Board of Trustees

Revised 2/26/2021

Finance, Facilities & Technology Committee

March 3, 2021 from 9:00 am to 12:00 pm
Via Zoom

The public is invited to view the meeting on YouTube. The link to the Board of Trustees YouTube page can be found the Board website: https://www.maine.edu/board-of-trustees/

AGENDA

9:00am - 9:30am **EXECUTIVE SESSION**
The Finance, Facilities, & Technology Committee will enter Executive Session under the provision of: 1 MRSA Section 405 6-C.

9:30am – 9:35am
TAB 10 Proposed Changes to Board of Trustee Policy 803 - *Naming of Physical Facilities*

9:35am – 9:45am
TAB 1 Neville Hall Renovations, UM

9:45am – 10:05am
TAB 2 Approval of FY2020 Maine Economic Improvement Fund Annual Report

10:05am – 10:15am
TAB 3 Interim Financing Resolution

10:15am – 10:25am
TAB 4 Financing Project Resolution, UM Fernald EEDC

10:25am – 10:55am
TAB 5 Rolling Capital Master Plan, UM

10:55am – 11:05am
TAB 6 Capital Projects Status Report and Bond Projects Update, UMS

11:05am – 11:25am
TAB 7 Sightlines Annual Facilities Report, UMS

11:25am – 11:45am
TAB 8 Housing Public Private Partnership (P3), UMF and UMPI

11:45am – 12:00pm
TAB 9 Review of IT Projects with a Value of $250,000 of Greater

Action items within the Committee purview are noted in green.
Items for Committee decisions and recommendations are noted in red.
Note: Times are estimated based upon the anticipated length for presentation or discussion of a particular topic.
An item may be brought up earlier or the order of items changed for effective deliberation of matters before the Committee.

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Neville Hall Renovations, UM

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **BOARD ACTION: X**

BOARD POLICY:
701 Budgets - Capital & Operating

UNIFIED ACCREDITATION CONNECTION:
N/A

BACKGROUND:
The University of Maine System acting through the University of Maine (UM) requests authorization to spend up to $1,500,000 to renovate classrooms and associated systems in Neville Hall located at the University of Maine. Funding for this project will come from the 2018 State Bond approved by Maine voters.

This request is pursuant to Board Policy 701 which requires projects with a total cost of more than $500,000 to be considered by the Board of Trusties or its Finance, Facilities and Technology Committee. In this case, the request is to approve and to forward this matter to the Consent Agenda of the Board of Trustees.

Neville Hall presently consists of lecture halls, classrooms and offices with one Active Learning Classroom. The spaces serve the English and Math Departments as well as campus scheduled classes. The building renovations are expected to be done in phases over the next few years.

Phase 1 proposed renovations would change three first floor classrooms into one Active Learning Classroom, making it the second Active Learning Classroom in the building. The renovations will also include multiple classrooms on the upper floors improving the learning environment. Collaborative spaces will also be developed as part of the renovation.

The renovations will also include the addition of a sprinkler system in the building (presently the majority of the building is not sprinkled) and upgrades to the toilet facilities which have not had a major renovation since the building's original construction in 1974. Other activities involved in the renovations include classroom furnishings, HVAC (heating, ventilation, and air conditioning), plumbing, electrical, fire alarm, Audio Visual and IT upgrades.

The design is ongoing with Phase 1 construction anticipated to commence in the Spring of 2021 with anticipated completion by Fall 2021. All renovations are expected to be complete by fall of 2022.

The recorded Sightlines Net Asset Value (NAV) for this building is 50%. No added operational expenses are expected as a result of this renovation.

2/22/2021

TEXT OF PROPOSED RESOLUTION:
That the Finance, Facilities and Technology Committee approves the following resolution to be forwarded to the Consent Agenda for Board of Trustee approval at the March 22, 2021 Board meeting:

> That the Board of Trustees, accepts the recommendation of the Finance, Facilities and Technology Committee, and authorizes the University of Maine System acting through the University of Maine to expend up to $1,500,000 of State Bond funds on the Neville Hall Renovations.

2/22/2021

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Approval of FY2020 Maine Economic Improvement Fund Annual Report

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **BOARD ACTION: X**

BOARD POLICY:

UNIFIED ACCREDITATION CONNECTION:
N/A

BACKGROUND:
Maine statute requires the University of Maine System to provide an annual report to the Governor and Legislature each year. In addition to listing the annual financial data, we also include an assessment of the achievement of the annual goals and objectives, and a summary of the research and development projects that have been funded. The annual report is included in the meeting materials for review and approval.

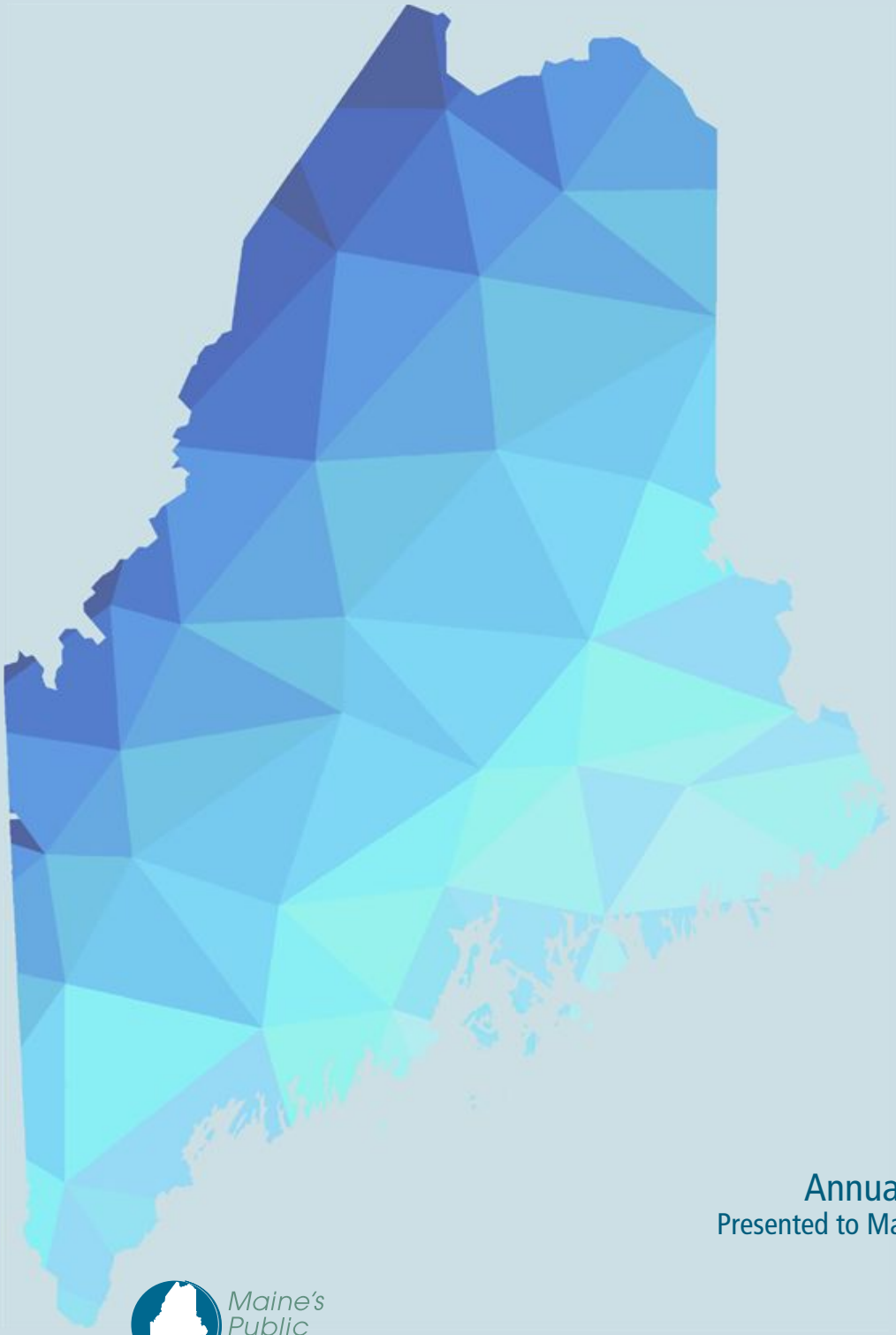
TEXT OF PROPOSED RESOLUTION:
That the Finance, Facilities and Technology Committee forwards this item to the March 22, 2021 Board of Trustees meeting for approval of the following resolution:

> That the Board of Trustees accepts the recommendation of the Finance, Facilities and Technology Committee and approves the 2020 Maine Economic Improvement Fund Annual Report as presented.

2/22/2021

DRAFT ONLY

MAINE ECONOMIC IMPROVEMENT FUND



Annual Report FY2020

Presented to Maine State Legislature

Maine's Public Universities

UNIVERSITY OF MAINE SYSTEM

A successful partnership among Maine's government, private sector and public universities to build Maine's economy and future workforce through research and development.

Maine's Public Universities

UNIVERSITY OF MAINE SYSTEM

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MAINE ECONOMIC IMPROVEMENT FUND
2020 ANNUAL REPORT

Memo from the Chancellor

The State of Maine's investment in the Maine Economic Improvement Fund (MEIF) is a vital and ongoing commitment to advancing the research mission of Maine's public universities. With the flagship University of Maine leading the way, the University of Maine System multiplies the impact of MEIF funding several times over by advancing knowledge and research that leads to job creation and economic growth for the benefit of all Maine people.

The importance of the UMS research mission has never been more clear than through the ongoing pandemic and public health emergency. COVID-19 has changed the world, and public research universities across the globe stepped up to rapidly respond in myriad ways unique to their research missions. In Maine, the research capacity of our public university system, bolstered by decades of MEIF and other investments, has been an important foundation for our ability to help lead Maine's fight against this global pandemic. Even as our universities successfully transitioned to remote teaching and learning, talented faculty and researchers, staff and students stepped up to serve our state, with university laboratories, centers and facilities pressed into service in new ways to protect public health and solve the problems that Maine's communities and companies faced in the pandemic.

As 2021 begins, the availability of effective COVID-19 vaccines developed with previously unheard of speed and coordination between government, private enterprise, and the academy is a powerful reminder of the importance of sustained investment in science and research capacity. But even with vaccines rolling out, the pandemic's financial toll continues to reverberate through our economy. Here in Maine, our public universities will play a central role in accelerating economic recovery and long-term resiliency by expanding the human capital and innovation that will catalyze recovery, growth, and greater prosperity for the people of this state.

Increasing investment in research through public sources like MEIF and federal grants and contracts also creates opportunity to leverage up to $150 million in private grants awarded to the University of Maine System in October 2020 by the Harold Alfond Foundation. Unlocking these additional transformational investments will be critical to realizing our full potential for Maine, including the incredible impact of our research enterprise.

