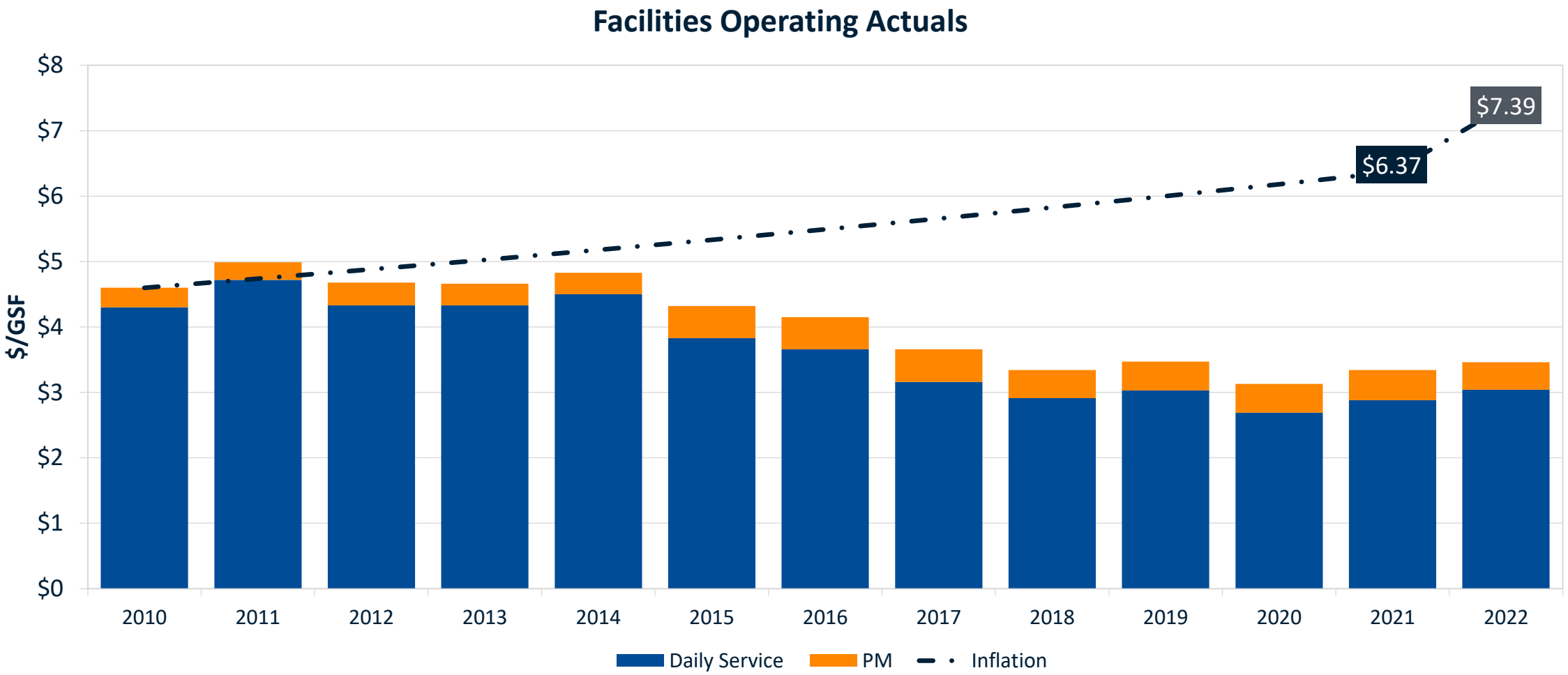
Facilities Operating Expenditures

Anchorage operates with significantly less resources than Gordian database



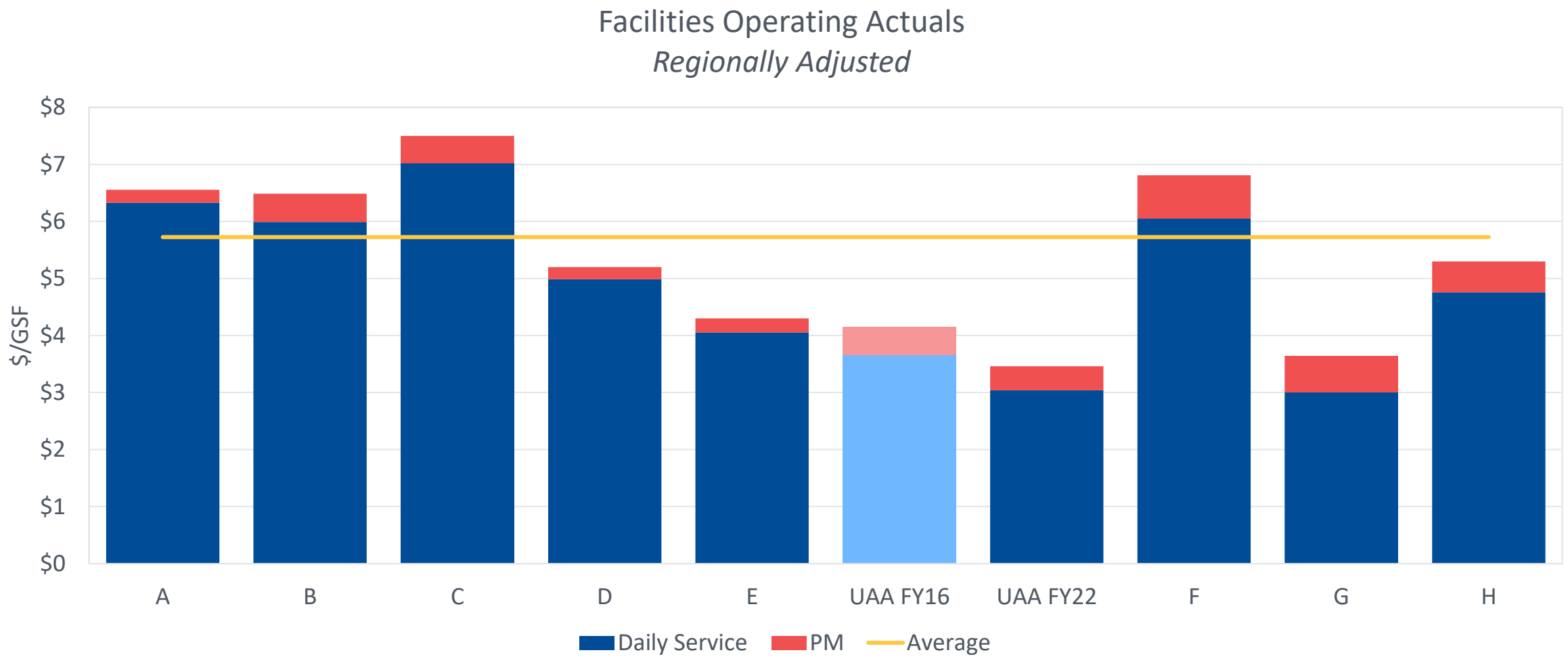
Budget Cuts Limit Purchasing Power

Operating spend is 50% less than if spending had kept up with inflation



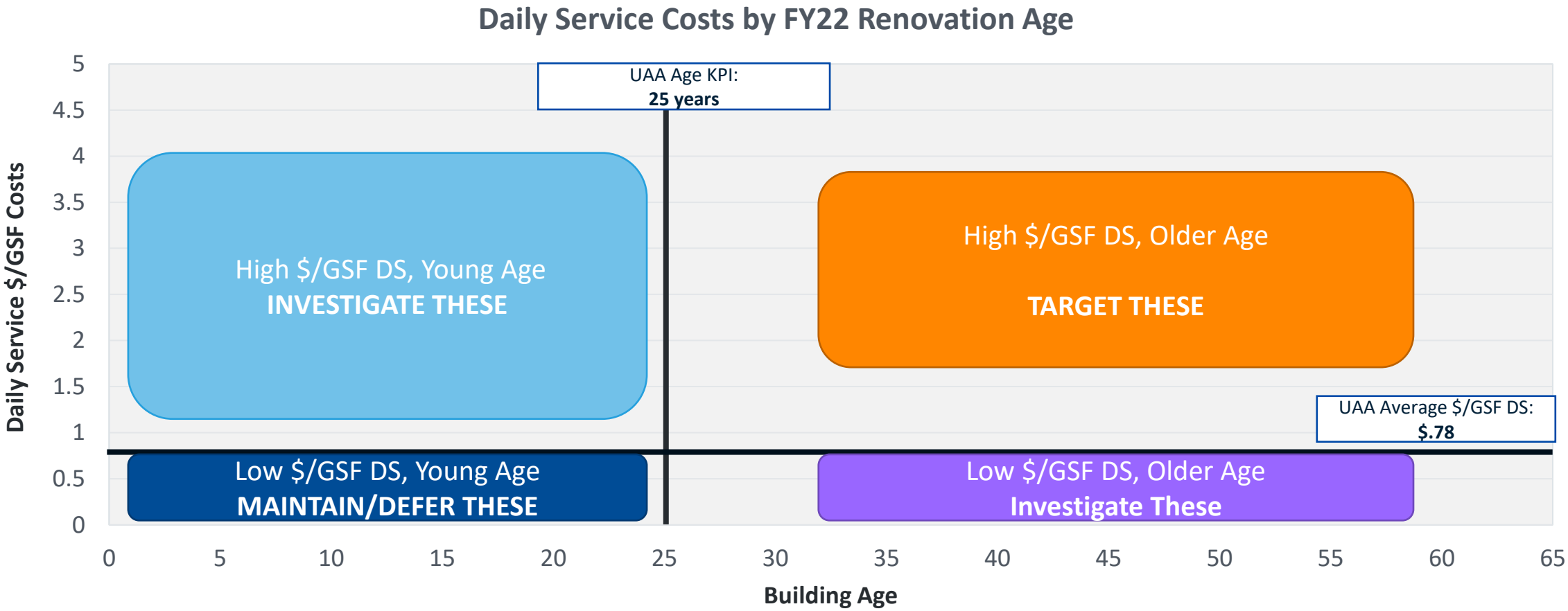
Facilities Operating Expenditures

Anchorage spends 40% less than peers on Daily Service



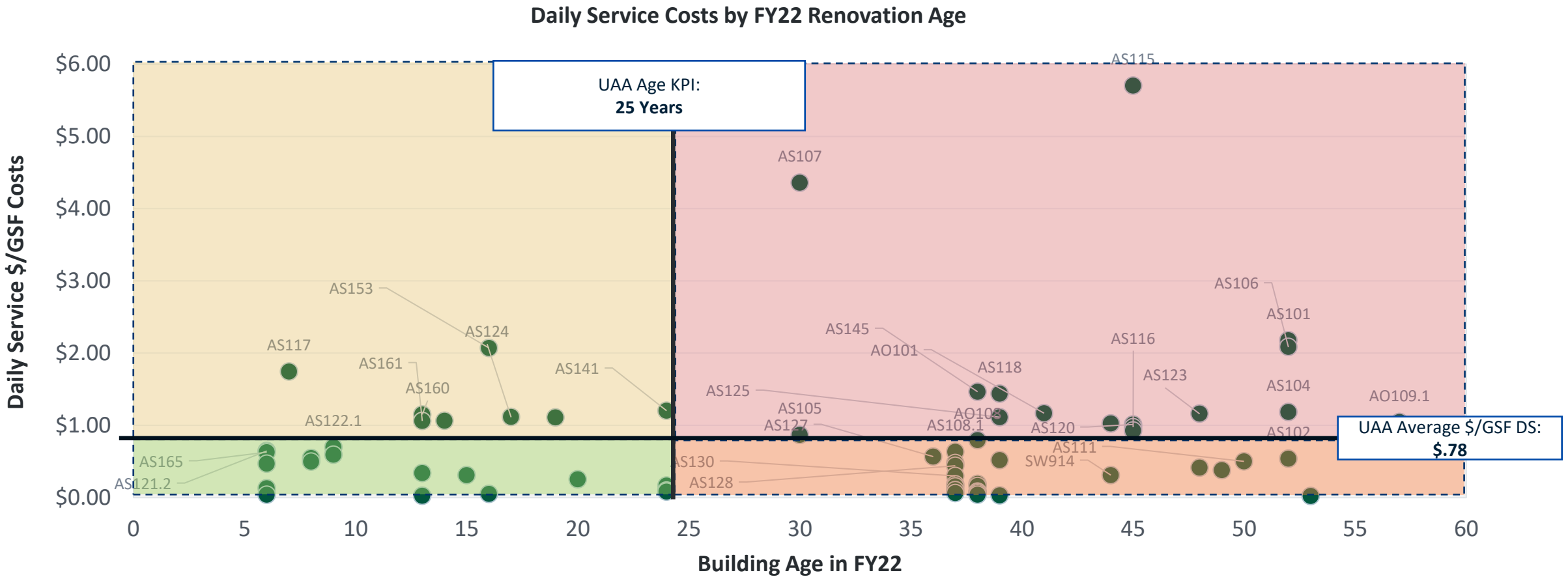
Analyzing Age and Corrective Maintenance

Identifying costly buildings can help focus future capital investment



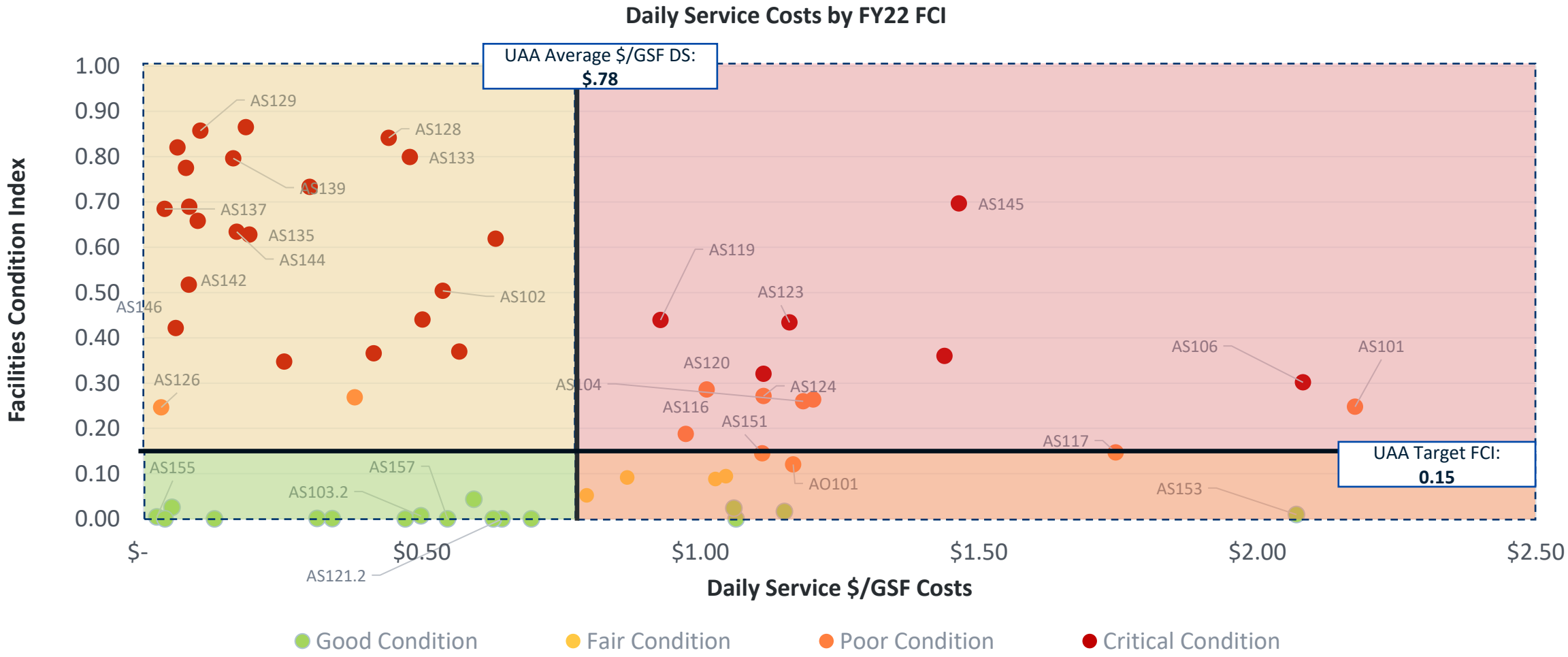
Analyzing Age and Corrective Maintenance

Identifying older, high need buildings, can help shape investment strategy



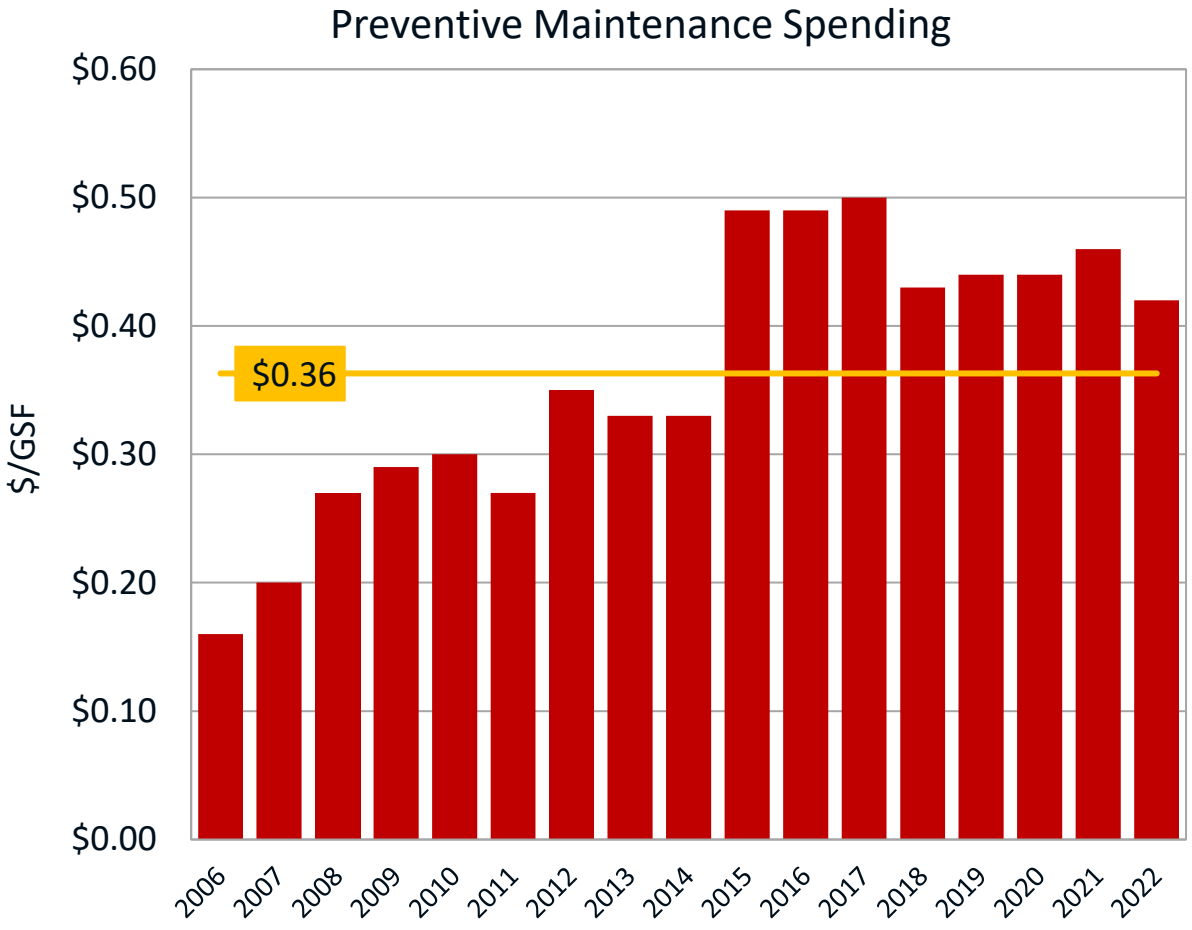
Analyzing FCI and Corrective Maintenance

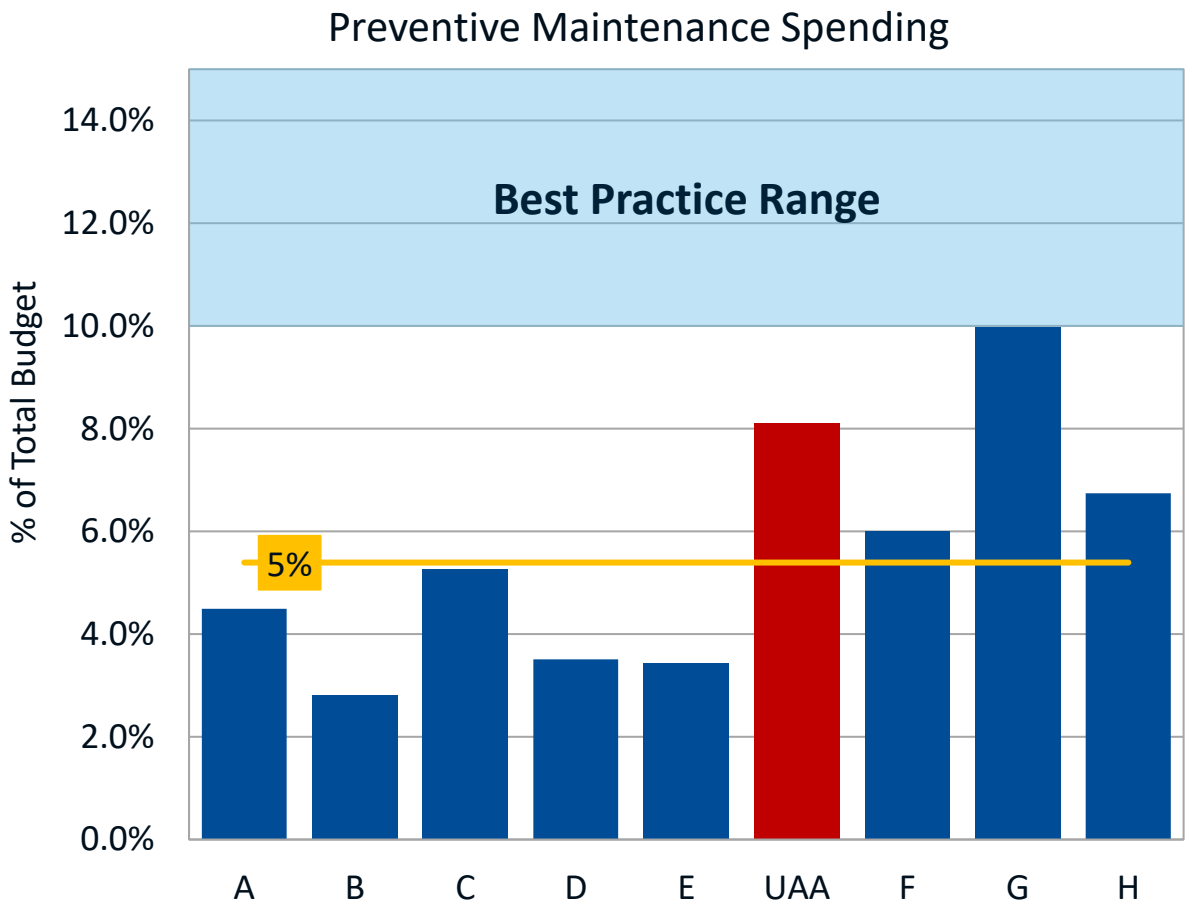
Identifying buildings with high operational and capital need, can determine investments



Anchorage Campus Spends More on PM than Peers

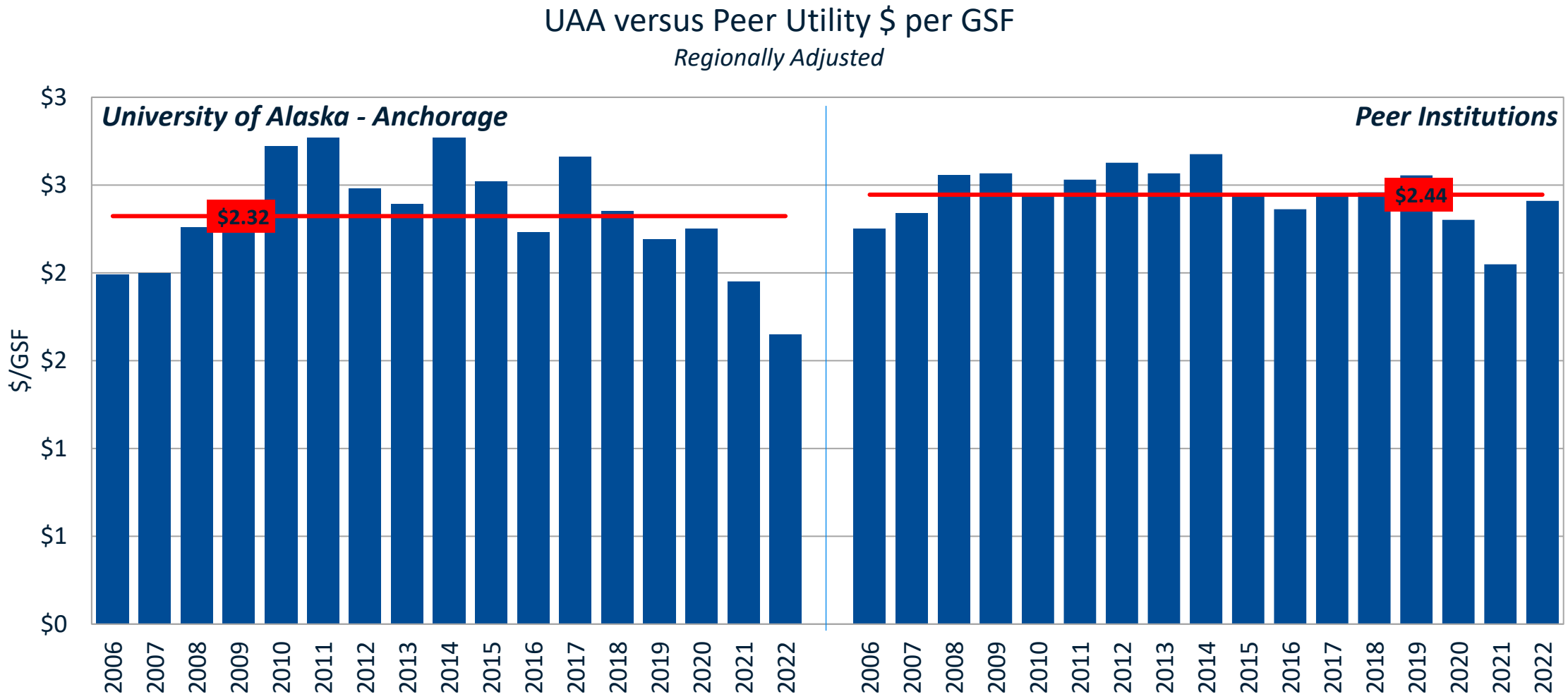
Anchorage stretches limited resources by focusing on extending life cycles through PM





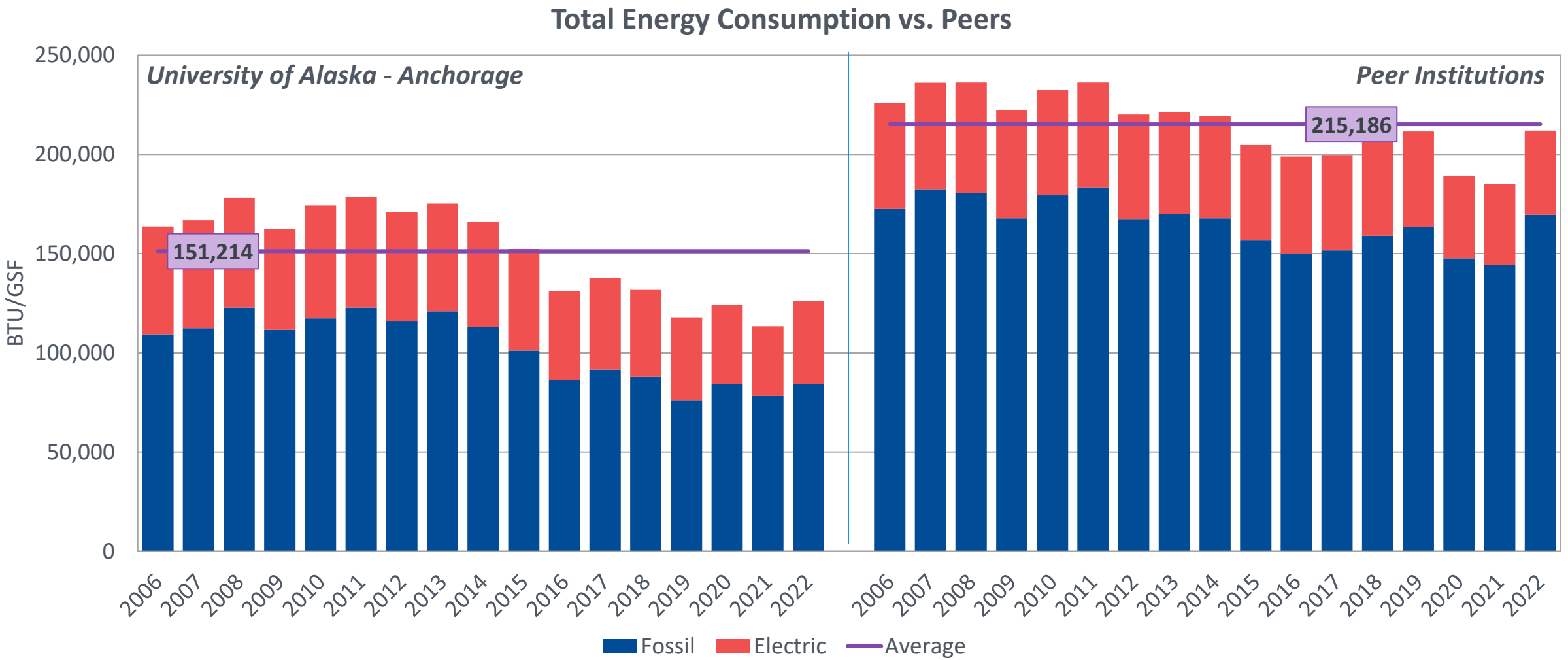
Utility Operating Expenditures Compared to Peers

Anchorage has decreased operating utility expenditures and spends less than Peers



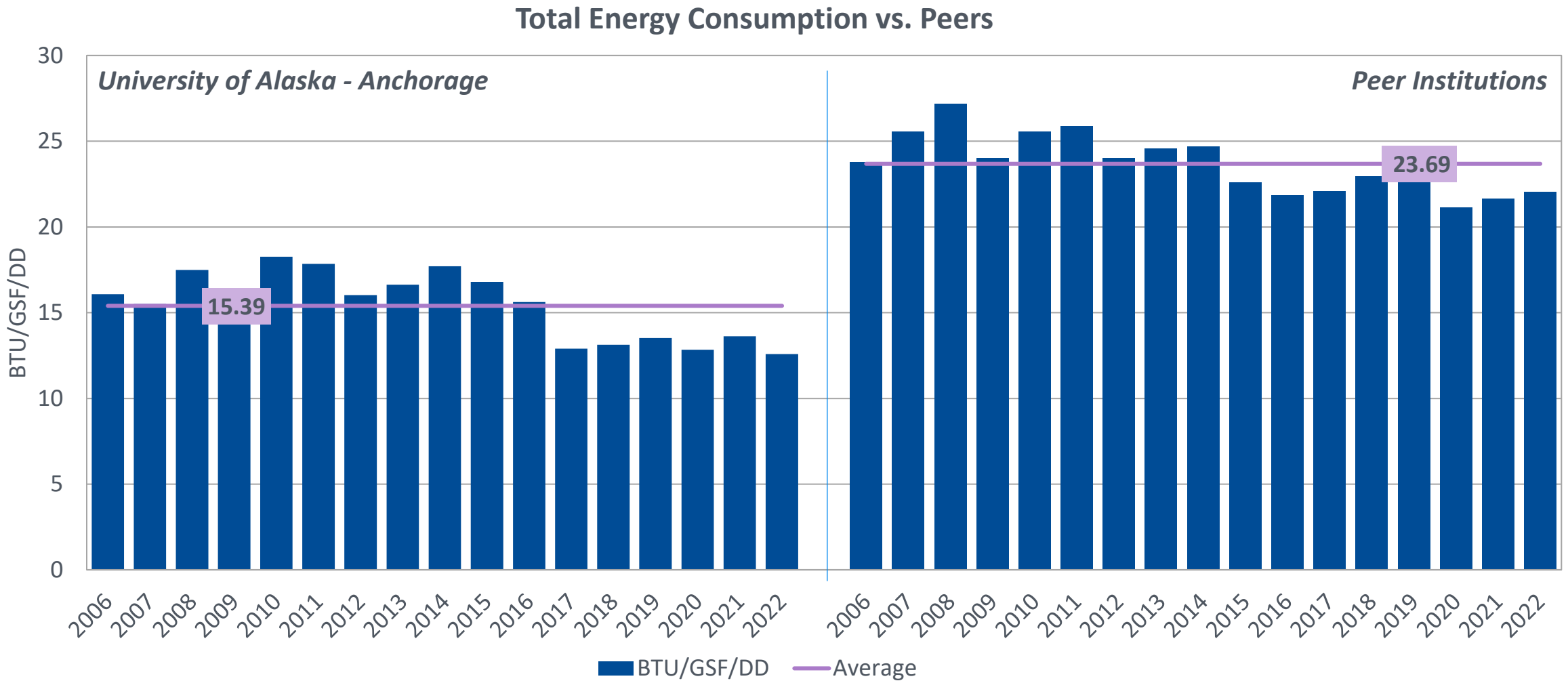
Total Energy Consumption

Anchorage has consumed less energy than peers, especially since 2015



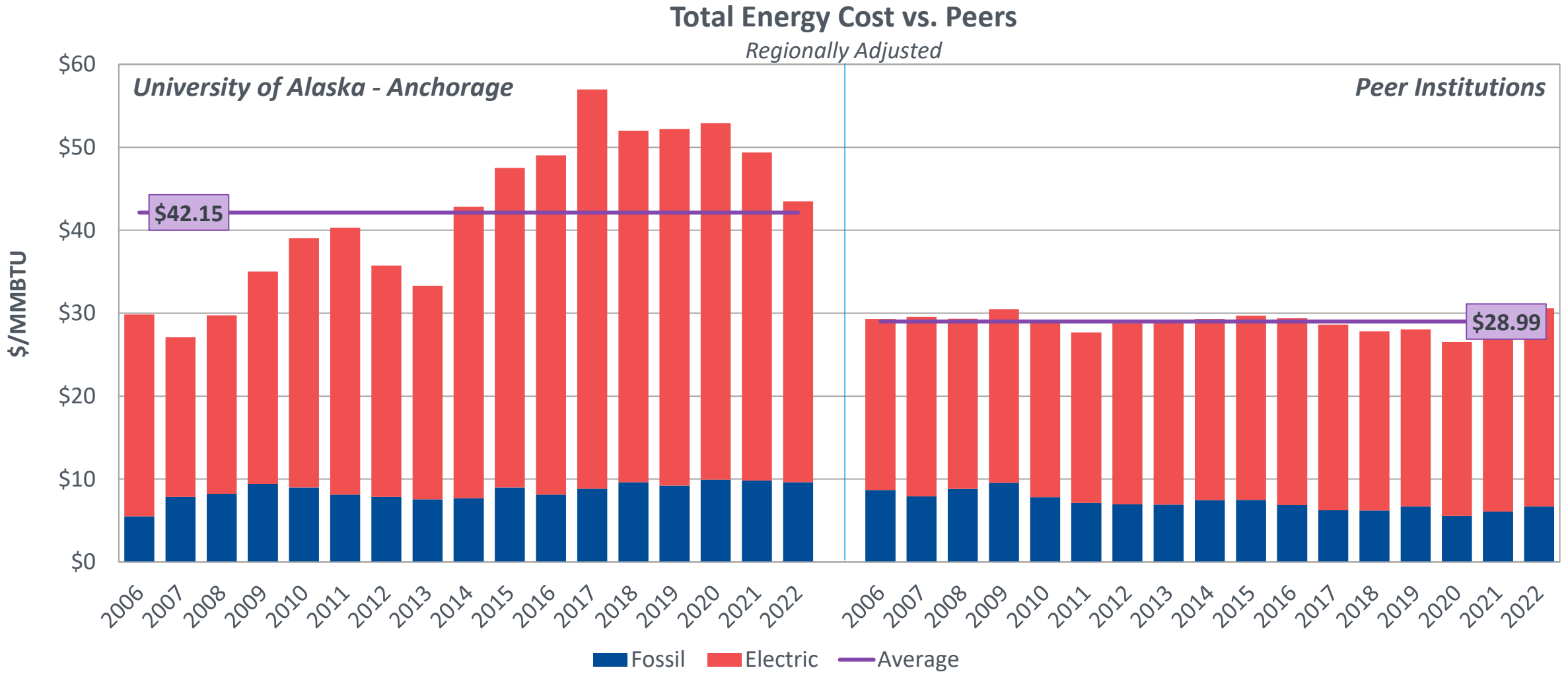
Total Energy Consumption

When normalizing by degree days, UAA has consumed less than peers throughout analysis



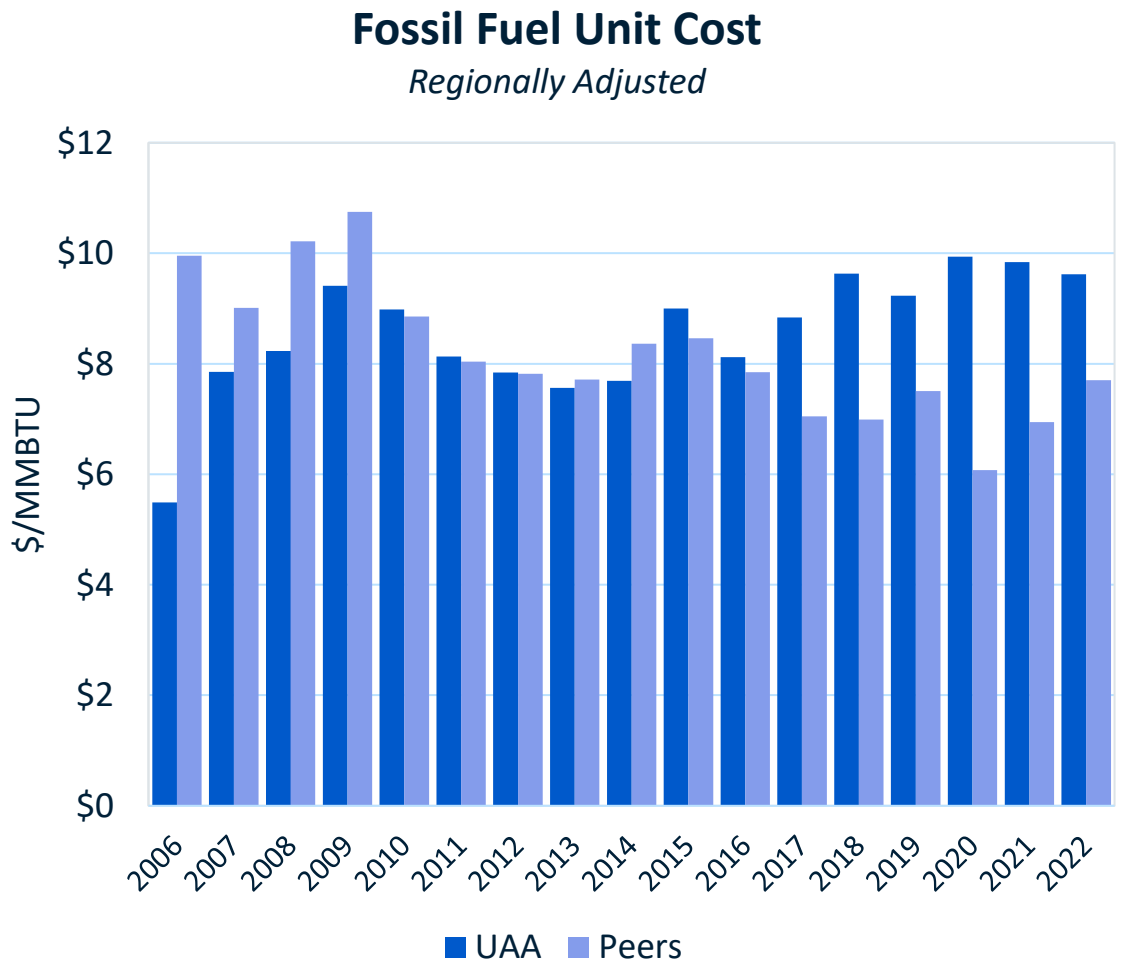
Energy Expenses are Increasing Over Time

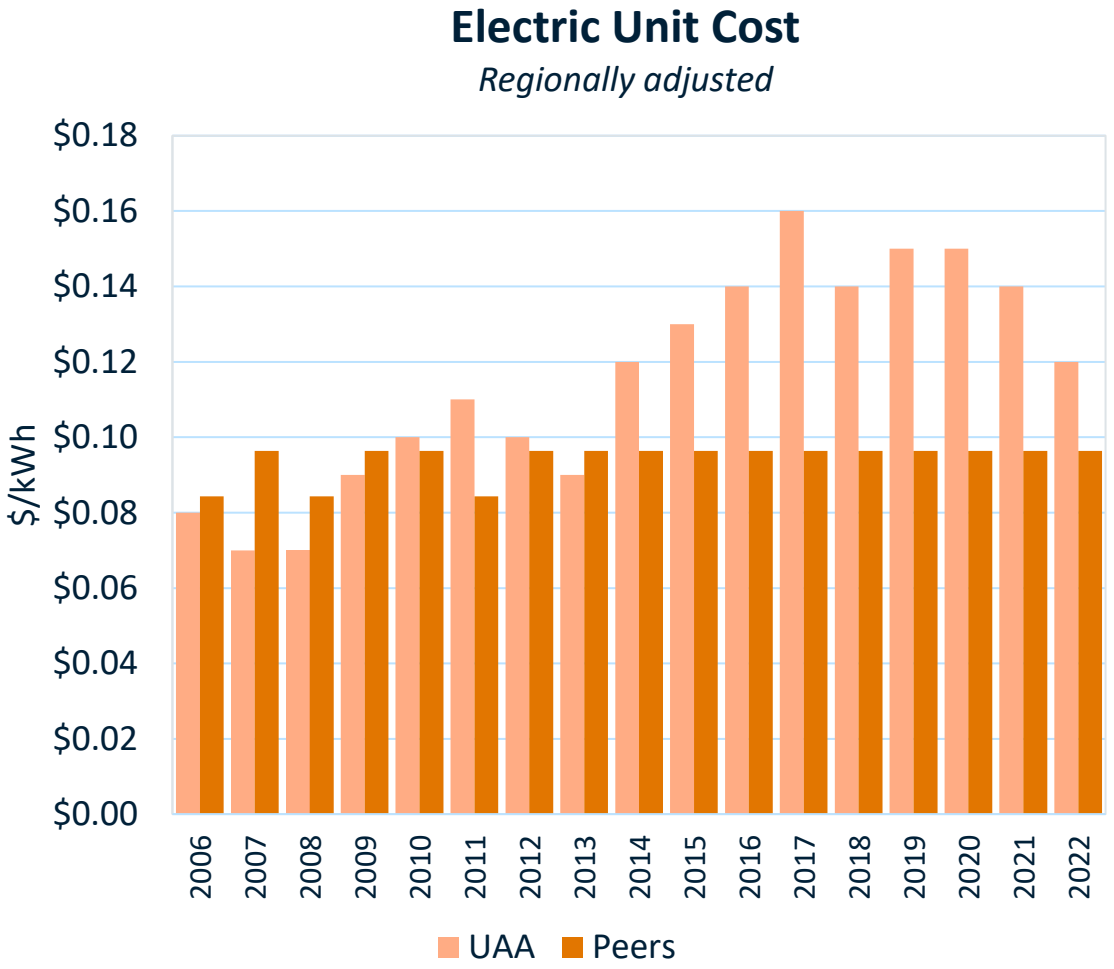
Anchorage campus has higher energy costs than peers, when normalized by region