This MEIF report, which details the results of the System's research efforts over the last fiscal year, demonstrates what advancements are possible from sustained research investment. A few highlights include:

- In FY2020, the state's $17.35 million MEIF investment was leveraged at a rate of 5.3:1 by our UMS campuses for an additional $92.4 million in federal and private-sector grants and contracts in the seven statutory sectors.
- MEIF funds, and the external grants and contracts they leverage, supported the work of 575 researchers and technicians and 1,221 graduate and undergraduate students.
- These grants and contracts provide funds to purchase major equipment to upgrade and outfit university laboratories.
- Maine's public universities secured 11 new US patents and 65 associated foreign patents, worked on development projects with large and small businesses and start-ups, and provided R&D support to 324 companies and individuals.

As required in the statute that created MEIF, included with this FY2020 MEIF report are financial reports and informational details.

I am available at your convenience to discuss how we use MEIF funding to expand knowledge, research, and economic opportunity in Maine. I would welcome the chance to do so.

Dannel Malloy
Chancellor

The Maine Economic Improvement Fund Fiscal Year 2020

MEIF Background

The Maine Economic Improvement Fund (MEIF) represents the ongoing commitment between the state, the private sector and our public universities, working together to advance research and economic development for the benefit of all Maine people.

Since the Maine Legislature established MEIF in 1997, MEIF has positioned the University of Maine System (UMS) at the center of statewide efforts to leverage economic development through targeted investment in university-based R&D. MEIF continues to be funded through an annual state appropriation to UMS.

These funds provided through state appropriation to the University of Maine System are dollars specifically directed to support university-based research, development and commercialization in the state's legislatively designated seven strategic technology areas:

- Advanced Technologies for Forestry and Agriculture
- Aquaculture and Marine Sciences
- Biotechnology
- Composites and Advanced Materials Technologies
- Environmental Technologies
- Information Technologies
- Precision Manufacturing

The University of Maine and the University of Southern Maine have well-established research, development and commercialization activities accounting for 97 percent of the MEIF activity. In 2009, the University of Maine System established the Small Campus Initiative Fund to promote seven-sector research and development activity at the other five UMS campuses and, as of 2013, Maine Maritime Academy (MMA).

Role of MEIF

The role of MEIF is to support the solution of fundamental problems and discover new solutions, and to provide researchers at Maine's public universities with the investment necessary to:

- attain external grants and contracts to support R&D activities in Maine's seven sectors
- attract and retain world-class researchers
- provide support for modern laboratories and state-of-the-art equipment
- create new products, patents, technologies, companies and exciting job opportunities in Maine
- create and sustain economic development and innovation

MEIF funds often provide the required match to acquire federal or private sector grants, and this investment in Maine's public university R&D helps faculty, staff and students successfully leverage tens of millions of dollars in grants and contracts annually.

MEIF directly supports faculty, grad students and staff who are working to make the universities more competitive for federal grants, expanding opportunities to support Maine companies and involve students in research learning and real applications of their education.

MEIF increasingly fosters university partnerships with business and industry through economic development collaborations, entrepreneur training programs, business incubators, technology accelerators, business research and other programs. These efforts lead to new Maine-based products, technologies, patents and spin-off businesses.

The University of Maine and the University of Southern Maine are the two universities with established research and graduate programs in the seven targeted research sectors and have received MEIF funds, with 76.6 percent to the University of Maine and 19 percent to the University of Southern Maine. In addition 1.4 percent of MEIF funds are awarded to the University of Maine Machias and 3 percent to the other campuses and Maine Maritime Academy.

Indicators of success show that Maine's MEIF investment is paying dividends by:

- Creating businesses and jobs, including the jobs of more than 575 faculty and staff, and over 1,221 students working on MEIF-funded projects
- Boosting Maine's economy by leveraging MEIF funds to bring federal and private-sector grants and contracts to Maine.
- Building capacity and expertise to help Maine companies solve problems and commercialize innovation.
- Generating new intellectual property and working to commercialize patents and innovations.
- Capitalizing on natural resources and core strengths by focusing R&D efforts on economic sectors where Maine can make real gains. University research personnel use MEIF resources to support the staff, equipment and facilities they need to successfully pursue and develop research projects.

Progress in FY2020: Strategic Outcomes, Goals and Metrics

In December 2018, the University of Maine System Board of Trustees issued a Declaration of Strategic Priorities, the first of which is Advancing Workforce Readiness and Economic Development, with a priority action item: Strengthen research and economic development efforts to support Maine industries, and to foster business formation and expansion. The five-year University of Maine System Research and Development Plan was approved in the Spring of 2019 with three specific goals that drive the UMS research activities including the Maine Economic Improvement Funds.

Goal One - Make Maine the best state in the nation in which to live, work, and learn by 2030

Goal Two - Establish an innovation-driven Maine economy for the 21st century

Goal Three - Prepare the knowledge-and-innovation workforce for Maine

The the following metrics help measure the progress against these goals and recognize that MEIF activity is restricted to Maine's legislatively selected seven R&D sectors.

UMS MEIF Metric 1 - Increase Research Capacity and Activity
UMS MEIF Metric 2 - Support New Technologies, Licensing, and Commercialization
UMS MEIF Metric 3 - Increase Economic Development Partnerships
UMS Metric 4 - Support R&D Workforce Development

This report addresses these goals. In addition, the University of Maine System reports R&D outcomes annually through the statutorily required survey of Maine R&D activity administered by the Maine Department of Economic and Community Development Office of Innovation (5 MSRA 13107).

The R&D Strategic Outcomes and related MEIF goals are:

MEIF Target 1

UMS maintains a sponsored programs grant and contracts effort growing greater than 3 percent annually on a three-year rolling average from a 2013 baseline of $45 million and NSF-defined total research expenditures of $45 million in the MEIF sectors. Activity from the seven MEIF sectors will account for 50 percent of the total R&D grants and contracts, with a 3 percent annual growth on a three-year rolling average. The utilization of MEIF funds will leverage other resources including grants and contracts from the federal government and the private sector increasing the impact of the State's investment.

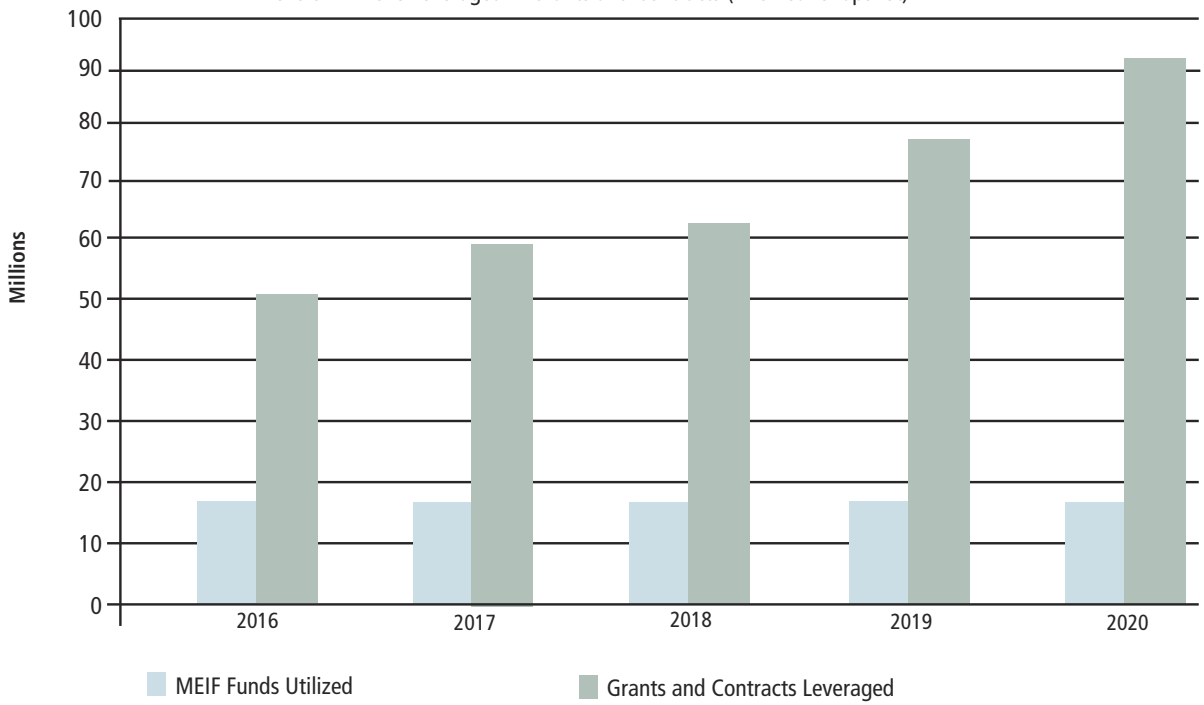
Table 1

FY2020 Total Grants and Contracts (ALL Activity Inclusive)	Number of proposals UM/UMM	Total Value UM/UMM	Number of proposals USM	Total value USM	number of proposals ALL	total value ALL
Total Proposals Submitted	852	$202,300,441	203	$40,000,000	744	$239,956,026
Total Proposals Awarded	666	$107,552,997	150	$34,000,000	497	$138,194,536

Grants and Contracts Awarded in MEIF Sectors ONLY	FY2016 Awards	FY2017 Awards	FY2018 Awards	FY2019 Awards	MEIF Awards FY2020 UM/UMM	FY2020 USM	FY2020 Total
Aquaculture and Marine	12,631,690	21,229,069	16,032,068	8,084,961	8,566,617	132,144	8,698,761
Biotechnology	2,399,487	3,821,390	6,552,964	16,035,473	14,412,593	199,313	14,611,906
Composites	6,974,264	13,504,642	9,952,947	11,478,611	31,070,913	22,738	31,093,652
Cross Sector	507,842	4,274,394	3,034,812	21,301,337	2,040,950	742,480	2,783,430
Environmental Technologies	5,045,536	5,543,121	7,407,213	7,250,820	6,918,715	548,272	7,466,987
Forestry and Agriculture	10,317,799	4,660,014	10,685,631	9,598,475	17,528,845	95,721	17,624,566
Information Tech	11,497,199	5,292,726	5,582,266	951,594	5,842,585	1,226,528	7,069,113
Precision Manufacturing	1,009,921	1,602,646	3,099,123	1,870,527	3,077,779	0	3,077,779
Total	**$50,383,738**	**$59,334,874**	**$62,347,023**	**$76,571,798**	**$89,458,997**	**$2,967,197**	**$92,426,194**
						FY2019–FY2020 Increase 21%	

Strategic Outcomes, Goals and Metrics

Figure 1 MEIF Return on Investment (UMS)
Tens of Millions Leveraged in Grants and Contracts (Five-Year Snapshot)



In summary, the MEIF Target 1 for increasing external grants and contracts leveraged through MEIF investments saw an increase of 21 percent over the previous fiscal year exceeding the goal of 3 percent per year. This favorable trend continues in a positive direction after decreases over the last five years. Continued growth can be attributed to the efforts of UMS researchers and energized by the turnover in faculty researchers resulting in over 150 new faculty in the last few years. New faculty researchers typically need several years of start-up activity to become competitive proposal writers, and their success is starting to show. Another key contributor to this growth is larger multi-principle investigator proposals at well-established centers.

Recognizing the lead time for proposal preparation, sponsor review and selection, and contract activity to begin, there can be a one- to two-year lag in output. Proposal preparation and submissions remain steady. For the purpose of this report, a private-sector contract is counted as a single proposal submission.

MEIF Target 2

UMS annual revenue from commercialization including intellectual property licensing from the MEIF sectors increases at least 10 percent annually on a three-year rolling average.

Table 2

MEIF Target 2 — Commercialization Activity	FY2016	FY2017	FY2018	FY2019	FY2020
Revenue from Commercialization	$204,709	$329,840	$914,120	$289,088	$519,019
Rolling three-year avarage	$276,063	$298,091	$482,890	$511,016	$574,076
Number of Patents Filed (US/PCT)	19	18	20	17	16
Number of Patents Issued (US)	5	8	6	6	12
Number of License Agreements and License Options	8	7	9	11	8

FY2019–FY2020 Change in Three-Year Average Revenue 11%

In summary, three-year rolling average revenue from commercialization has shown an overall increase since over the last decade. Commercialization relies on private companies utilizing UMS intellectual property to secure private investment to advance technology, products and services into markets. Maine continues to rank very low in comparison to other states for its industry R&D and innovation. This has been recognized by the state economic development agencies and is addressed in the 2020 Maine Economic Development Strategy.

The timeline for commercialization of newly invented technology is hard to predict, but it is lengthy. U.S. patent applications take four to five years from initial application to issuance. Newly issued UMS patents reported above and detailed in Appendix 1 were filed four to five years ago. In addition, UMS technologies generally fall into categories, such as transportation infrastructure, pulp and paper and sensors and biotechnology.

These sectors have longer timelines from lab to market at five to ten years. UMS is focusing additional effort to accelerate commercialization with private-sector partners and other investment programs, such as the Maine Technology Institute and Maine Venture Fund.

MEIF Target 3

The UMS annual revenue from activities with business and industrial partners in the MEIF sectors continues to increase reaching $10,876,661 million in FY2020, bolstered by a few large projects started before the pandemic while number of business and industry contracts in the MEIF sectors dropped off primarily in the last quarter of FY2020, due to the pandemic.

Table 3

MEIF TARGET 3 — Business and Industry Contracts	FY2016	FY2017	FY2018	FY2019	FY20
Revenue from Business and Industrial Contracts	$4,836,138	$5,035,394	$6,339,260	$7,211,422	$10,876,661
Number of Business and Industrial Contracts	519	565	528	530	327

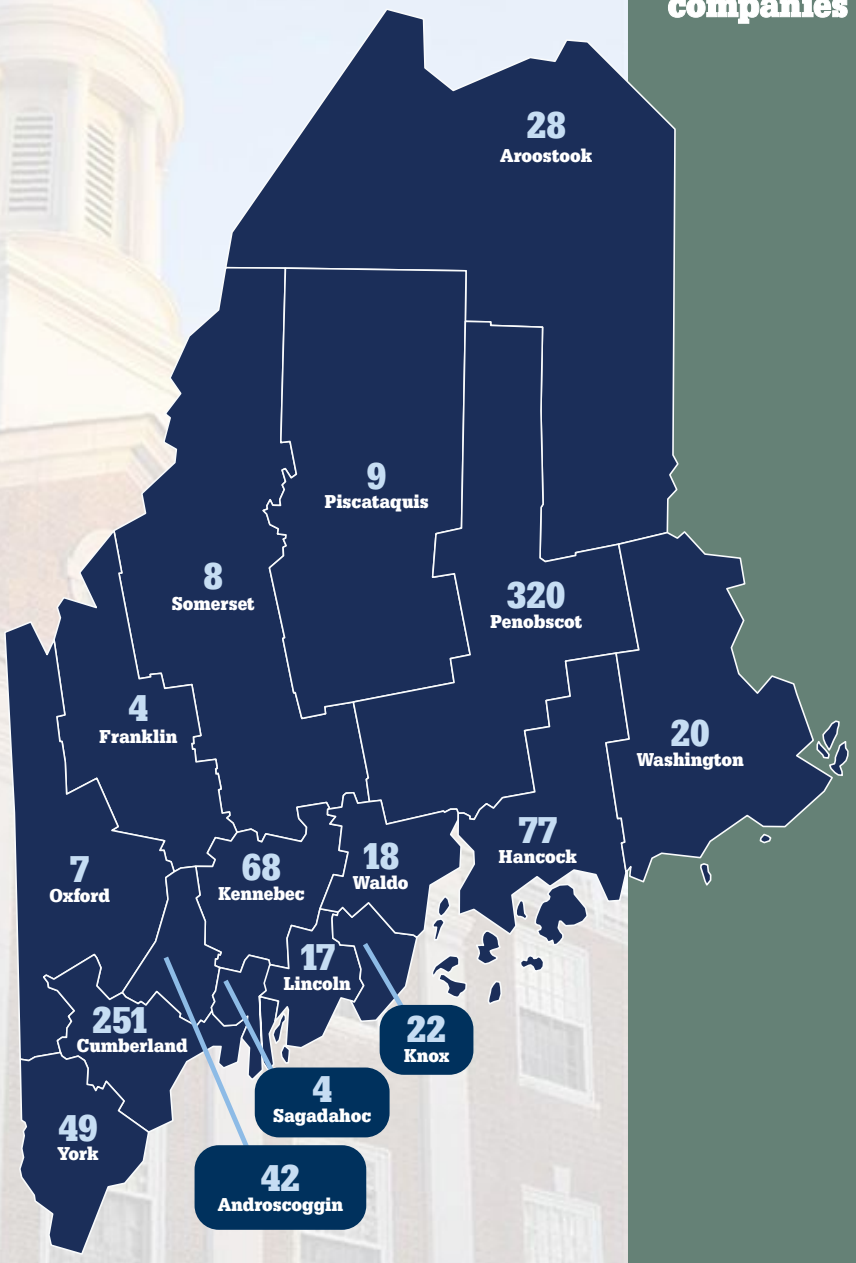
FY2019–FY2020 Change in Revenue 50.83%

IIn summary, many MEIF investments not only leverage external grants and contracts, but through a combination of MEIF funds, and grant and contract funds, help UMS campuses build capacity to work directly with industry partners. Figure 2 illustrates the variety of campus-based programs that work directly with companies. Some industry partners will be companies licensing and commercializing UMS intellectual property, while many companies are working with UMS campuses to get assistance with solving their problems or perfecting their inventions and innovations. UMS projects with business and industry are steady and activity is meeting the goals and metrics of this Target. Figure 2 demonstrates the statewide nature of these partnerships for those contracts that are currently tracked. Many additional companies, inventors, and entrepreneurs receive advice and guidance but do not result in formal contracts.

Strategic Outcomes, Goals and Metrics

Office of Innovation and Economic Development

Figure 2
Innovation projects with Maine companies FY2016–FY2020



Every day, the University of Maine strives to turn research and development activities into new opportunities that will create jobs and grow Maine's economy.

In the past five years, UMaine has supported 944 innovation projects, providing access to facilities and expertise to help organizations with research, new products and business development.

944
Innovation projects with Maine companies

MEIF Target 4

Support R&D Workforce Development

UMS shall maintain a concerted effort to involve faculty, staff and students participating in research, development and commercialization, and shall report annually the number of employees directly supported by MEIF funds and by grants and contracts in the MEIF sectors. As external funding is hard to predict, there is no specific numerical goal for employee count, but UMS shall report the annual number of faculty, staff and students to indicate trends and identify opportunities for growth.

In summary, state economic analysis predicts economic growth in Maine based on an available trained and educated workforce. Growth in the seven MEIF sectors is especially dependent on the available workforce. MEIF seven-sector projects at UMS rely on regular faculty and staff, as well as many "soft money" employees — those hired to work on specific grants and contracts, and paid by those grant and contract funds. UMS employees and students gain valuable on-the-job training and experience, and may then contribute to the employment base within these sectors after completion of the grants or graduation. Grant and contract revenue is a strong contribution to this workforce development. UMS counts employees involved in this activity, and will continue to pursue the growth in employment numbers related to growth in grant and contract activity. Non-student employees are tracked as full-time equivalents (FTEs) based on a 40- hour/52-week work year. Student employees, tracked by head count, generally work less than 20 hours per week during the academic year.

Grant and contract revenue also is an important source of funding for students' salary, tuition and other types of support, allowing many research-active students to offset their cost of education while getting valuable skills and on-the-job experience, positioning them well to be leading contributors to Maine's key growth sectors.

Success and Strategic Impact

By investing MEIF funds in researchers, facilities and matching for grants, UMS has attracted more than $340 million over the last five years in federal and private-sector grants and contracts related to the seven strategic research areas. This funding directly results in Maine products and technologies, such as biofuels, pulp and paper products, biomaterials and bridges, new potato varieties, aquaculture technologies, offshore wind hulls and software, which lead to improvements in Maine's industries.

Return on Investment

Each year, the power of the state's MEIF appropriation is expanded by tens of millions of dollars in federal and private funds for important research, development and commercialization. The University of Maine as the state's land grant, sea grant and space grant institution utilizes its long-established research capacity and infrastructure to attract the majority of these external funds.

Other UMS schools continue to build and partner within federal and private-sector grants and contracts.

Developing Workforce and Creating Jobs

Five hundred plus full-time equivalent jobs are funded in Maine through the grants and contracts leveraged and expended related to MEIF. These positions include faculty, technicians and research staff. Currently 1,221 graduate and undergraduate students are funded for their involvement in research, development and commercialization. This student involvement in research, development and commercialization projects is comparable to an internship and gives students great real-world experience as well as life-long networks and connections.