Differences in Unit Costs are Growing vs. Peers

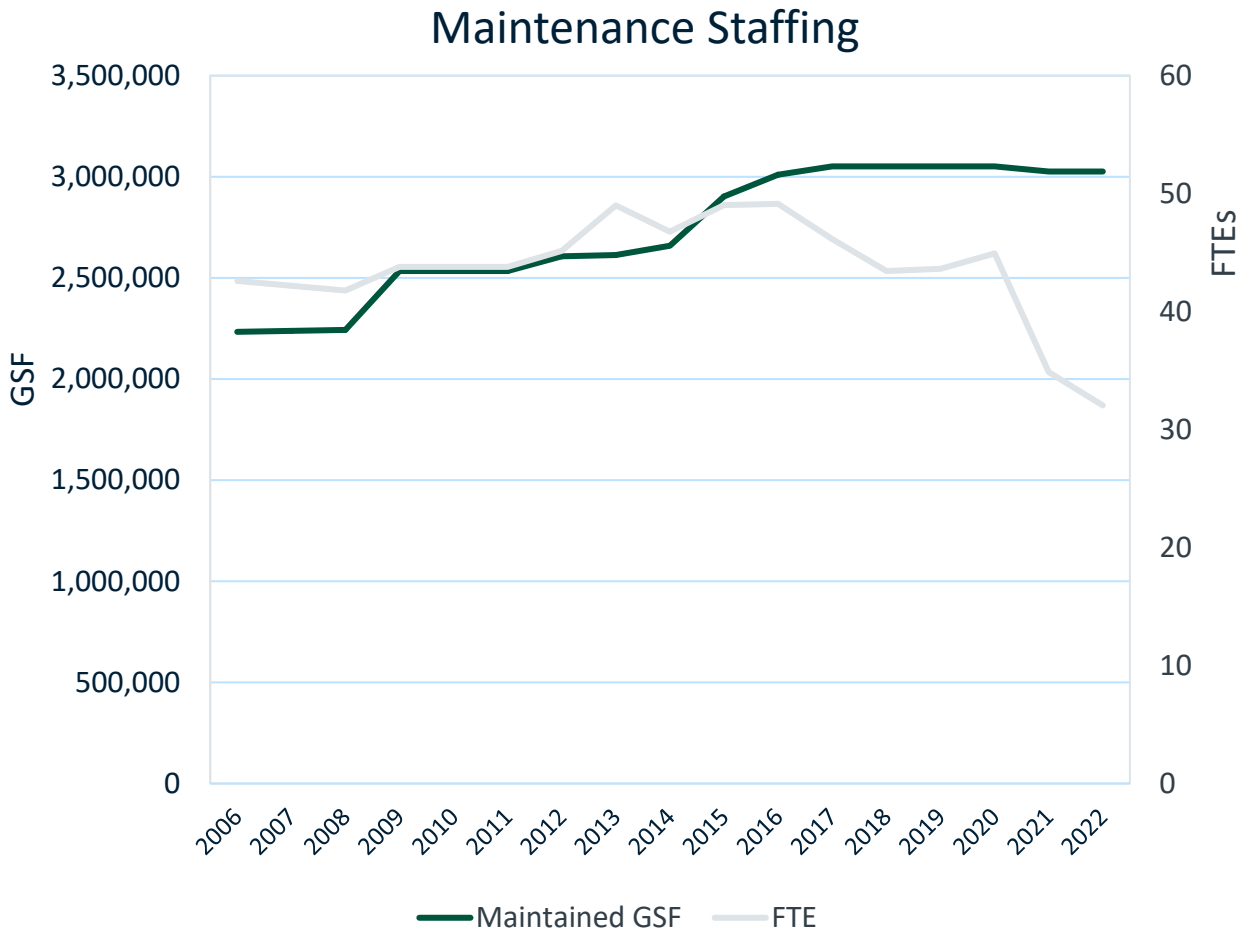
Anchorage has seen unit cost of electricity and fossil increase above peers

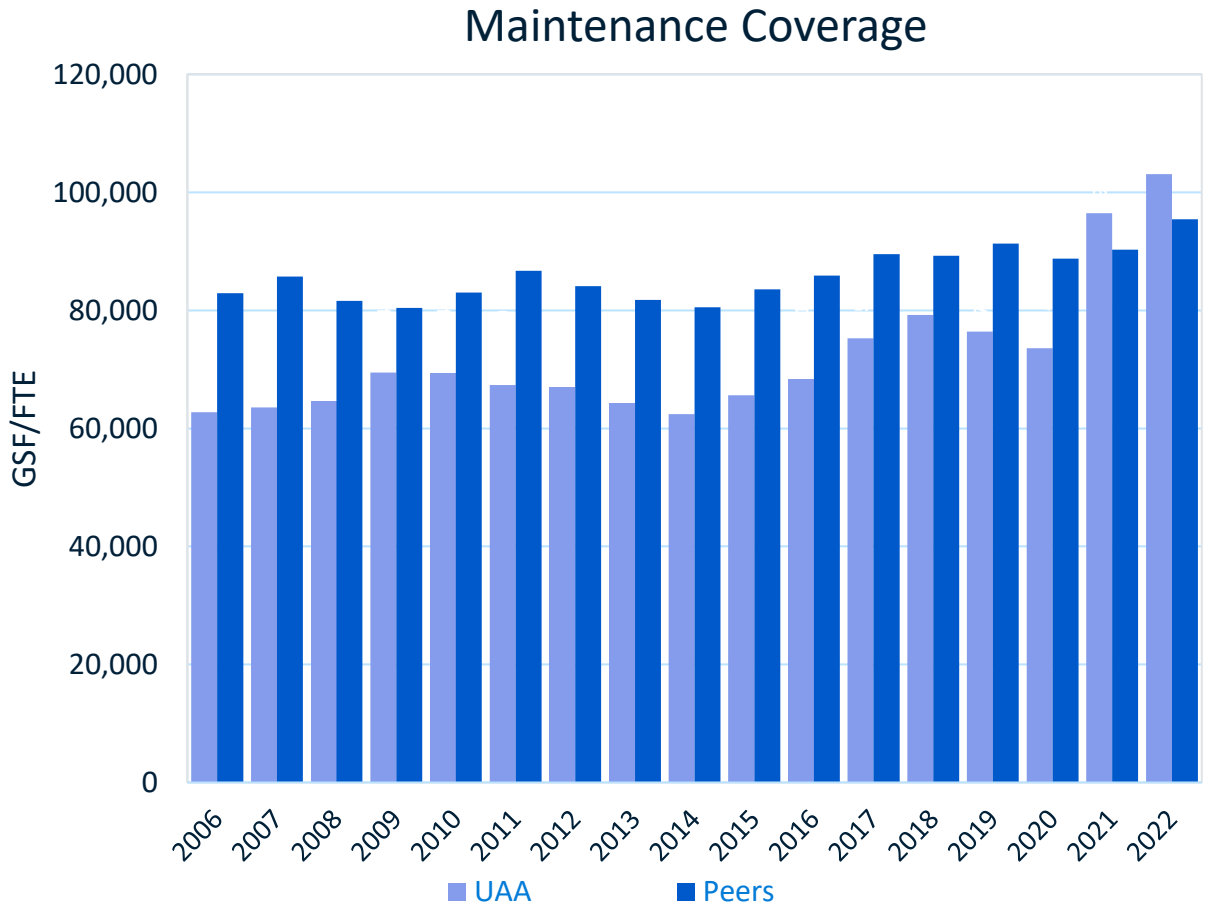




Maintenance Staffing Coverage

GSF per FTE jumps in FY22 as maintenance FTEs are reduced

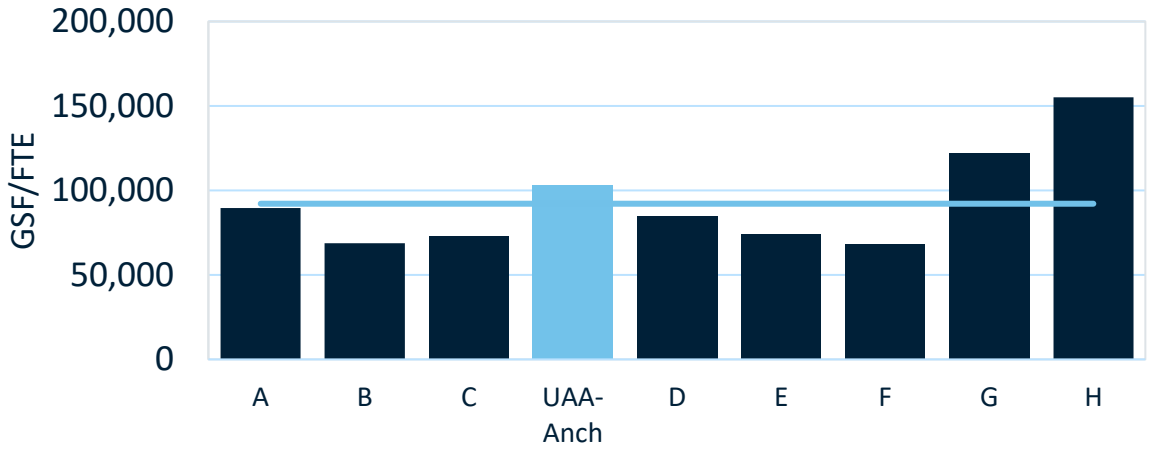




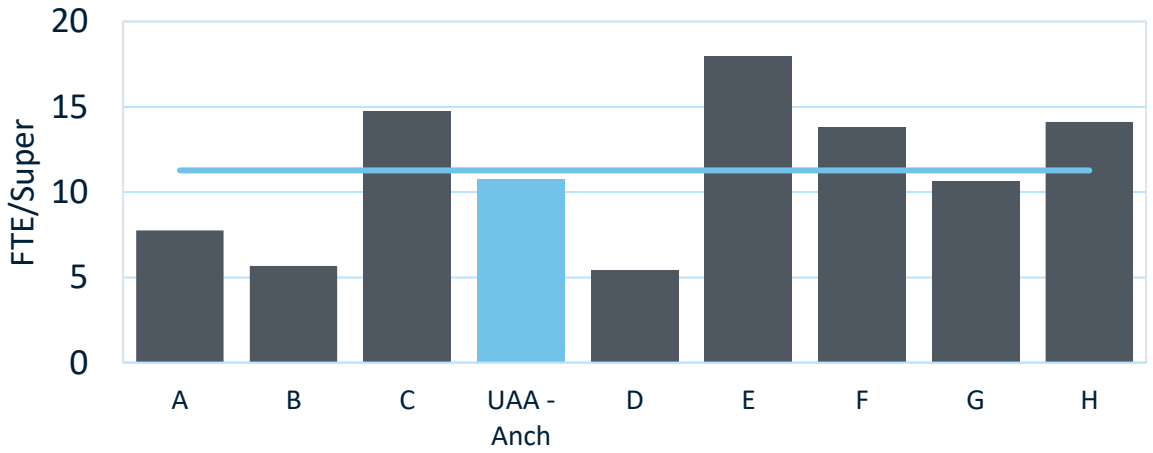
Maintenance Metrics

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

Maintenance Staffing

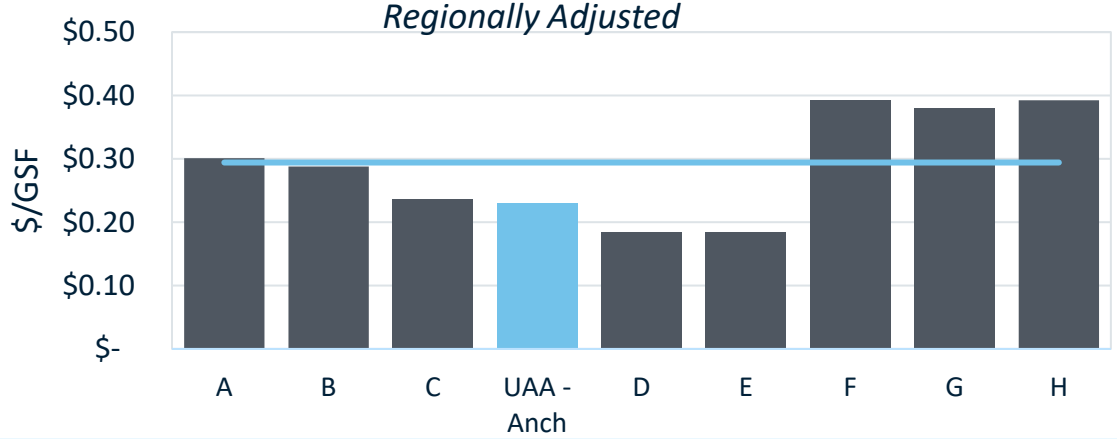


Maintenance Supervision

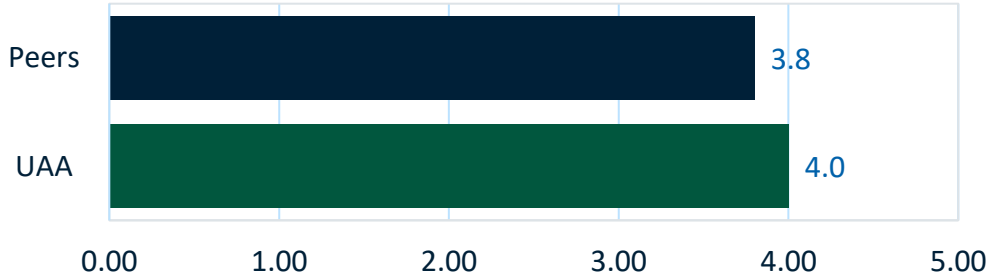


Maintenance Materials

Regionally Adjusted



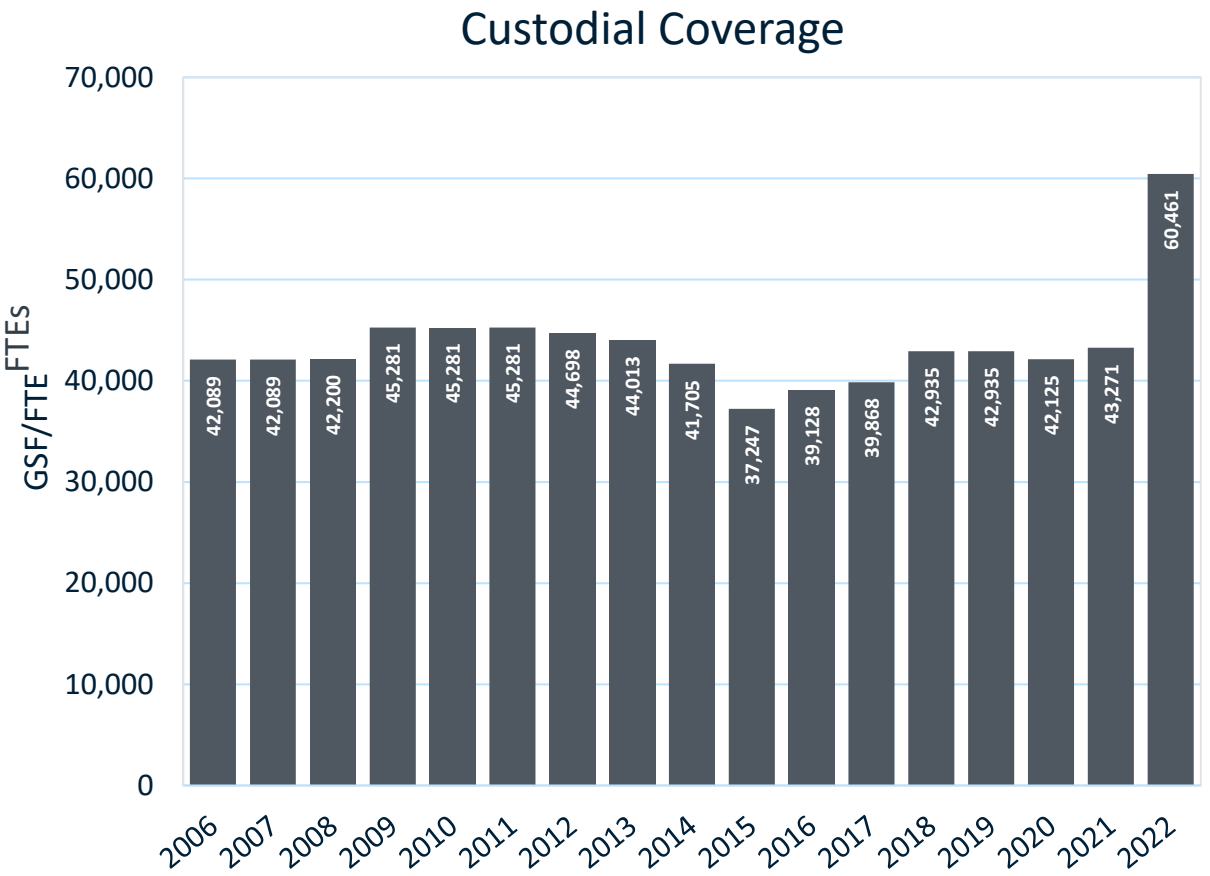
General Repair Inspection Score



Institutions arranged by Technical Complexity

Custodial Staffing Coverage

Custodial coverage significantly increases as FTEs were reduced in FY22

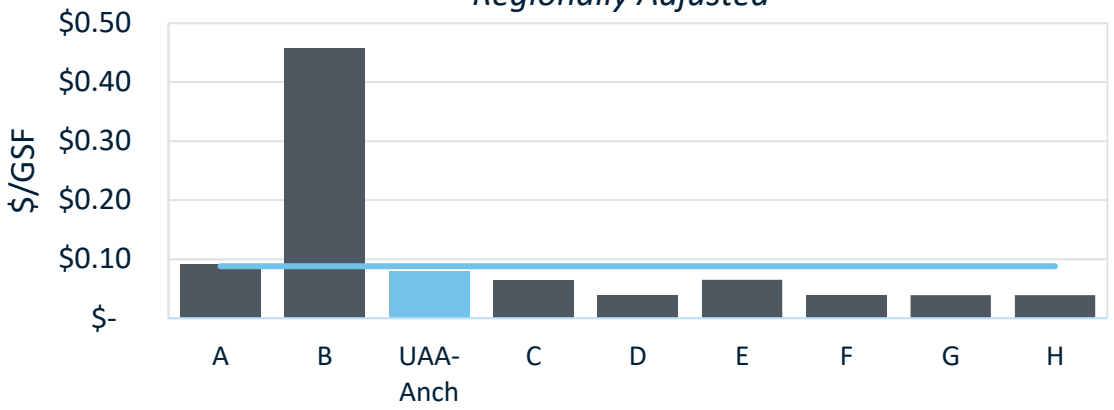


Custodial Metrics

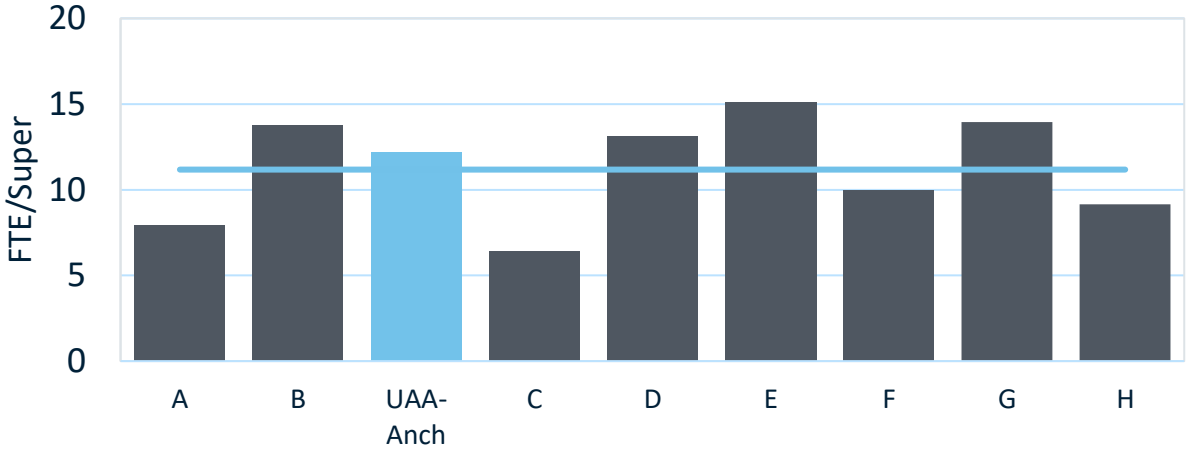
Anchorage staff cover more GSF and are supervised at lower rates than peers

Custodial Materials

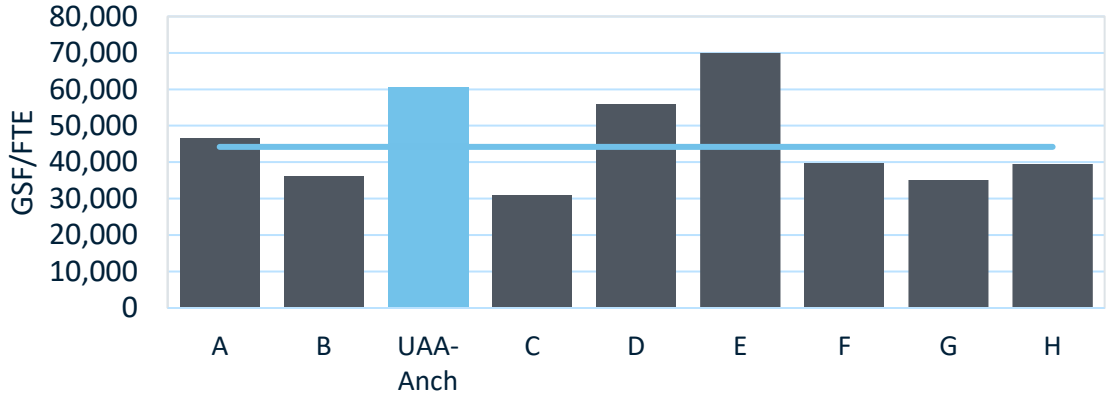
Regionally Adjusted



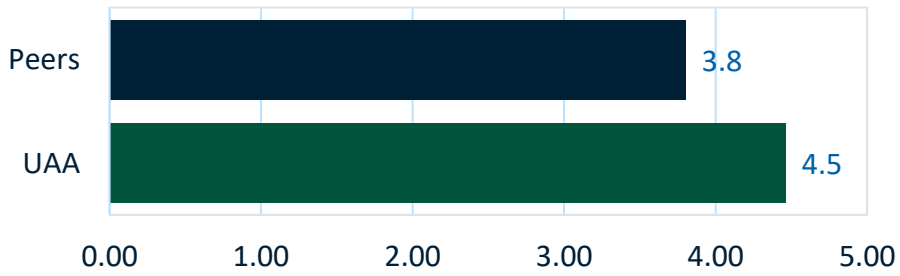
Custodial Supervision



Custodial Staffing



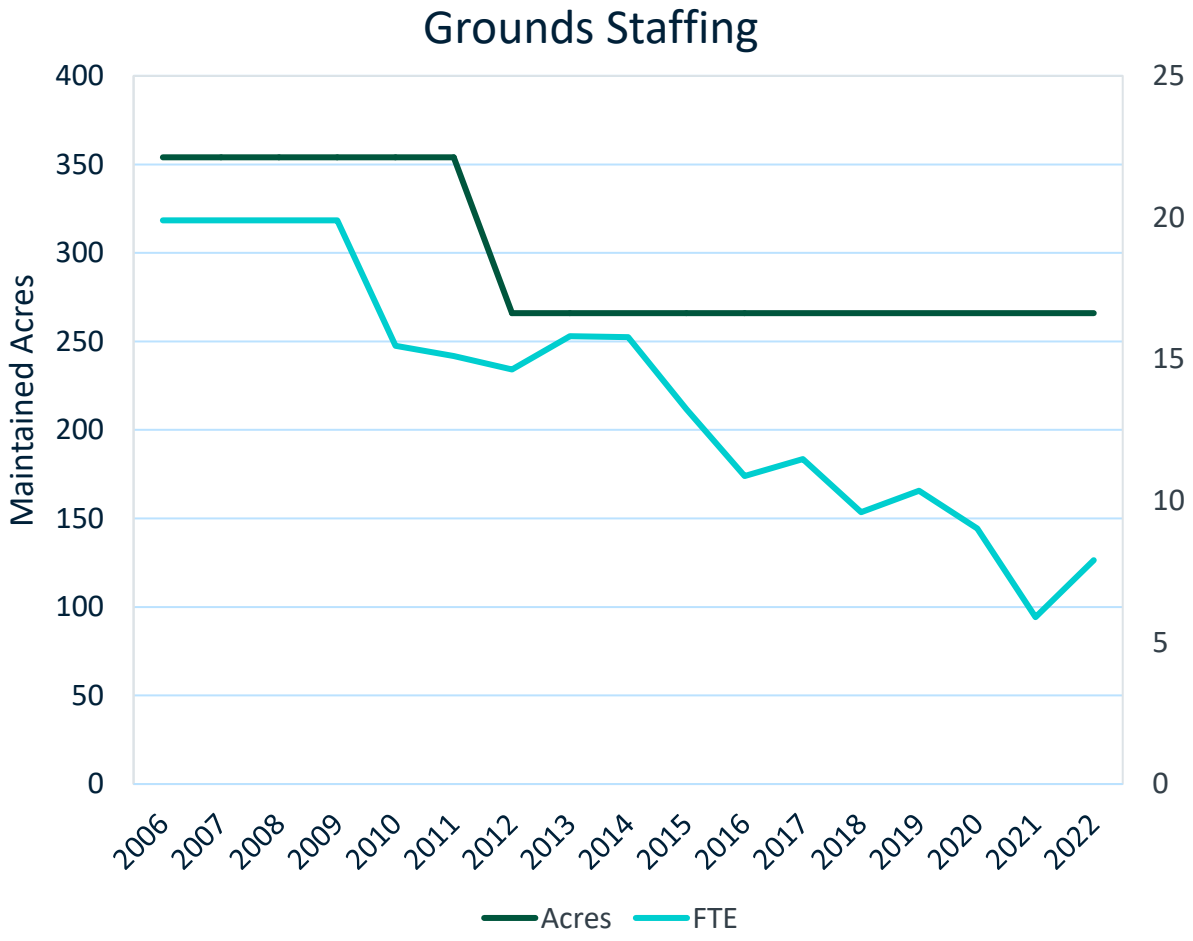
Cleanliness Inspection Score

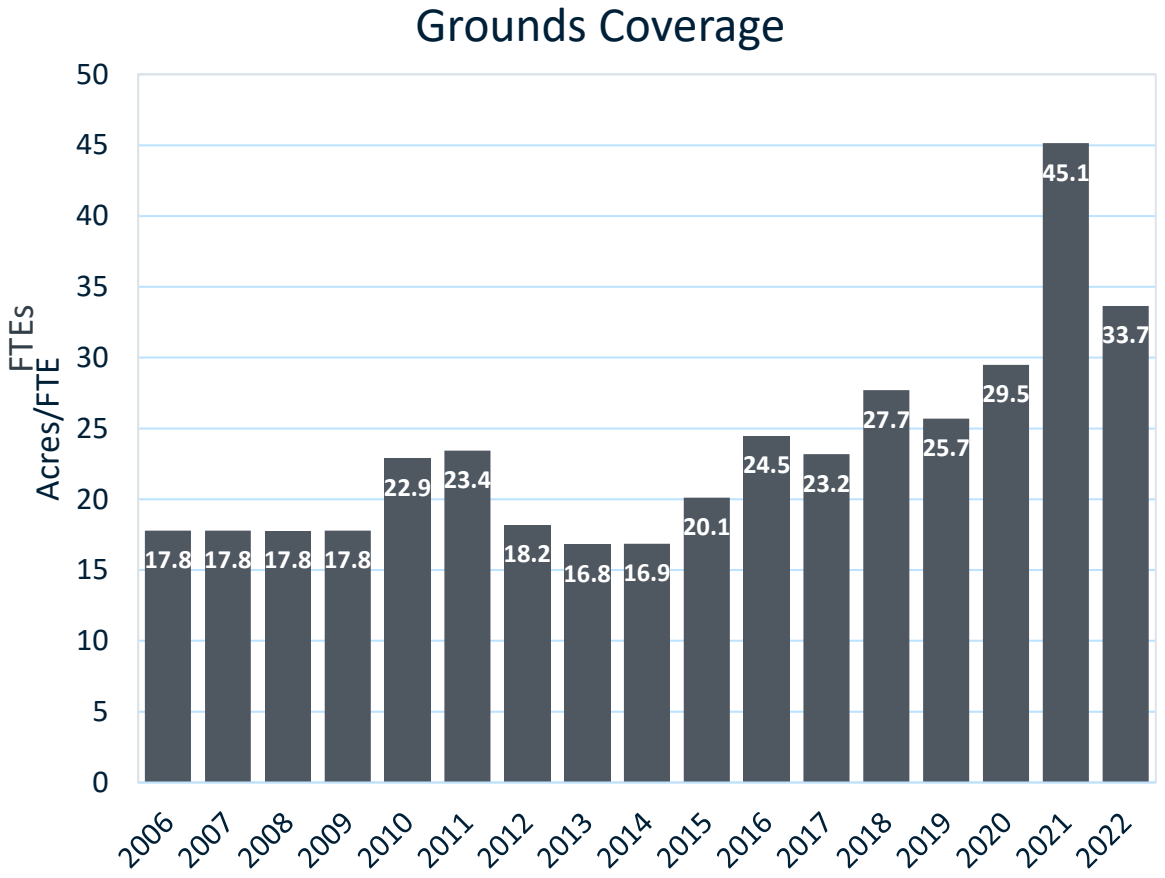


Institutions arranged by Density Rating

Grounds Staffing Coverage

Coverage ratios have decreased as grounds department regains employees

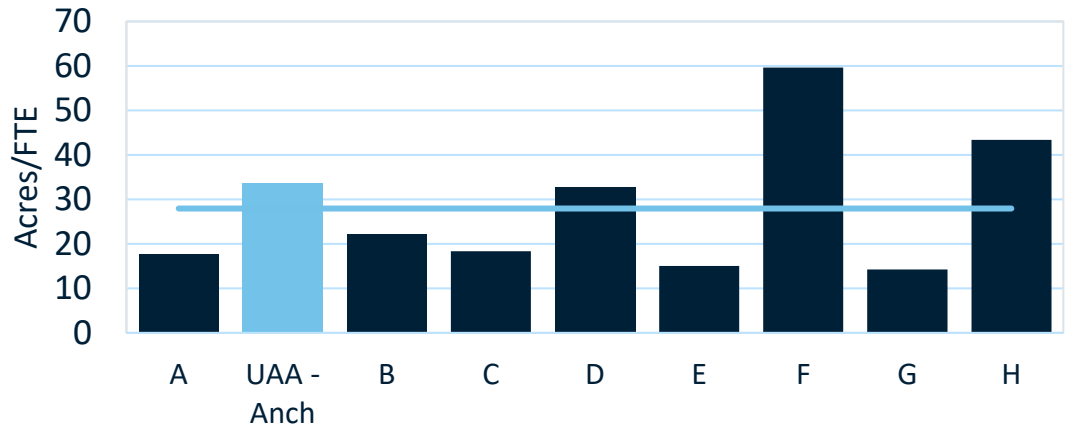




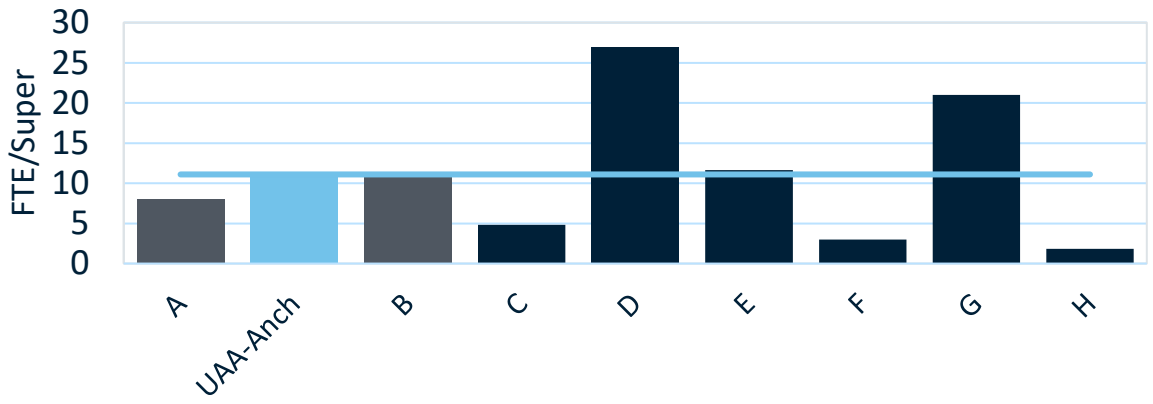
Grounds Metrics

While grounds department has grown from FY21, coverage still higher than peers

Grounds Staffing

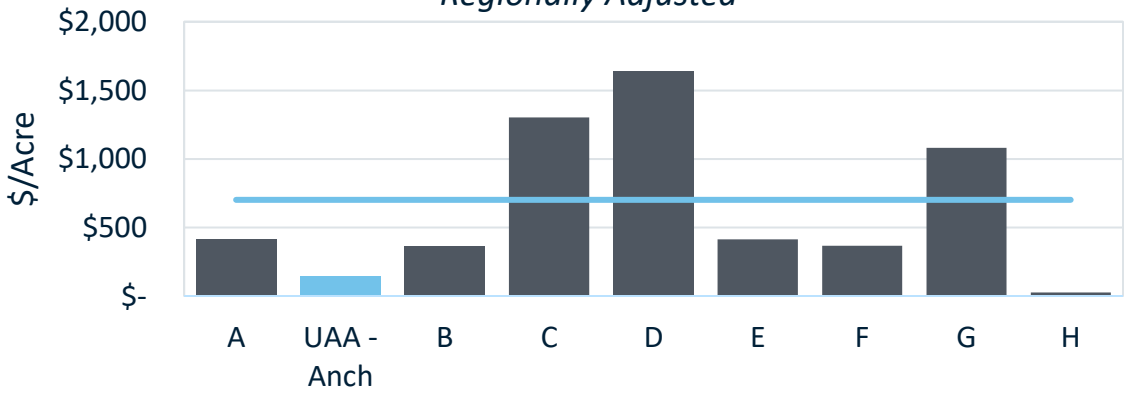


Grounds Supervision

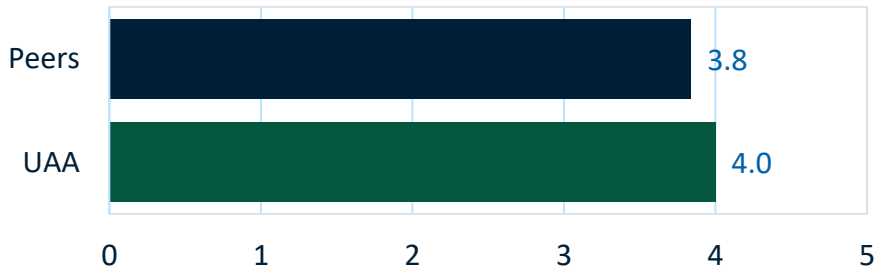


Grounds Materials

Regionally Adjusted



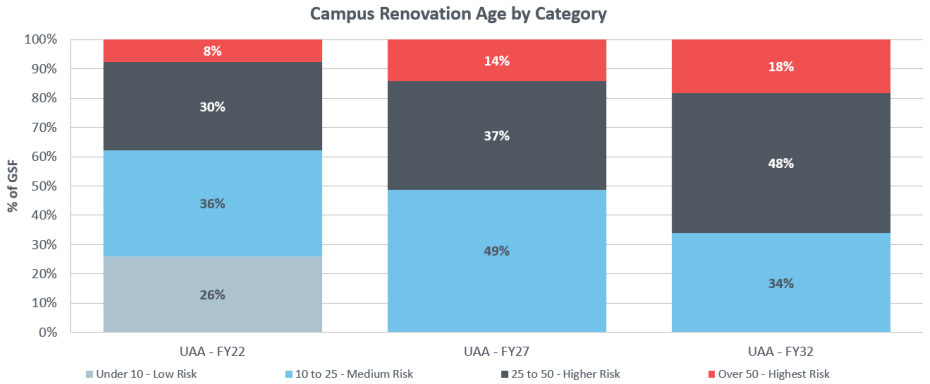
Grounds Inspection Score

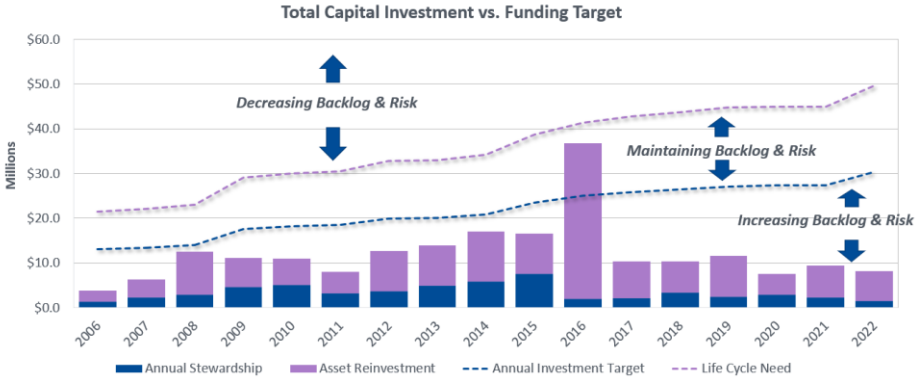


Institutions arranged by Grounds Intensity

Key Takeaways

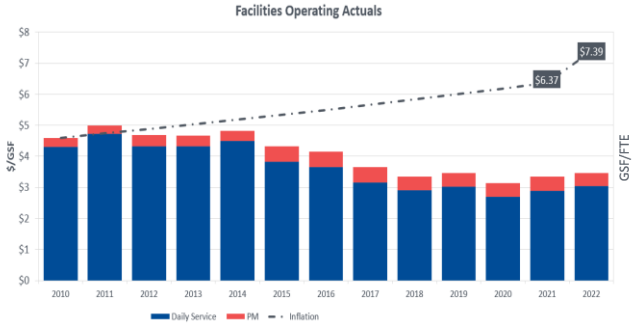
UAA is a young campus compared to peers. However, this young campus age may be misleading, because it is due to new construction of space. Within five years none of the space on campus will be under 10 years of age. At that time the newer “younger” space will compete for capital and operational resources with the older space on campus.

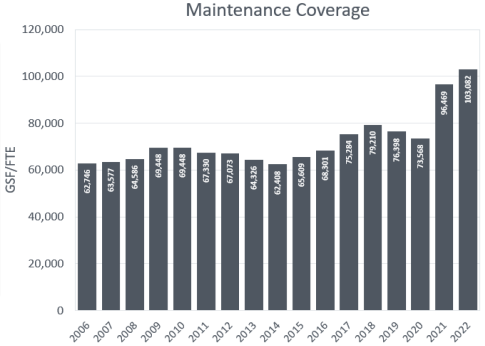




Since FY16 capital investment into existing space has significantly declined, which has correlated with the increase of Asset Reinvestment Need. To decrease total campus need, capital funding must be increased. If capital investments cannot be increased, older high FCI space should be divested from or ideally taken offline to reduce capital need.

Operationally UAA is facing significant shortfalls of resources. While expenditures increased from FY21, facilities budgets are still far below previous years when compared to inflation. Additionally, staffing FTE’s have decreased resulting in coverage ratios increasing. In order to alleviate the capital and operational strain, facilities budgets should be increased to take on either service contracts or hire more staff.





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FY22 Facilities Benchmarking & Analysis

University of Alaska Anchorage:

Community Campus Breakout

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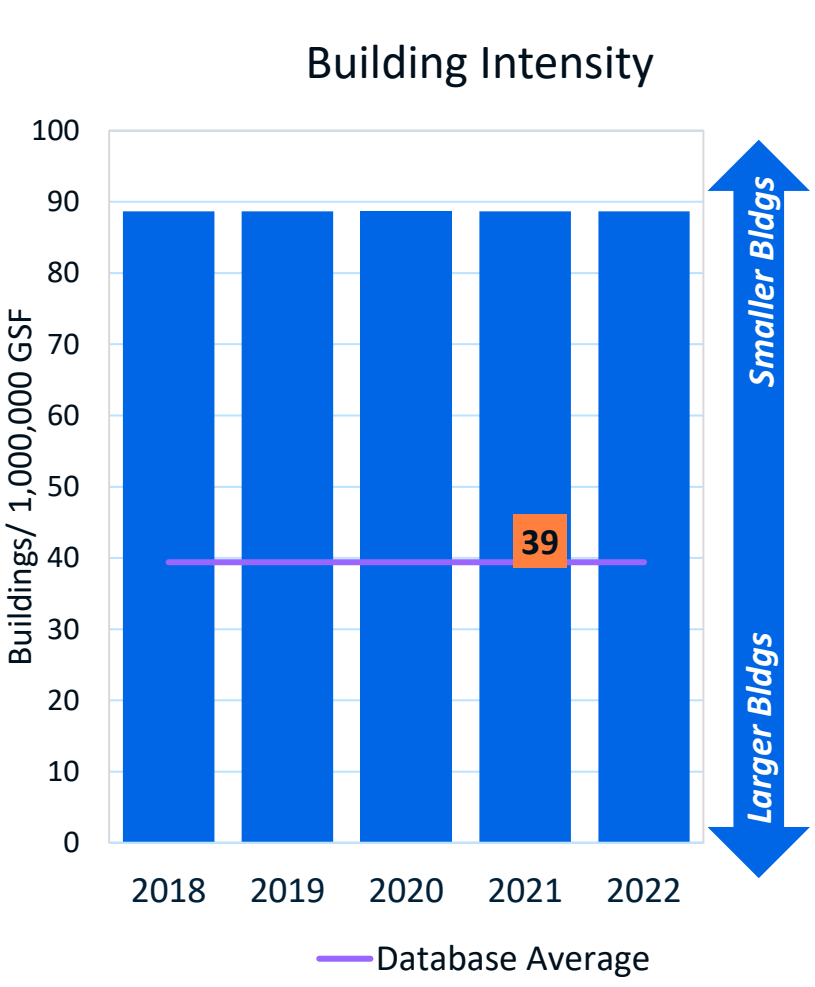
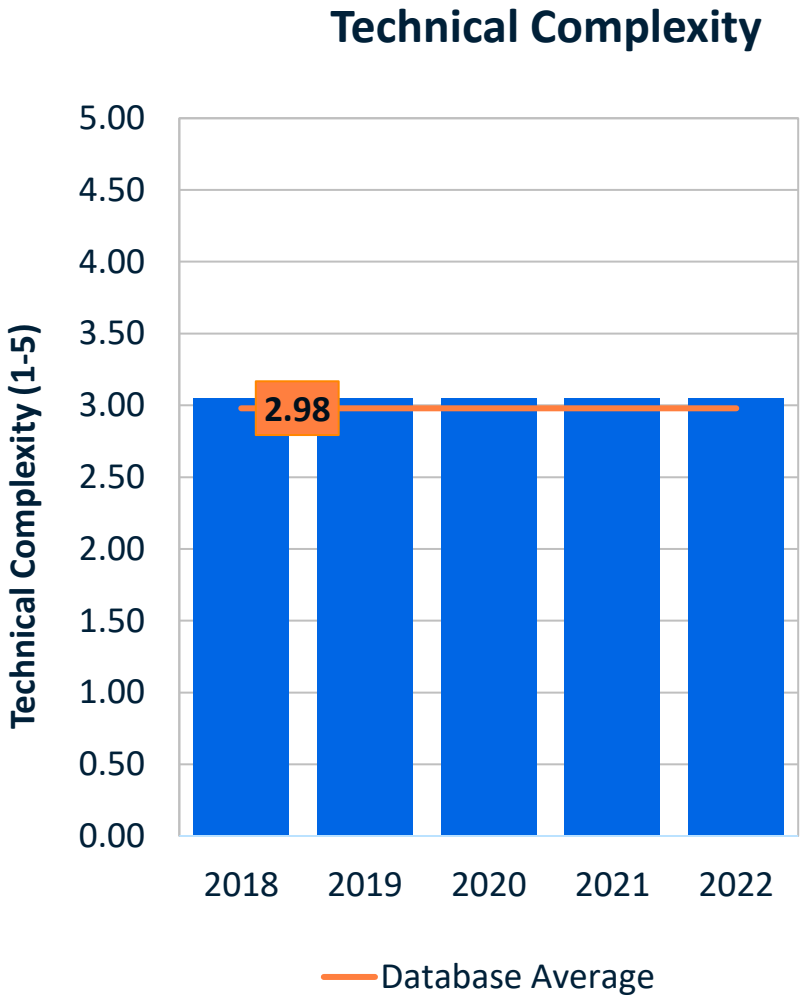
Space Profile:

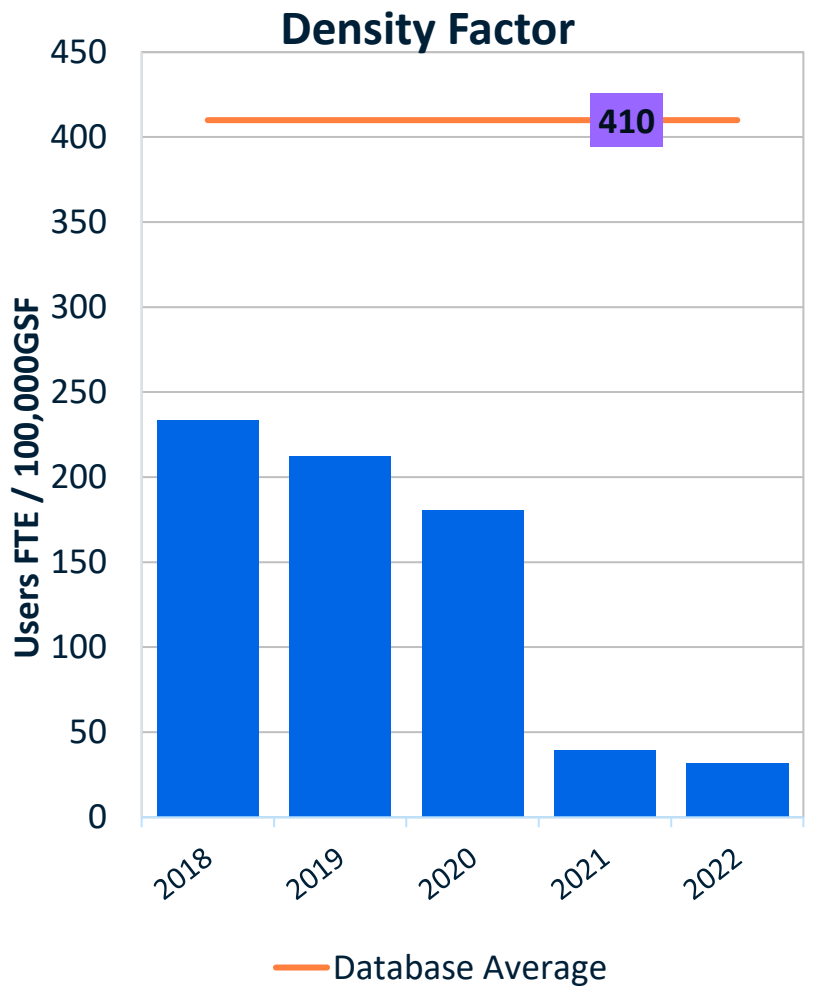
Kenai Peninsula College

Qualifying Metrics – Building and Grounds Intensity

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

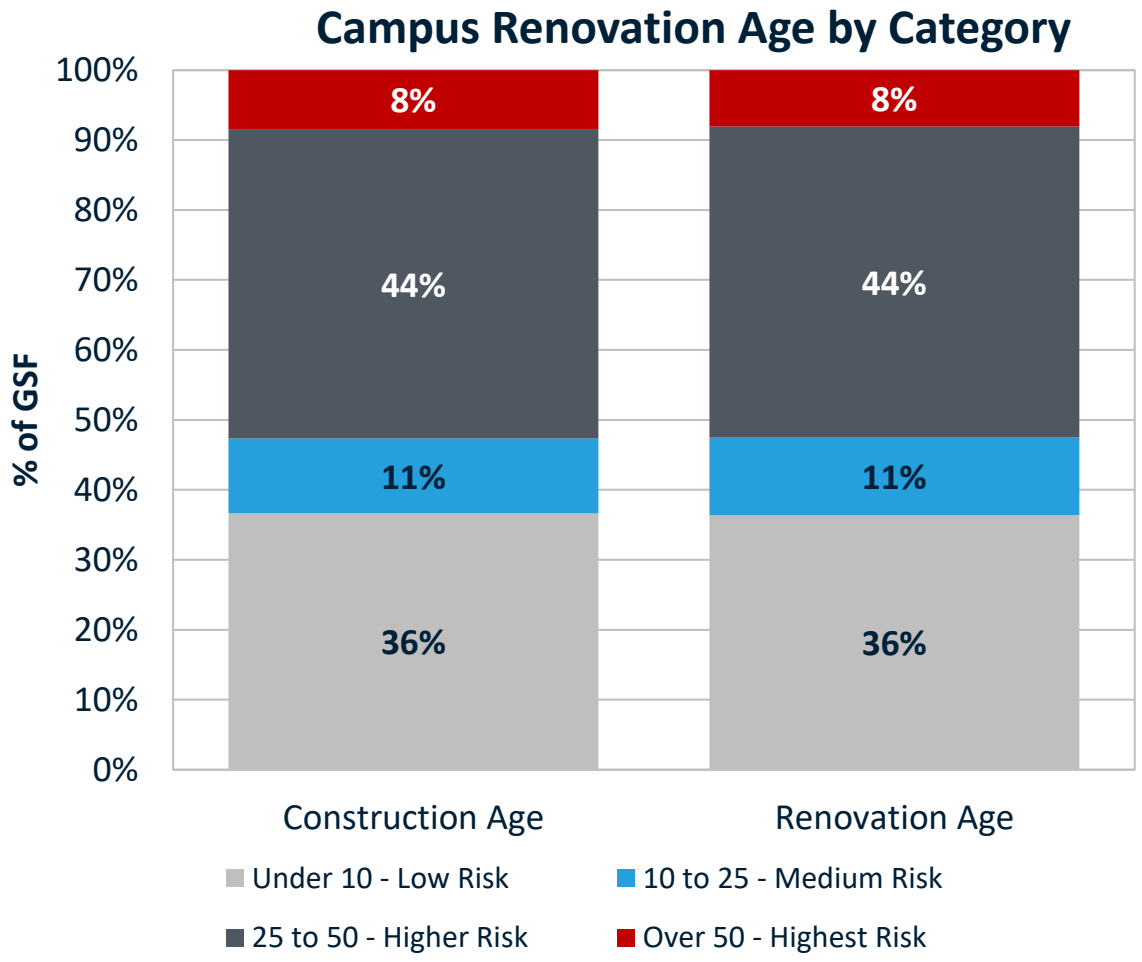






New Construction Keeps Kenai Campus Young

A younger campus allows Kenai to proactively manage operational and capital demands



	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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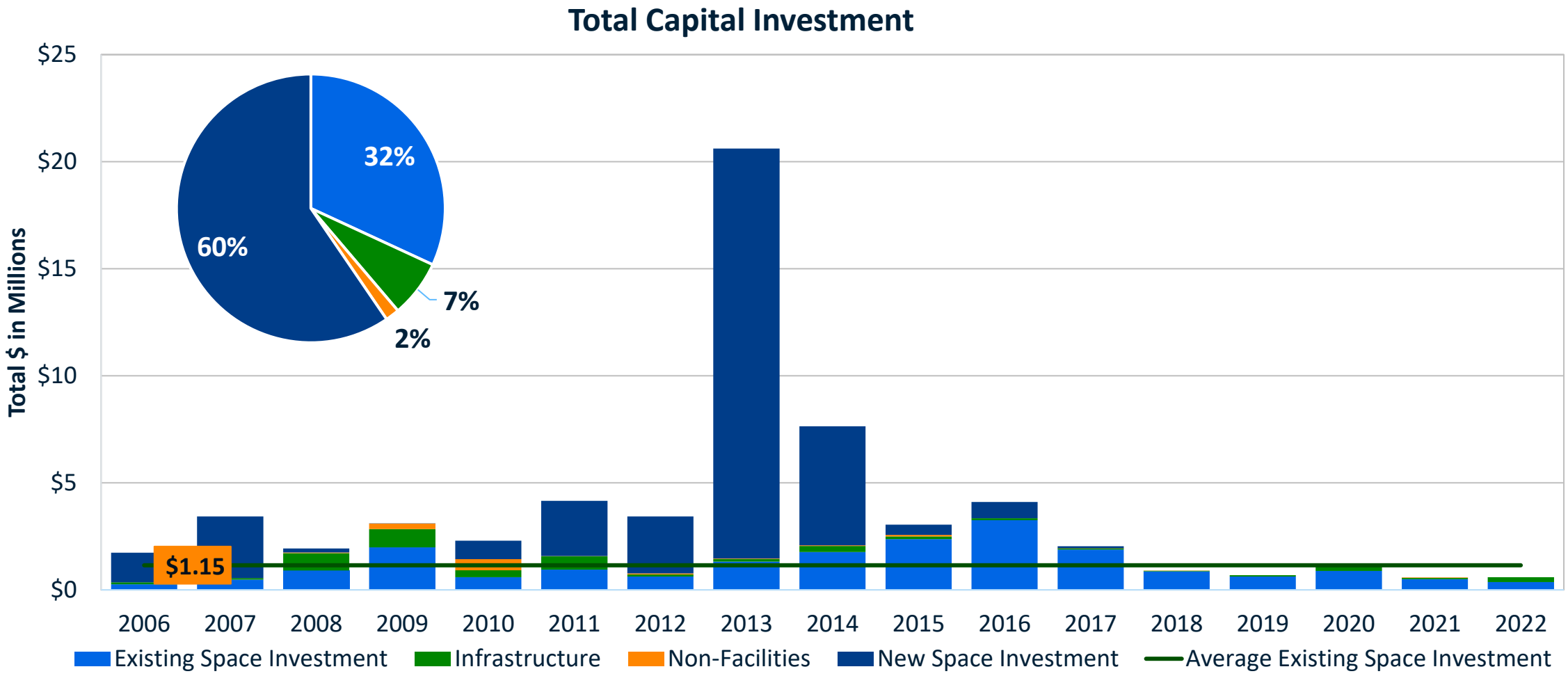
Capital Profile:

Kenai Peninsula College

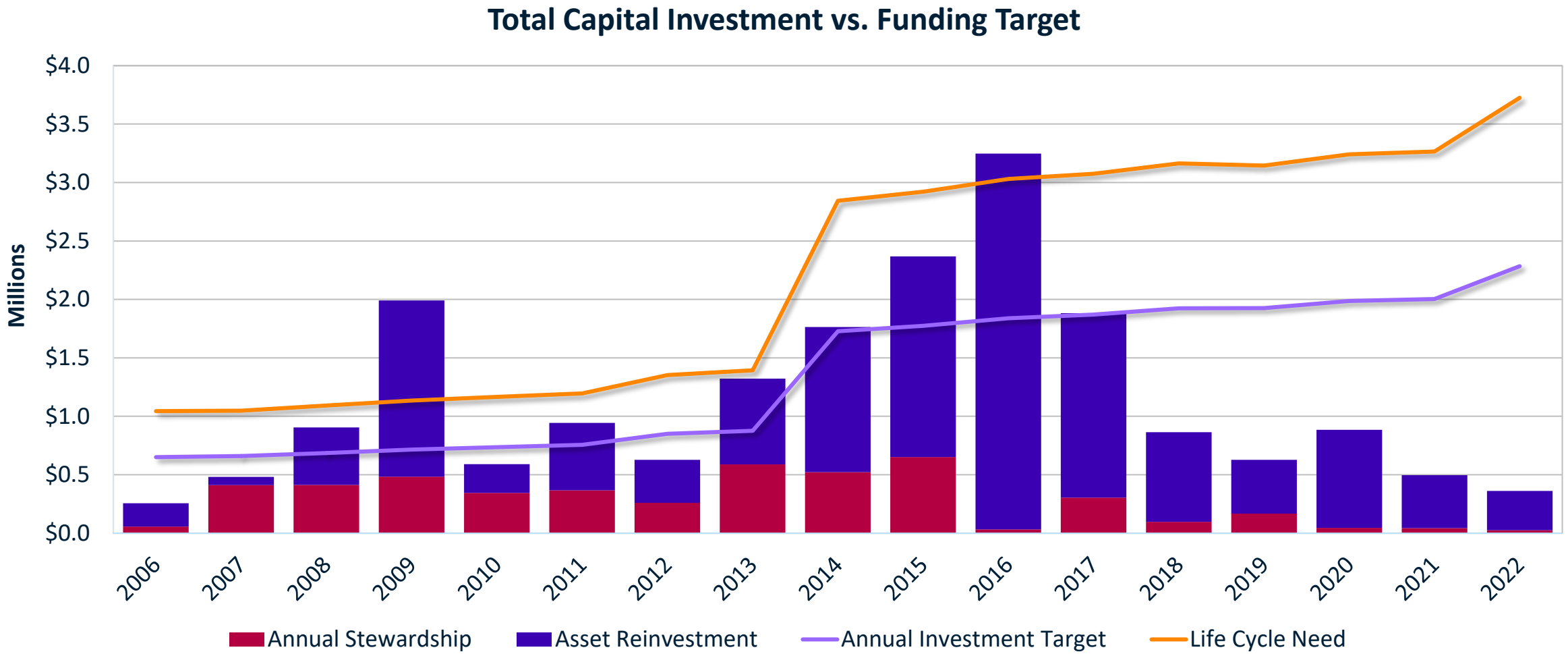
Capital Investment has focused on New Construction

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



Capital Investment vs. Annual Investment Target

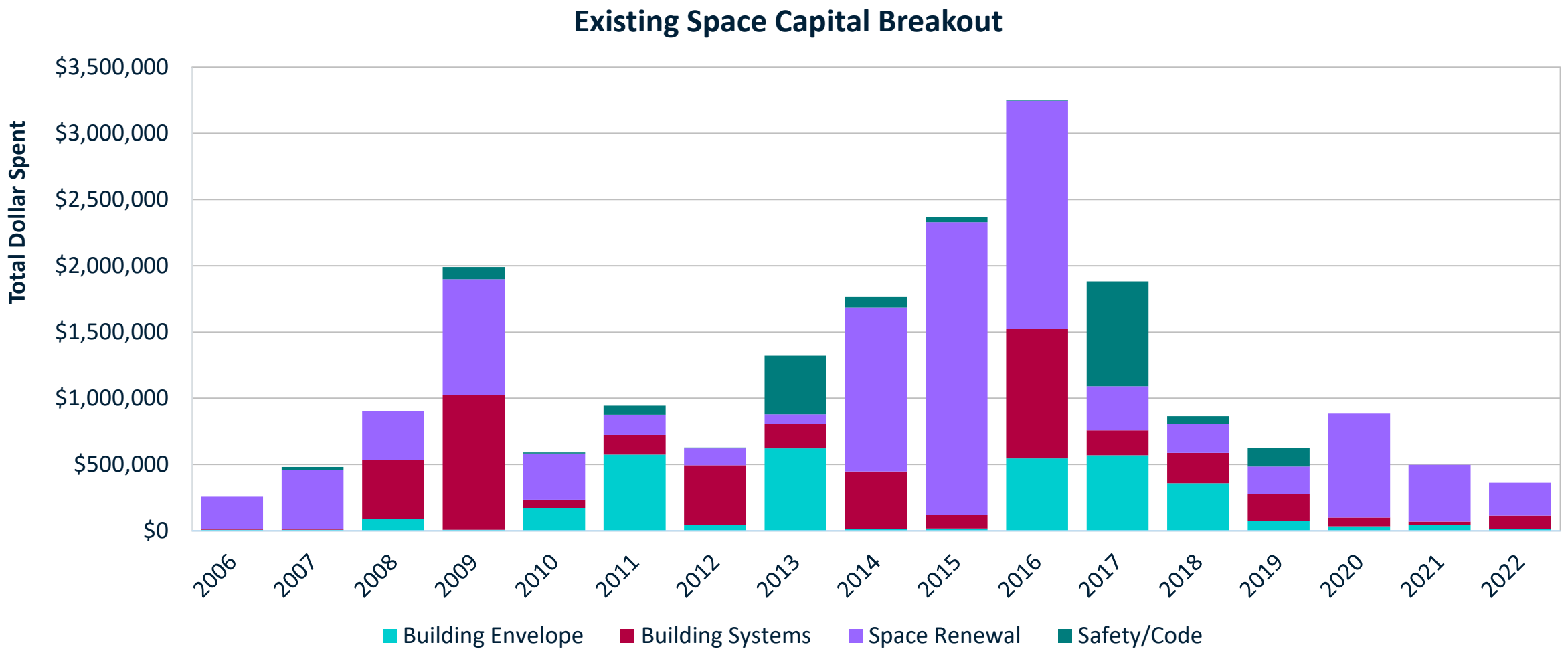
- Kenai has fallen short of the investment target since 2017 leading to growing backlog



Fund 1 Projects: Annual Stewardship
Funds 2-9 Projects : Asset Reinvestment

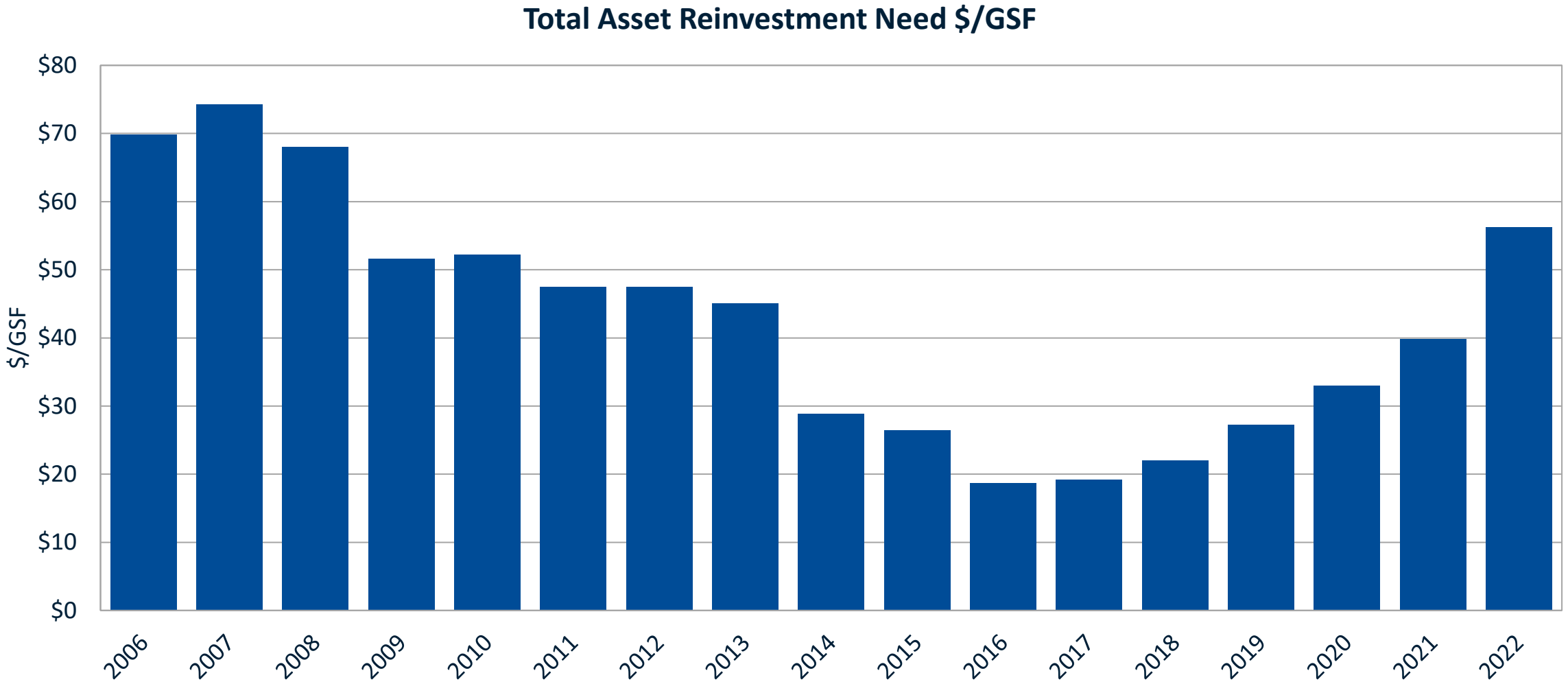
Existing Space Investment Breakout

KPC should shift investment away from space renewal towards building systems



Asset Reinvestment Need has Increased since 2016

KPC benefits from new construction, and until 2016, consistent capital investment

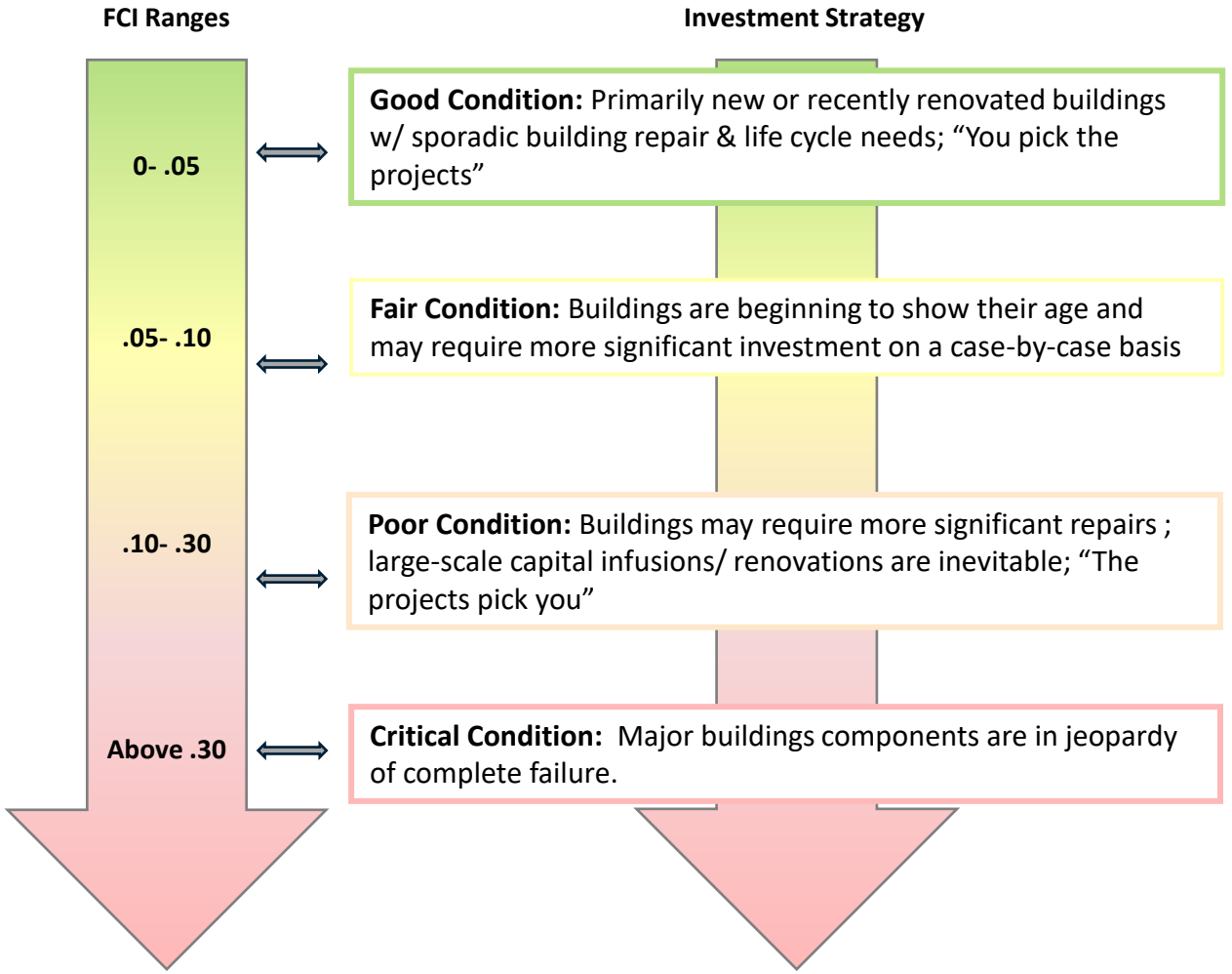


Facilities Condition Index

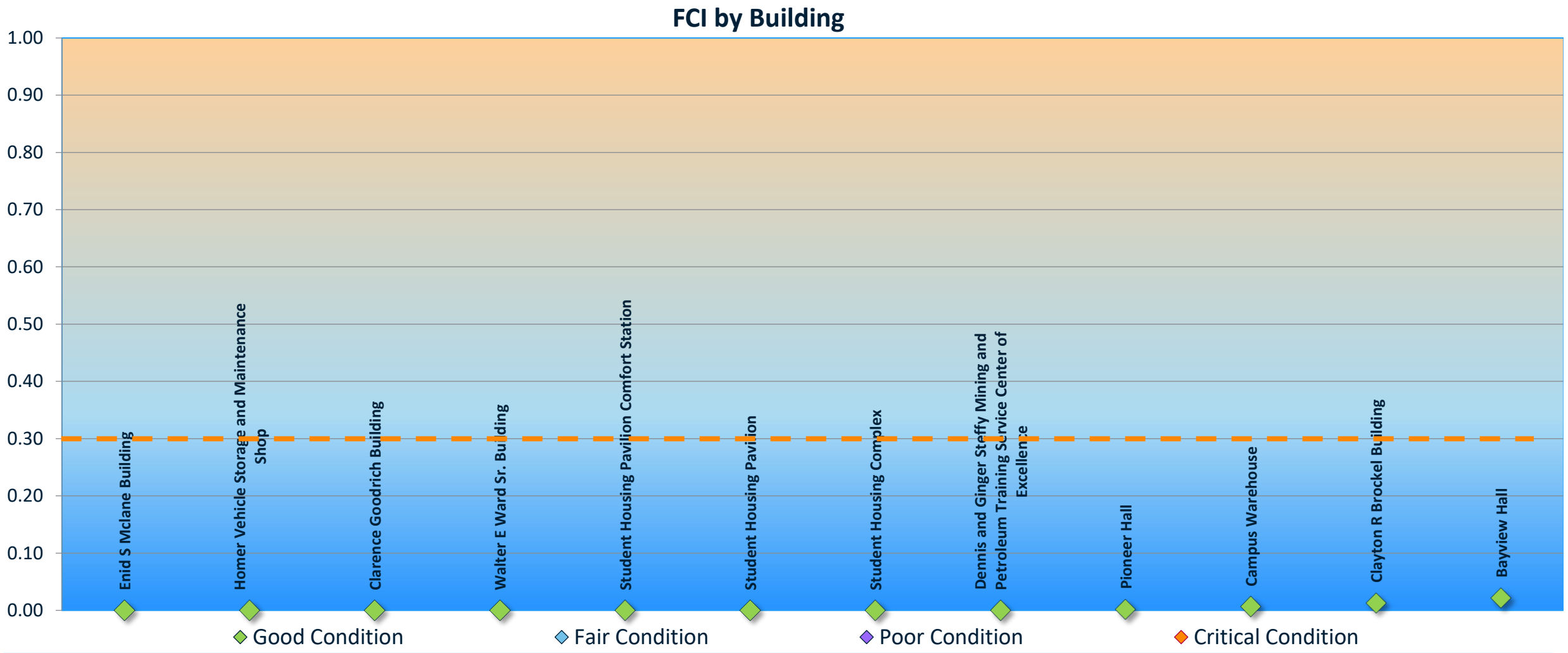
- Condition based investment strategy

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

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 – All Buildings



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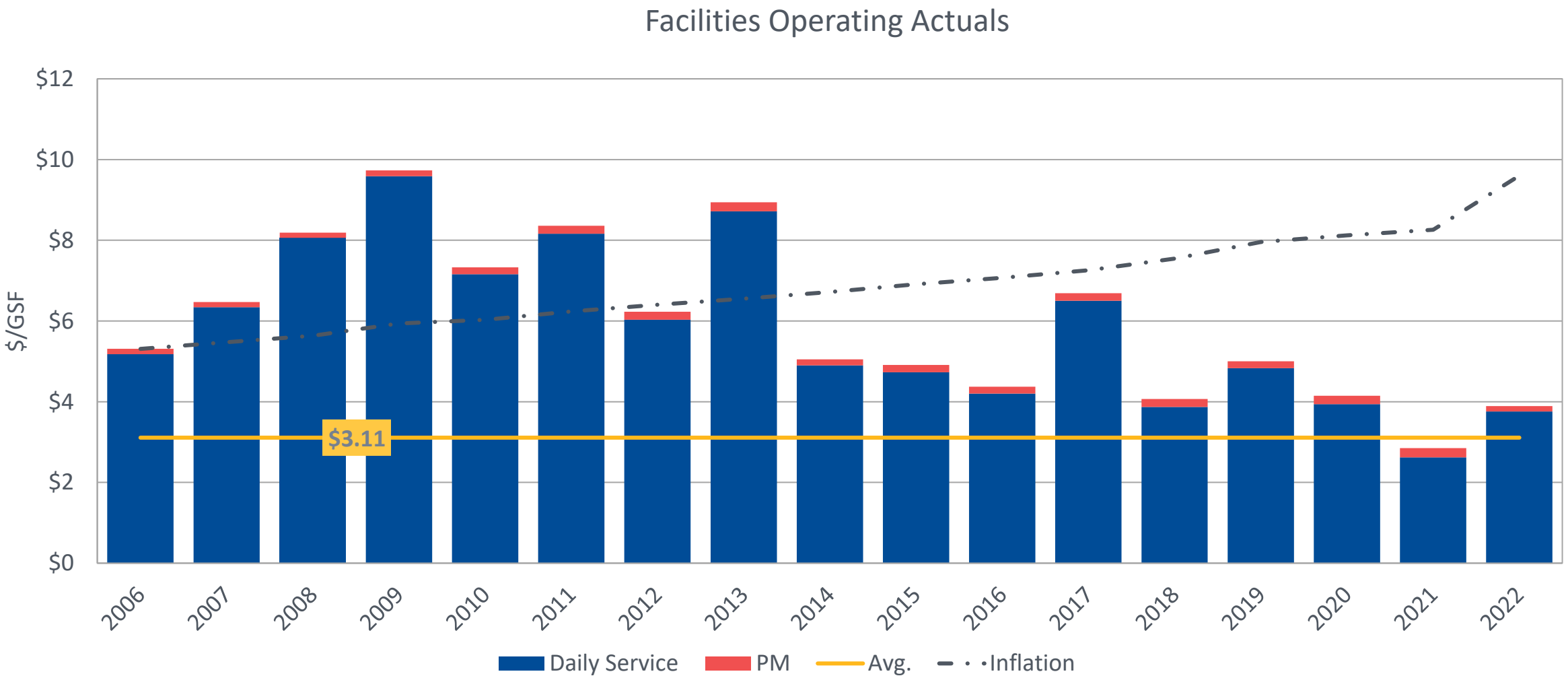
Operations Success:

Kenai Peninsula College

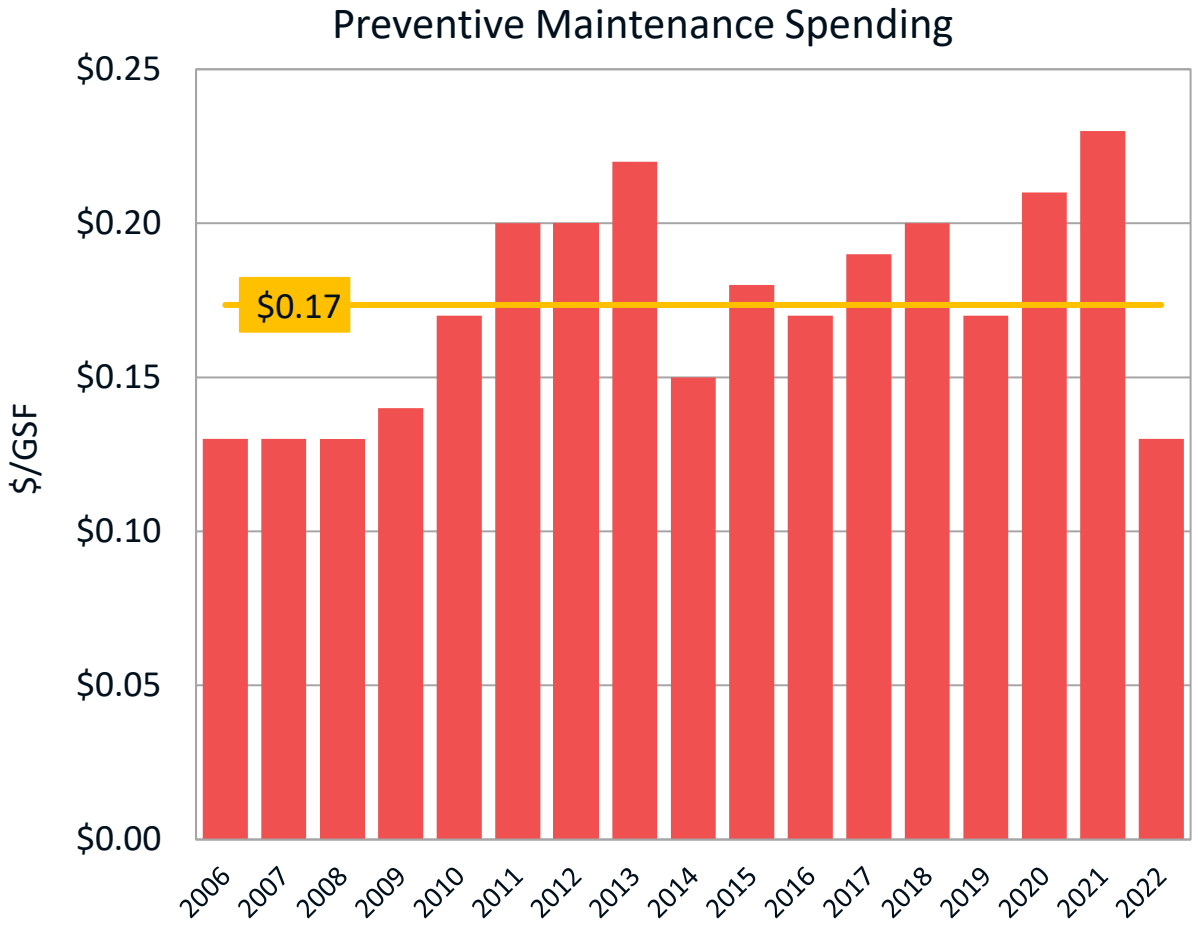
Facilities Operating Expenditures

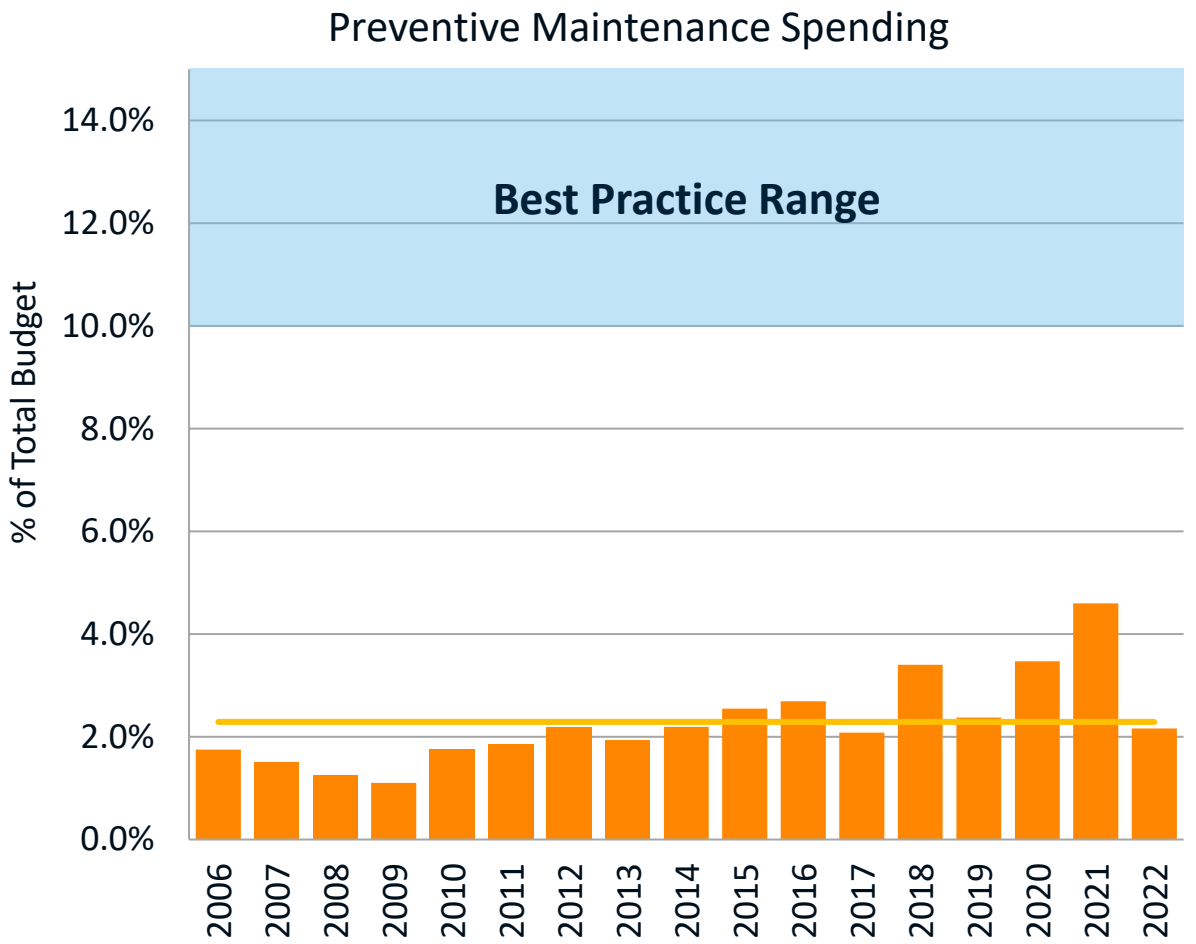
Kenai $/GSF spending in 2022 is 40% of operating expenditures compared to inflation



PM Declines, is Below Recommended Spending Range

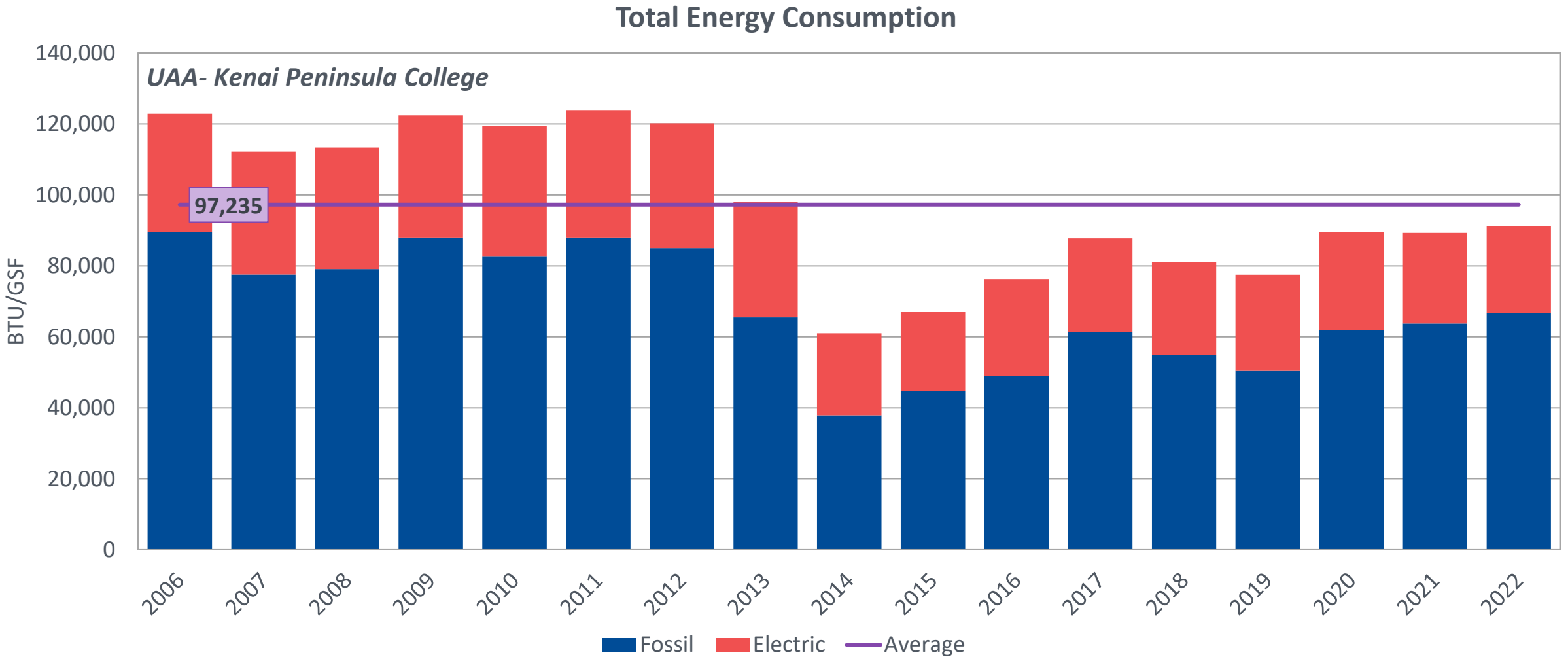
KPC should increase PM spending into younger buildings and assets





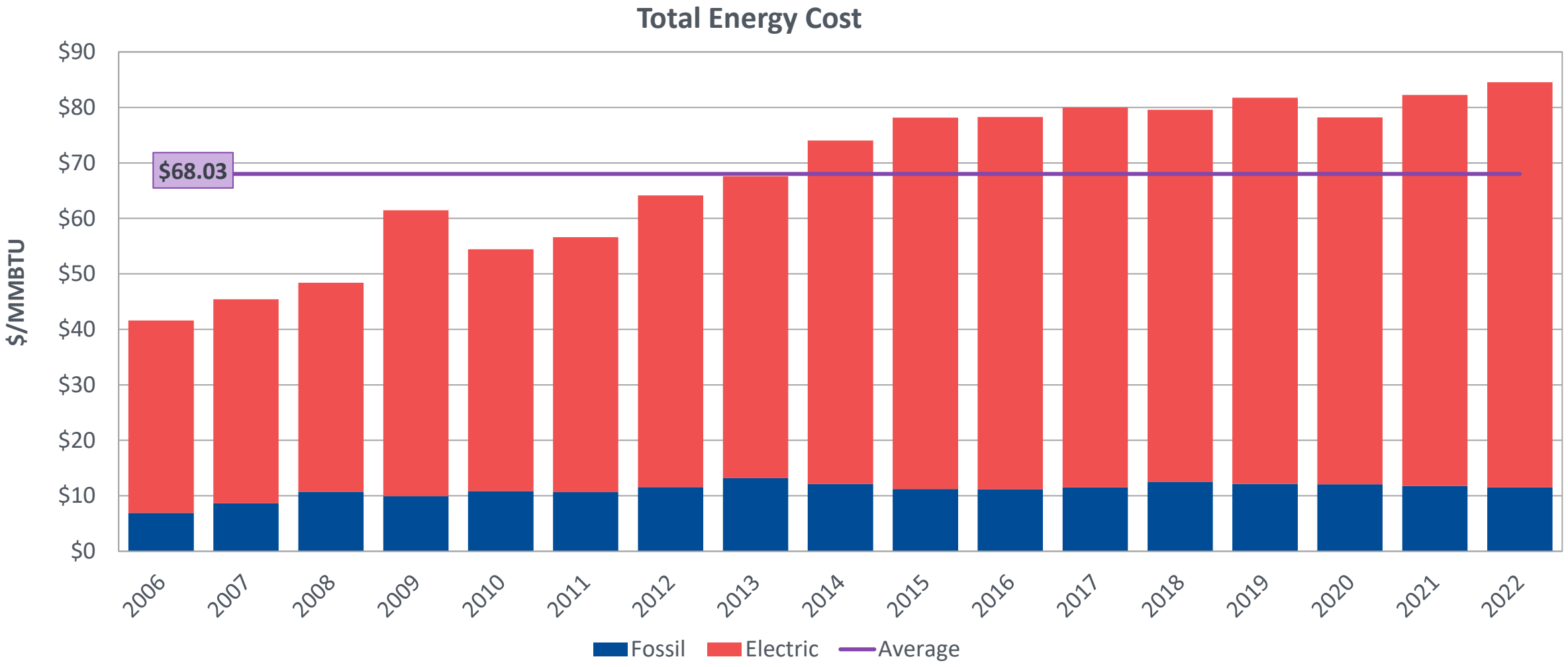
Total Energy Consumption

Overall reduction in energy consumption from historic highs, since 2019 usage increasing