Table 4-A FY2020

MEIF Target 4 — Workforce Development	Wages Paid from MEIF	Wages Paid from External Grants/Contracts	Totals
Number of Faculty and Staff Supported (FTE = Full-Time Equivalent)	156	418.95	574.95
Number of Graduate Students Supported (Headcount)	17	445	462
Number of Undergraduate Students Supported (Headcount)	91	668	759

Table 4-B

Graduate and Undergraduate Student Costs Paid from Grants and Contracts	FY2016	FY2017	FY2018	FY2019	FY2020
Student Salaries and Wages from Grants and Contracts	$5,255,861	$4,957,536	$4,853,956	$6,361,381	$6,869,073
Student Tuition Paid by Grants and Contracts	956,963	870,787	795,339	916,618	$1,384,425
Student Fellowships Paid by Grants and Contracts	197,744	233,111	373,118	457,884	$422,111
Student Health Insurance Paid by Grants and Contracts	247,960	203,406	214,000	298,386	296,807
Total Soft Money Student Support	**$6,658,528**	**$6,264,840**	**$6,236,413**	**$8,034,269**	**$8,792,417**

FY2019–FY2020 Change 12%

MEIF Success Stories

MEIF in FY2020: Responsiveness and Resilience

The Maine Economic Improvement Fund has been a critical driver of R&D at Maine's public universities for the last 23 years, helping to establish and sustain infrastructure and expertise to support and grow Maine's seven sectors.

FY2020, defined largely by the COVID-19 pandemic, did not represent a typical year for the State of Maine or the University of Maine System.

The story of FY2020, for both our state and our university system, is one of responsiveness and resilience. Thanks to ongoing investment in our facilities and programs, including MEIF, Maine's public universities have been able to mount a robust response to many challenges the public health crisis has brought to our state. Our commitment to advance research and economic development for the benefit of all Maine people will bolster Maine's resilience in responding to the myriad effects of the pandemic, across sectors, in the coming months and years.

Events of the past year have highlighted the important role Maine's public universities play in supporting the state's major economic sectors at all times, with this crisis serving to reinforce the universities' existing bonds with our communities, and forge new ones.

As significant as the pandemic's impact has been, it did not define 2020. Campus research activities persisted, enjoying significant growth at UMaine and showing the resilience of the university's research enterprise in the face of an unprecedented challenge. As with our ability to respond to needs related to the pandemic, our ability to sustain our research commitment is thanks to years of investment coupled with strategic emphasis on the growth and development of the research enterprise and its resulting impact on Maine and beyond.

Following are stories that bear out these themes, some focused on COVID-19 response efforts, others sharing progress in key research areas focused on Maine.

Covid-19 Response

While COVID-19 interrupted the 2020 spring semester, forcing us to empty campuses and pivot swiftly to a remote learning model, the ongoing pandemic has offered unique opportunities for collaboration with the State of Maine and within our campus communities.

University of Maine System COVID response efforts are governed by an umbrella agreement between the University of Maine System and the Maine Emergency Management Agency (MEMA) that allows the system to provide goods and services to Maine health care facilities and agencies as coordinated by MEMA.

These systemwide efforts have taken many forms since the start of the

pandemic, many advanced by a UMaine-led rapid-response innovation team that brought together university researchers and staff, representatives from health care and government and community partners. All have relied on the expertise and infrastructure available at Maine's public universities.

Hand sanitizer a signature effort

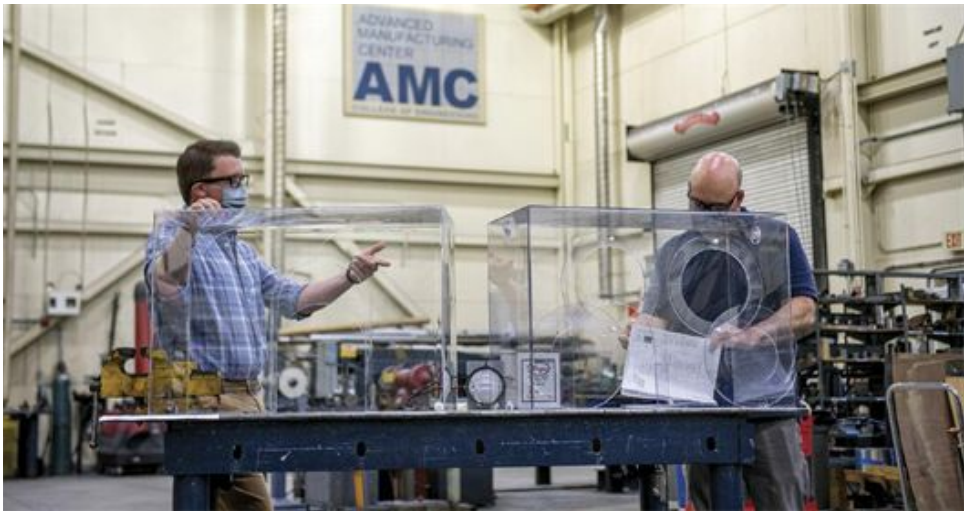
In the early days of the public health crisis, UMaine's pilot-scale pulp and paper research facility was at the center of efforts to manufacture hospital-grade hand sanitizer and produce large batches of fit-test chemicals. The Process Development Center, part of UMaine's department of Chemical and Biomedical Engineering, helped health care centers avert a supply crisis by making and delivering locally made hospital-grade hand sanitizer in the face of global shortages.

With its existing capacity for commercial-scale products and chemical engineering processes, the facility was able to pivot swiftly to scale up production of hand sanitizer to meet urgent early needs. From there, the center partnered with Maine's craft distillers and brewers to obtain a steady supply of ethanol, and then helped distillers ramp up their own production to form an in-state supply chain. Maine-made sanitizer was able to meet health care needs and beyond, buoying Maine's brewing and craft distilling industries at a time of great uncertainty. More than 3,000 gallons of sanitizer was produced on the UMaine campus alone and distributed to more than 100 health care facilities.

The PDC's capacity and expertise also proved useful in response to an urgent request from the Maine Center for Disease Control and Prevention. The agency needed chemical solutions used to fit medical workers with N95 masks, a key piece of personal protective equipment (PPE), and was facing a national shortage of fit-testing kits and test solutions

Chemical solutions with a distinctive taste or odor are used in the N95 fitting process to ensure that the mask forms a tight seal with the wearer's face and keeps contaminated air out. In May and June, UMaine delivered more than 4,200 bottles of fit-testing solutions for Maine CDC to distribute to the Maine National Guard and partner agencies that conduct the tests.

MEIF Success Stories



Aiding manufacturers

The Advanced Manufacturing Center (AMC) — UMaine's manufacturing business and engineering support and service center — has also been busy in response to COVID-19. The center is dedicated to promoting economic and workforce development and was established to provide a high-level technical resource that would be readily accessible to businesses, entrepreneurs, students and researchers throughout Maine.

In the COVID-19 era, this mission has taken on new meaning as AMC has served Maine manufacturers and other sectors in unexpected ways.

Since the pandemic started, AMC has provided design, prototyping and materials testing services for a variety of companies looking to respond to shortages and emerging needs.

The center has helped a number of Maine companies, including L.L.Bean and Strainrite, gauge the particle filtration properties of different types of material they intended to use to make face coverings. As part of this effort, the center tested in excess of 100 different types of material, everything from basic cotton t-shirts to technical fabrics.

In some cases, this work has expanded beyond initial testing. AMC has worked closely with Hermon-based Ntension as the company leveraged existing fabric manufacturing capacity to develop a general use mask that could be used in certain health care settings. Ntension, which supplies masks to Northern Light Health, is exploring creation of an automated medical product line, and has continued to work with the AMC on product development and process improvements as they begin to build capacity and pursue FDA approval for their masks.

In a similar vein, the AMC has also tested N95 masks before and after different sterilization treatments to ensure the filtering performance has not been degraded, part of an effort to support hospitals exploring the limited reuse of PPE.

AMC also assisted Maine plastics manufacturers with new products, including evaluating prototype designs for clear plastic face shields that were eventually produced by the hundreds of thousands in Maine.

A request from MaineHealth led to AMC prototyping two designs for "aerosol boxes" that

can be used to protect medical workers during transportation and intubation procedures in patients suspected to have COVID-19. AMC's designs, developed in coordination with UMaine biomedical engineering researchers and with help from the Maine Manufacturing Extension Partnership, were tested in area hospitals and refined based on feedback from the front lines. Both variations of the boxes were manufactured in Maine for Maine hospitals.

Since late summer, the AMC has been a key partner in a sweeping project aimed at helping Maine's manufacturing sector weather the ongoing economic effects of the pandemic.

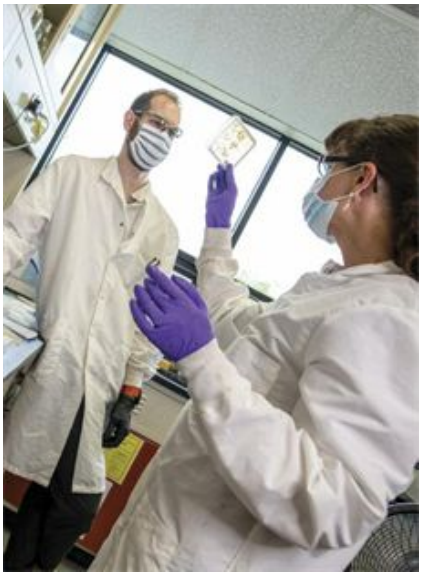
The COVID Countermeasures Project is a collaborative effort that marries the AMC's product and process development and research expertise with services provided by the Maine Manufacturing Extension Partnership (MMEP) and the Manufacturers Association of Maine (MAME), two regional trade organizations. Supported by $286,000 in CARES Act funding and a $100,000 grant from the Maine Technology Institute, they have surveyed more than 250 companies about impacts related to the pandemic and are conducting 50 in-depth assessments for companies that requested additional support. From these assessments, the group is developing a series of customized remediation projects to solve individual challenges.

It's a big lift for a critical sector that accounts for more than 54,000 Maine jobs and a $5.9 billion share of the state's GDP. Projects run the gamut from marketing assistance to engineering work and draw on the expertise of a statewide network of consultants, including AMC.

Through it all, AMC's regular support services to Maine manufacturers have continued, sometimes taking on new urgency as the center helps companies respond to pandemic-related needs.

For example, the AMC has designed and built a robotic tray-handling system for Gray-based Enercon Technologies, a precision contract manufacturer specializing in medical, life sciences, military and industrial devices. Enercon is working with a national company in the COVID-19 testing effort and was asked to ramp their production 12 times to generate what had been a year's worth of production on a monthly basis. The AMC-designed tray handling systems support this effort and by automating, will allow around the clock production with minimal operator intervention.

Research expertise key



From providing expert counsel to Maine's health care community on decontamination and sterilization of PPE to providing public health briefing documents to Bangor Public Health that help the municipality and its partners navigate the epidemic, university researchers and their students have provided essential community support.

As part of its mission to stay fully abreast of fast-breaking scientific developments in areas relevant for universities and the pandemic, including testing, contact tracing and vaccine development, the UMS COVID-19 Scientific Advisory Board is another valuable resource that supports not only the university community, but also shares knowledge with benefit for Maine at large.