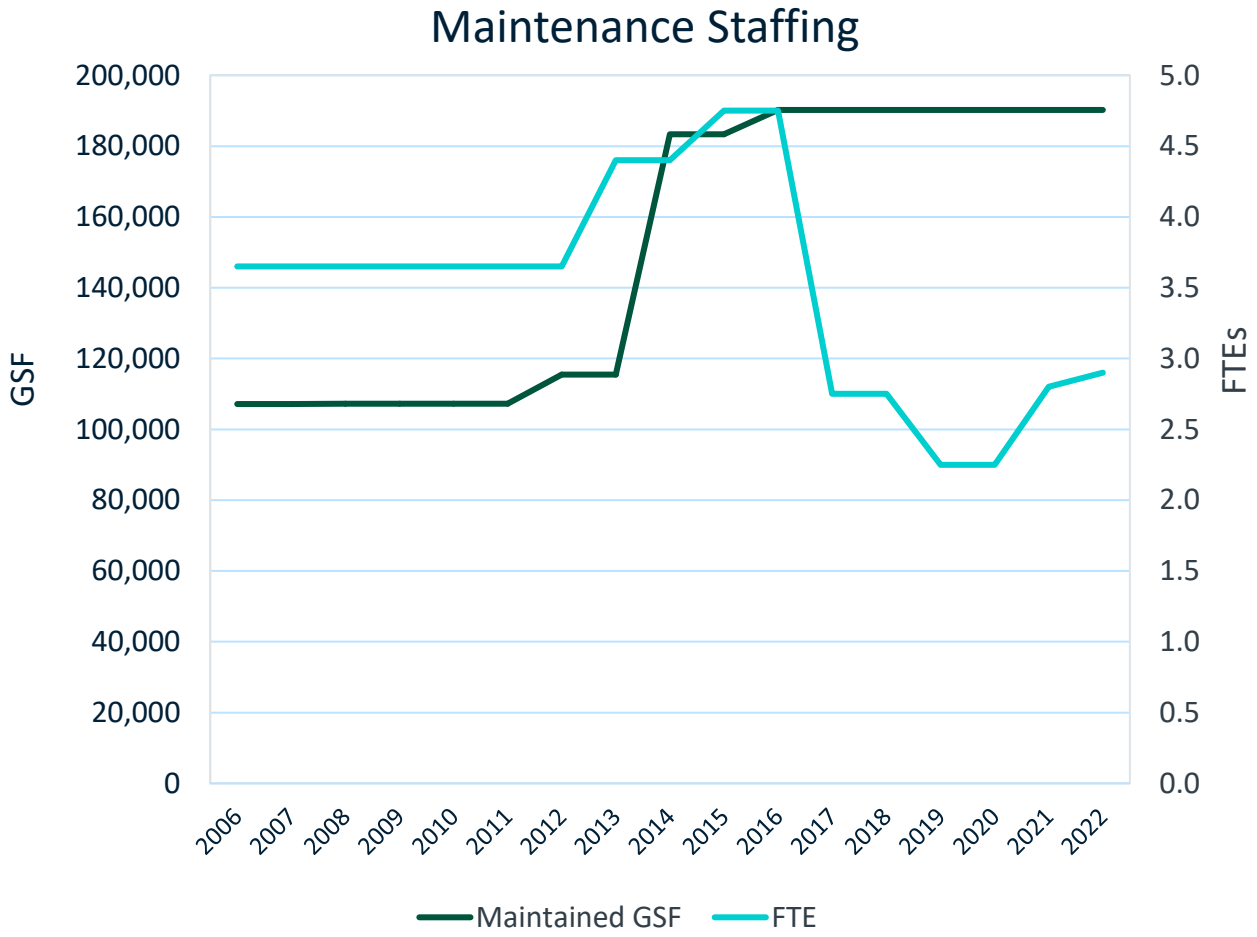
Energy Expenses are Increasing Over Time

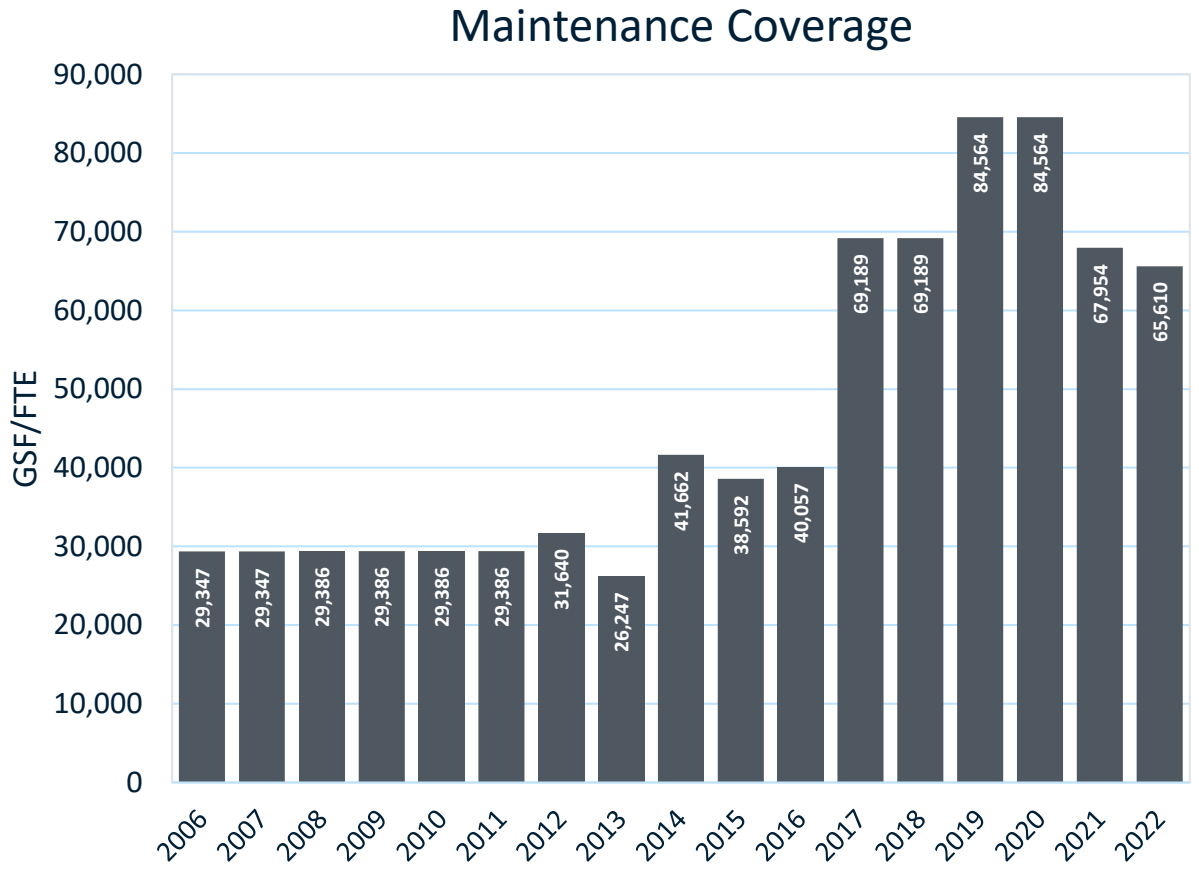
Electric unit costs have steadily continued to increase throughout analysis



Maintenance Staffing Coverage

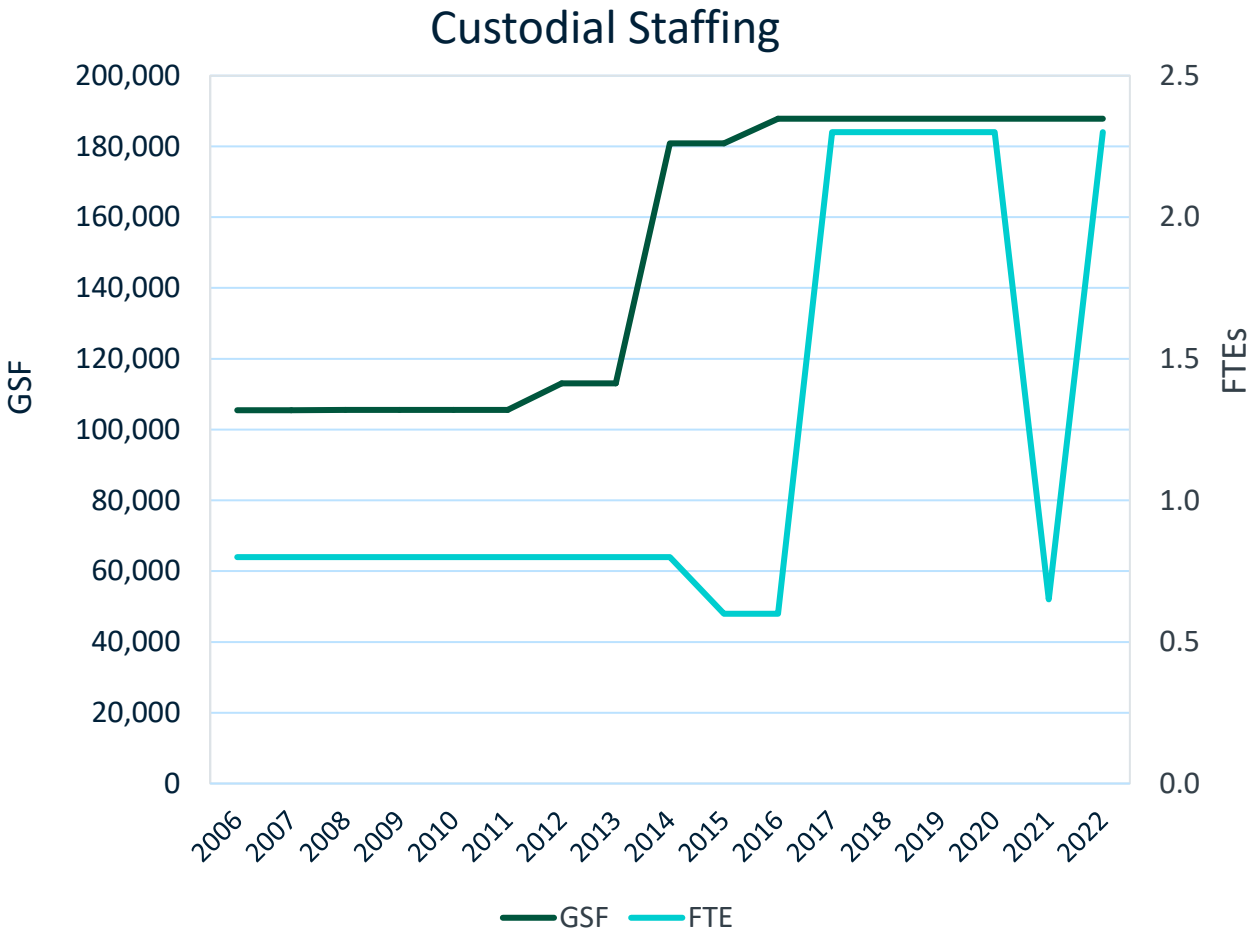
Increases in FTE led to a minimal decrease in coverage rates

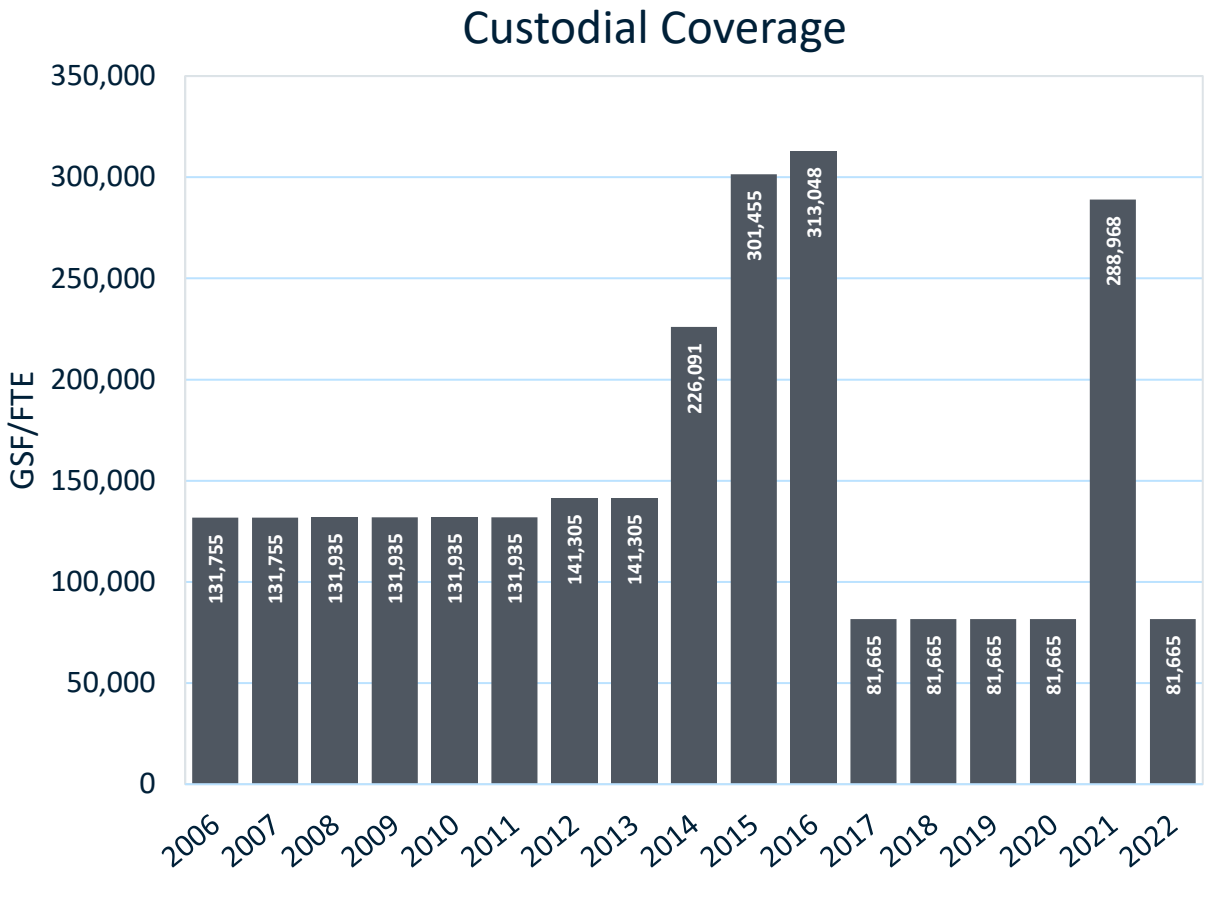




Custodial Staffing Coverage

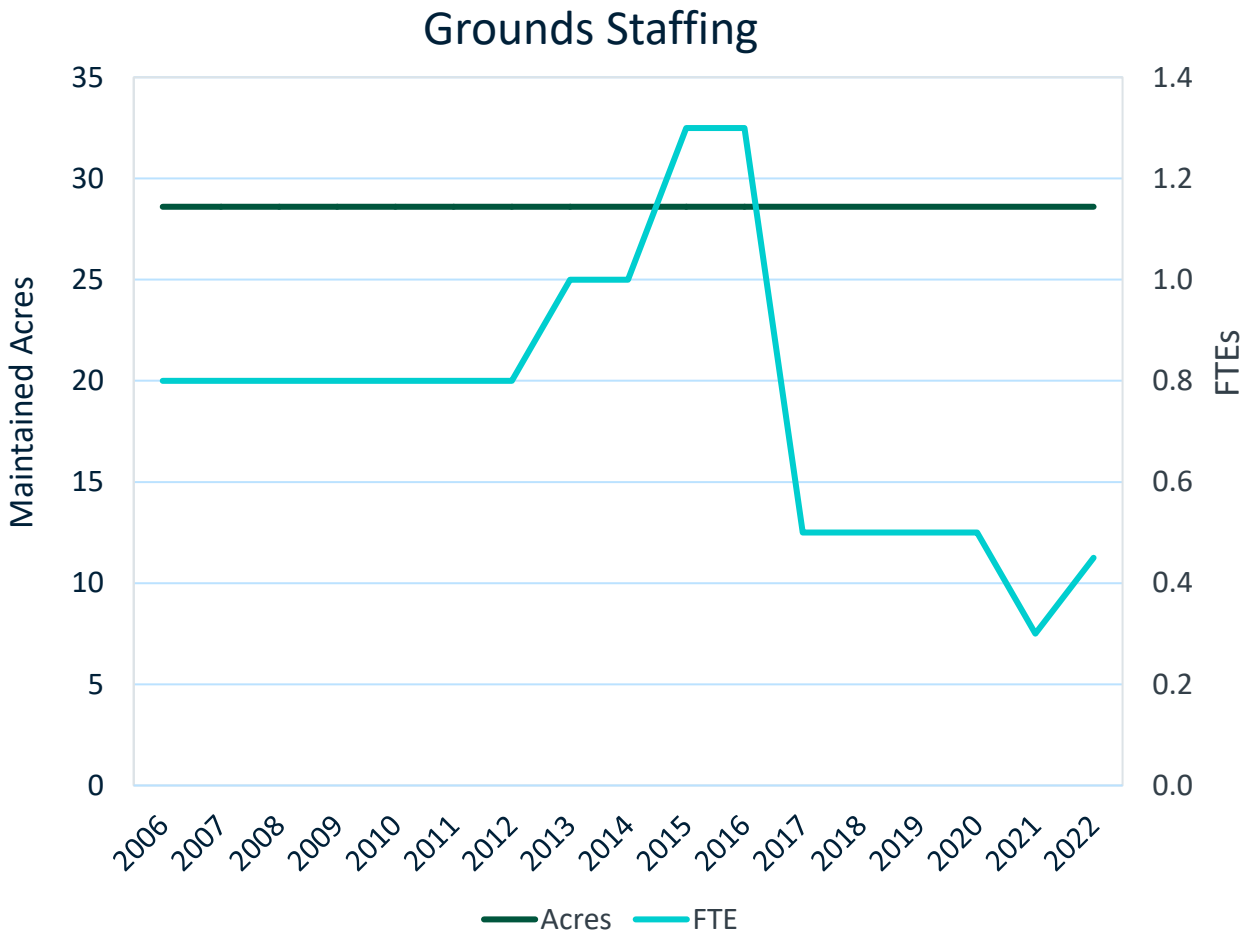
Increases in FTE result in a return to historic coverage levels

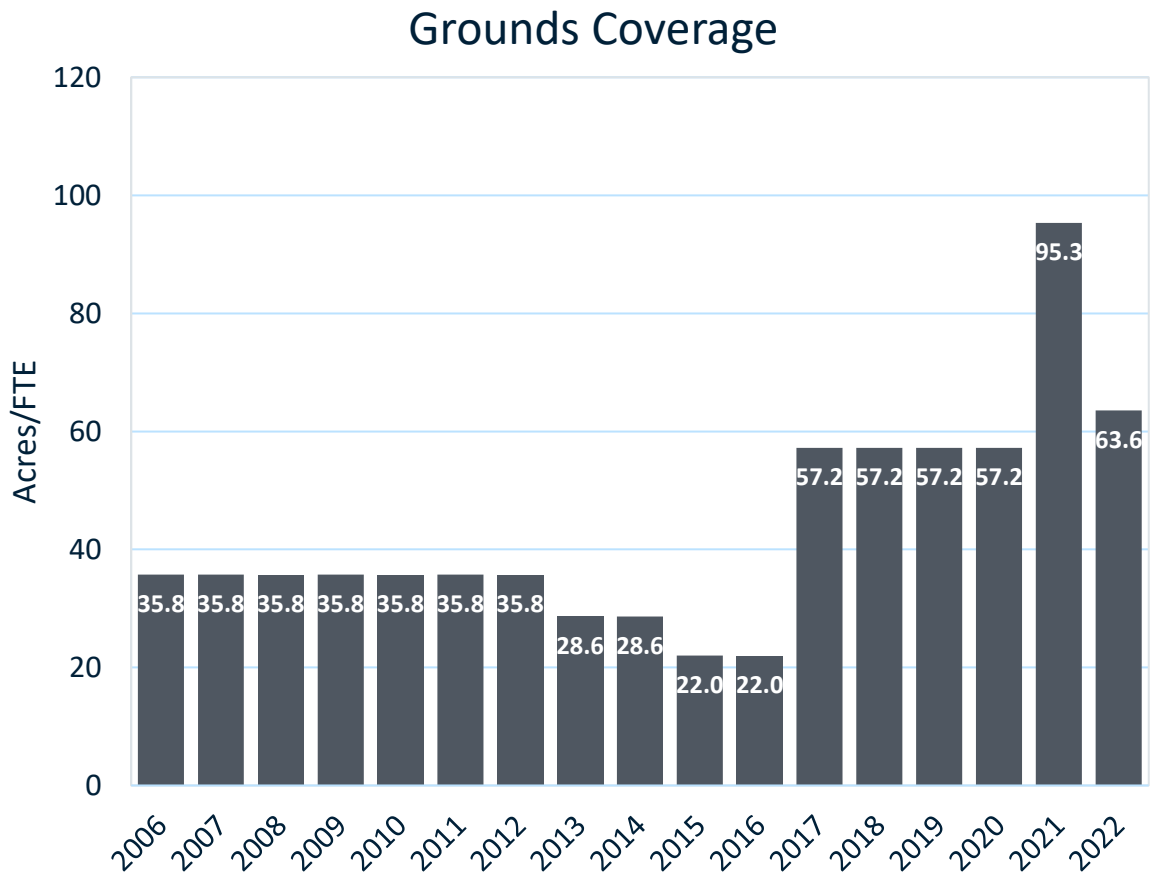




Grounds Staffing Coverage

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





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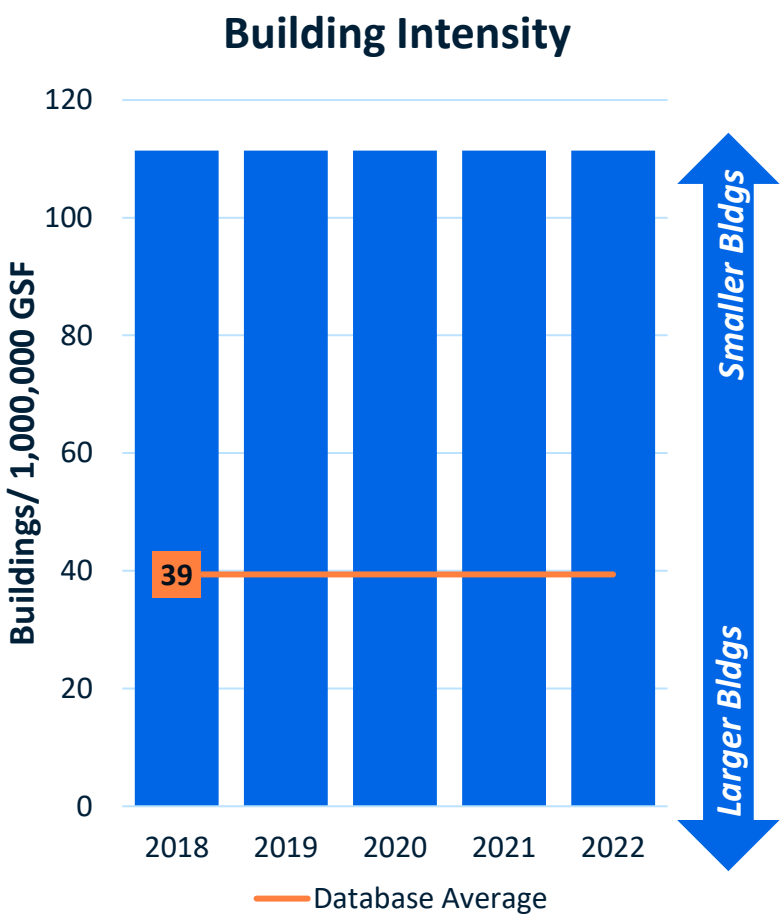
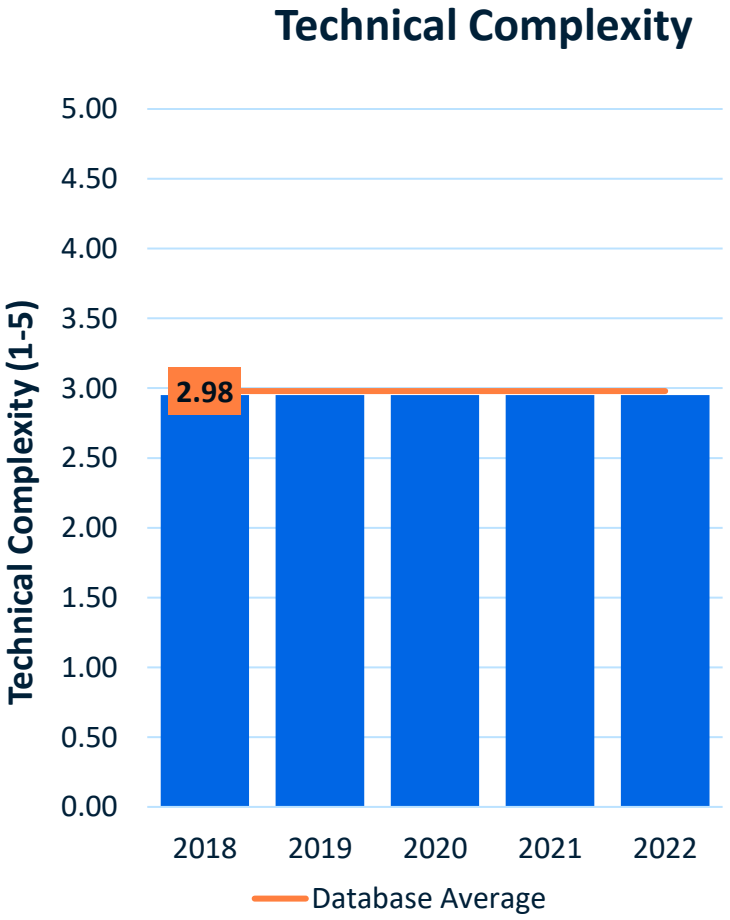
Space Profile:

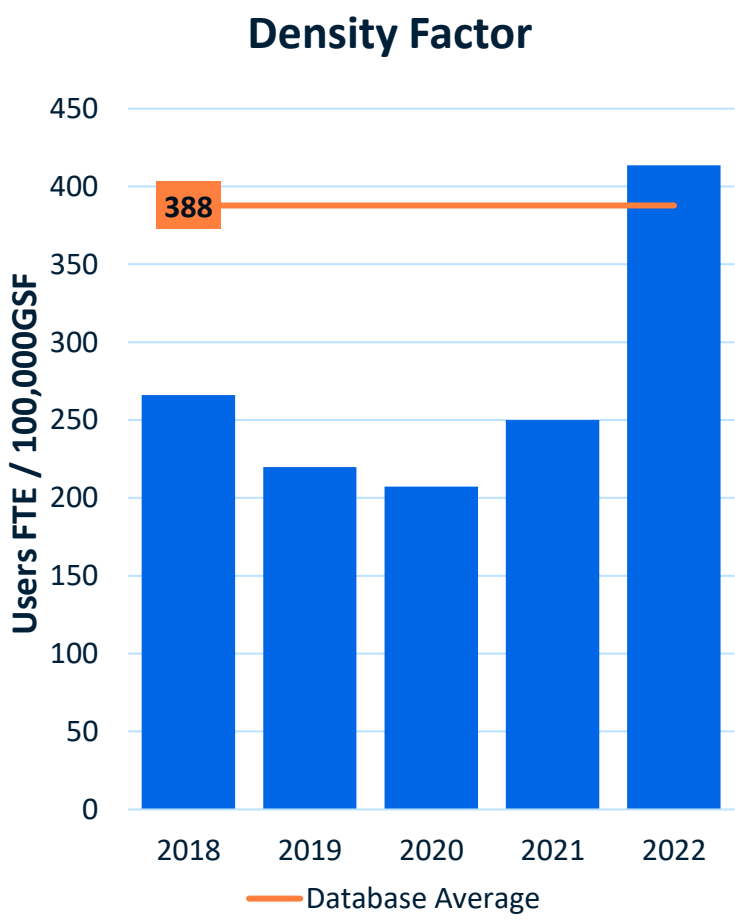
Kodiak College

Qualifying Metrics – Building Demographics

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

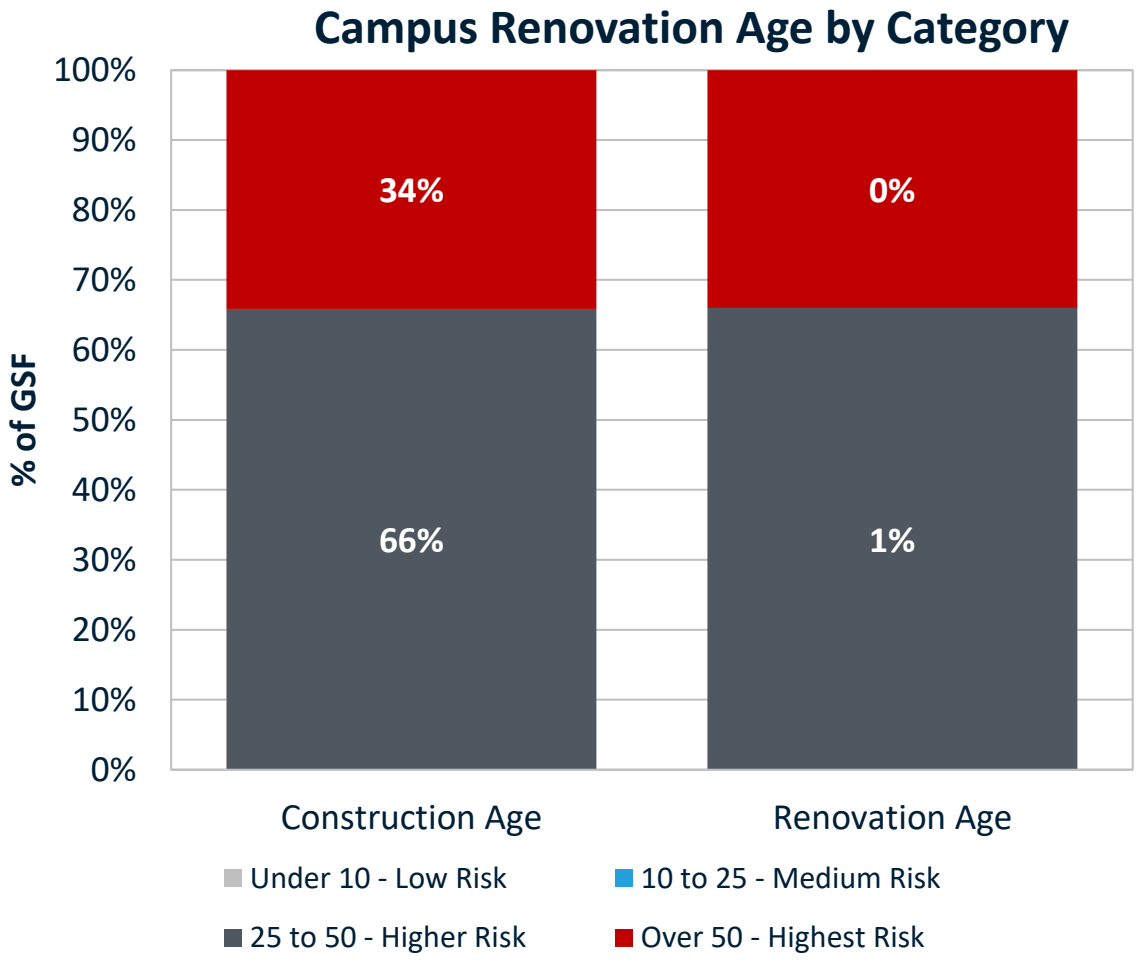






Aging Campus Puts Buildings At Risk

An older campus will cause operational strain, while demanding capital investment



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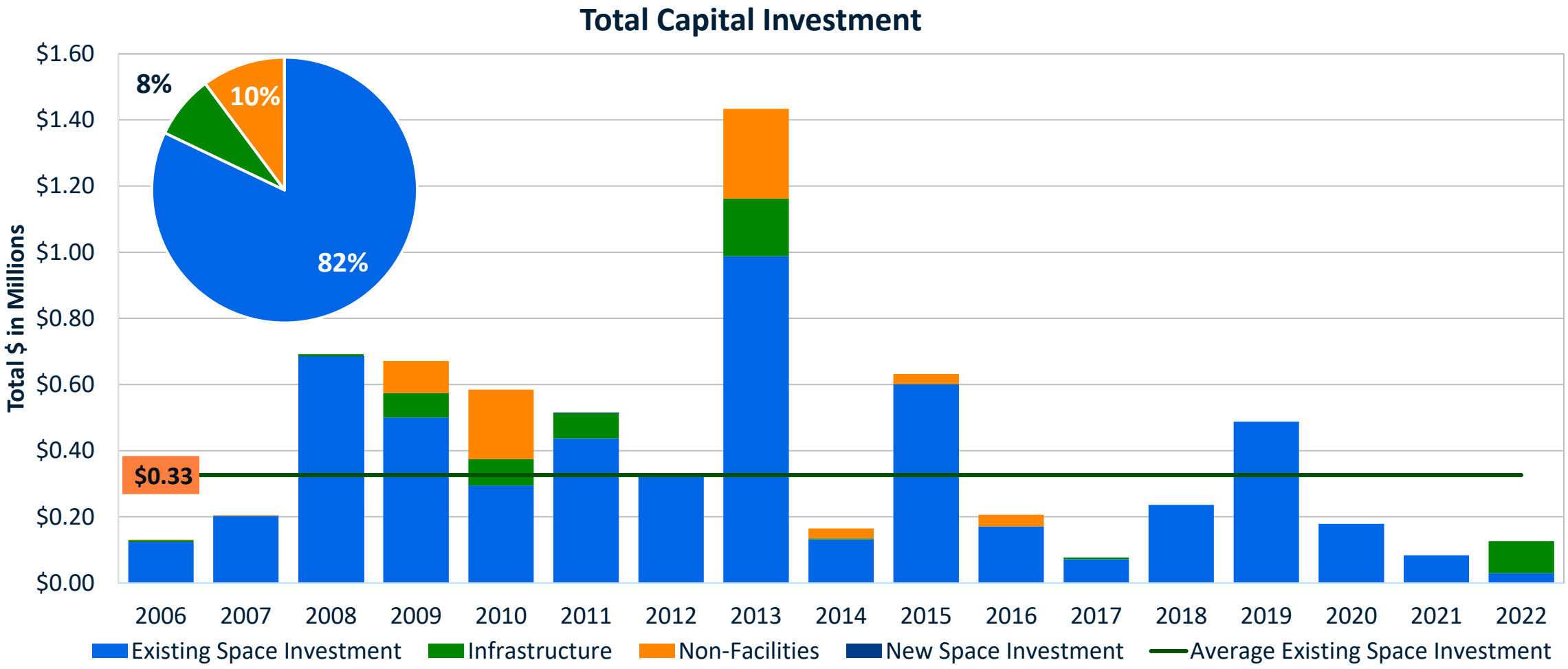
Capital Profile:

Kodiak College

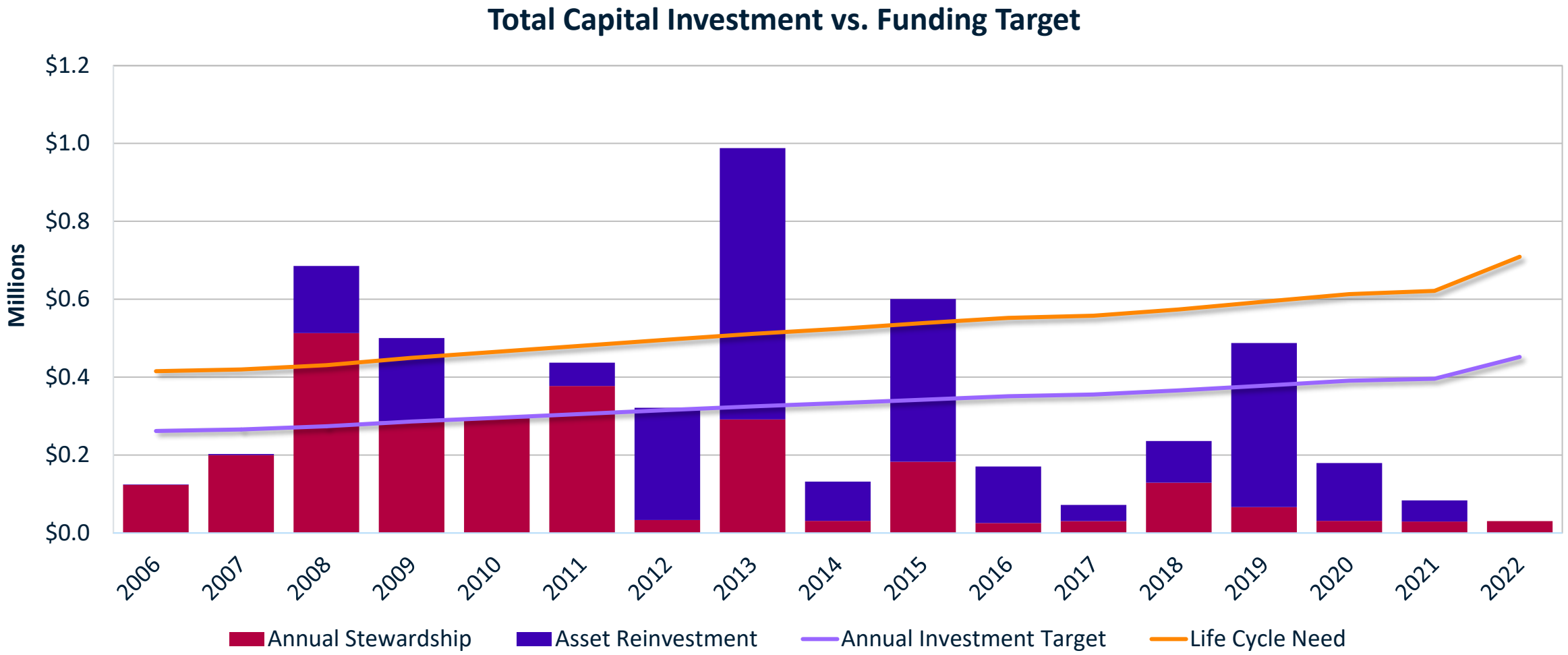
Focusing Investments on Aging Campus

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



Capital Investment vs. Annual Investment Target

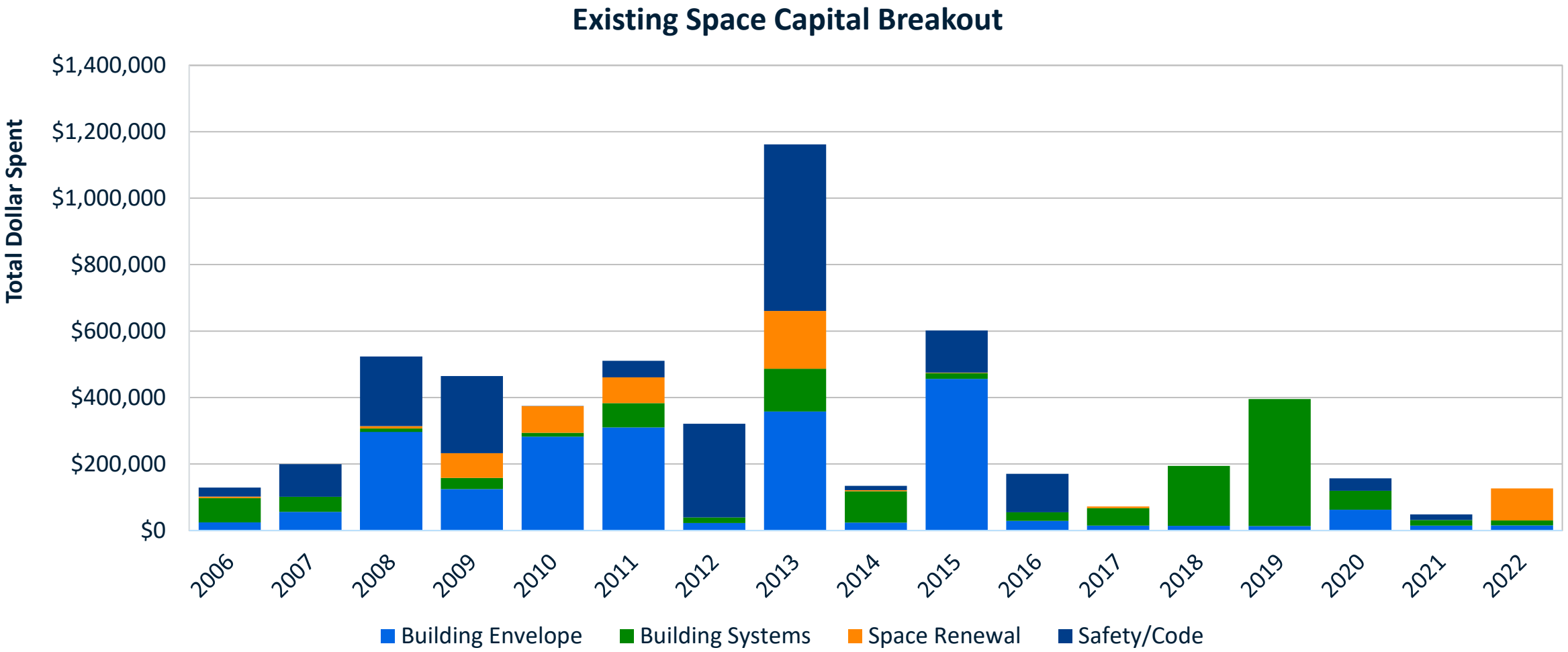
Kodiak's lack of recurring capital dollars results in dependence on one-time capital funding



Fund 1 Projects: Annual Stewardship
Funds 2-9 Projects : Asset Reinvestment

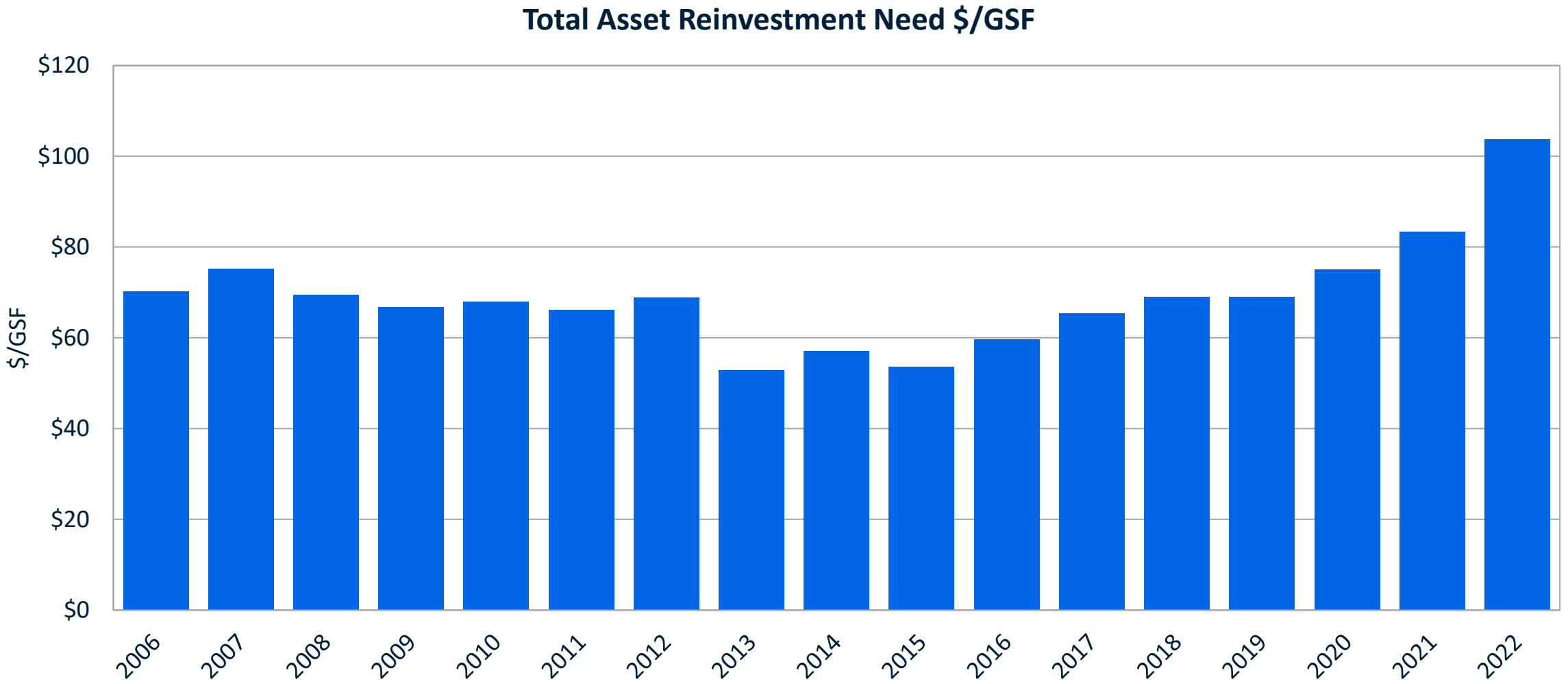
Existing Space Investment Breakout

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



Asset Reinvestment Need has Increased since 2015

Asset Reinvestment Need continues to increase as capital investments have decreased

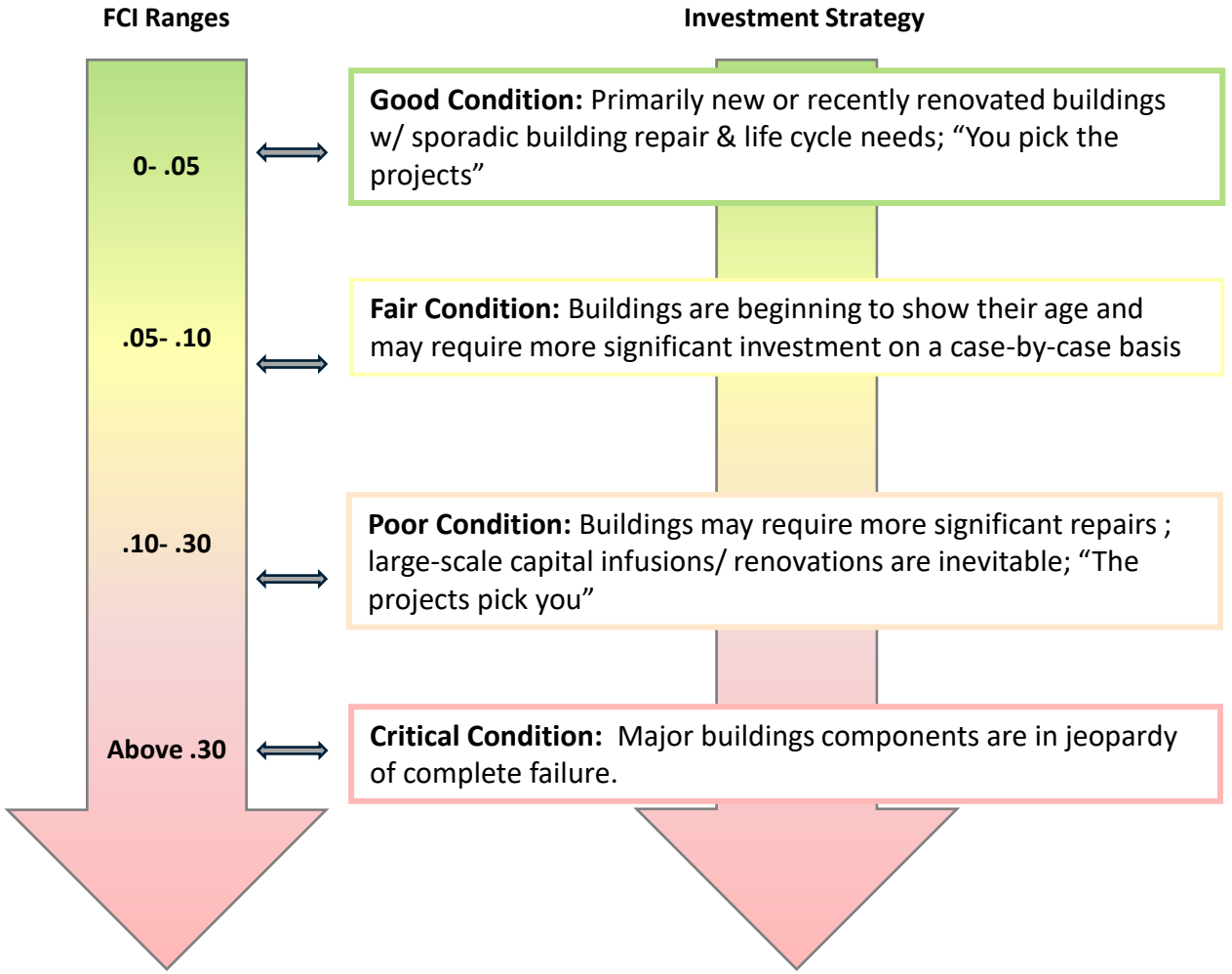


Facilities Condition Index

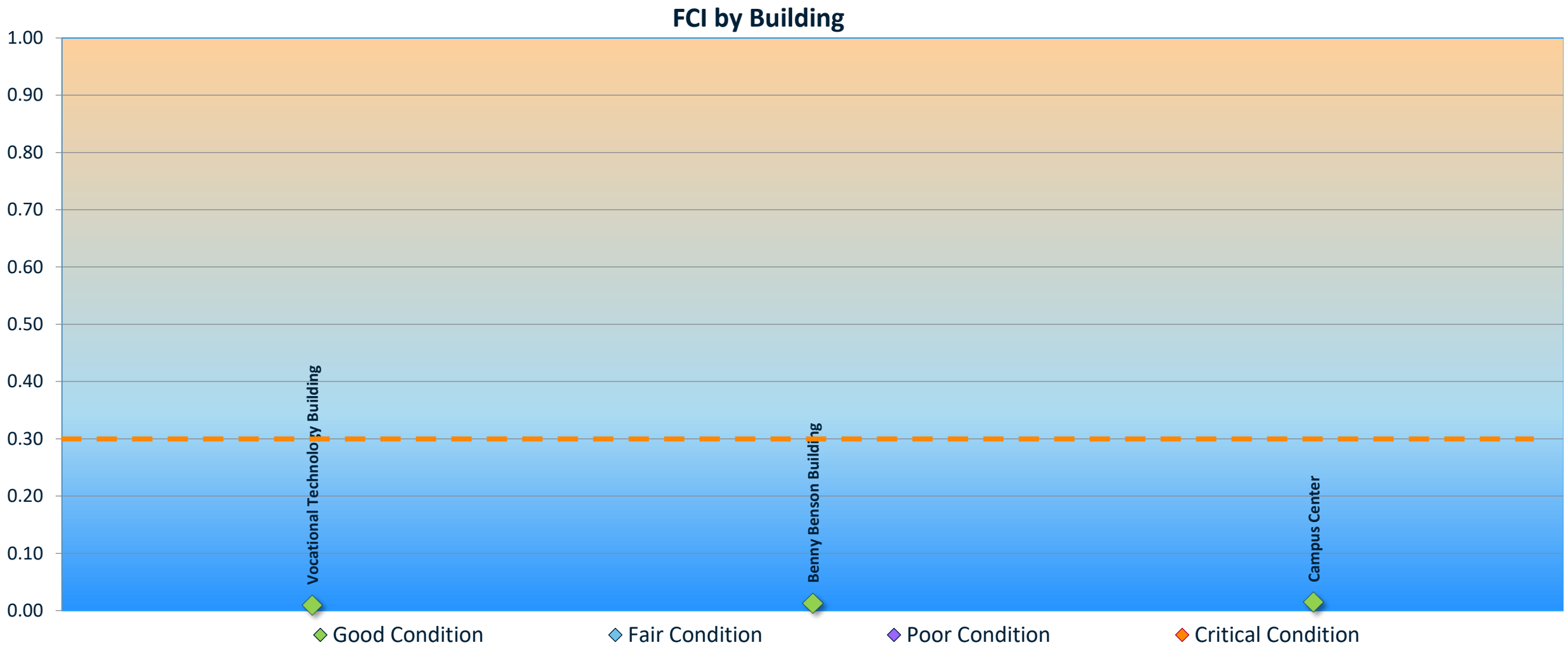
Condition based investment strategy

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

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 – All buildings



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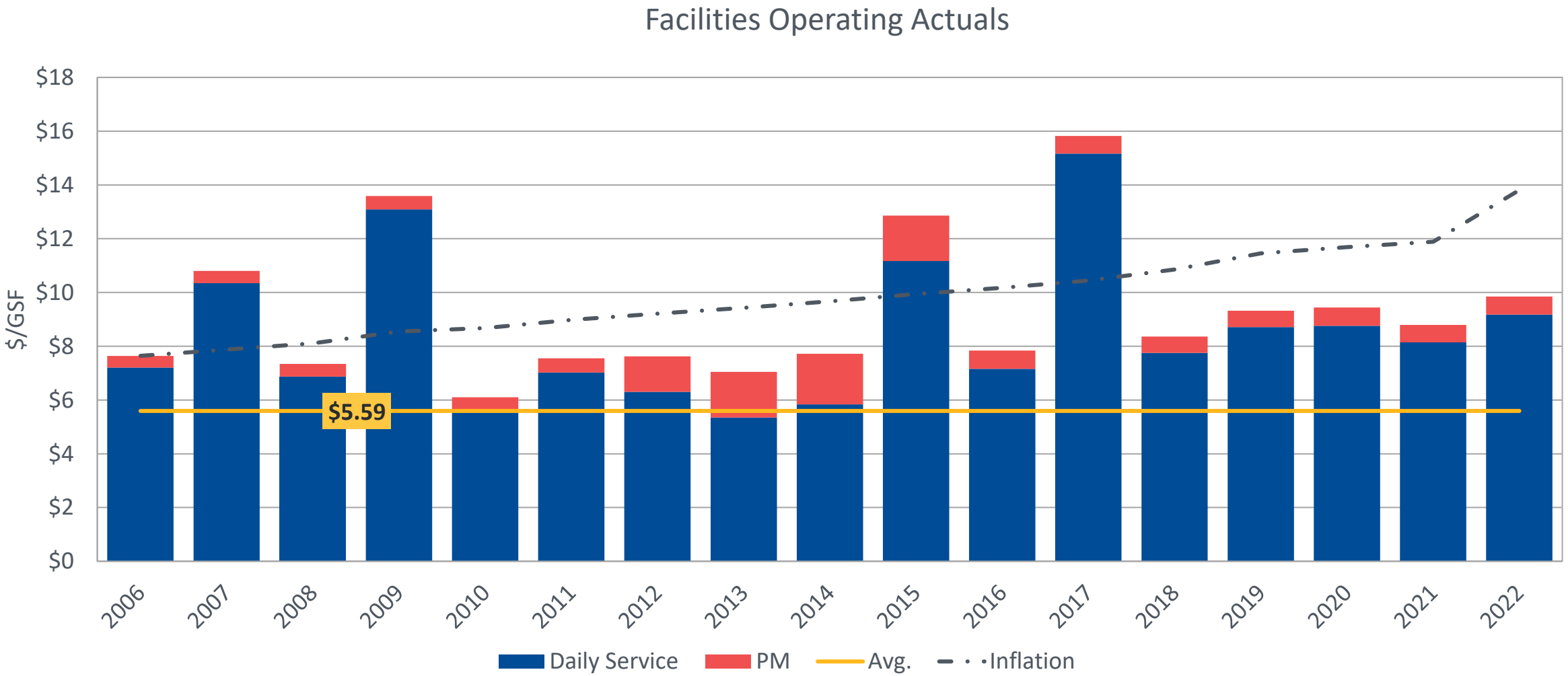
Operations Success:

Kodiak College

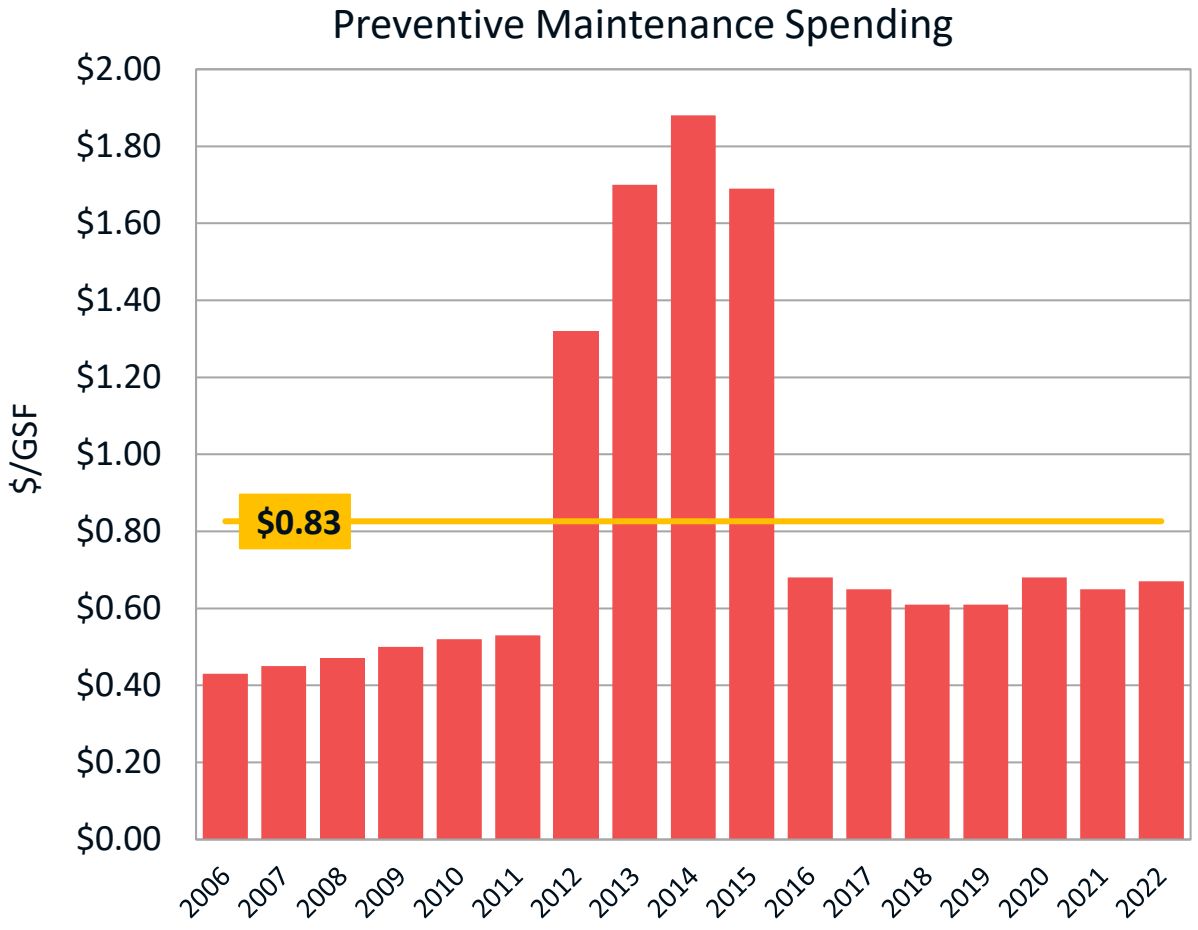
Facilities Operating Expenditures

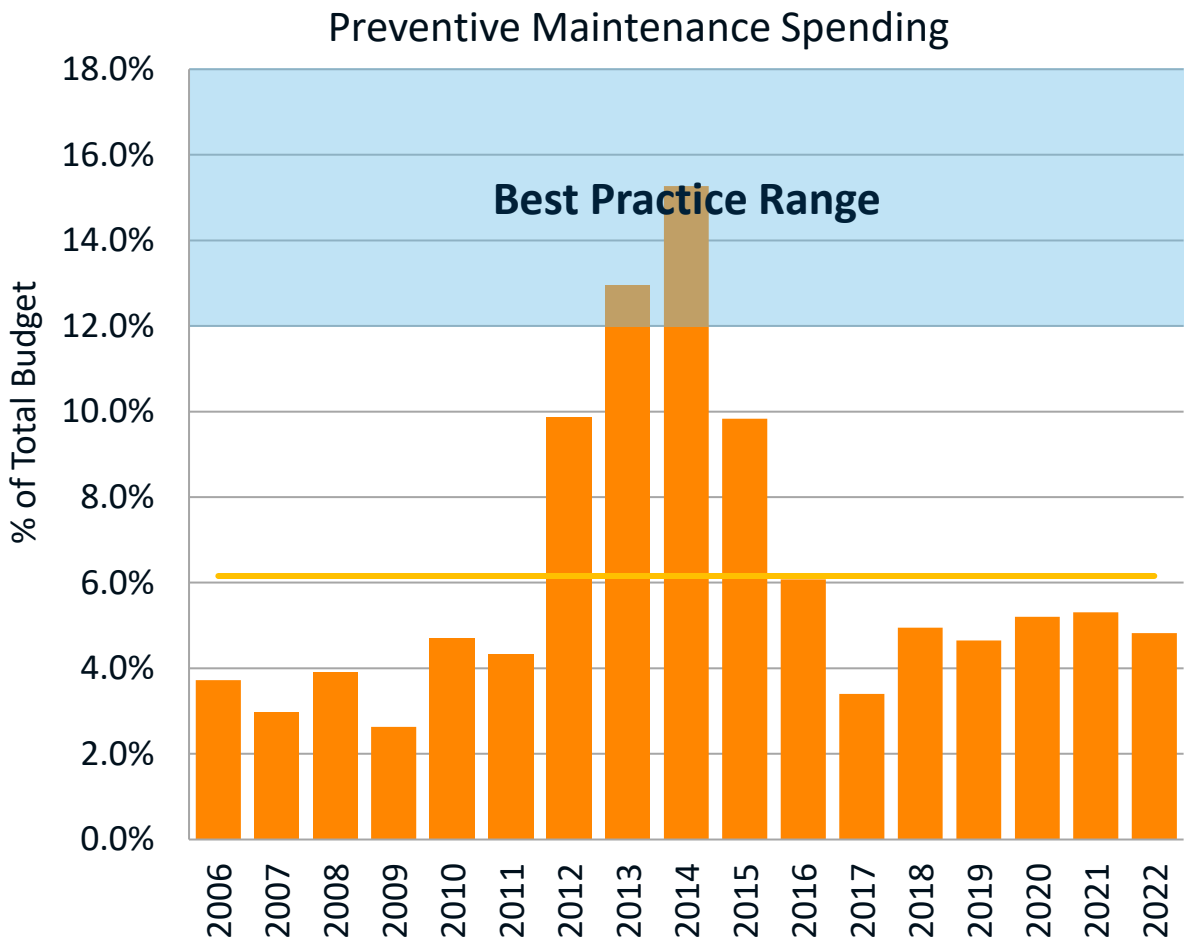
Kodiak's operating expenditures remain consistent over the last five years, below inflation



PM Declines, is Below Recommended Spending Range

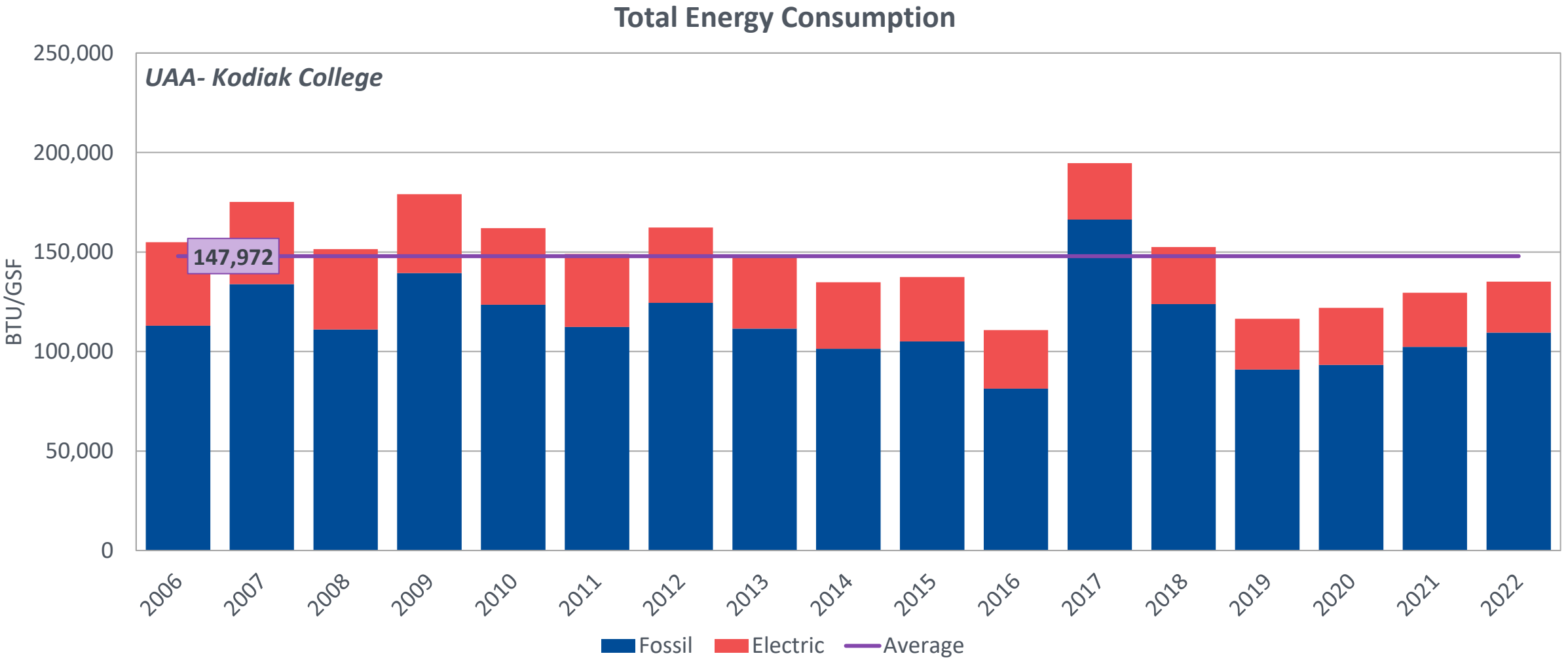
Minimal PM dollars should be focused in costly to replace or repair assets





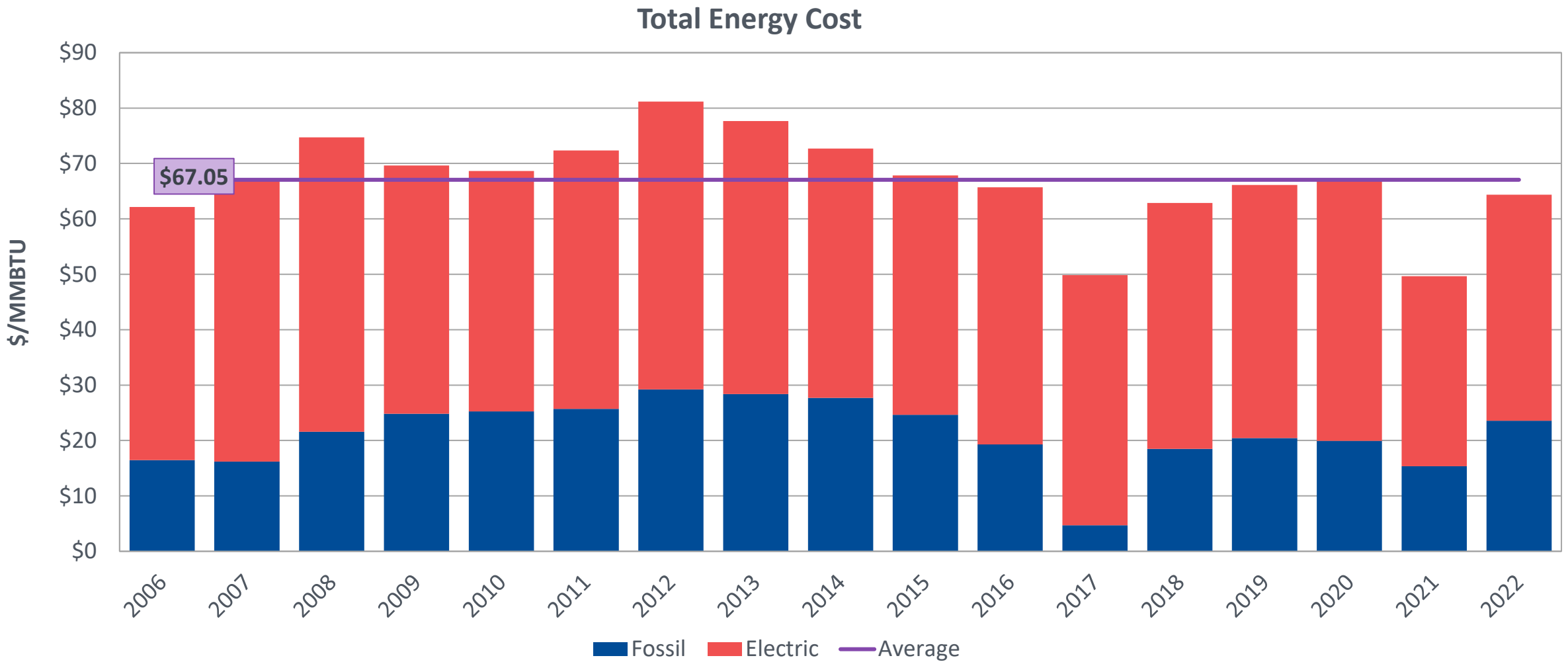
Total Energy Consumption

Kodiak energy consumption decreases from 2017 high



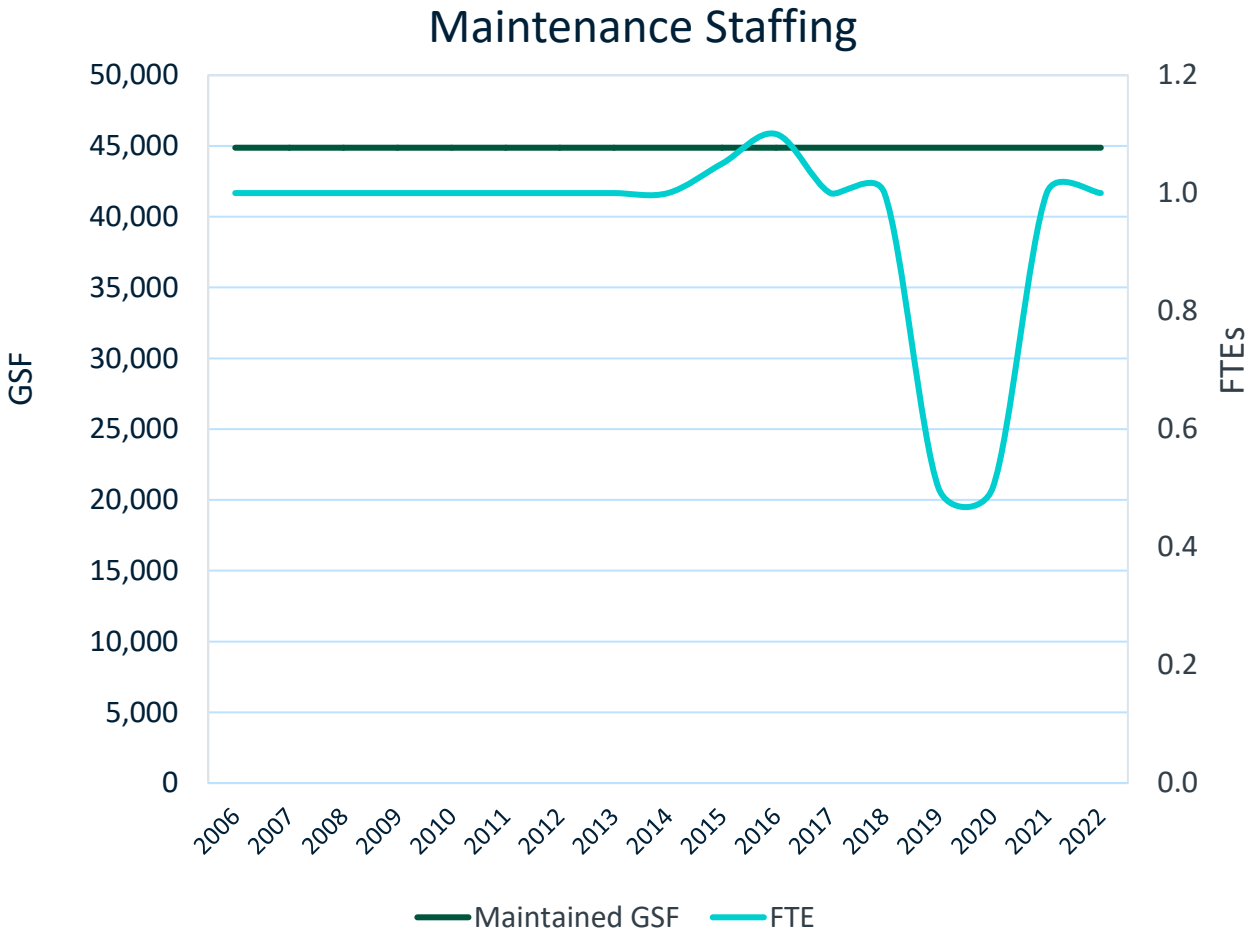
Energy Expenses are Increasing Over Time

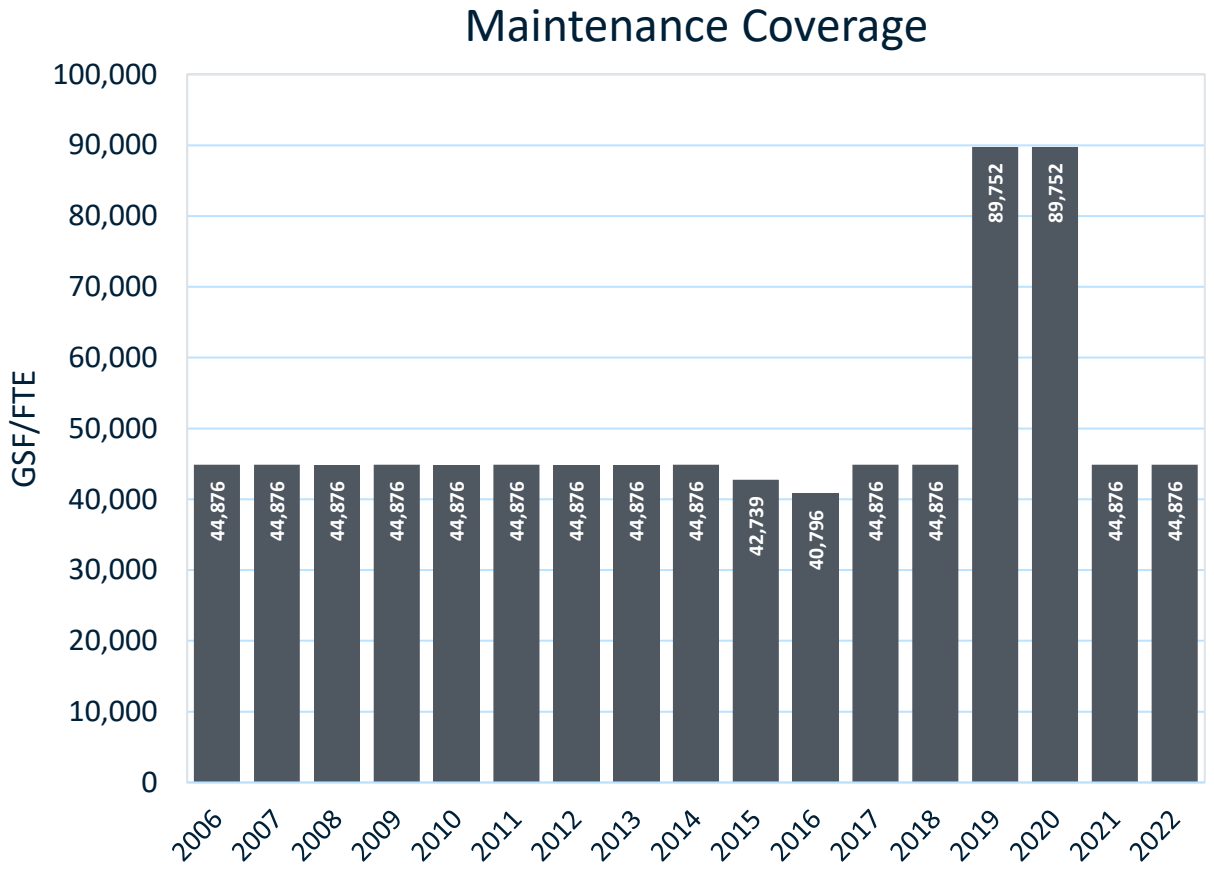
FY22 unit costs substantially increase, resulting in overall cost increases



Maintenance Staffing Coverage

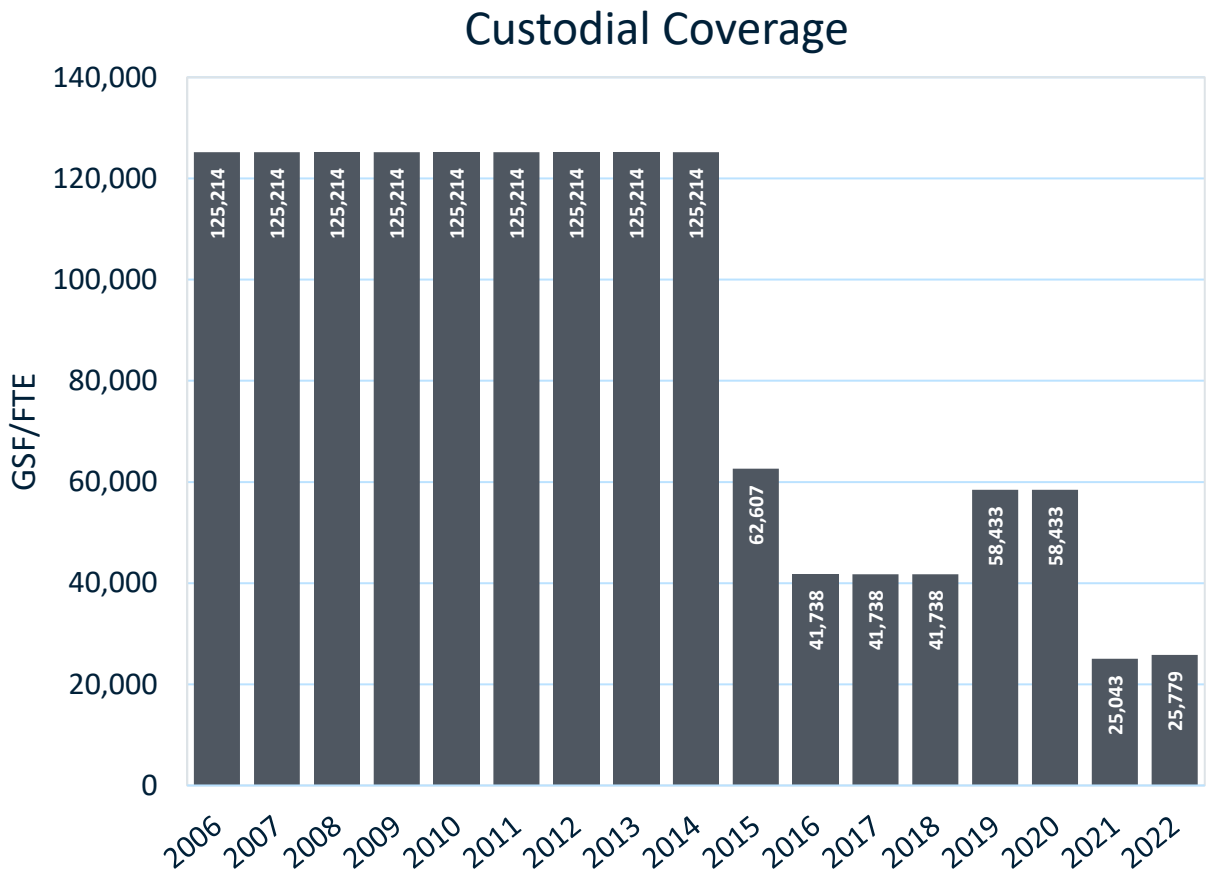
Despite 2019 – 2020, staffing coverage remains consistent





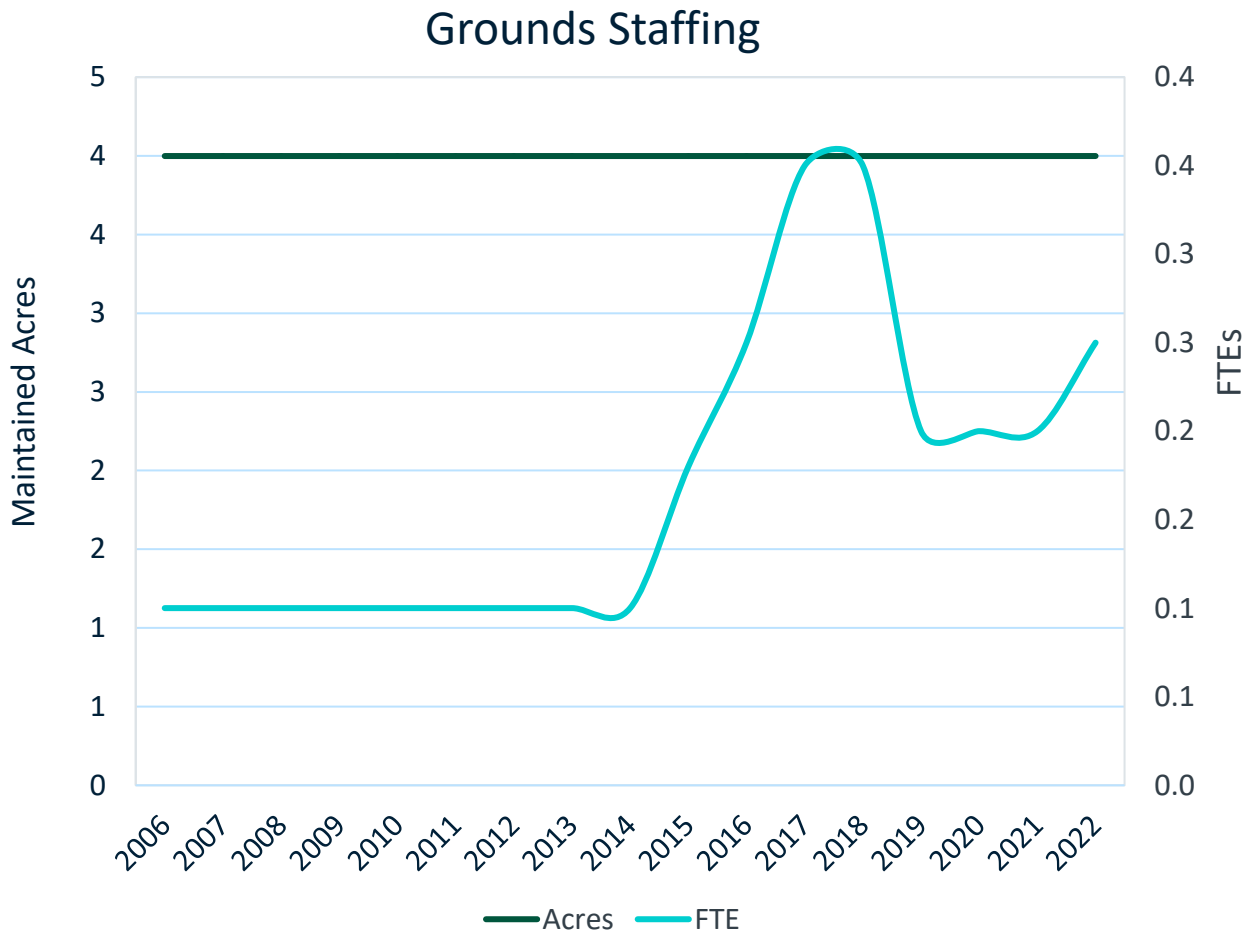
Custodial Staffing Coverage

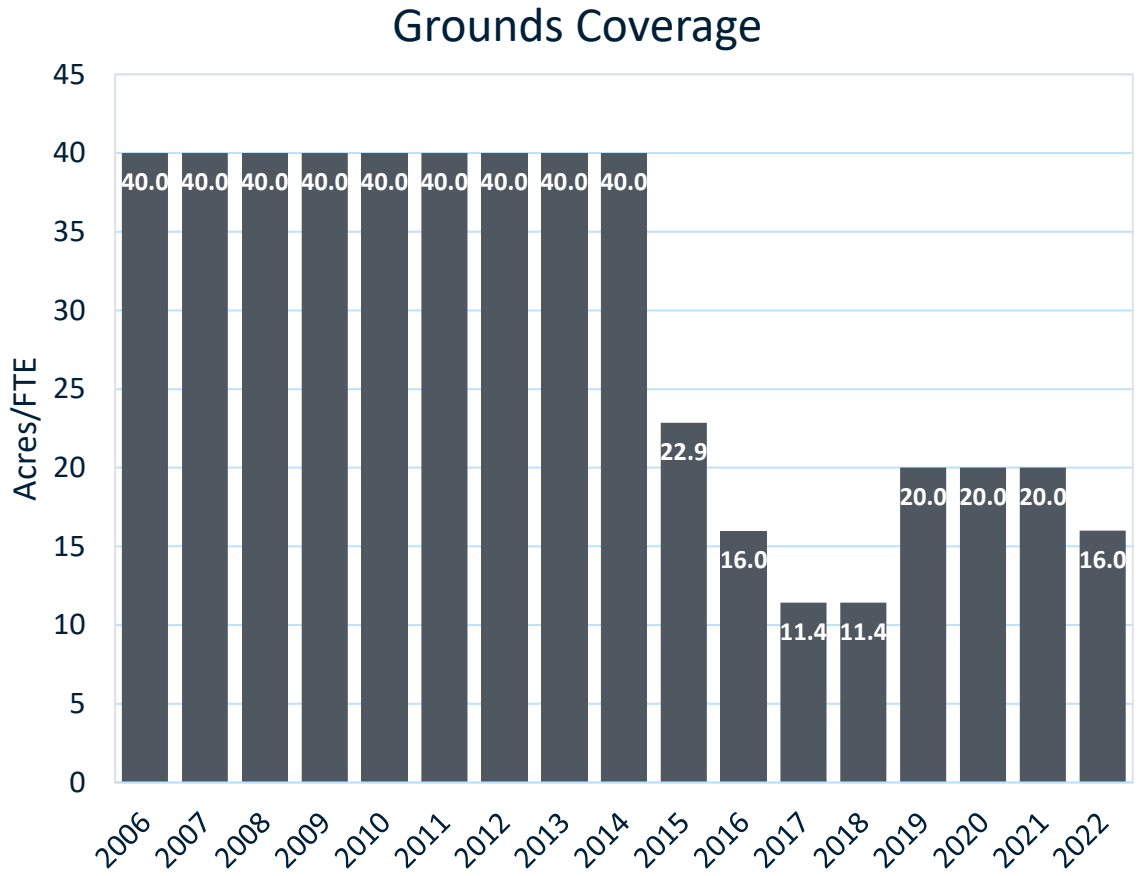
Increases in FTE results in decreased GSF per FTE