Established by Chancellor Dannel Malloy and chaired by University of Maine President Joan Ferrini-Mundy, the council comprises faculty members from UMaine and USM and draws support from other UMS researchers involved in task groups and subcommittees. The team provides evidence-based guidance to inform UMS planning efforts and also has presented to the Maine Legislature and other groups.

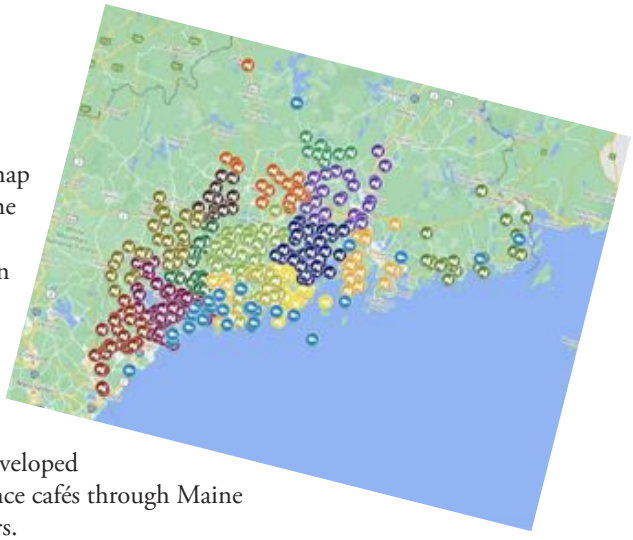
In addition to public health support, UMaine has also worked with government partners in an effort to mitigate the economic impact of prolonged shutdowns related to the pandemic.

Andrew Crawley, an assistant professor of regional economic development with the UMaine School of Economics, and six graduate students are collaborating with the State Economist's Office to develop forecasts for how much COVID-19 will affect Maine's economy. They are building models to evaluate the possible loss in tourism spending, travel-related spending, cruise ship spending, state revenues and overall sectoral output changes. The forecasts will also include prospects for recovery.

Extending a hand to growers and producers

The University of Maine Cooperative Extension's mission to put university research to work in homes, businesses, farms, and communities in every corner of Maine has been especially critical in the face of uncertainty created by the pandemic.

An early and visible Extension response effort was the development of a database that connects producers with retail customers looking to purchase local food. Allison Lakin, owner of East Forty Farm and Dairy, and Lakin's Gorges Cheese in Waldoboro, first conceived the idea when business from restaurant clients declined as the pandemic forced eateries to close. Lakin developed an initial spreadsheet and worked with the Extension team to expand the list of producers offering alternative pickup options for Maine meat, seafood, produce and other items.



Launched in late March, the database is hosted on the University of Maine Extension website as both an interactive map and a searchable spreadsheet and contains more than 400 Maine producers.

UMaine Extension has also worked closely with producers in other ways, developing fact sheets, FAQ documents and other information for Maine's agricultural community, surveying producers to gauge their needs and concerns, and hosting weekly online meetings for farmers to connect and share information.

To support the wider community, UMaine extension has developed educational materials for distance learning, offered virtual science cafés through Maine 4-H, and provided new resources for home cooks and gardeners.

Maine Law interns assisting economic recovery efforts

A partnership among Maine Law, the Maine Regulatory Training and Ethics Center (MeRTEC), and the Maine Small Business Development Center (SBDC) is helping Maine's small business community navigate the complex world of COVID-19 regulations and guidance. The work is built upon a USM collaboration with the Greater Portland Chamber of Commerce, the Greater Portland Council of Governments, the Maine Small Business Development Centers, the Maine Economic Improvement Fund, and the University of Maine School of Law.

Under the supervision of Professors Andrew Kaufman and Ross Hickey, two recent Maine Law graduates prepared weekly newsletters on a variety of business and regulatory topics in multiple sectors, including restaurants, food service, tourism and hospitality, and retail. These newsletters were distributed to the SBDC's broad network of small business advisors around the state, as well as to the Volunteer Lawyers' Project recently launched Small Business Clinic. The partnership continued through the fall with the help of current law students, who also assisted in responding to questions raised by business owners.

Beginning in June 2020, four MEIF-supported interns also assisted the Governor's Economic Recovery Committee (ERC) that is charged with developing specific policy recommendations to stabilize the state's economy and build a bridge to future prosperity in the wake of the COVID-19 pandemic. The quartet of law school interns assisted in managing all affairs of the subcommittees and supported subcommittee chairs and lead staff to meet goals and deliverables. They also played active roles in supporting the ERC in drafting the Committee Report on Economic Support and Stabilization Recommendations shared with Governor Mills on July 15, 2020.

In addition, two law students under the supervision of Professors Dmitry Bam and Jeff Thaler researched and drafted "Responding to the COVID-19 Pandemic: Constitutional Implications: A Guide to Constitutional Legal Principles Implicated When Responding To A Public Health Crisis." The guide explores how restrictions implemented to "flatten the curve" of the COVID-19 pandemic relate to constitutional issues, procedural and substantive due process issues, and infringements on rights related to restrictions on business operations and gathering sizes. The analysis in this guide is intended for legislators, governors and their staffs, as well as lawyers and non-lawyers.

Funding for all these initiatives and internships has been provided by the Maine Economic Improvement Fund (MEIF).

MEIF supports the research that matters to Maine. In the pages that follow, learn more about some notable ongoing initiatives by sector that support R&D and economic development for state benefit.

Advanced Technology for Forestry and Agriculture

UMaine research supports innovation and resilience in Maine's heritage industries. Work related to agriculture and forestry serves growers, landowners and businesses across the state in myriad ways, helping them solve operational problems and introduce new technologies to drive efficiency.

Many Maine communities have felt the effects of declining paper industries. In order to revitalize the economies of these towns across the state, it is crucial to find alternative and innovative uses for the mills and resources that are currently underutilized.

The University of Maine's Forest Bioproducts Research Institute is leading work that addresses this issue and breaking new ground in the development of a variety of bioproducts made from woody biomass from Maine forests.

UMaine is nationally recognized for research into nanocelluose and biofuels, and recent federal funding will allow FBRI to complete significant upgrades to its Technology Research Center (TRC) in Old Town, Maine, and Process Development Center (PDC) on campus to bolster ongoing efforts to create new bioproducts, increase production and find uses for woody biomass materials typically considered waste. Investment in FBRI's pilot-scale infrastructure will help institute researchers simulate the commercial-scale production of a variety of biobased goods, particularly biomass-derived jet fuel and diesel, and expand nanocellulose production.

FBRI is actively engaged with Maine's forest industry stakeholders and is a key collaborator in Forest Opportunity Roadmap / Maine (FOR/Maine), a coalition focused on identifying new markets for Maine wood products and advancing technology innovations to commercialize new uses of wood.

Turning to agriculture, ongoing UMaine wild blueberry research is helping to address pests, improve fruit quality and yield, and explore the impact of climate warming on one of Maine's major agricultural industries. Researchers have uncovered promising foliar fertilizer products and are testing mulching and biochar as drought, warming, and pest management tools. The UMaine Cooperative Extension wild blueberry team — a group of extension specialists and researchers who do field and lab work directly with growers, graduate students, other researchers in the U.S. and Canada, and the Wild Blueberry Commission of Maine — dispenses research-based knowledge directly to farmers.

Integrated pest management research is also key to key to sustaining Maine's $500 million potato industry, providing support to growers through field monitoring, disease forecasting, and distribution of educational materials that can offer specific and timely strategies in order to minimize pesticide applications and maximize potato yield. UMaine's leading potato-breeding program continues efforts to develop attractive, highly productive disease- and insect resistant potato varieties that can be employed by small and large producers to enhance marketing opportunities, farm sustainability and profits. It takes 12 to 14 years to develop a new potato variety, and in recent years UMaine's breeding program has released several varieties, including the Caribou Russet, which has white flesh and lightly russeted skin, and the Pinto Gold, a yellow-flesh gourmet potato.

Aquaculture and Marine Sciences

As with agriculture and forestry, research supporting Maine's diversifying marine economy is a major area of focus. Anchored by lobstering, this sector also includes fishing, rapidly expanding aquaculture, life sciences, and value-added processing. UMaine is a key collaborator in statewide efforts to develop an industry-led roadmap and action plan for economic growth and greater resiliency, a three-year project that will provide strategies to match Maine's marine-related products with global markets and develop strategies to attract investment in new markets; identify new opportunities and barriers to value-added production; seek ways to maximize efficiencies and returns across the seafood value-chain; and address current and future workforce challenges in Maine's marine resource economy.

Over the past decade, Maine has seen 2.2% annual growth in aquaculture, which has had an overall economic impact of $140 million annually.

Aquaculture research at UMaine is helping to pave the way for the growth of sustainable aquaculture in the state, addressing challenges and providing support for innovation. Researchers are collaborating with aquaculture industry and community partners in several areas, including new aquaculture opportunities, accelerating the development of collaborative networks to support aquaculture growth, and exploring gaps in social, behavioral and economic knowledge relating to aquaculture and communities it impacts and serves. A Maine Aquaculture Hub, coordinated by Maine Sea Grant, is working to build capacity for industry-driven innovation, diversification and workforce development. The hub will help the aquaculture industry overcome barriers associated with commerce, permitting and policies, new species, production systems, and seafood safety and quality. A new sustainable aquaculture certificate program aims to prepare students to become competent in a wide range of aquaculture fields, such as husbandry, recirculating and hatchery systems, and aquatic animal health. Through this program's experiential

curriculum and industry internship, students develop the technical skills to work in diverse professional environments. The internship provides 12 weeks of experience at a range of industry sites throughout the state and significantly expands career opportunities. Open to all applicants with at least a high school degree, this low-cost program was designed to address aquaculture industry workforce and extension needs in Maine by facilitating alternative career opportunities.

Adding to these efforts, an Aquaculture Experiment Station has been established by the University of Maine Aquaculture Research Institute (ARI), in partnership with the U.S. Department of Agriculture Agricultural Research Service (ARS) and Auburn University. This cooperative agreement is a commitment to an ongoing conversation between researchers and the aquaculture industry to increase sustainable production and industry stability.

Business incubation facilities at UMaine's Center for Cooperative Aquaculture Research in Franklin and the Darling Marine Center in Walpole support the growth of aquaculture businesses in Maine by offering pilot-scale, land-based research and culture facilities, office space, and direct access to university experts. Not only can entrepreneurs take advantage of research expertise, but also business counseling and support services and access to talent, including interns.

UMaine researchers are project leaders in the $2 million Sea Grant American Lobster Initiative to understand physical and chemical changes affecting American lobster in the Gulf of Maine. The initiative addresses critical gaps in knowledge about American lobster responses to environmental change and how to provide opportunities to increase economic resilience and adaptation in the lobster fishery. Researchers are working to facilitate partnerships, communication and collaboration among the lobster industry, management agencies and lobster scientists throughout the region and help to ensure that coastal communities benefit from the funded research. "The Sea Grant American Lobster Initiative will target critically important areas of concern for our most valuable fishery," said Carl Wilson, director of the Maine Department of Marine Resources Science Bureau. "It will also reinforce and amplify efforts in Maine, and regionally, to ensure the resilience of the resource, and the ability of managers to adapt to changes in the dynamic marine environment."

Ongoing research at the University of Maine Machias funded through the MEIF Small Campus Initiative on has examined the effects of ocean acidification on commercially important, calcified marine organisms, such as lobsters, crabs, clams, mussels and scallops — a global problem that has implications for healthy, sustainable wild and cultured fisheries in Maine. Recently published results from three years of field experiments led by researchers at UMM and the Downeast Institute (UMM's marine science field station in Beals, Maine) showed that spreading clam and oyster shells on the mudflats in an effort to counteract the effects of coastal acidification does not increase numbers of juvenile clams and quahogs, but found that efforts to exclude predators (such as invasive green crabs) led to improved density of both bivalve species. The findings have practical application for fisheries managers in Maine who can focus attention on mitigating effects of predators in order to enhance clam populations.

At USM, MEIF is supporting feasibility research to understand the specific needs of the fishing industry/economy in Maine, and how the university could support those needs.

Eighty-three stakeholders representing commercial fishing, tourism and sport fishing, aquaculture, marine biology, processing, and other groups were interviewed about their biggest challenges, their workforce needs, and what they think impedes expansion of the fishing industry/economy in Maine.

Participants reported that the biggest challenges facing the industry are climate change, regulations, lack of government support, and lack of skilled workforce. They also cited the need for better coordination among business, government, and education/research.

Recommendations for USM include developing more USM faculty expertise in fishing industry, offering more incubator/accelerator business development spaces, developing a relationship with Gulf of Maine Research Institute to offer programs, designing a cross-disciplinary minor in fisheries and aquaculture business, developing fishing industry business counseling expertise at Maine SBDC, and establishing a business support unit staffed by USM business practicum students at the New England Ocean Cluster in Portland. MEIF will work with faculty to explore how to integrate these findings into initiatives and programs at USM.

Biotechnology

Life sciences are a rapidly expanding industry in Maine, with life science job growth of 14 percent for the five years ending in 2019 according to the Bioscience Association of Maine. UMaine is among the state's largest life science employers, and research from the university is further helping to drive industry growth.

The University of Maine's MIRTA accelerator program, designed to help advance research from the lab to the marketplace, has recently supported two promising made-in-Maine biomedical innovations.

One, a nanocellulose composite material for use in orthopedics, promotes the growth of strong natural bone while safely dissolving over time, eliminating the need for metal devices that can be expensive, dense, stiff, prone to infection, and often require costly follow-up surgeries for removal. The nanocellulose composite developed at UMaine, by contrast, is a cost-effective, customizable, resorbable, porous platform biomaterial with the potential to help optimize the healing process for patients. It could be used as a synthetic bone, surgical bone scaffold, or bone grafting implement, designed for dissolution and gradual replacement with native bone cells.

A second product draws on the wound-healing properties of bioactive compounds found in Maine wild blueberries. Two classes of compounds extracted from wild blueberries — anthocyanins and phenolic acids — that have documented benefits in the treatment of chronic diseases and UMaine researchers are developing a biomedical product prototype with embedded bioactive compounds for the commercial marketplace.

Composites and Advanced Materials Technologies

Maine's reputation as a hub for the development of composites and advanced materials only grew in FY2020 with the debut of the world's largest 3D printer at the UMaine Advanced Structures and Composites Center (ASCC). The center now claims three Guinness World Records for the world's largest prototype polymer 3D printer, largest solid 3D-printed object, and largest 3D-printed boat.

Beyond the record books, ASCC research is helping to advance composite manufacturing and use in Maine and support markets for products from other Maine economic sectors.

The UMaine ASCC and the Department of Energy's Oak Ridge National Laboratory (ORNL) in Tennessee are advancing efforts to 3D print with wood products, creating a new market for Maine's forest products industry.

The $20 million project supports fundamental research in key technical areas in large-scale, biobased additive manufacturing, as well as efforts to produce new biobased materials conducive to 3D printing of large, structurally demanding systems. The research is focused on cellulose nanofiber (CNF) production, drying, functionalization and compounding with thermoplastics, building on UMaine's leadership in CNF technology and extrusion research. By placing CNF from wood into thermoplastics, bioderived recyclable material systems can be developed with properties that may rival traditional materials, possibly even metals. CNF's incorporation into plastics shows great promise for a renewable feedstock suitable for additive manufacturing.

The collaboration provides students, faculty and companies associated with UMaine's Advanced Structures and Composites Center access to ORNL's assets and expertise in advanced manufacturing. ORNL researchers, in turn, gain access to UMaine's facilities and expertise in CNF and composites. A key goal of the partnership is to strengthen regional manufacturing by connecting university–industry clusters with DOE's Manufacturing Demonstration Facility at ORNL.

Environmental Technologies

The release of Maine's Climate Action Plan in late 2020 lays out concrete action steps for Maine's goals to decrease greenhouse gas emissions by 45% by 2030 and 80% by 2050 and achieve carbon neutrality by 2045. More than 20 UMS researchers and staff are members of the Maine Climate Council subcommittees and working groups that developed Maine's plan, and UMS research and support will be essential to its successful implementation.

Clean energy innovation is central to the plan, and technology created at UMaine's Advanced Structures and Composites Center is driving the growth of offshore wind in Maine and beyond. The university's patented VolturnUS floating hull technology will be deployed in a demonstration project off Monhegan Island and is slated to be used in a small-scale research array part of the ongoing Maine Offshore Wind Initiative announced by Gov. Mills in 2019.

The University of Maine will collaborate with New England Aqua Ventus, LLC (NEAV), a joint venture between Diamond Offshore Wind, a subsidiary of the Mitsubishi Corporation, and RWE Renewables, the second-largest company in offshore wind globally, to develop the Monhegan demonstration project. This project will deploy a single 9.5-10 MW turbine on VolturnUS, the floating concrete semi-submersible hull designed by UMaine.

NEAV has pledged to involve Maine companies in permitting, construction and assembly, deployment, and ongoing operations and maintenance of the project. In addition, NEAV has committed to working with the University of Maine on research, development and design to take the technology elsewhere in the U.S. and the world. The concrete hulls are designed to be built in communities adjacent to potential projects, generating local construction jobs and other benefits during the building and assembly phase.

The demonstration project is projected to produce more than $150 million in total economic output and create hundreds of Maine-based jobs during the construction period.

Expanding the use of green building products is another key focus area in Maine's Climate Action Plan. UMaine research into mass timber products, including cross-laminated timber (CLT), contributes to efforts to revitalize and diversify Maine's forest-based economy by bringing innovative mass timber manufacturing to the state of Maine. Construction materials incorporating nanocellulose also show great promise, and this is another area of ongoing research.

Information Technologies

Information technologies are revolutionizing the way we interpret and solve a range of real-world problems and graduates with related skills will help build Maine's innovation economy. The recently announced University of Maine Artificial Intelligence Initiative aims to transform the state into a world-class hub for artificial intelligence research and education and develop AI-based solutions that enhance social and economic wellbeing in Maine and beyond.

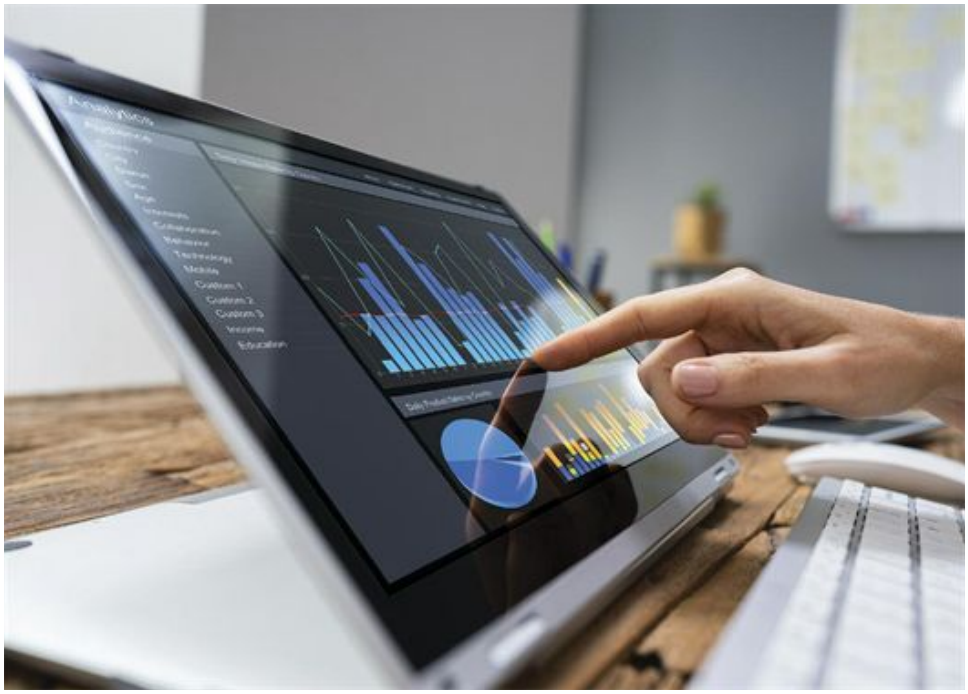
Related research shows great promise for Maine's heritage industries, including forestry. UMaine researchers are leading a multidisciplinary regional project to compile data to better assess, understand and forecast complex forest landscape changes. An economically important and ecologically critical component of New England's working landscape, forests support biodiversity, conservation, recreation and a forest-based workforce. However, current and quality data on forest

health or tree species composition remains highly varied, inconsistently available, and relatively coarse in resolution. UMaine researchers, working with teams from the University of New Hampshire and the University of Vermont, are building a digital framework that integrates, analyzes and visualizes complex data streams across the region's vast forest. The project integrates emerging computational, monitoring, remote sensing and visualization technologies that will provide comprehensive spatial and temporal measurements of the forest that can be readily accessed by scientists, land managers and policymakers.

At USM, the Community Research Assistantships program conducted by the Data Innovation Project matches graduate students to community-based organizations interested in improving their use of data, evaluation, and monitoring to achieve their organizations' missions.

In recent assistantships, USM students from the policy, planning, and management and public health programs were matched with five site organizations. Students were able to apply their skills in program evaluation/monitoring, logic models, performance measurement, public presentations, qualitative research methods, data visualization, and data dashboards in the real world. Community partners were left with an increased capacity to use data and a clear implementation path for using data in their work and strategic planning.