Grounds Staffing Coverage

Increases to FTEs decrease acreage per FTE coverage ratio





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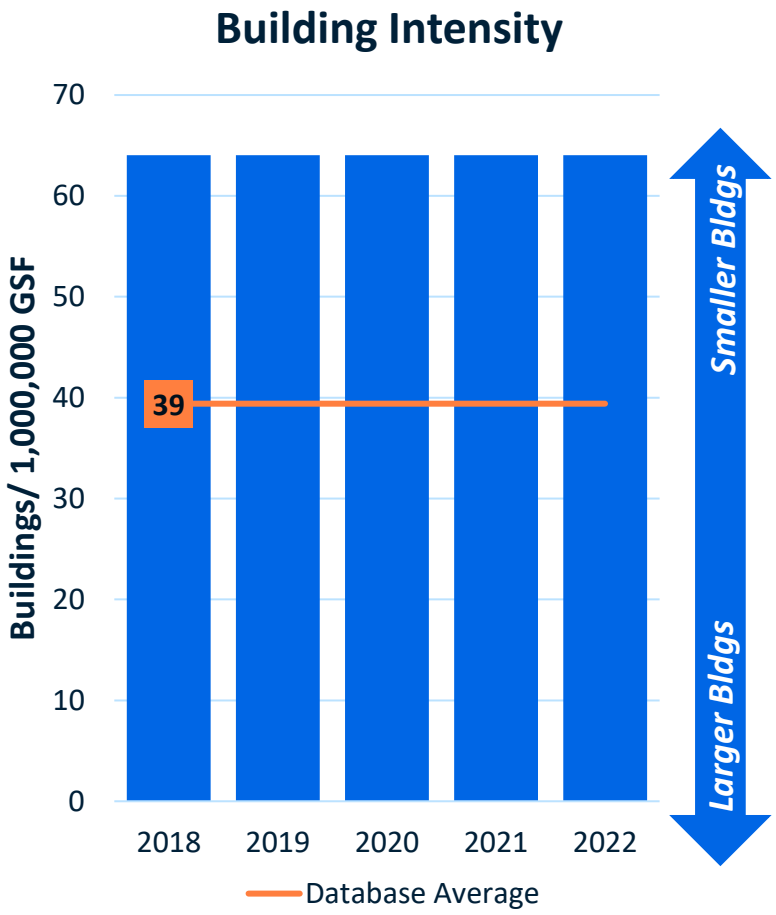
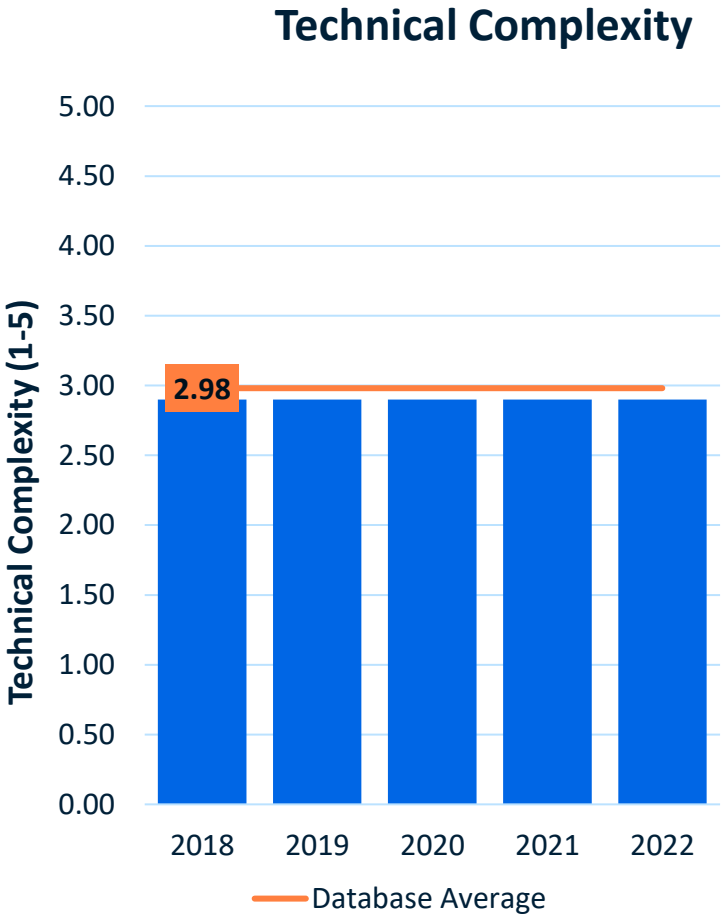
Space Profile

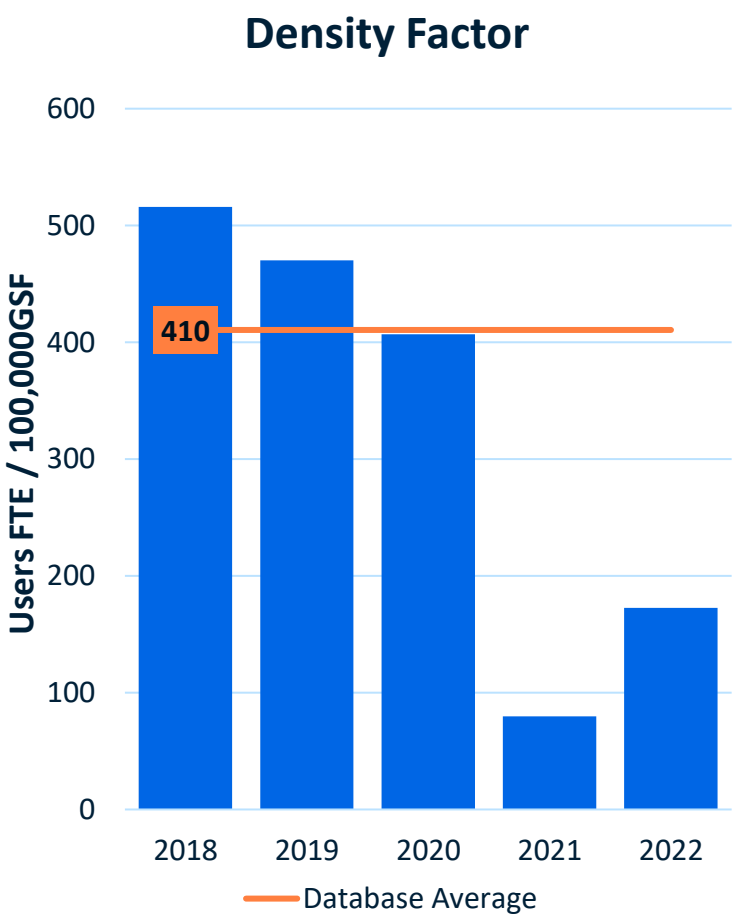
Mat-Su College

Qualifying Metrics – Building Demographics

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

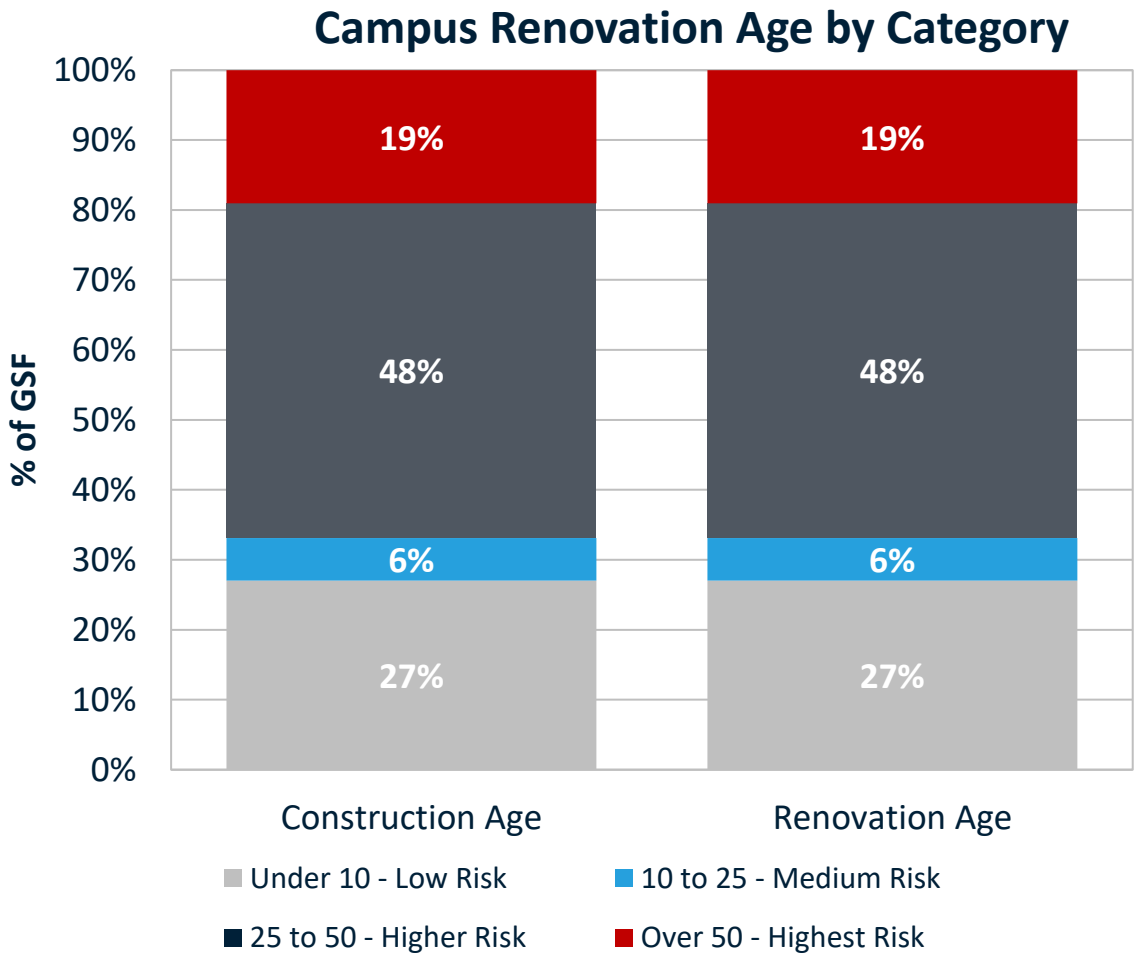


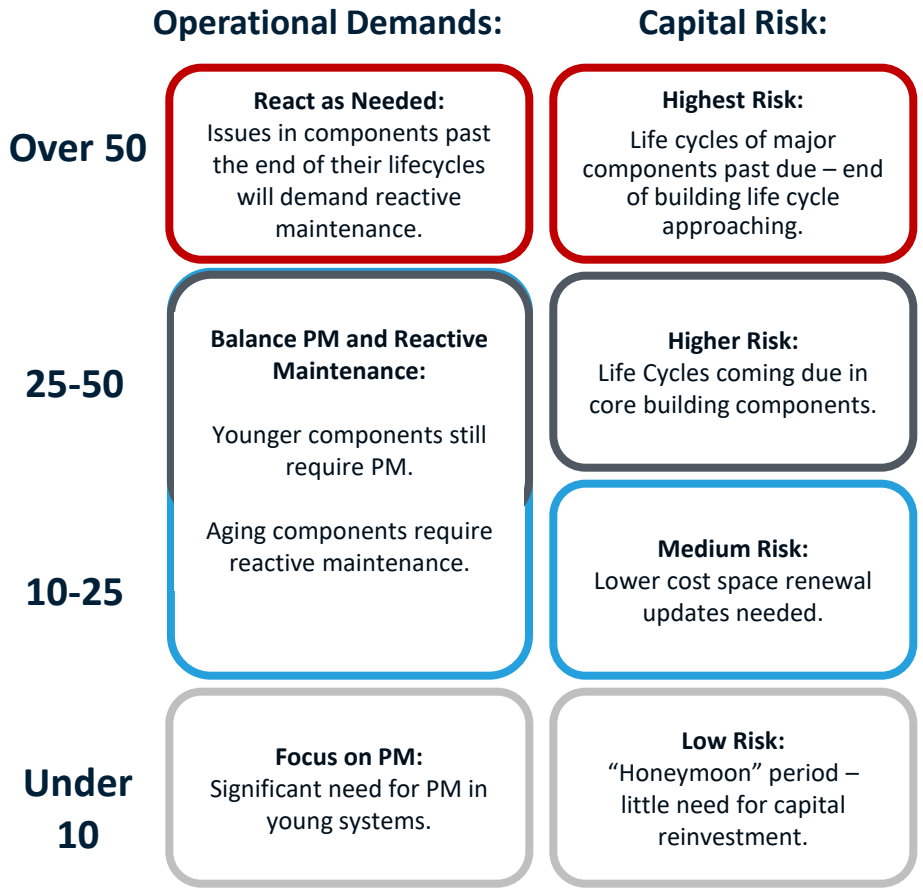




Aging Campus Puts Buildings At Risk

67% of Mat-Su campus is older than 25 years; increasing risk significantly





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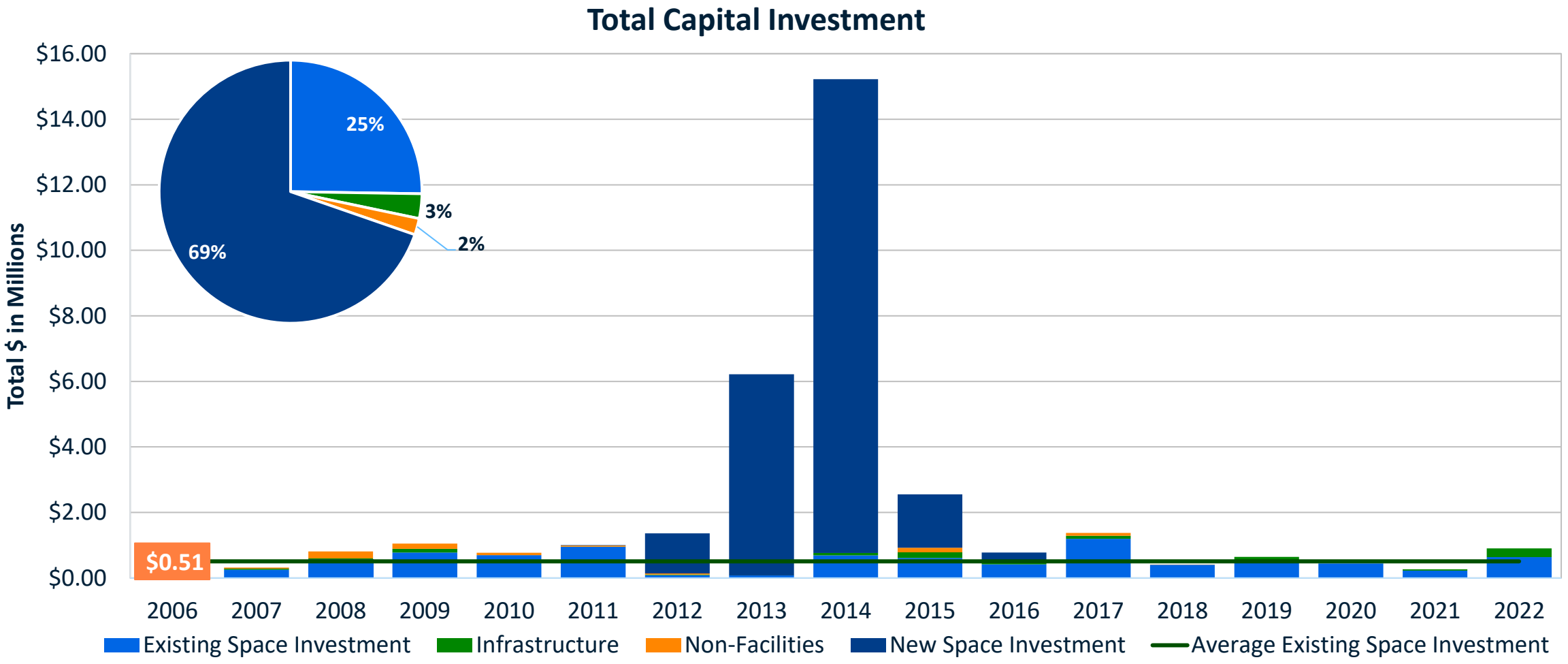
Capital Profile:

Mat-Su College

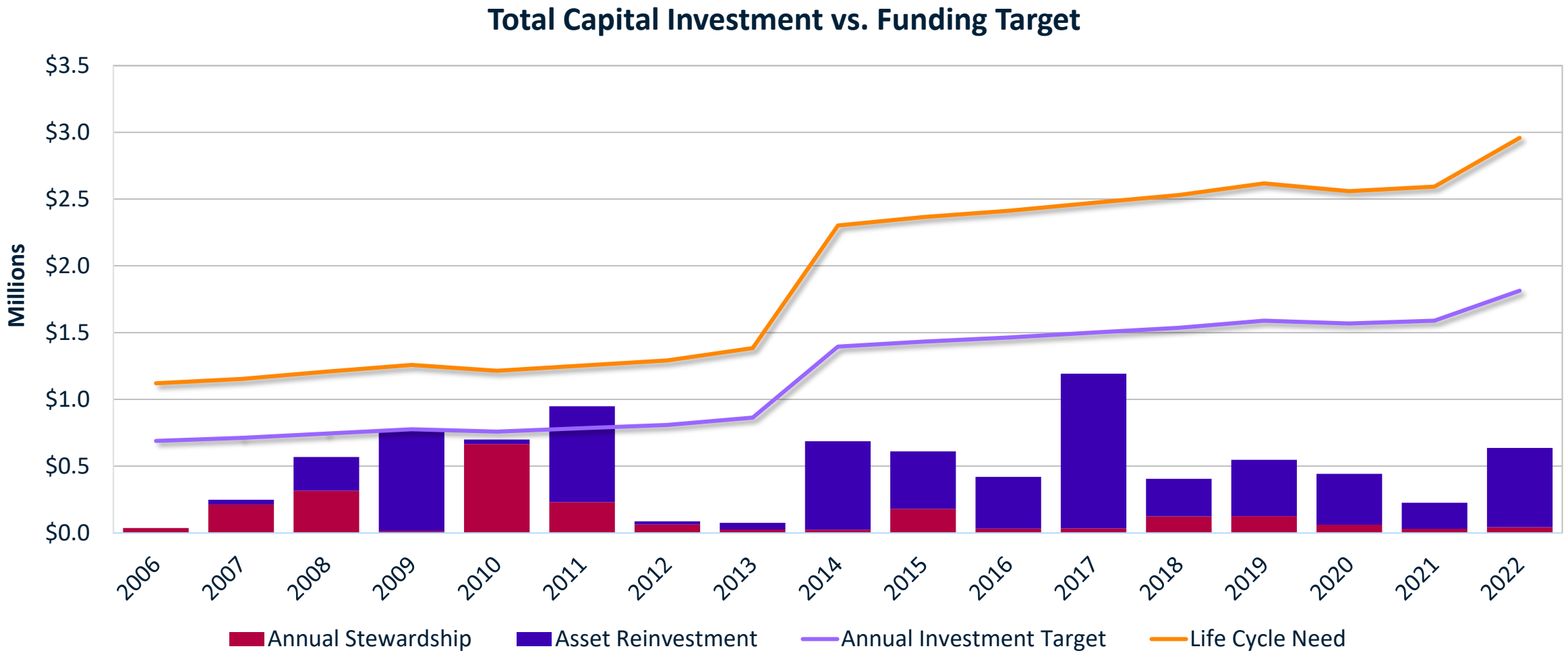
Focusing Investments on Aging Campus

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



Capital Investment vs. Annual Investment Target

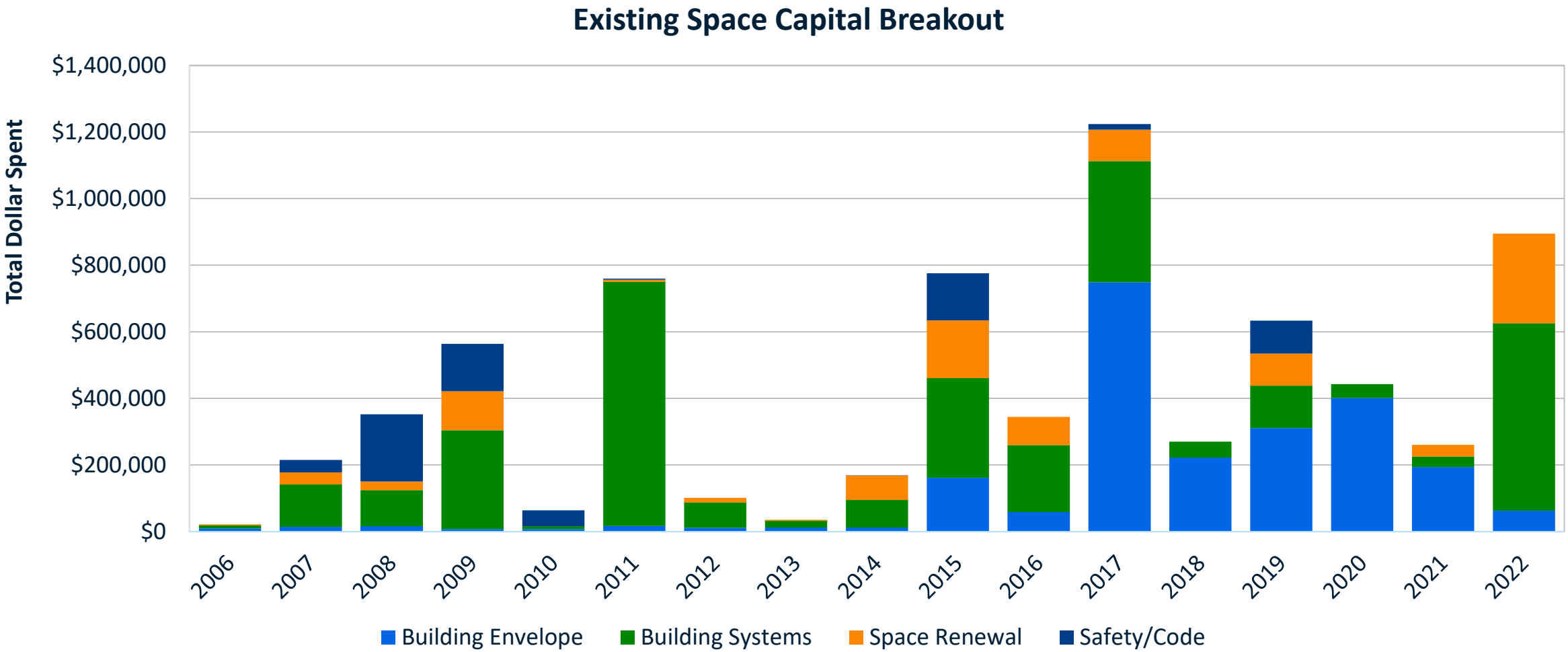
Mat-Su continues to miss target further increasing backlog and operational strain



Fund 1 Projects: Annual Stewardship
Funds 2-9 Projects : Asset Reinvestment

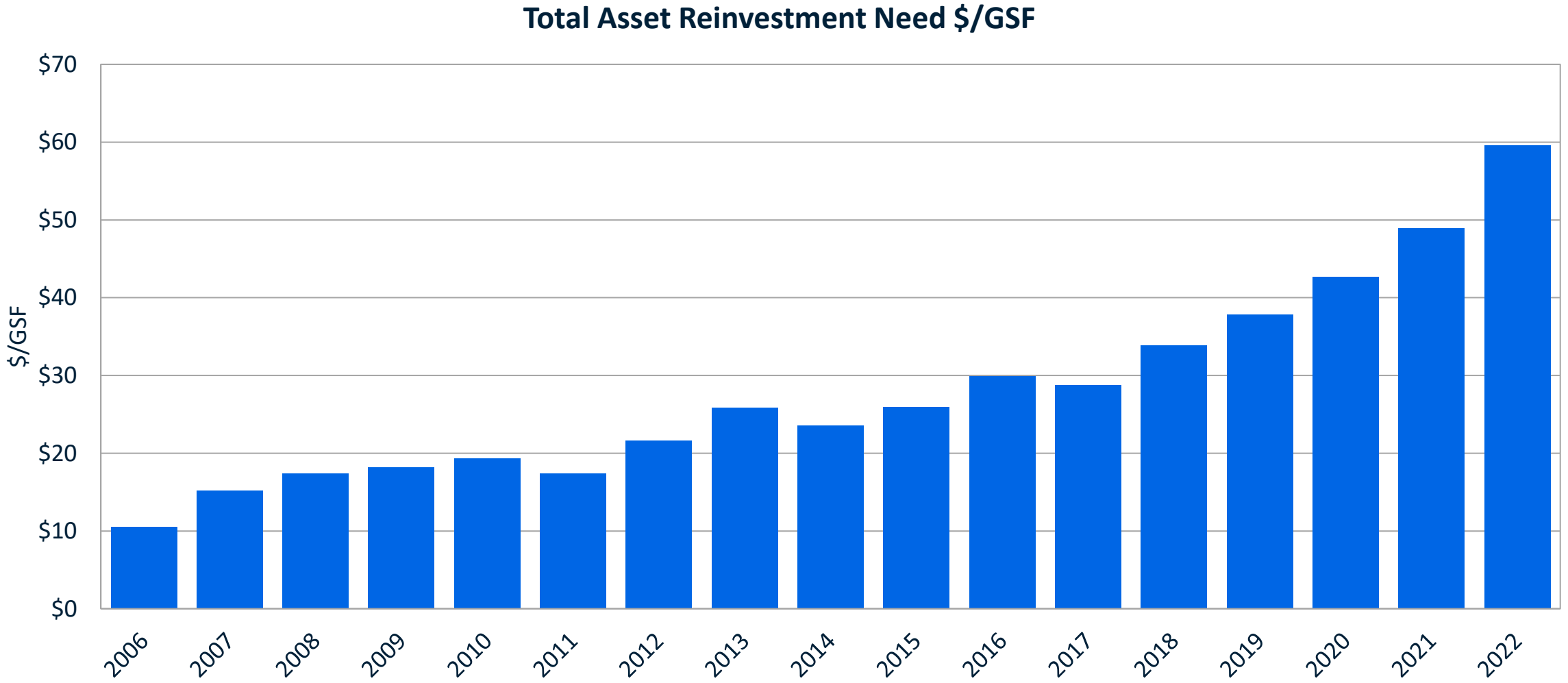
Existing Space Investment Breakout

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

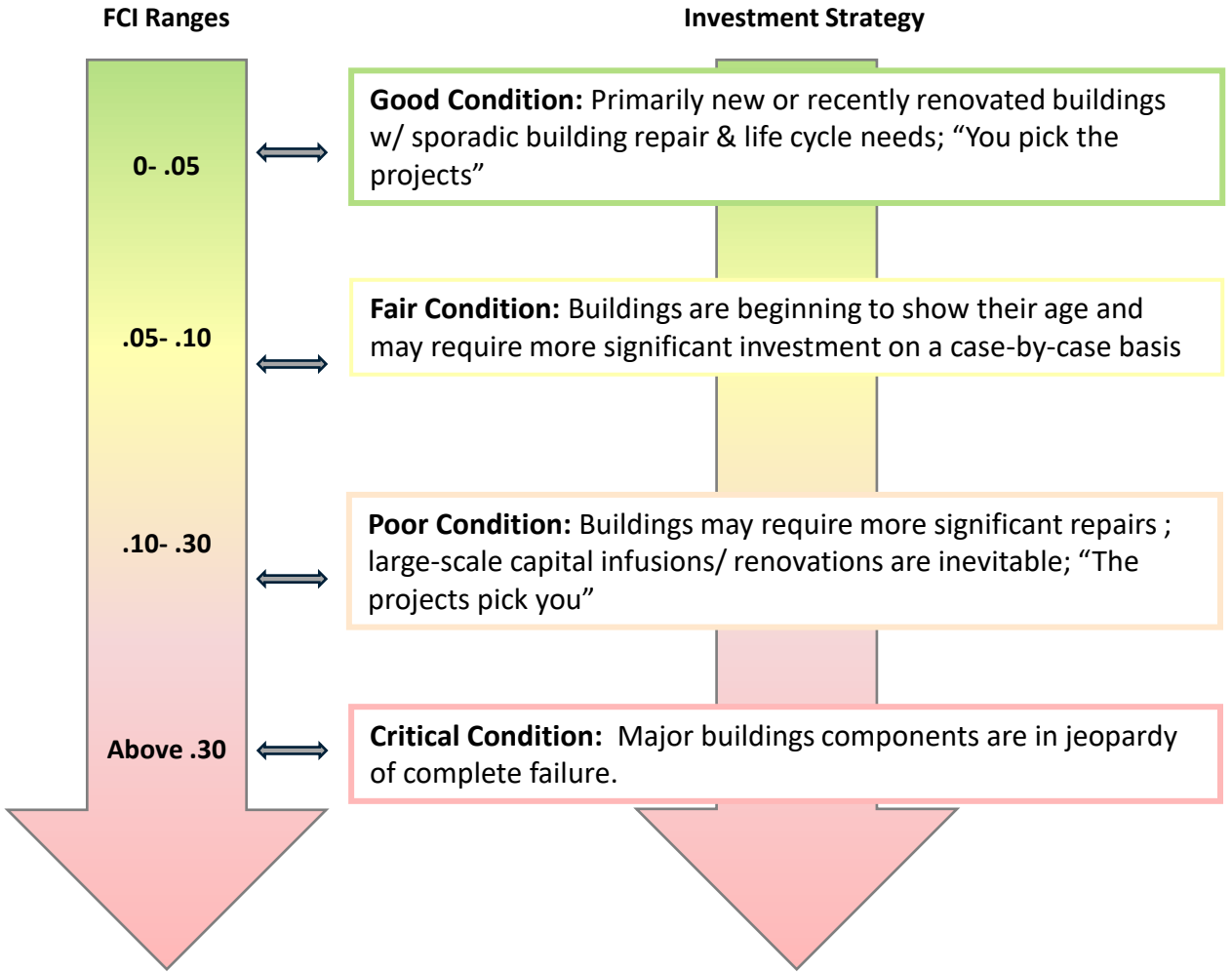


Facilities Condition Index

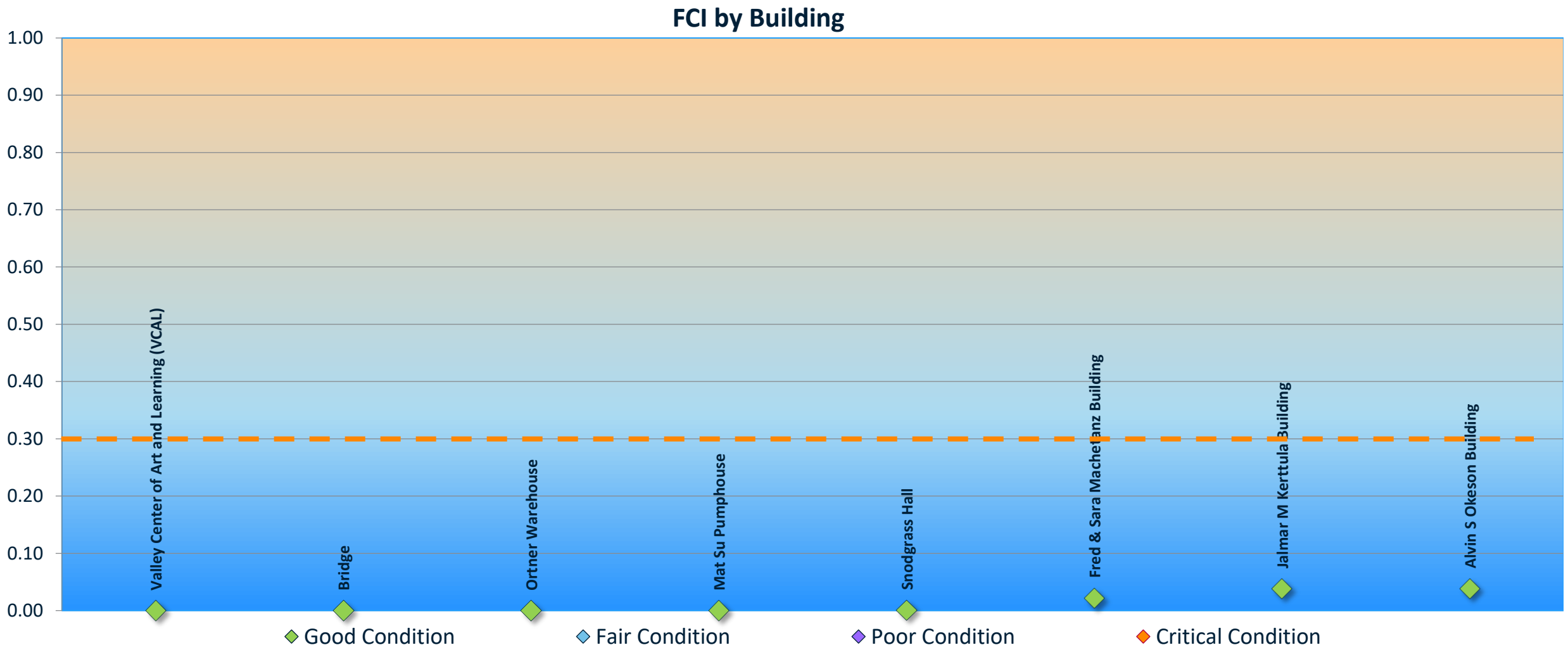
Condition based investment strategy

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

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 – All Buildings



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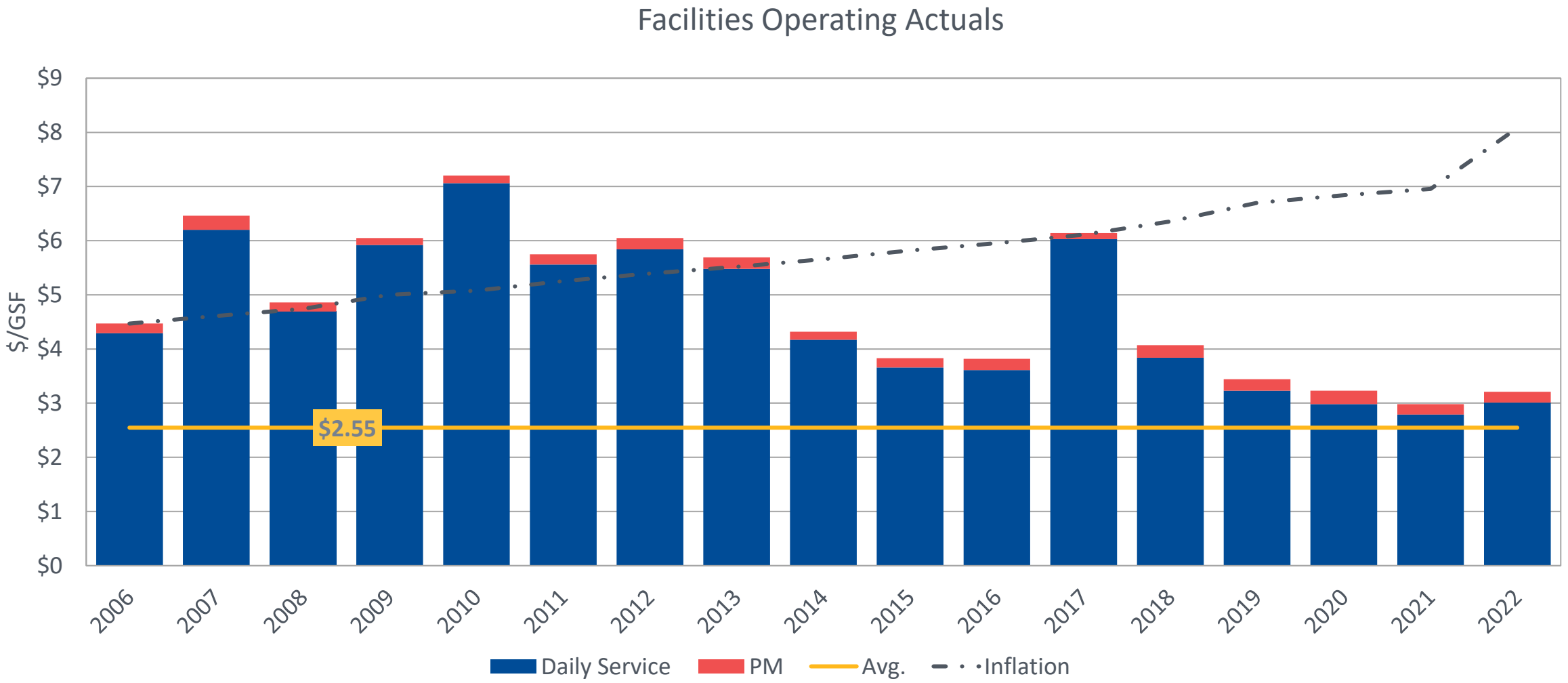
Operations Success:

Mat-Su College

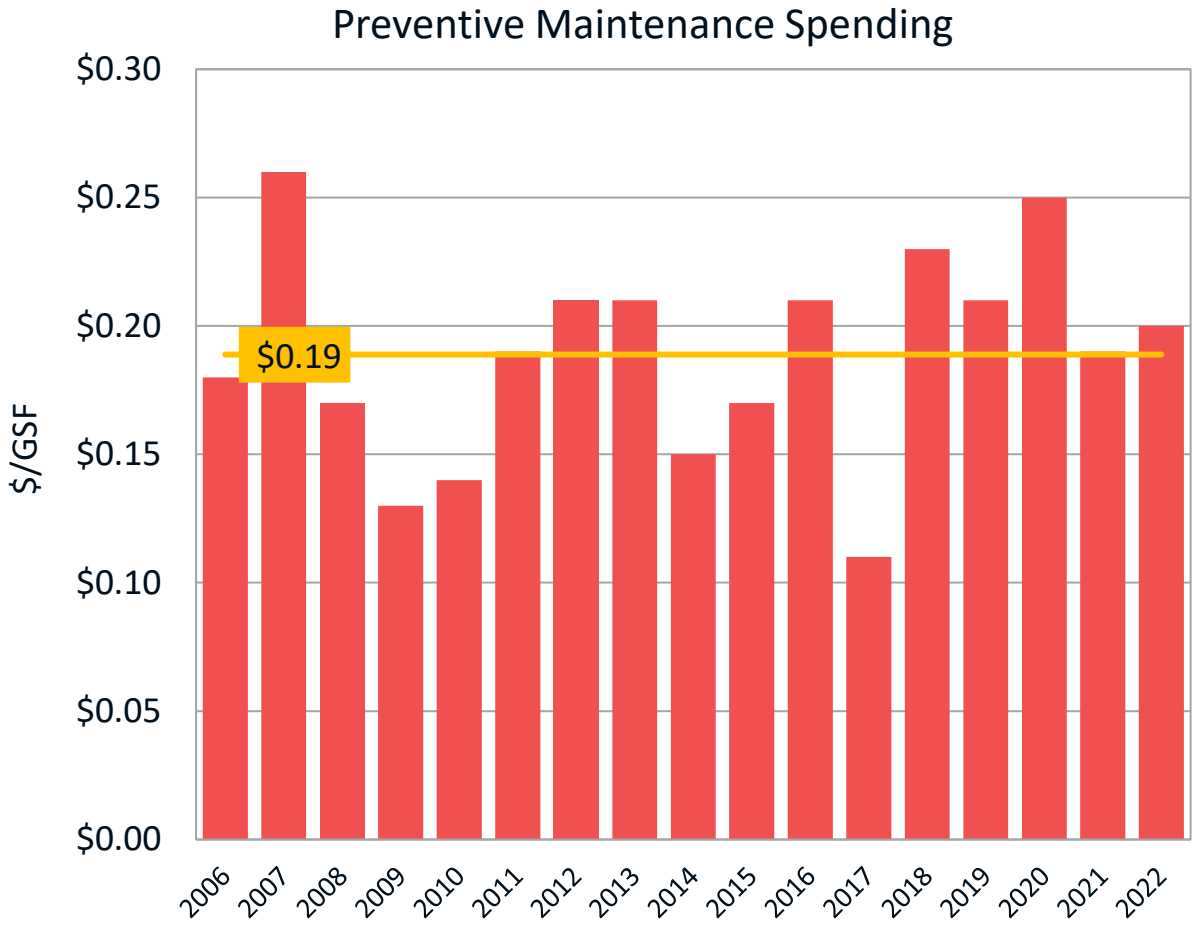
Facilities Operating Expenditures

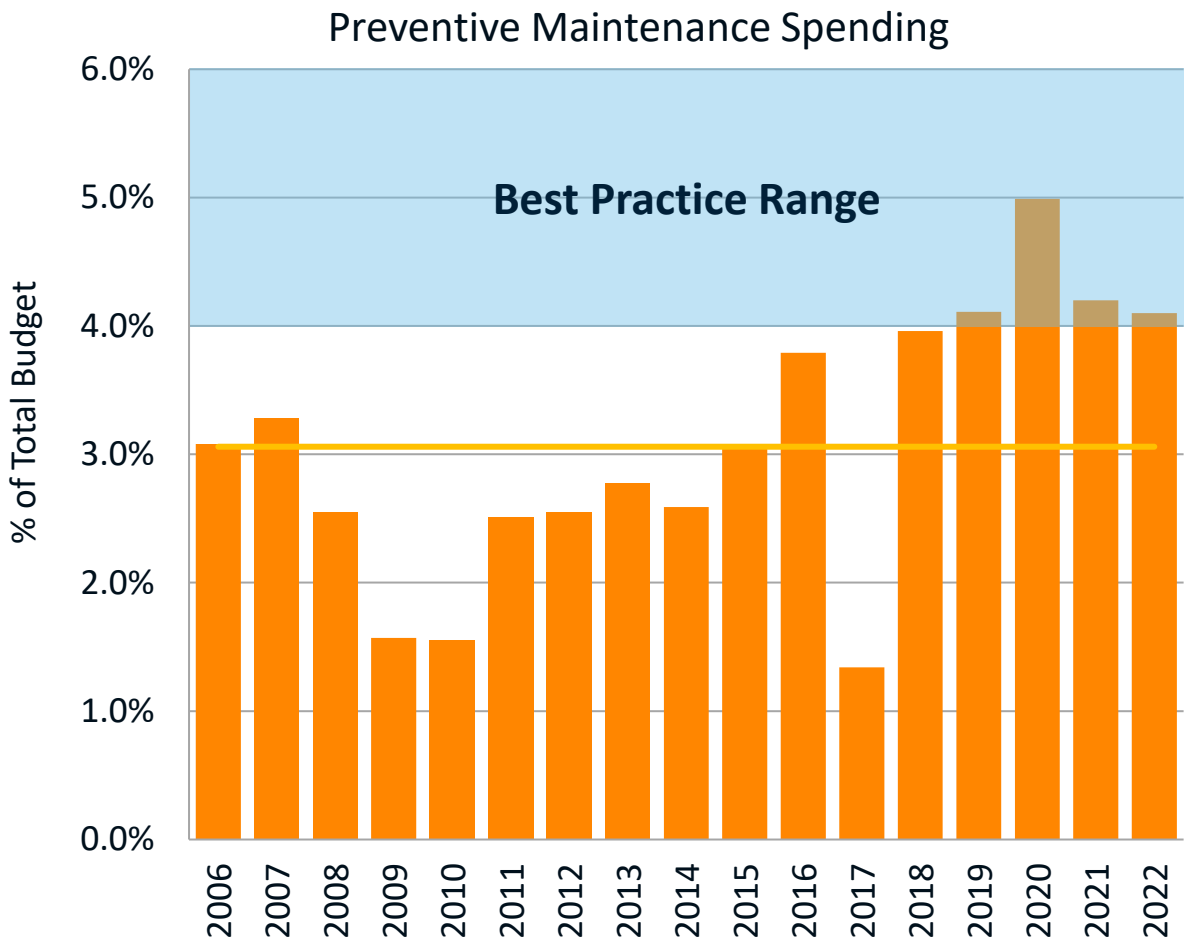
Mat-Su operating expenditures decreased significantly from 2017, missing inflation