Notable successes include overhauling data dashboards, developing an evaluation plan, and facilitating a performance indicator workshop for MaineHealth's Access to Care program; and developing a new logic model, performance measurement framework, and data dashboard for Operation HOPE, a police-assisted addiction and recovery program at the Scarborough Police Department. One student was invited to continue as a consultant to help a community organization with ongoing data technology needs.



Precision Manufacturing

Modern, computer-controlled production and facilities are the future of manufacturing in Maine. The growth of this sector will rely on skilled workers trained on state-of-the-art systems and equipment and support for businesses integrating new systems and technologies.

UMaine's Advanced Manufacturing Center (AMC) is central to those efforts, helping businesses with custom, innovative solutions and training the workforce they need.

A key area of focus is making 3D metal printing accessible to Maine businesses at the Center for Additive Manufacturing of Metals (CAMM), based at the AMC. It is the only Maine facility currently offering these services, which focus on the process of fusing small metal particles together through 3D printing to form solid metal objects. The technology is ideal for creating small parts used in tooling or fixturing, and with CAMM's support Maine companies can experience the benefits of the emerging technology without risk, paving the way for their own adoption.

"Additive metal manufacturing represents an epochal shift in manufacturing technology on par with the advent of multi-axis machining in the 1980s," according to Larry Robinson, president of the Maine Manufacturing Extension Partnership. "In order for the technology to become widely adopted, there has to be a nascent infrastructure to scale from." CAMM's goal is to help companies develop that infrastructure, offering services that employ the latest advanced metal manufacturing technology and offer access to the AMC's full suite of machining and post-processing facilities, including CNC machining, turning, and surface finishing machines.

CAMM's funding comes from a nearly $500,000 Maine Technology Institute (MTI) cluster initiative program grant, with matching funds from the university and 35 Maine companies, bringing the total to $1 million. The funds also will be used as a partial match for a $750,000 U.S. Economic Development Administration grant AMC received in FY2020 for equipment upgrades including a Desktop Metal FDM additive metal machine with testing equipment, 5-axis machining center, hybrid metal additive cell, wire EDM (electrical discharge machining), and 4-axis lathe with live tooling.

The companies who have contributed funding – including GE Power in Bangor – are true partners in CAMM's work. GE's location in Bangor manufactures steam turbine rotors and blading and specializes in gas turbine components. The AMC has worked with GE on test parts for a gripper system that the company uses to hold blades and parts for machining, as well as testing for a high-temperature masking operation they use in the blade-coating process.

Appendix 1 — University of Maine System Intellectual Property

Table A1-1

University of Maine System — Patents Applications FY2020

Title	Application Type	Filing Date	Inventor	Campus
DOPPLER RADAR BASED BEE HIVE ACTIVITY MONITORING SYSTEM	PCT	7/5/19	HERBERT AUMANN NURI EMANETOGLU	ORONO
NON-ORTHOGONAL ADDITIVE MANUFACTURING AND THE TREATMENT OF PARTS MANUFACTURED THEREOF	PCT	8/6/19	MATTHEW IRELAND JAMES ANDERSON *	ORONO
IMPROVED METHODS OF CANCER DETECTION	US - DIVISIONAL	9/20/19	ANDRE KHALIL * KENDRA BATCHELDER	ORONO
LIGNOCELLULOSIC FOAM COMPOSITIONS AND METHODS OF MAKING THEREOF	US - PROVISIONAL	10/29/19	ISLAM HAFEZ SEYED ALI HAJI MIRZA TAYEB AILEEN CO MICHAEL MASON * MEHDI TAJVIDI	ORONO
TUNED MASS DAMPER FOR FLOATING STRUCTURES	PCT	11/4/19	ANDREW GOUPEE HABIB DAGHER * ANTHONY VISELLI CHRISTOPHER ALLEN	ORONO
PARASITE TREATMENT COMPOUND	US (PCT)	3/11/20	DEBORAH BOUCHARD * IAN BRICKNELL	ORONO
METHOD TO PRODUCE MARKET PULP AND PAPER WITH ENHANCED PROPERTIES	(PCT) US	4/8/20	MICHAEL BILODEAU * MARK PARADIS	ORONO
PARASITE TREATMENT COMPOUND	EP	4/9/20	DEBORAH BOUCHARD * IAN BRICKNELL	ORONO
MULTI-BODY FLOATING OFFSHORE WIND TURBINE FOUNDATION WITH HANGING STABILIZING MASS AND METHOD OF INSTALLATION	PCT	4/16/20	ANDREW GOUPEE HABIB DAGHER ANTHONY VISELLI * JACOB WARD CHRISTOPHER ALLEN	ORONO
PHENOLIC AND ANTHROCYANIN FRACTIONS FROM WILD BLUEBERRIES (VACCINIUM ANGUSTIFOLIUM) DIFFERENTIALLY MODULATE ENDOTHELIAL CELL MIGRATION	US (PCT)	4/28/20	PANAGIOTIS TSAKIROGLOU DOROTHY KLIMIS *	ORONO
IMPROVED FILAMENTS FOR 3D PRINTING	US	5/6/20	DOUGLAS GARDNER * JORDAN SANDERS LU WANG	ORONO
METHODS AND DEVICES FOR TREATMENT OF NEUROPATHY	US - PROVISIONAL	5/8/20	ROSEMARY SMITH KRISTY TOWNSEND *	ORONO
IMPROVED FILAMENTS FOR 3D PRINTING	EP	5/16/20	DOUGLAS GARDNER * JORDAN SANDERS LU WANG	ORONO
PATHOGEN COLLECTION AND HANDLING SYSTEM	US-PROVISIONAL	6/30/20	CAITLIN HOWELL* DANIEL REGAN	ORONO
	Total 14			

Table A1-2

University of Maine System — Patents Issued FY2020

Title	Patent Number	Country	Issue Date
ATTACHMENT OF A DEVICE TO A SUBSTRATE FOR OPERATION IN UNDER VARIABLE CONDITIONS	2545754	Germany, France, United Kingdom, European Patent	1/15/20
LIQUID MODULATED ANTENNA	9046405	United States	1/24/20
PROCESSING PHOTOREACTIVE MATERIALS WITH OPEN OPTICAL WAVEGUIDES	7050690	United States	1/24/20
NANOFIBRIL-POLYMER COMPOSITES	3022255	European Patent	2/12/20
ENERGY EFFICIENT PROCESS FOR PREPARING NANOCELLULOSE FIBERS	10563352	United States	2/18/20
METHODS OF CONTROLLING THE HYDROPHILICITY OF CELLULOSE	10,570,563	United States	2/25/20
METHODS OF CONSTRUCTION, ASSEMBLY, AND LAUNCH OF A FLOATING WIND TURBINE	ZL 2016800076915	China	3/10/20
HYBRID COMPOSITE MATERIAL SYSTEMS FOR OFFSHORE FLOATING PLATFORMS	10598155	United States	3/24/20
PROCESS FOR IMPROVING THE ENERGY DENSITY OF FEEDSTOCKS USING FORMATE SALTS	2670819	European Patent	4/29/20
STYLIZED ADAPTIVE MOBILITY DEVICE	10667979	United States	6/2/20
EXPLOITING PCM ASYMMETRIES TO ACCELERATE WRITE	10-2127616	Korea, Republic of	6/23/20
BUOY WITH INTEGRATED MOTION COMPENSATION	3180238	European Patent	6/24/20
COMPOSITE BUILDING PRODUCTS BOUND WITH CELLULOSE NANOFIBERS	10695947	United States	6/30/20

Total	**76**
United States	11
Non-U.S.	65
University of Southern Maine	3
University of Maine	73

Appendix 2 — Maine Economic Improvement Fund Financial History and Tables

Table A2-1

A History of Legislative Actions on Appropriating State Research Funds

The following is a summary of the actions of the 118th–129th (first regular session) Maine Legislature with regard to appropriating research and development funds to the University of Maine System.

118th LEGISLATURE
March 26, 1997: Governor signed into law the Economic Improvement Strategy (Chapter 24) that appropriated $500,000 to UMS for research.

April 1, 1998: Governor signed into law the Economic Improvement Strategy (Chapter 643, Part LL, Sec. S-3) that appropriated $4 million to UMS for research. These funds were allocated from the FY1998 year-end state surplus for use in FY1999.

119th LEGISLATURE
March 15, 1999: Governor signed into law the Part I Current Services budget (Chapter 16) that appropriated $4 million in 1999–2000 and 2000–01 to UMS on a "base budget" basis for research. This extends the one-time FY1999 $4 million research appropriation that was funded from the FY1998 year-end state surplus.

June 4, 1999: Governor signed into law the Part II Supplemental Appropriation budget (Chapter 401) that appropriated an additional $5.55 million in 1999–2000 and an additional $50,000 in 2000–01 to UMS on a "base budget" basis for research.

April 25, 2000: Governor signed into law the Part II Supplemental Appropriation budget (Chapter 731) that appropriated $300,000 in 2000–01 to UMS on a "base budget" basis for the Maine Patent Program.

120th LEGISLATURE
June 21, 2001: Governor signed into law the Part II Supplemental Appropriation budget (Chapter 439) that appropriated an additional $2 million in 2002–03 to UMS on a "base budget" basis for research.

March 25, 2002: Governor signed into law a deappropriation (Chapter 559) that reduced the FY2003 $2 million Supplemental Appropriation by $1 million.

July 1, 2002: Governor signed a Financial Order that curtailed the FY2003 $2 million Supplemental Appropriation by an additional $1 million. This eliminated the FY2003 increase of $2 million for research, bringing the FY2003 research and development appropriation back to the FY2002 level of $10.1 million.

November 18, 2002: Governor signed into law a Supplemental Appropriation budget (Chapter 714) that deappropriated the $1 million curtailment that was signed July 1, 2002.

121st LEGISLATURE
March 27, 2003: Governor signed into law the Part I Current Services budget (Chapter 20, Part RR) that appropriated $100,000 in 2003–04 and 2004–05 on a "base budget" basis for research.

January 30, 2004: Governor signed into law a Supplemental Appropriation budget (Chapter 513, Part P, Sec. P-2) that includes a provision to transfer to MEIF up to $2 million of any unbudgeted State revenue remaining at the close of FY2004. The full amount was subsequently transferred to UMS. This same Chapter 513, Part P, Sec. P-3 made the $2 million part of the MEIF FY2005 base appropriation.

122nd LEGISLATURE
March 29, 2006: Governor signed into law a Supplemental Appropriations budget (Chapter 519, Part A, Sec. A-1) that includes providing one-time funding of $600,000 in FY2007 for the commercialization of research and development activity, and for the Gulf of Maine Ocean Observing System.