PM Spending Remains within Best Practice Range

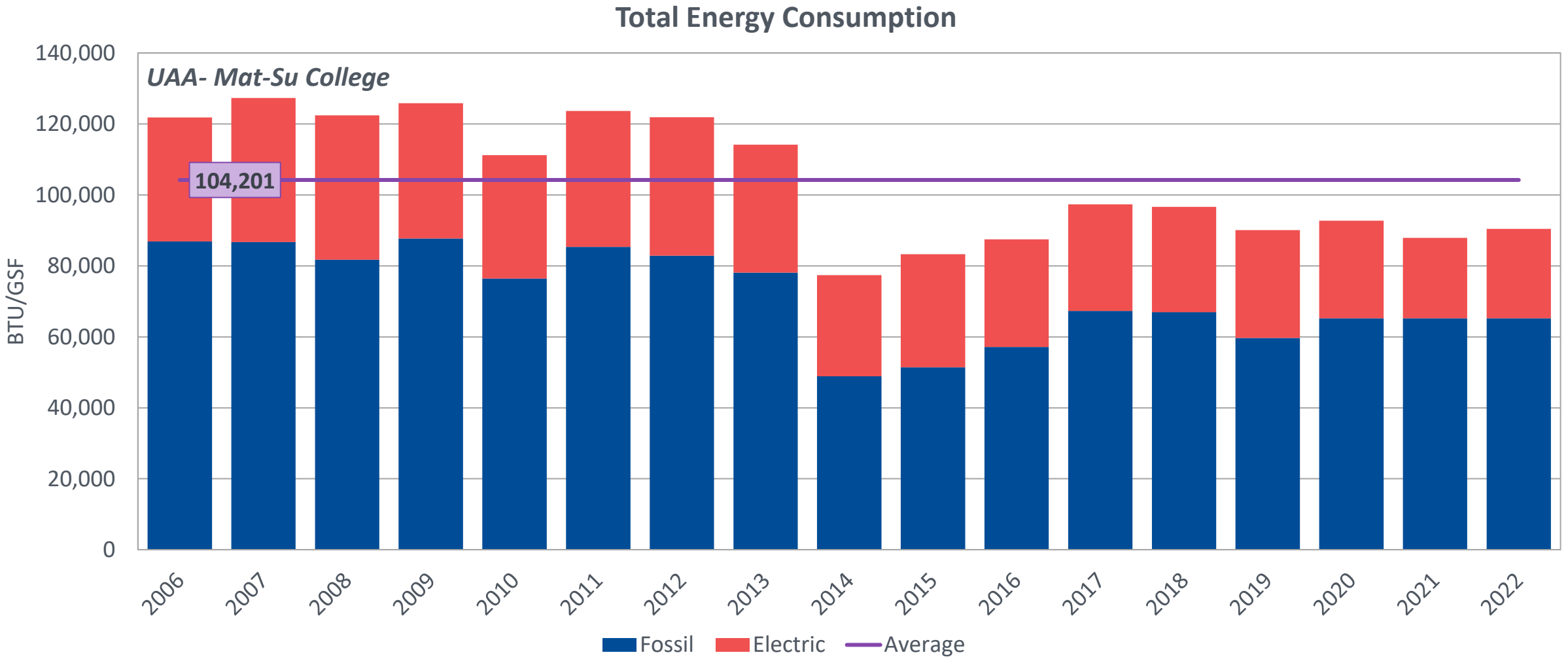
PM spending increased from FY21 to FY22, falls short of 2019 and 2020





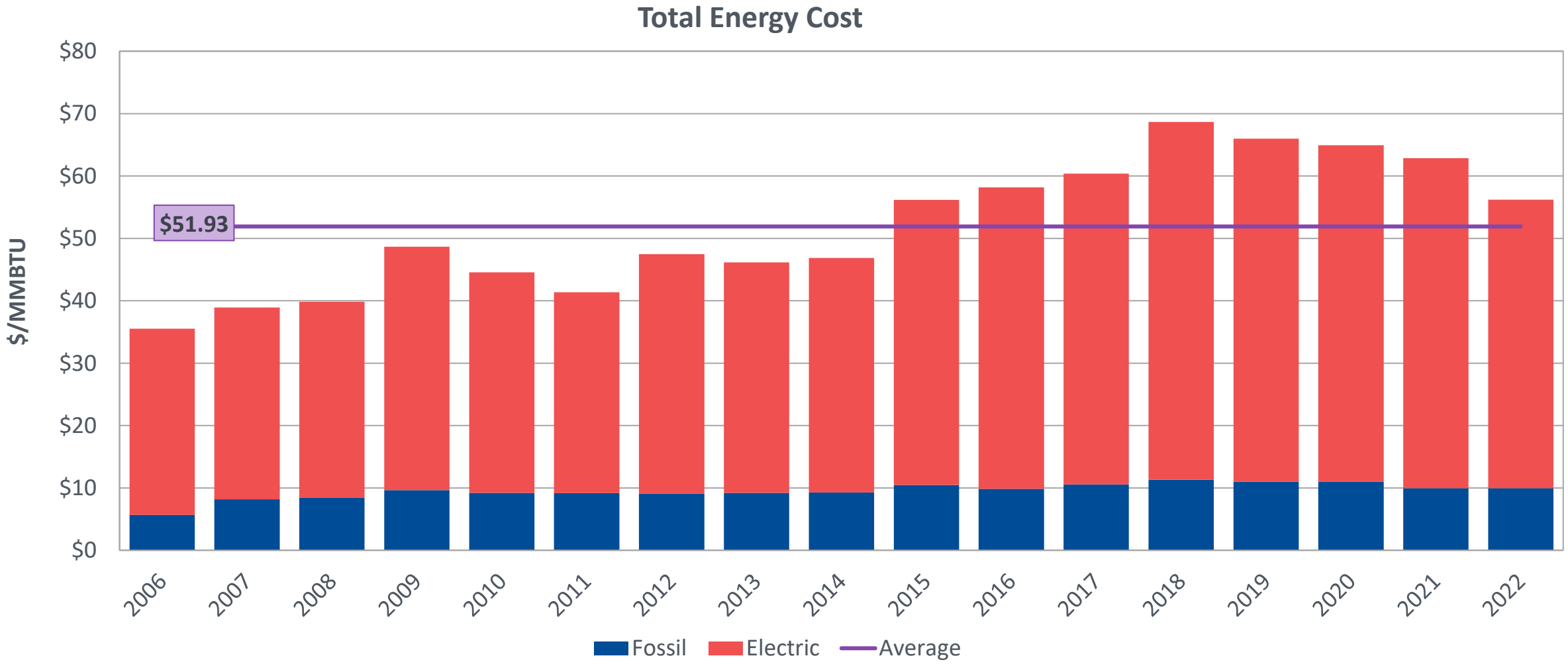
Total Energy Consumption

Mat-Su consumption remains consistent and below average since 2014



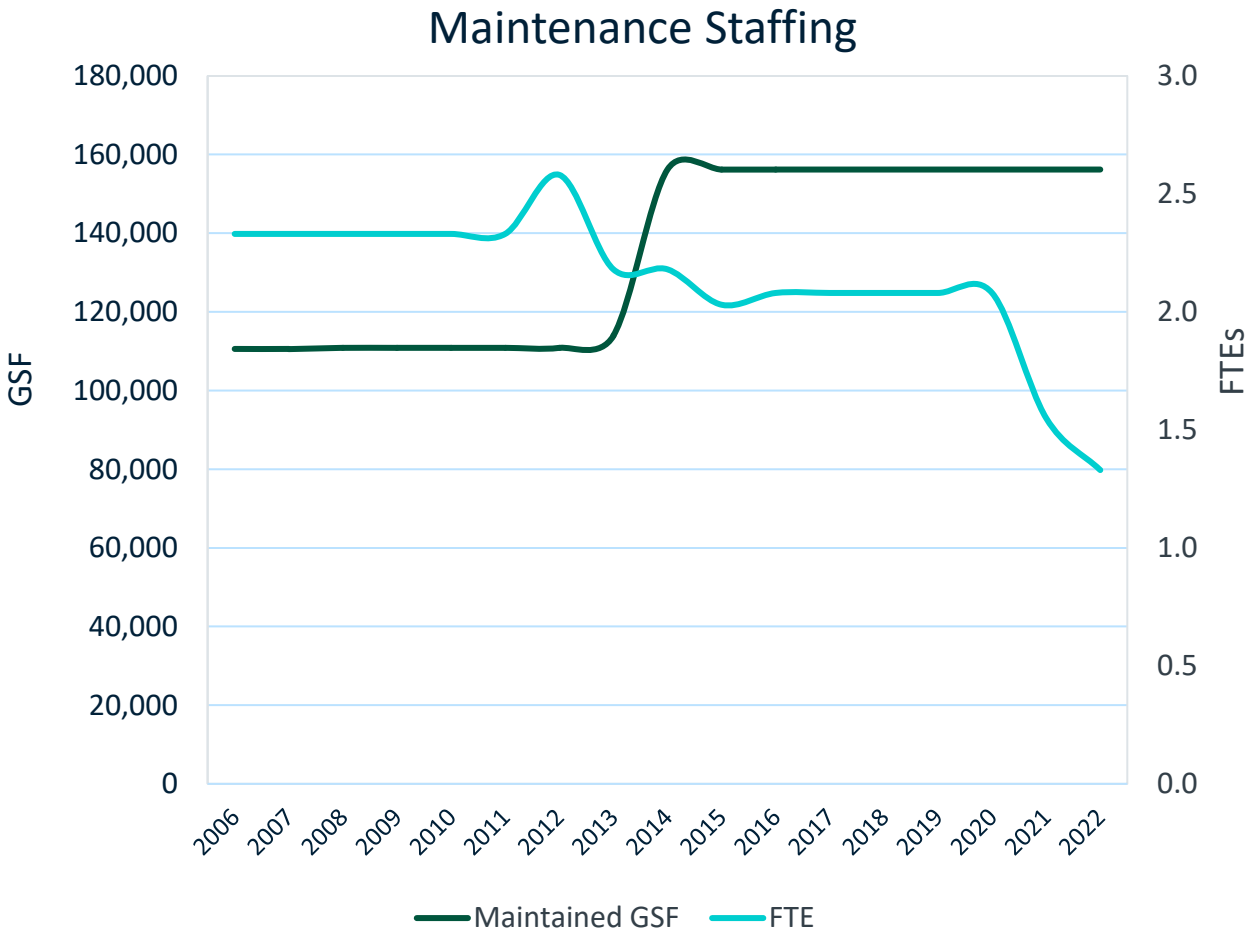
Energy Expenses are Increasing Over Time

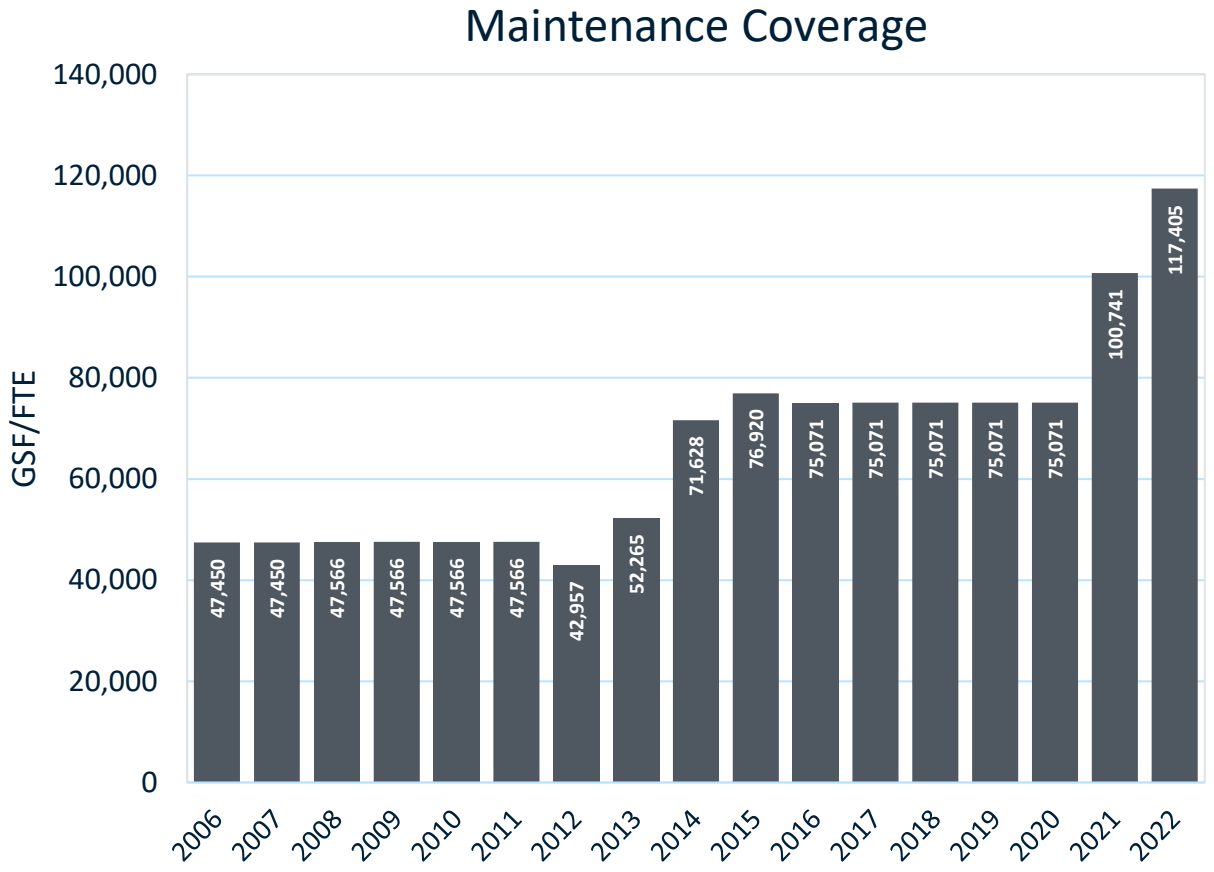
Despite “flatness” in consumption, costs are increasing



Maintenance Staffing Coverage

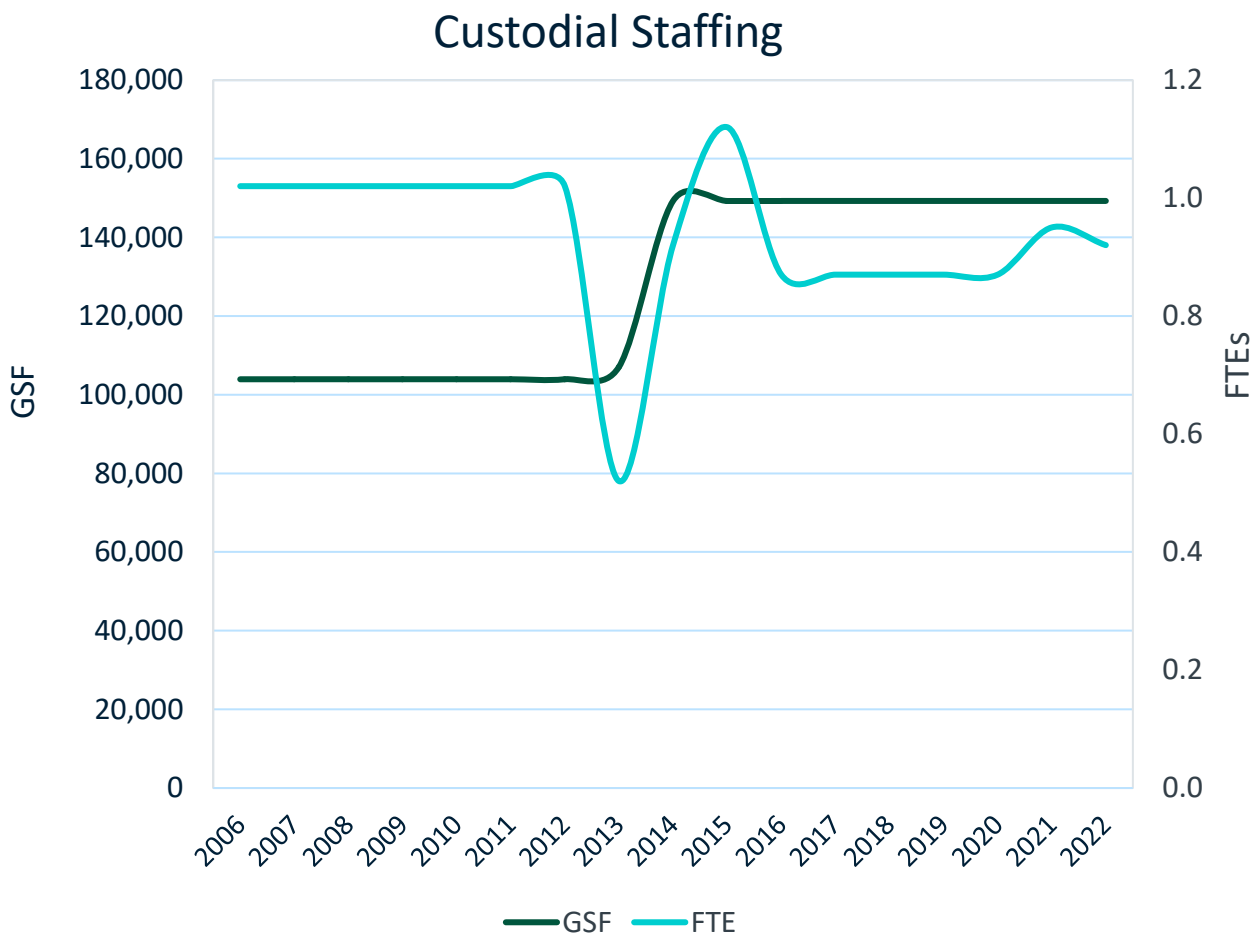
Drops in FTE lead to increasing coverage ratios and operational strain

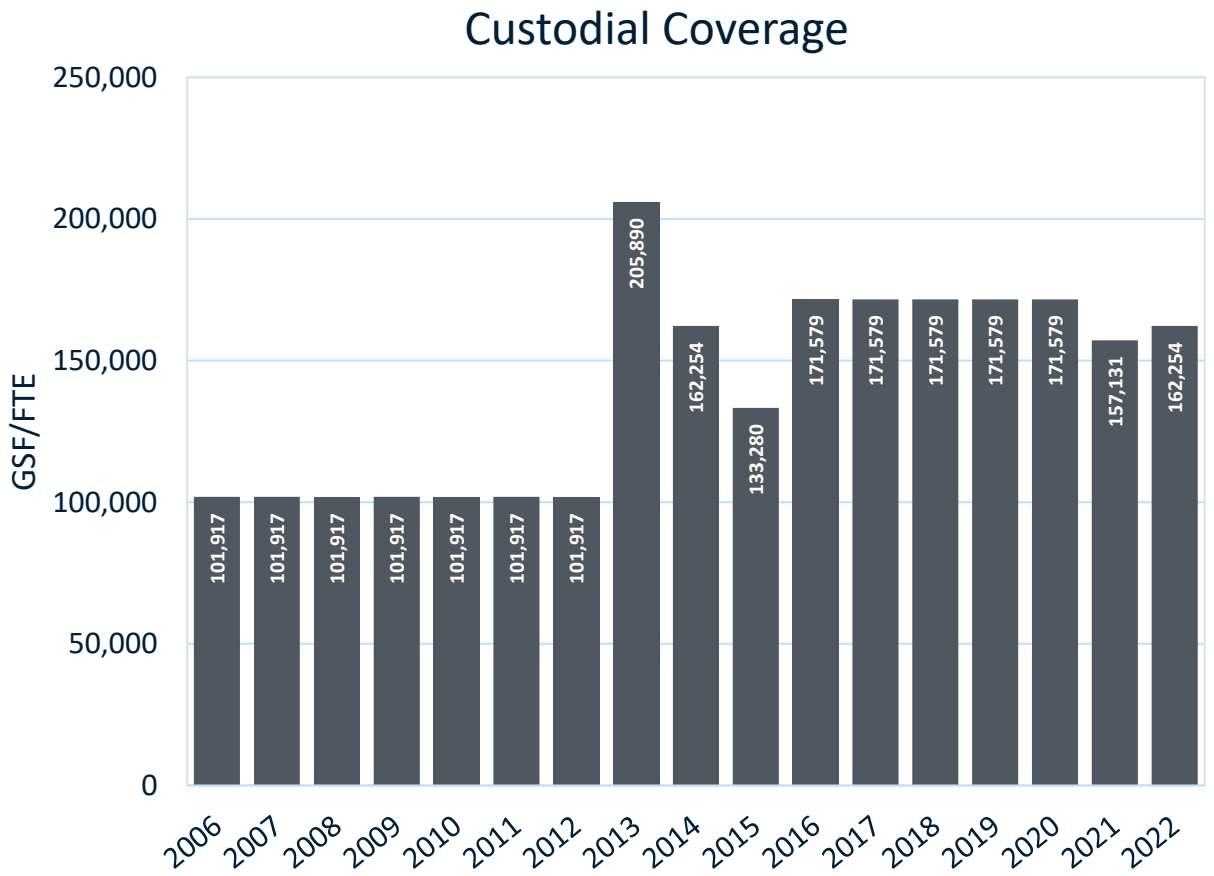




Custodial Staffing Coverage

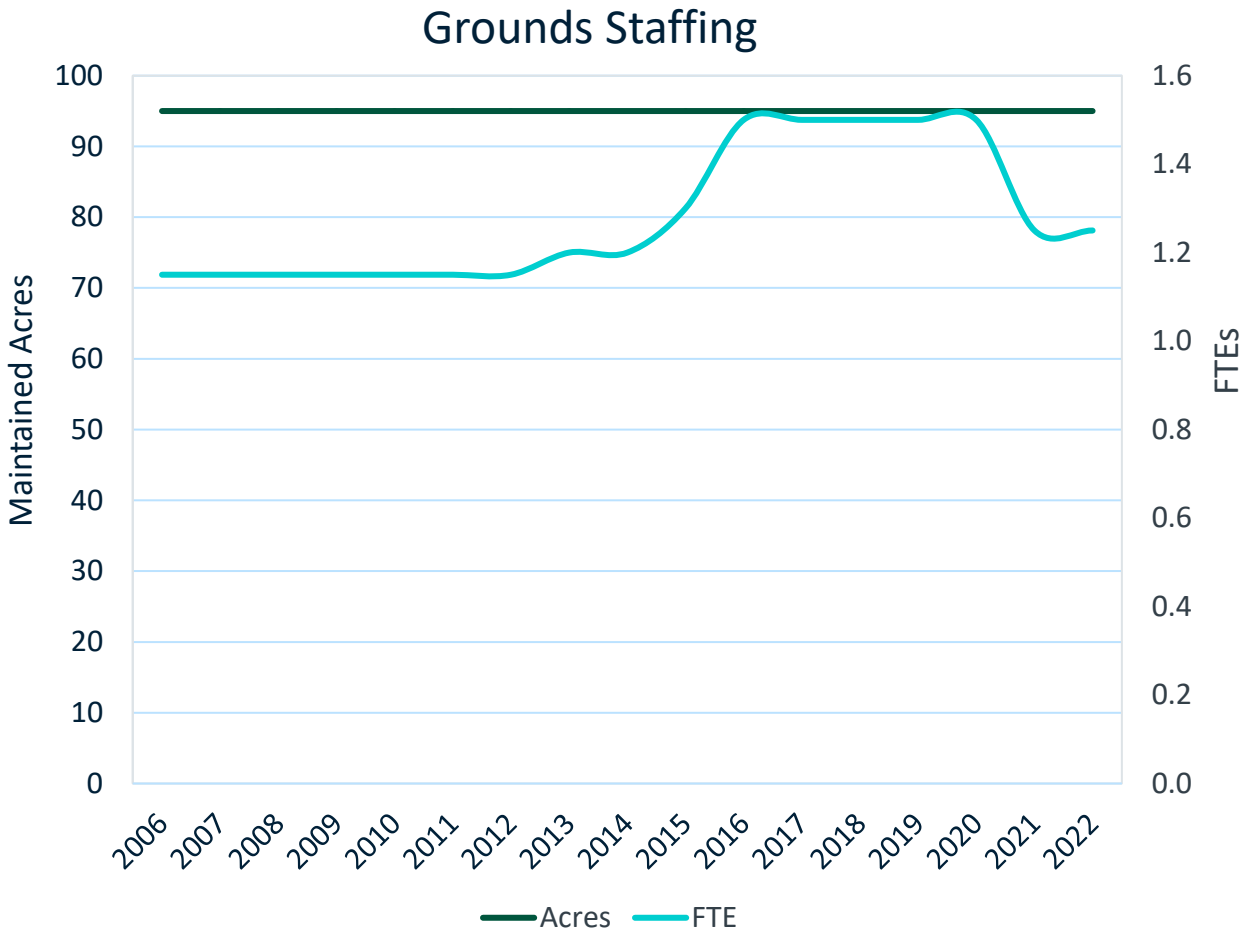
Custodial FTE’s have decreased, but ratios are minimally impacted

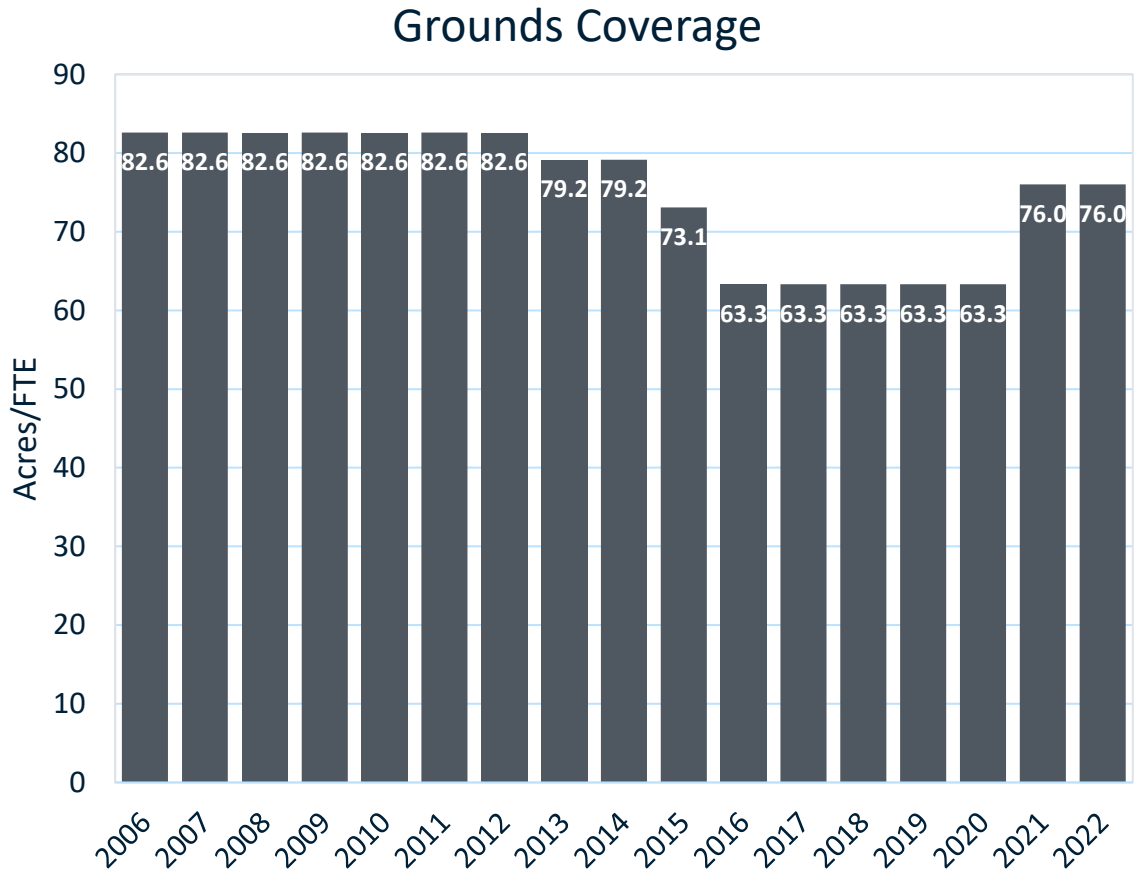




Grounds Staffing Coverage

Grounds coverage increasing to 2012 levels





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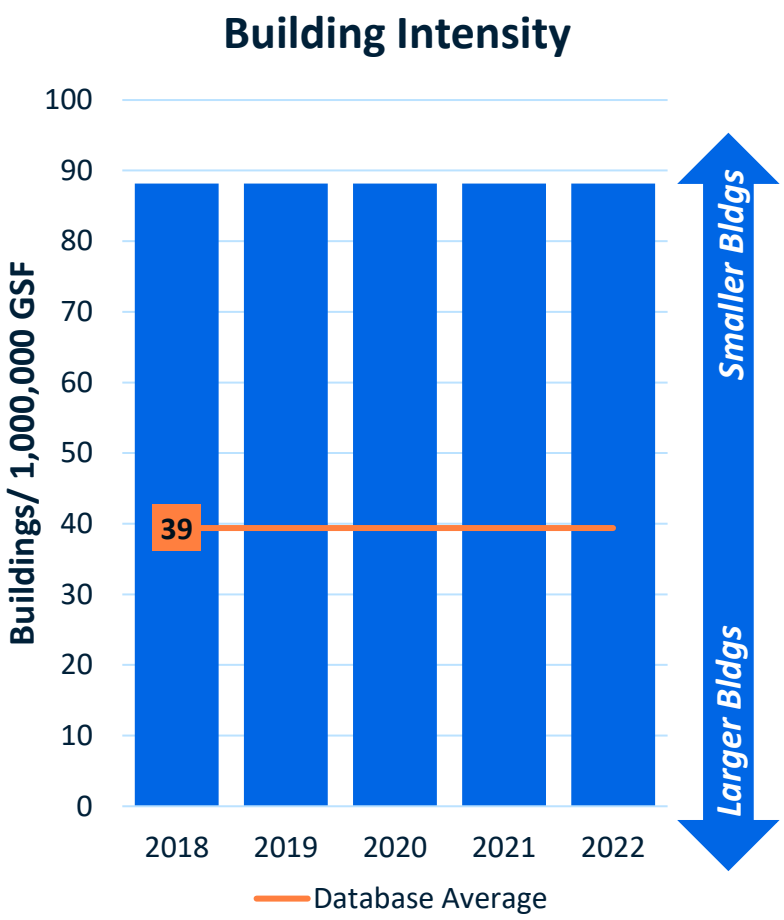
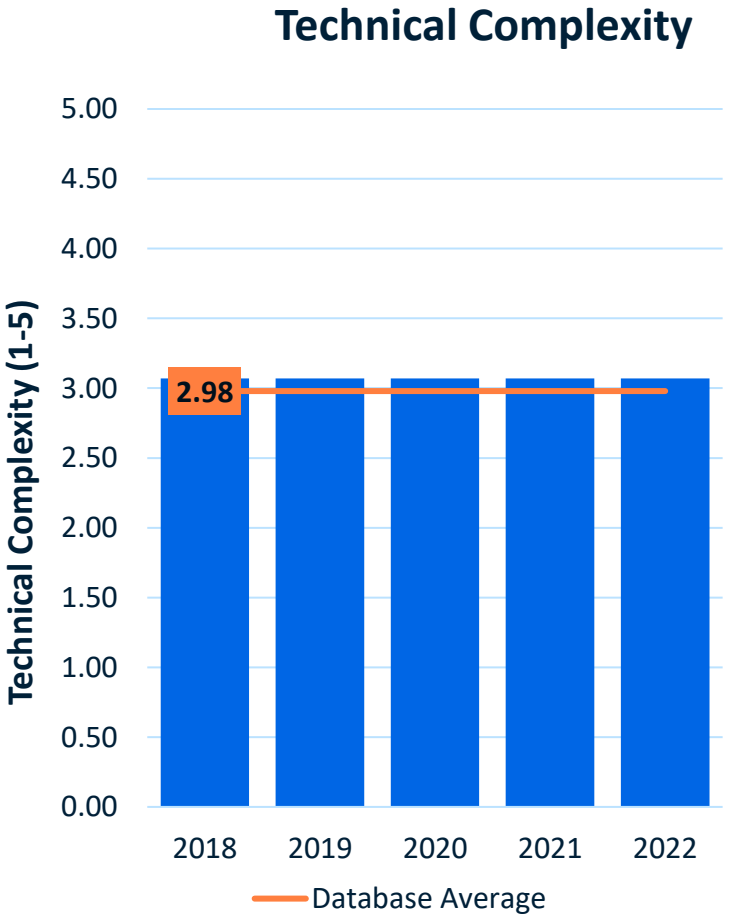
Space Profile:

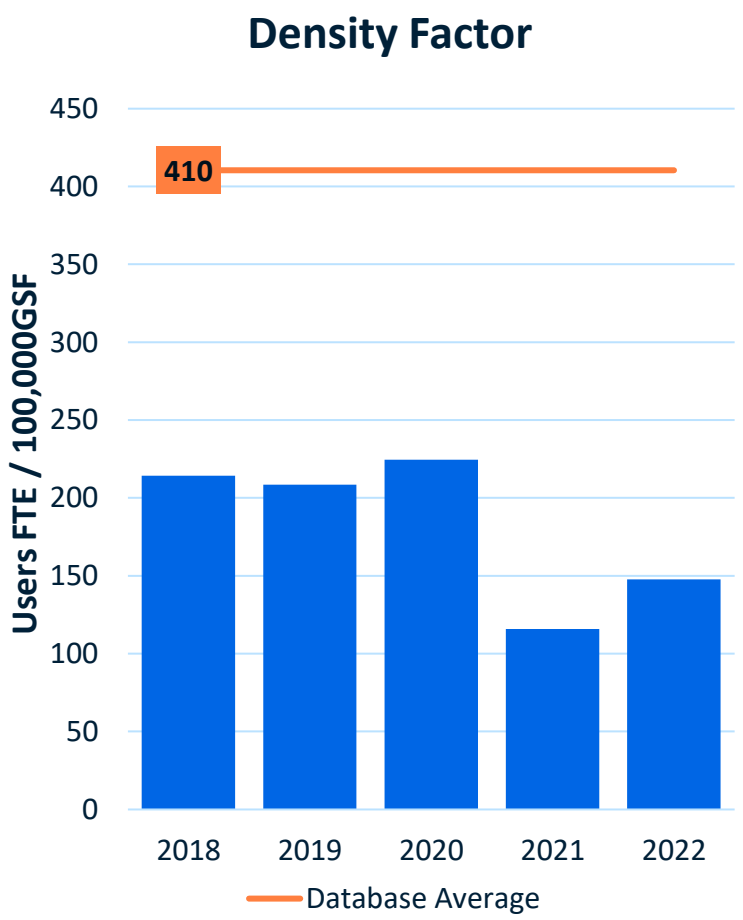
Prince William Sound Community College

Qualifying Metrics – Building Demographics

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

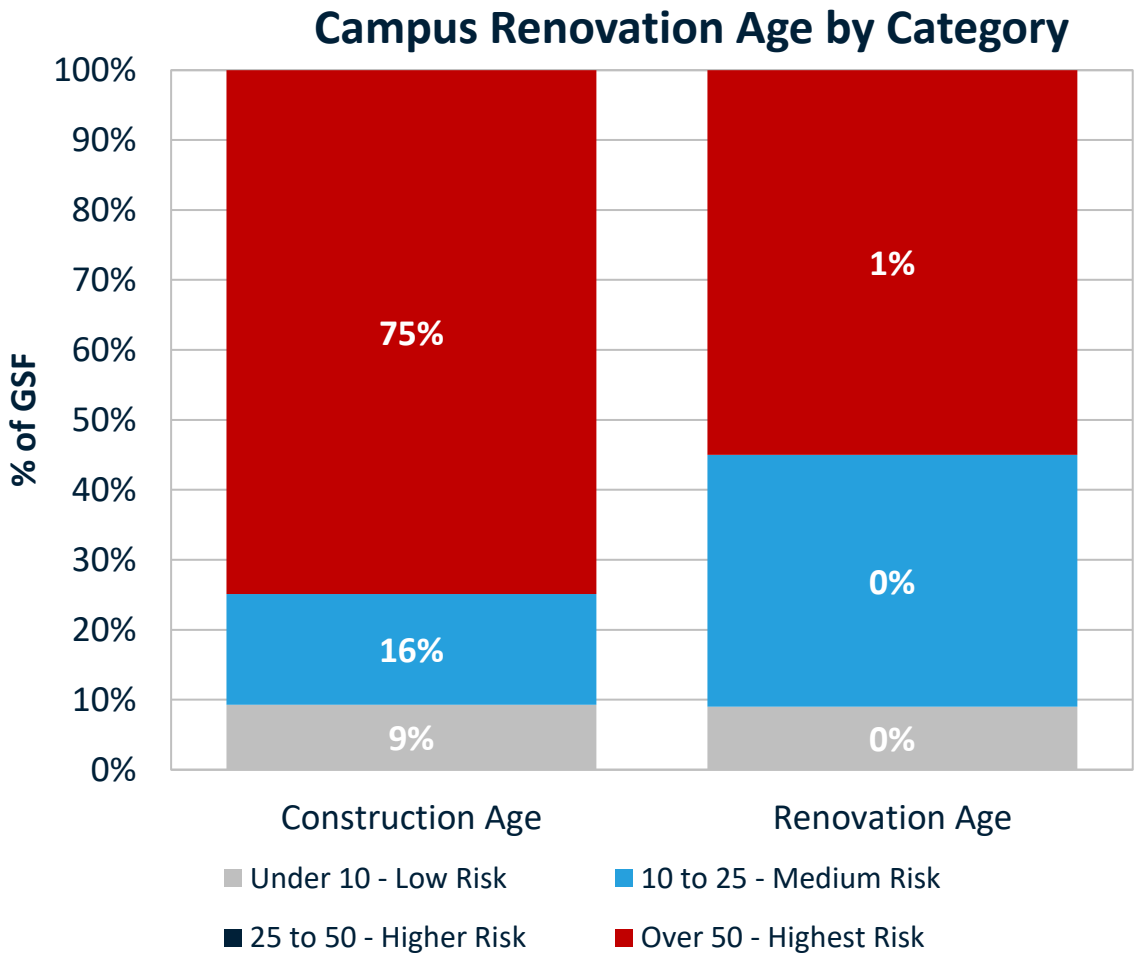






Aging Campus Puts Buildings At Risk

Renovations have reduced overall capital risk and operational strain



	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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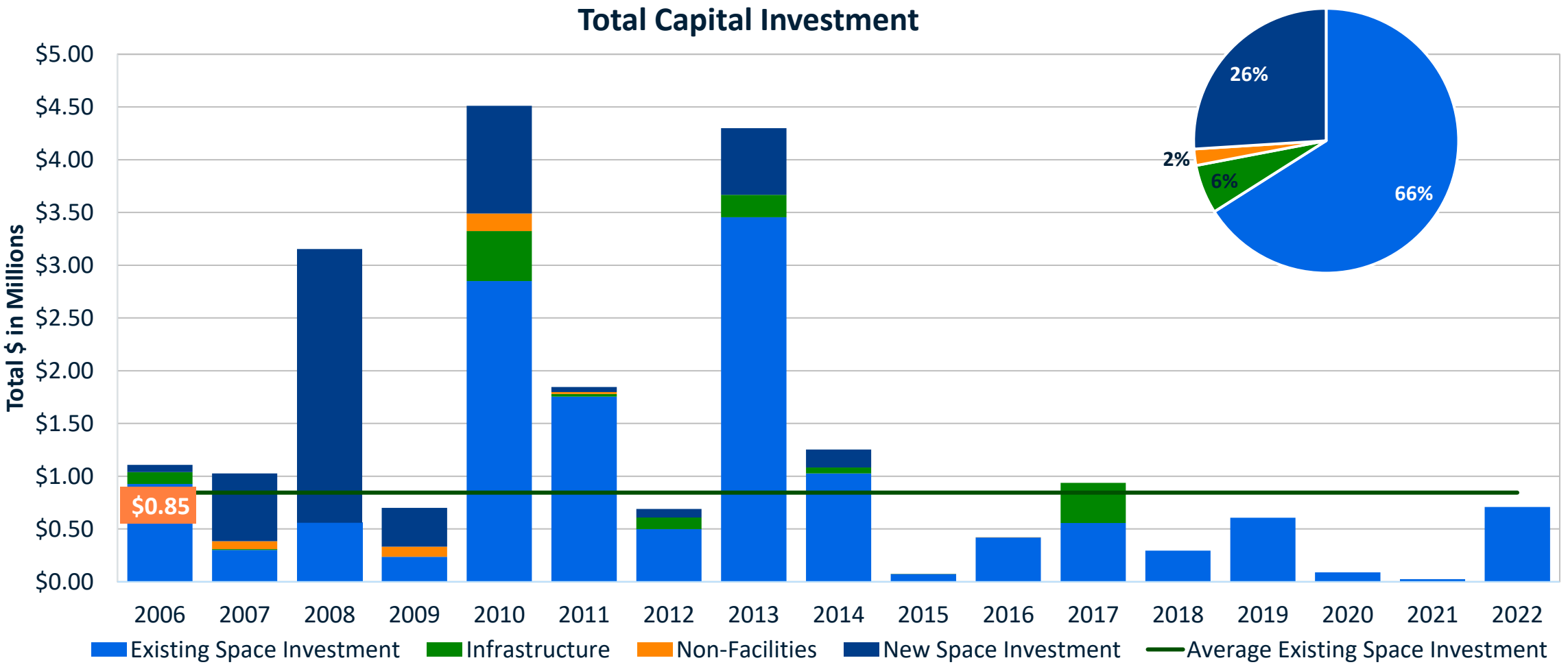
Capital Profile:

Prince William Sound Community College

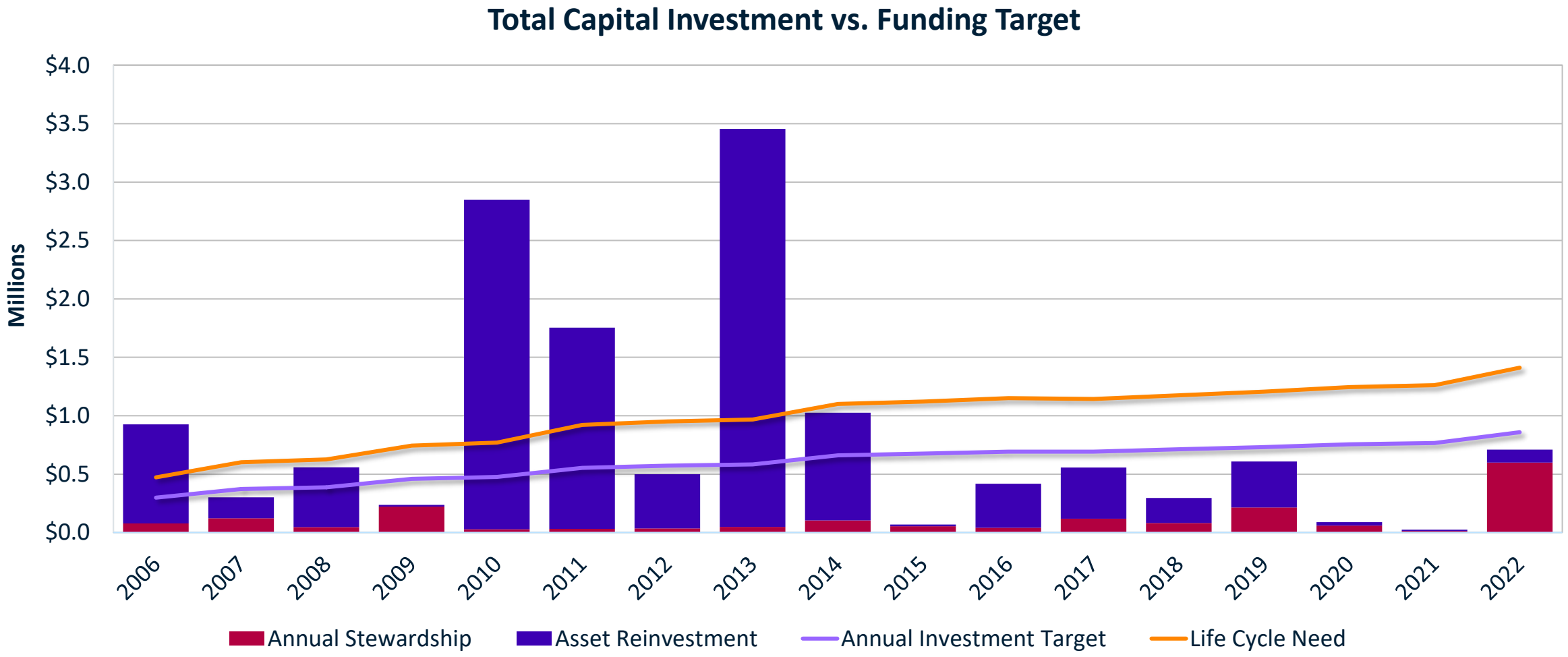
Focusing Investments on Aging Campus

Capital investments at PWSCC smartly focused into existing space



Capital Investment vs. Annual Investment Target

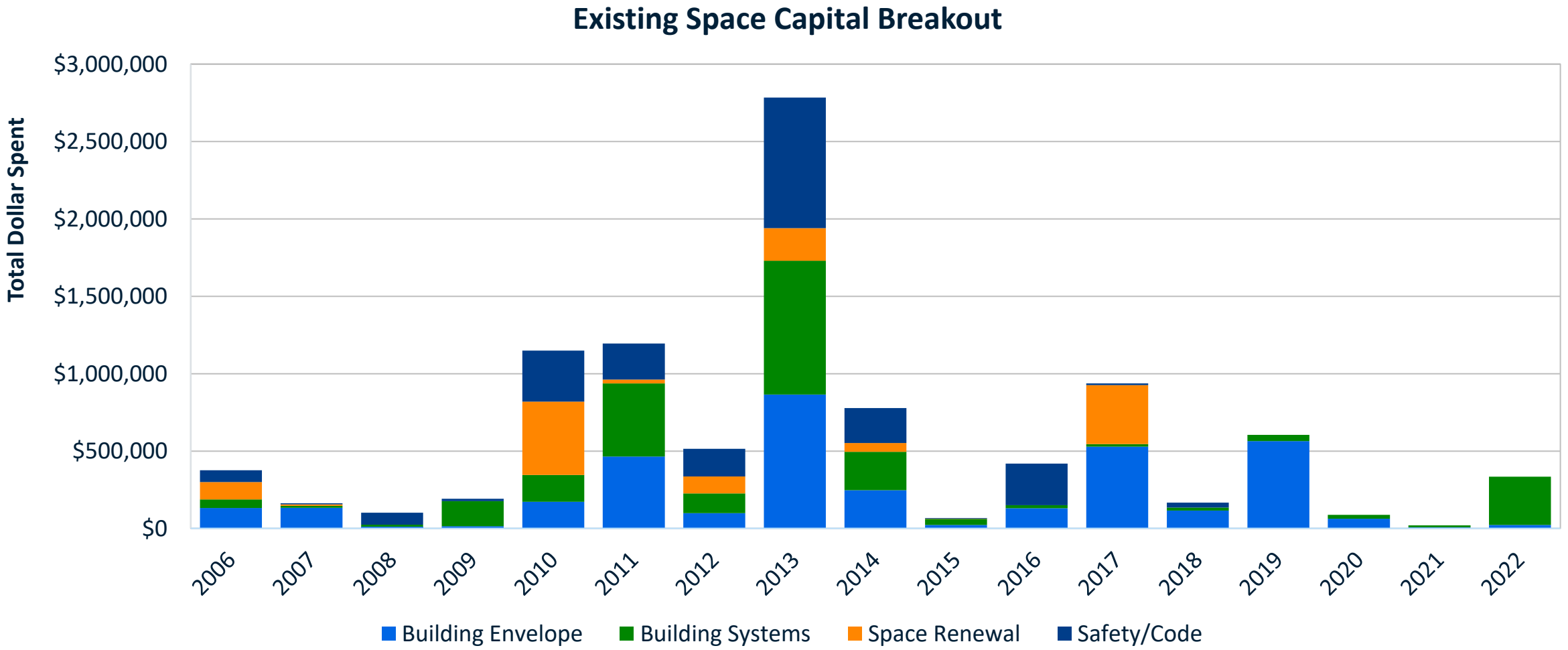
PWSCC continues to miss target, further increasing asset reinvestment need



Fund 1 Projects: Annual Stewardship
Funds 2-9 Projects : Asset Reinvestment

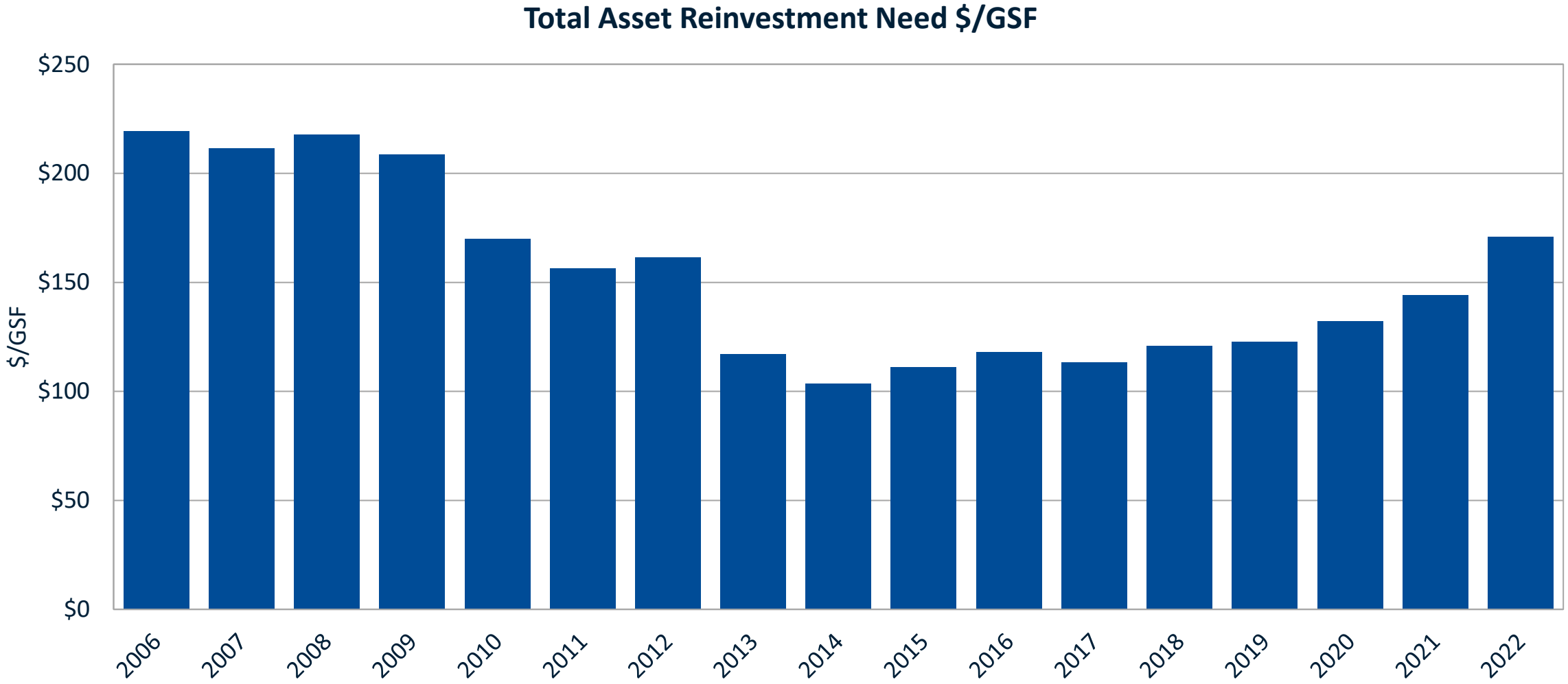
Existing Space Investment Breakout

Continued investment in systems and envelope diminishes impact of aging campus



Asset Reinvestment Need has Increased since 2014

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

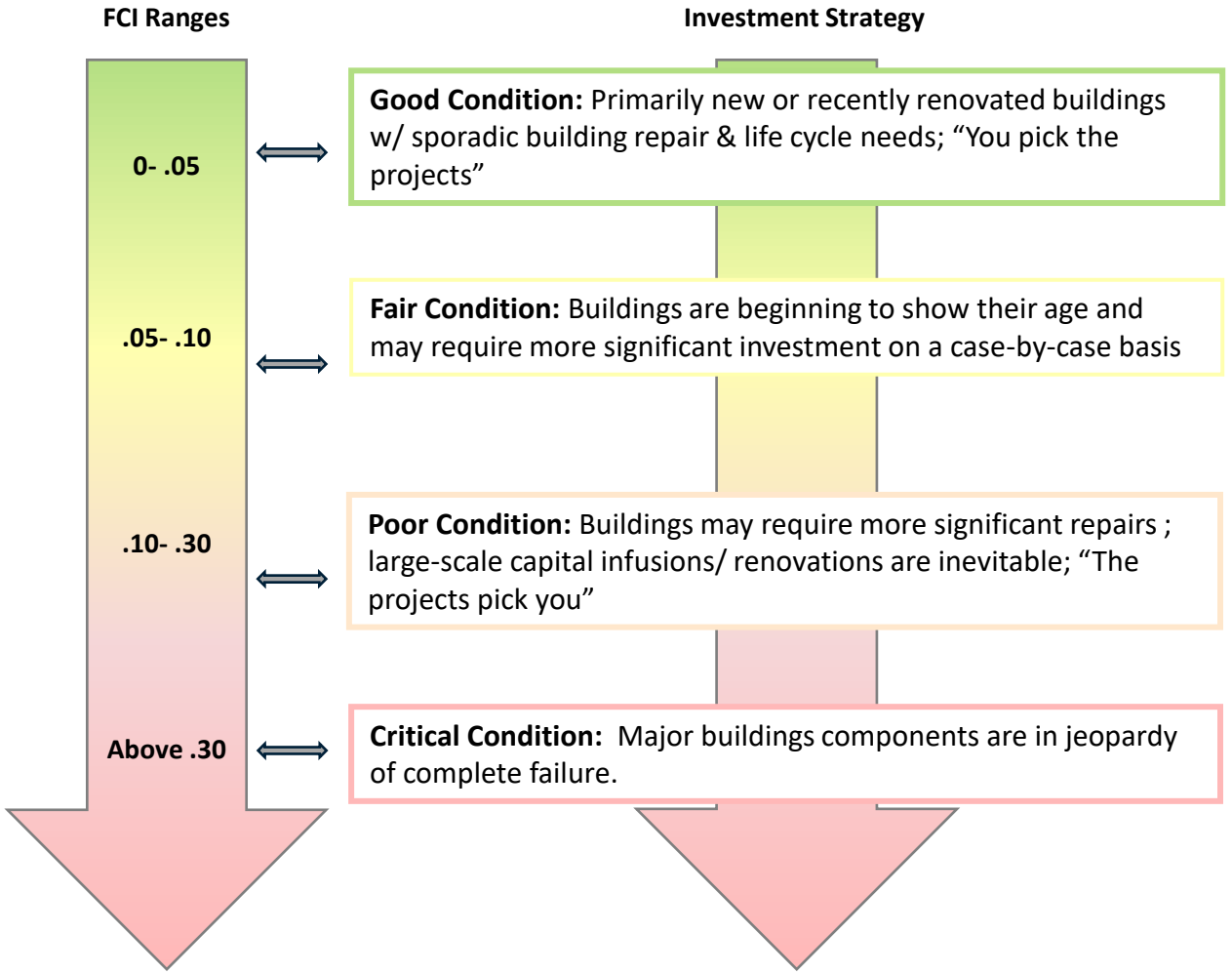


Facilities Condition Index

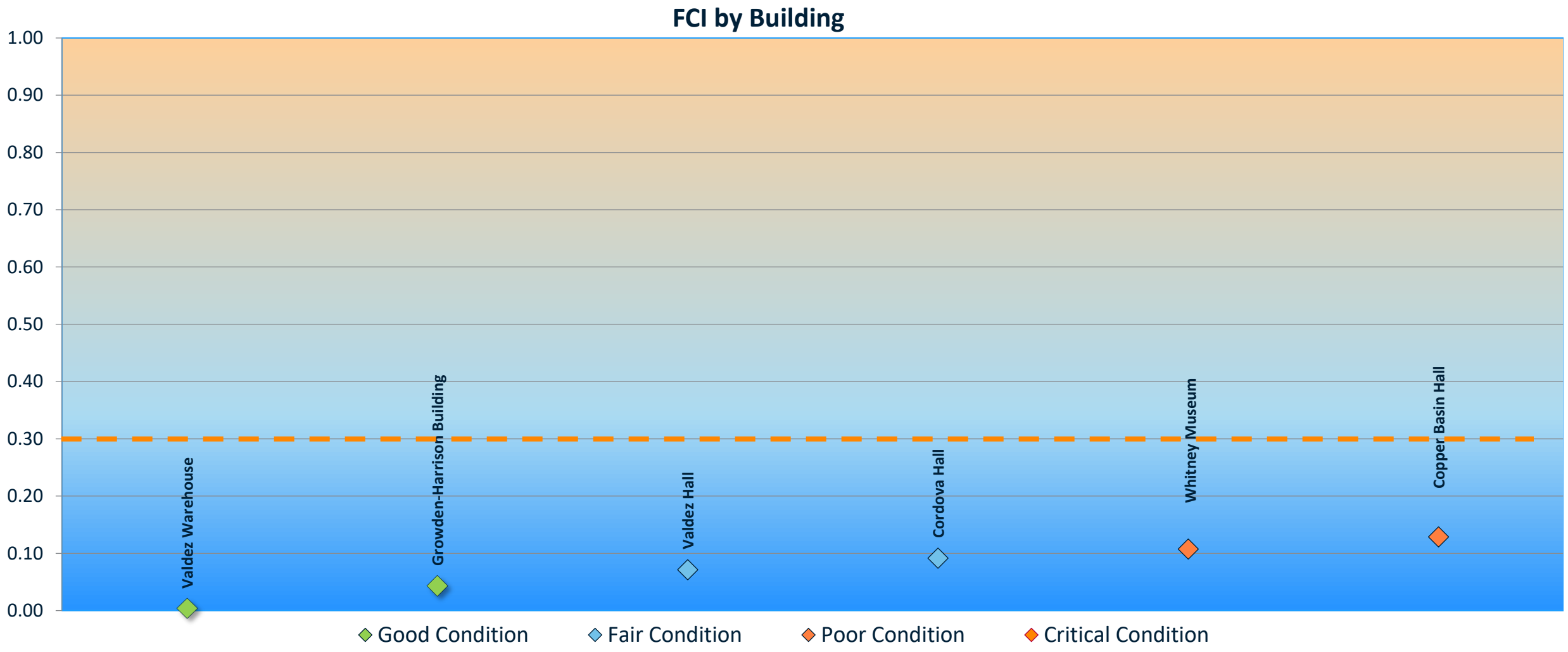
- Condition based investment strategy

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

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 – All Buildings



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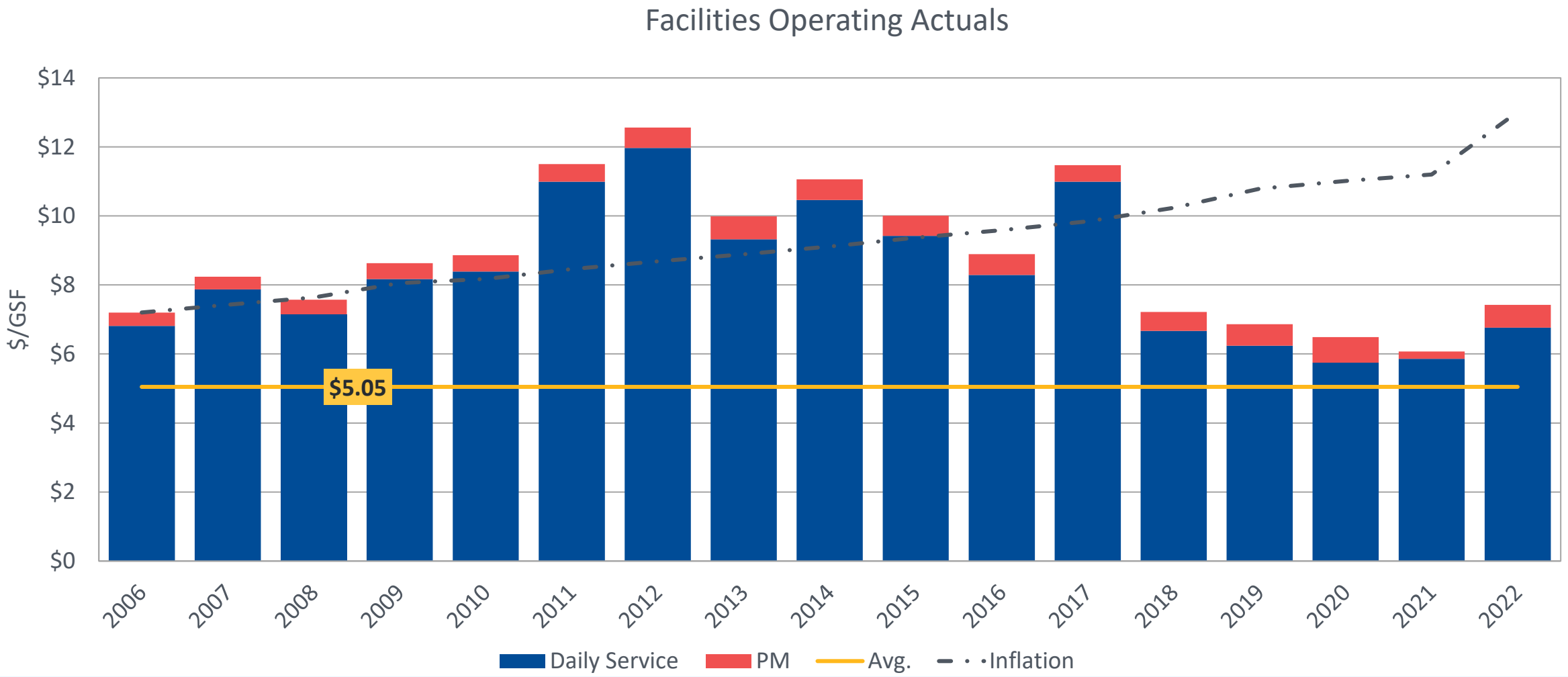
Operations Success:

Prince William Sound Community College

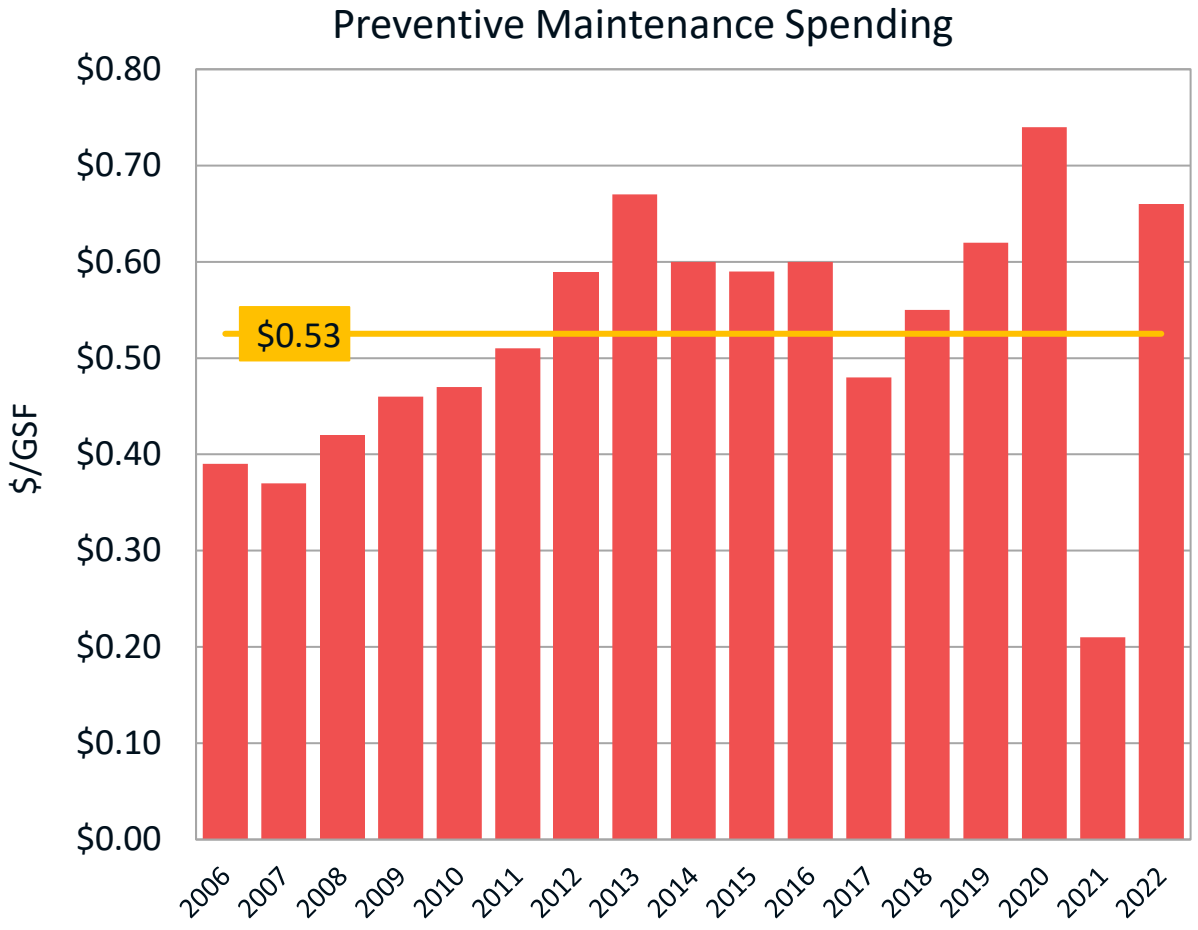
Facilities Operating Expenditures

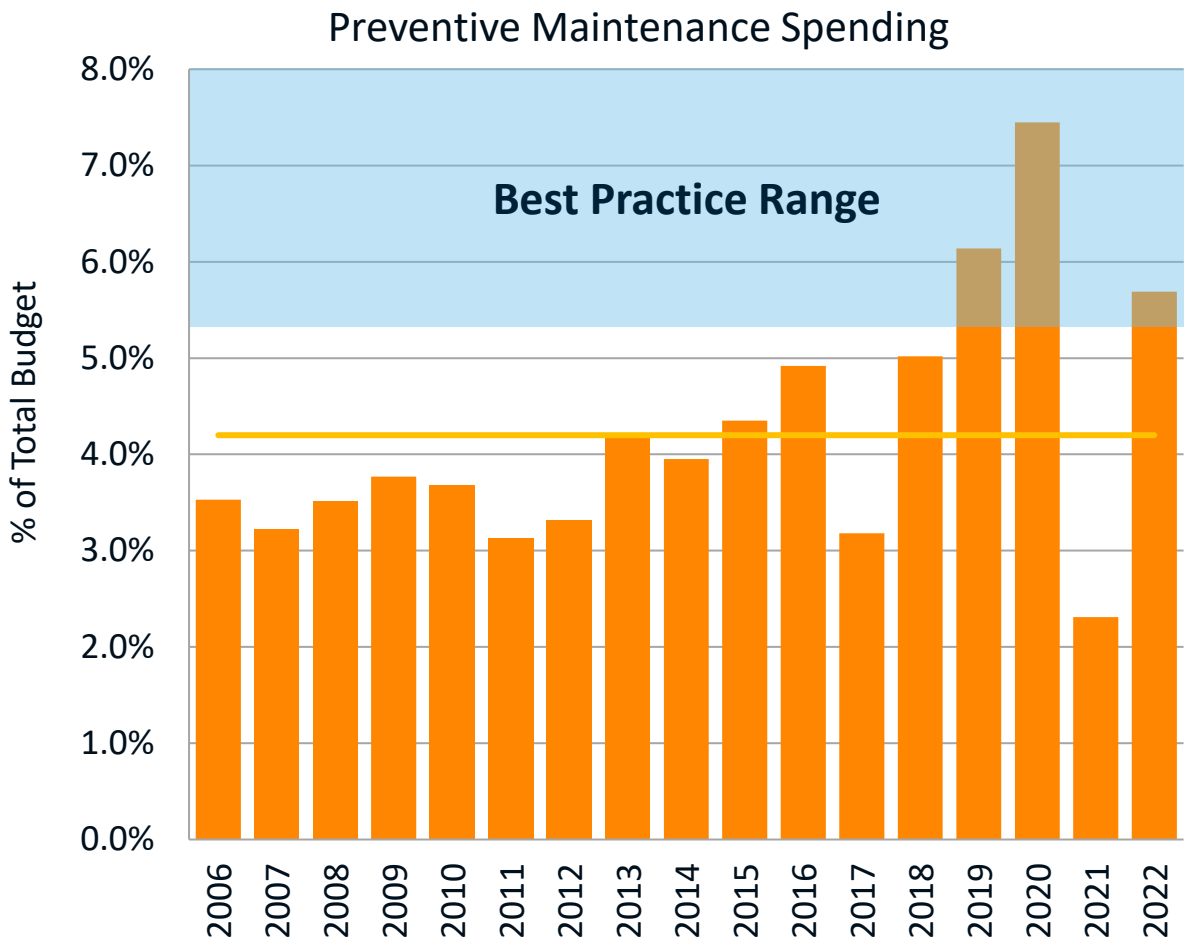
Operating expenditures increase for the first time since 2017, still below inflation



PM is within Recommended Spending Range

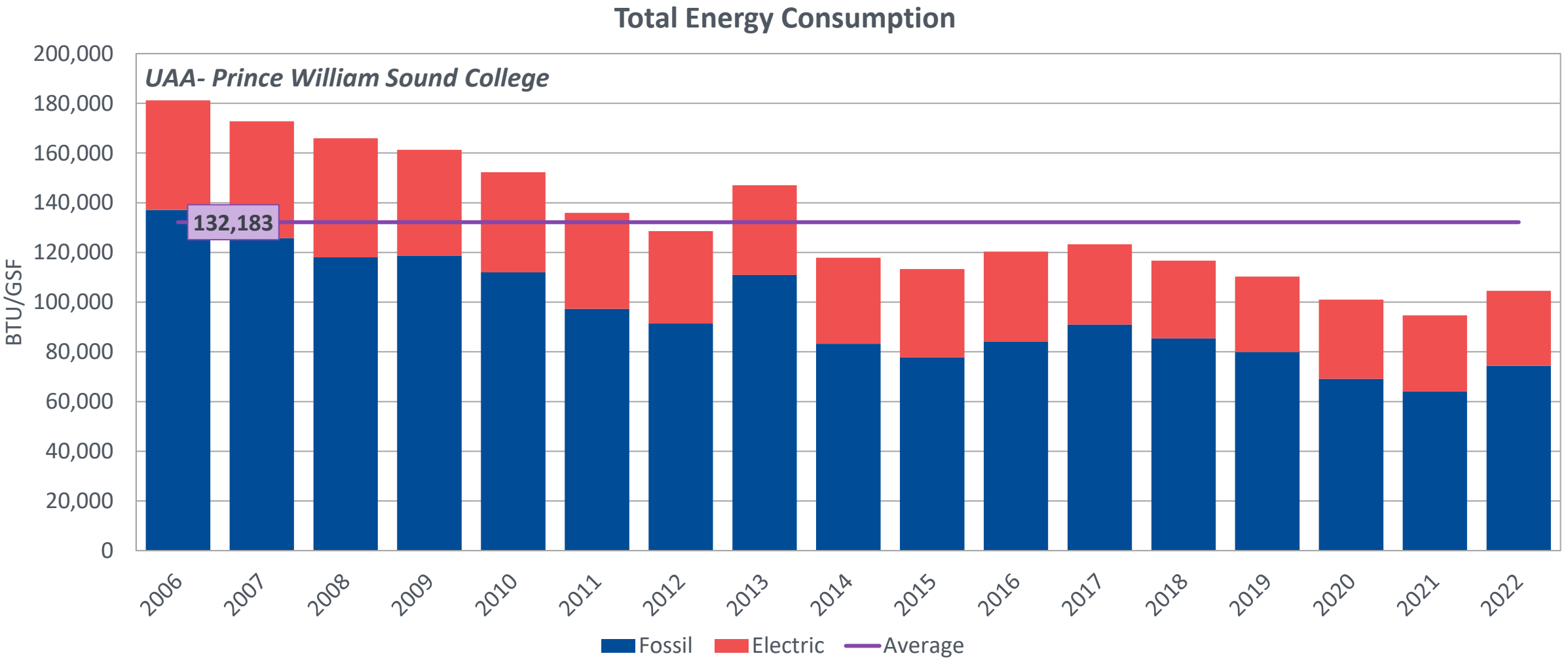
PM spending has rebounded from FY21 historic low





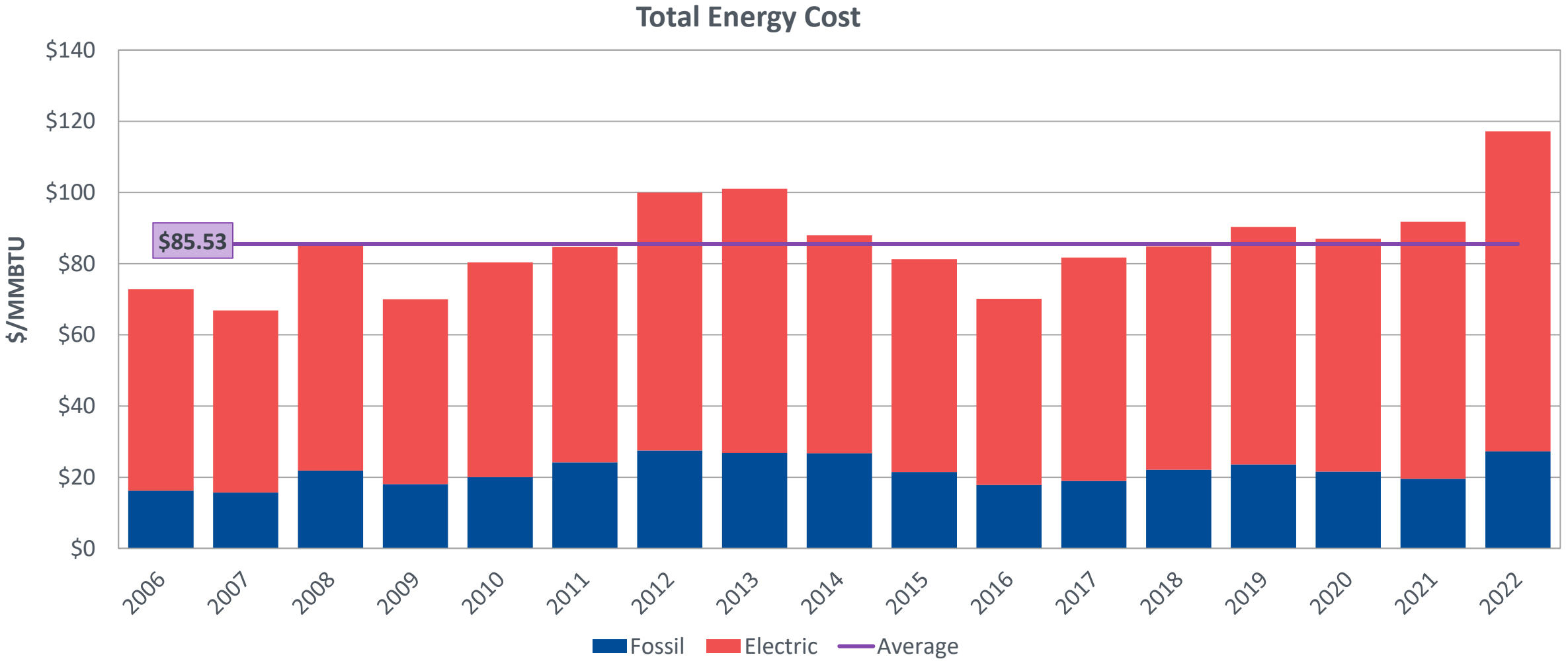
Total Energy Consumption

Consumption still below average, but has increased from FY21 low



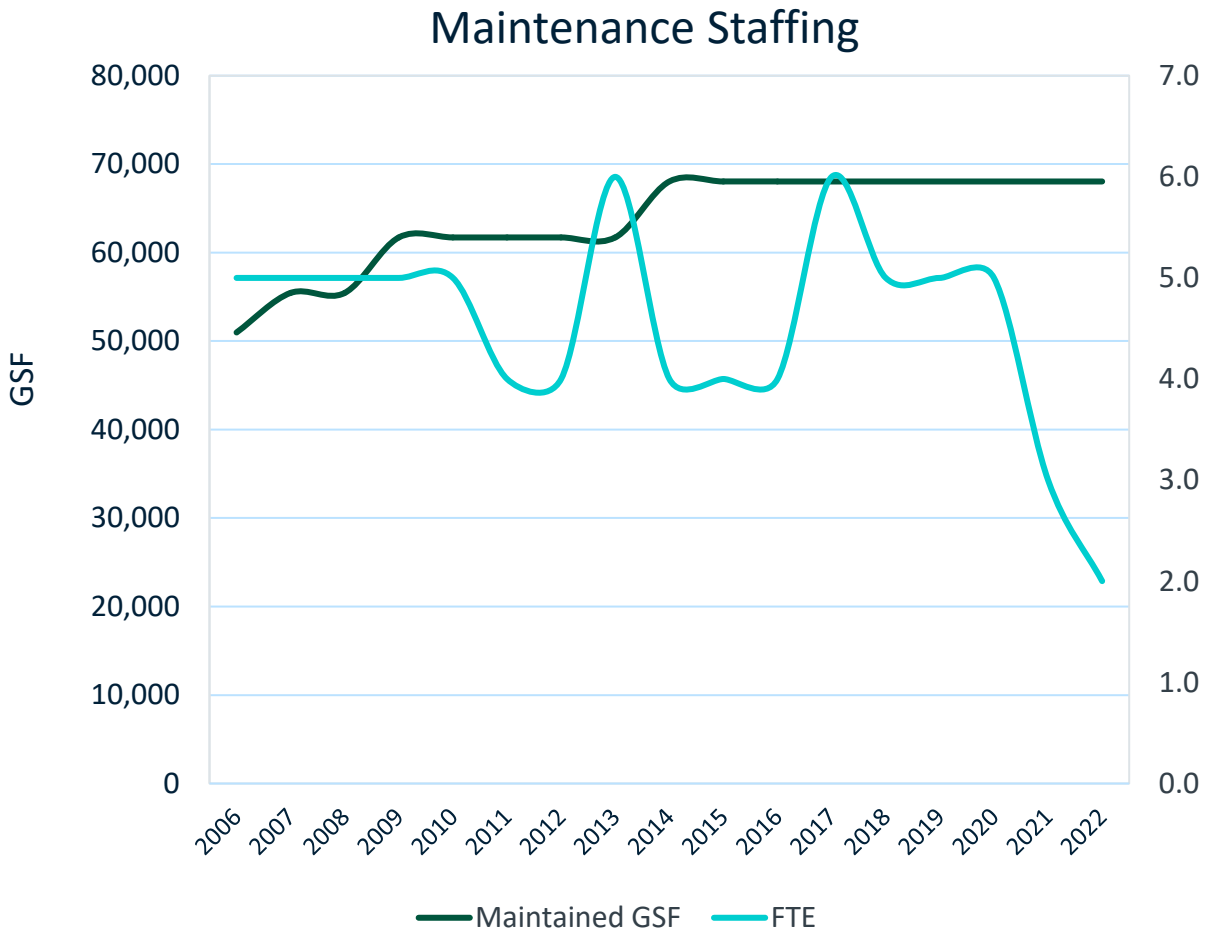
Energy Expenses are Increasing Over Time

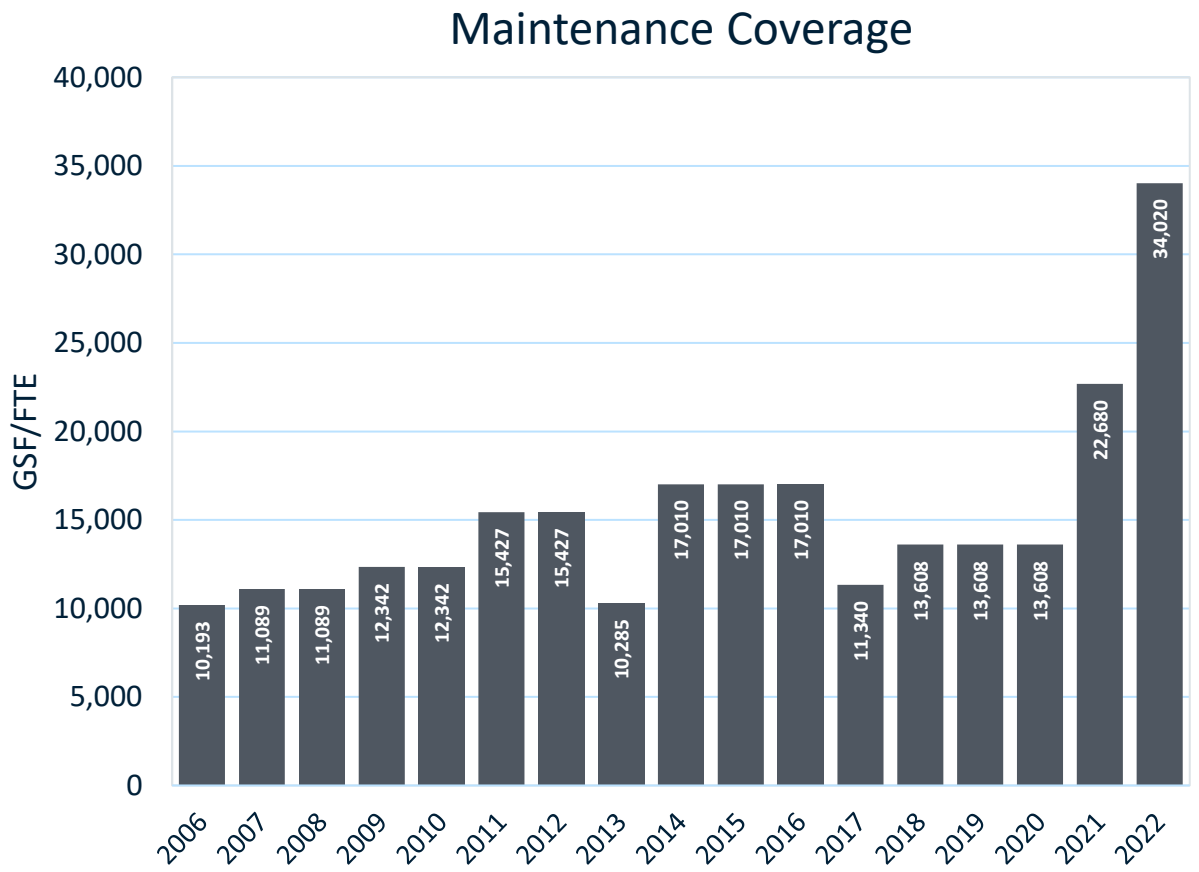
Significant increases in energy commodity costs result in dramatic rise



Maintenance Staffing Coverage

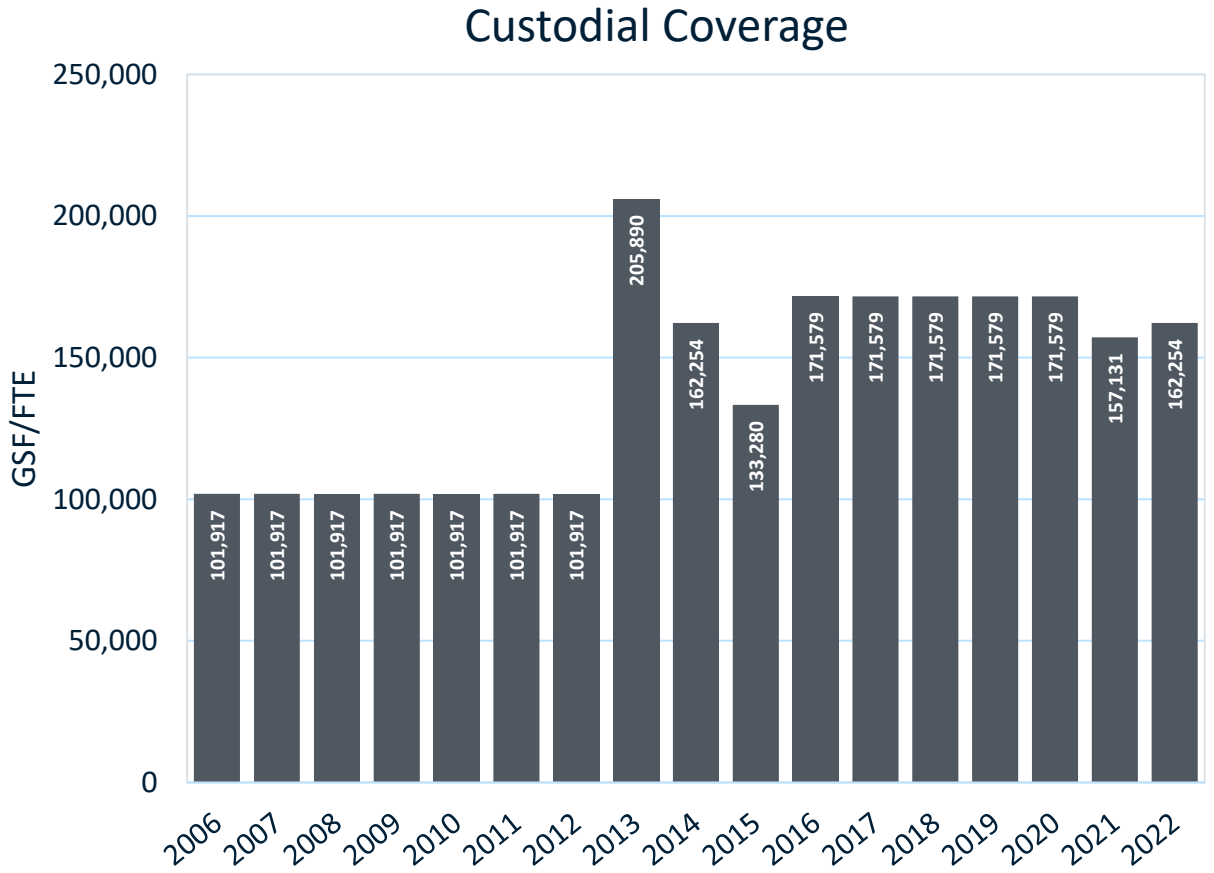
Coverage increases as a result of steep decline in FTEs





Custodial Staffing Coverage

No dedicated full-time custodian at PWSCC



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Questions & Discussion