123rd LEGISLATURE
June 7, 2007: Governor signed into law a budget (Chapter 240, Part A, Sec. A-68) that provides an increase of $1.5 million in FY2008 and an additional $1 million in FY2009 on a "base budget" basis for research.

124th LEGISLATURE
May 28, 2009: Governor signed into law a budget (Chapter 213, Part A, Sec. A-67) that maintains the annual funding at the FY2009 level of $14.7 million.

125th LEGISLATURE
June 15, 2011: Governor signed into law a budget (Chapter 380) that maintains the annual funding at $14.7 million. May 29, 2012: PUBLIC Law (Chapter 698) creates the formula funding for the Small Campus Initiative, reserving a percentage of MEIF exclusively for the five smaller campuses of the University of Maine System.

126th LEGISLATURE
June 10, 2013: Governor signed into law (Chapter 225) an amendment to the MEIF statute to include Maine Maritime Academy as a MEIF-eligible small campus.

June 26, 2013: Legislature approved into law a budget (Chapter 368) that maintains the annual funding at $14.7 million.

127th LEGISLATURE
June 30, 2015: Legislature approved into law a budget (Chapter 267) that increases the annual funding by $2.65 million in each year of the biennium.

128th LEGISLATURE
July 4, 2017: Governor signs into law the state budget that maintains the annual funding at $17.35 million (FY2017/FY2018).

129th LEGISLATURE
June 17, 2019: Governor signs into law the state budget that maintains the annual funding at $17.35 million (FY2018/FY2019)

Table A2-2

Legislative History of MEIF New Appropriations

118th LEGISLATURE

	FY1998	FY1999	Total 2-Year
UMaine	$400,000	$3,200,000	$3,600,000
USM	100,000	800,000	900,000
Total	$500,000	$4,000,000	$4,500,000

119th LEGISLATURE

	FY2000	FY2001	Total 2-Year
UMaine	$4,440,000	$40,000	$4,480,000
USM	1,110,000	10,000	1,120,000
Total	$5,550,000	$50,000	$5,600,000

120th LEGISLATURE

	FY2002	FY2003	Total 2-Year
UMaine	$0	$0	$0
USM	0	0	0
Total	$0	$0	$0

121st LEGISLATURE

	FY2004	FY2005	Total 2-Year
UMaine	$80,000	$1,600,000	$1,680,000
USM	20,000	400,000	420,000
Total	$100,000	$2,000,000	$2,100,000

122nd LEGISLATURE

	FY2006	FY2007	Total 2-Year
UMaine	$0	$540,000	$540,000
USM	0	60,000	60,000
Total	$0	$600,000	$600,000

123rd LEGISLATURE

	FY2008	FY2009	Total 2-Year
UMaine	$1,200,000	$720,000	$1,920,000
USM	300,000	180,000	480,000
S.C. Initiatives	0	100,000	100,000
Total	$1,500,000	$1,000,000	$2,500,000

124th LEGISLATURE20

	FY2010	FY2011	Total 2-Year
UMaine	$0	$0	$0
USM	0	0	0
S.C. Initiatives	0	0	0
Total	$0	$0	$0

125th LEGISLATURE

	FY2012	FY2013	Total 2-Year
UMaine	$0	$0	$0
USM	0	0	0
S.C. Initiatives	0	0	0
Total	$0	$0	$0

126th LEGISLATURE

	FY2014	FY2015	Total 2-Year
UMaine	$0	$0	$0
USM	0	0	0
S.C. Initiatives	0	0	0
Total	$0	$0	$0

127th LEGISLATURE

	FY2016	FY2017	Total 2-Year
UMaine	$2,056,400	$0	$2,056,400
USM	514,100	0	514,100
S.C. Initiatives	79,500	0	79,500
Total	$2,650,000	$0	$2,650,000

128th LEGISLATURE

	FY2018	FY2019	Total 2-Year
UMaine	$0	$0	$0
USM	0	0	0
S.C. Initiatives	0	0	0
Total	$0	$0	$0

129th LEGISLATURE

	FY2020	FY2021	Total 2-Year
UMaine	$0	$0	$0
USM	0	0	0
S.C. Initiatives	0	0	0
Total	$0	$0	$0

Total Yearly Research Appropriations for FY2020

FY2019 Appropriation

UMaine	**$13,289,194**	**76.6%**
USM	**3,290,306**	**19.0%**
UMM	**250,000**	**1.4%**
UMFK	**0**	**0.0**
UMPI	**0**	**0.0**
UMA	**0**	**0.0**
UMF	**0**	**0.0**
UMS S.C. Init.	**520,500**	**3.0**
MMA	**0**	**0.0**
Total	**$17,350,000**	**100.0%**

S.C. Initiatives ..... Small Campus Initiatives

University of Maine at Augusta ..... UMA
University of Maine at Farmington ..... UMF
University of Maine at Fort Kent ..... UMFK
University of Maine at Machias ..... UMM
University of Maine at Presque Isle ..... UMPI
Maine Maritime Academy ..... MMA

Table A2-3 Maine Economic Improvement Fund

Utilization of FY2020 Research Appropriation by Targeted Sector

UMAINE	Source of R&D Funds						Utilization of R&D Funds				Balance
Targeted Research Area	Unused FY2020 R&D Initial Base Budget	Unused R&D Funds from Prior Years As Reported	Adjustment To Prior Years Unused R&D Funds	Adjusted Unused R&D Funds From Prior Years	FY2020 R&D Funding Transfers	FY2020 Total R&D Funds Available	Transferred FY2020 R&D Actual Expenditures	Transferred To Match Grants & Contracts	Total Between R&D Accounts	Funds R&D Funds Utilized	Carried Forward To FY2021 [1]
Adv. Technology Forestry & Agriculture	$1,990,830	$(1,401,378)	$-	$(1,401,378)	$-	$589,452	$2,535,879	$280,706	$(1,333,392)	$1,483,193	$(893,741)
Aquaculture & Marine Science	2,389,659	(2,516,483)	-	(2,516,483)	-	(126,824)	2,920,686	376,987	(2,352,268)	945,405	(1,072,229)
Biotechnology	1,142,687	(1,315,211)	-	(1,315,211)	-	(172,524)	1,894,423	201,906	(1,207,331)	888,998	(1,061,522)
Composites	1,673,678	2,286,477	-	2,286,477	-	3,960,155	1,997,328	343,778	1,474,442	3,815,548	144,607
Environmental	1,544,326	(646,096)	-	(646,096)	-	898,230	1,990,036	248,472	(956,602)	1,281,906	(383,676)
Information Technology	1,893,809	(999,936)	-	(999,936)	-	893,873	2,999,032	63,242	(1,448,489)	1,613,785	(719,912)
Precision Manufacturing	1,475,256	327,580	-	327,580	-	1,802,836	2,099,336	33,609	(539,181)	1,593,764	209,072
Cross Sector	1,178,949	(531,625)	-	(531,625)	-	647,324	1,167,715	153,700	(428,791)	892,624	(245,300)
Total State Funding	$13,289,194	$(4,796,672)	$-	$(4,796,672)	$-	$8,492,522	$17,604,435	$1,702,400	$(6,791,612)	$12,515,223	$(4,022,701)
UM Cost Sharing Funding 2	6,791,612	-	-	-	-	6,791,612	-	-	6,791,612	6,791,612	-
Total Funding	**$20,080,806**	**$(4,796,672)**	**$-**	**$(4,796,672)**	**$-**	**$15,284,134**	**$17,604,435**	**$1,702,400**	**$-**	**$19,306,835**	**$(4,022,701)**

[1]Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid).
[2]Salary and benefits from University.

USM	Source of R&D Funds						Utilization of R&D Funds				Balance
	Unused FY2020 R&D Initial	Unused R&D Funds from Prior Years	Adjustment To Prior Years Unused	Adjusted Unused R&D Funds From	FY2019 R&D Funding	FY2019 Total R&D Funds	Transferred FY2019 R&D Actual	Transferred To Match Grants &	Total Between R&D	Funds R&D Funds	Carried Forward
Forestry & Agriculture	$-	$187,070	$-	$187,070	$802,718	$989,788	$746,926	$90,319	$-	$837,245	$152,543
Aquaculture & Marine	-	177,737	-	177,737	650,587	828,324	451,369	-	-	451,369	376,955
Biotechnology	-	17,547	-	17,547	273,670	291,217	246,806	-	-	246,806	44,411
Composites	-	890	-	890	(890)	-	-	-	-	-	
Environmental	-	3,462	-	3,462	19,696	23,158	17,187	-	-	17,187	5,971
Information Technology	-	247,147	-	247,147	686,536	933,683	637,658	78,827	-	716,485	217,198
Precision Manufacturing	-	3,971	-	3,971	36,978	40,949	37,403	-	-	37,403	3,546
Cross Sector	-	258,225	-	258,225	961,429	1,219,654	1,013,050	-	-	1,013,050	206,604
Unassigned	3,290,306	478,282	-	478,282	(3,430,724)	337,864	-	-	-	-	337,864
Total State Funding	**$3,290,306**	**$1,374,331**	**$-**	**$1,374,331**	**$-**	**$4,664,637**	**$3,150,399**	**$169,146**	**$-**	**$3,319,545**	**$1,345,092**

[1] Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid).
[2] At USM, projects are funded on a year to year basis with renewals contingent on performance. A majority of the unused funds carried forward into FY21 are committed to multi year projects.
[3] Transfers for current year funding of USM R&D programs and awards from Unassigned. UM base budgets the MEIF appropriation by sector and thus does not use funding transfers.

Table A2-4 Maine Economic Improvement Fund

FY2020 Summary Utilization of Operating Research Appropriation by University

	Source of R&D Funds						Utilization of R&D Funds				Balance
	FY2020 R&D Initial Base Budget	Unused R&D Funds from Prior Years As Reported	Adjustment to Prior Years Unused R&D Funds	Adjusted Unused R&D Funds from Prior Years	FY2020 R&D Funding Transfers[3]	FY2020 Total R&D Funds Available	FY2020 R&D Actual Expenditures	Transferred To Match Grants & Contracts	Transferred Between R&D Accounts[2]	Total R&D Funds Utilized	Unused Funds Carried Forward To FY2021[1]
UMAINE	$13,289,194	$(4,796,672)	$-	$(4,796,672)	$-	$8,492,522	$17,604,435	$1,702,400	$(6,791,612)	$12,515,223	$(4,022,701)
USM	3,290,306	1,374,331	-	1,374,331	-	4,664,637	3,150,399	169,146	-	3,319,545	1,345,092
UMM	250,000	335,521	-	335,521	-	585,521	486,625	-	-	486,625	98,896
UMFK	-	61,357	-	61,357	130,000	191,357	23,944	-	-	23,944	167,413
UMPI	-	65,621	-	65,621	-	65,621	65,612	-	-	65,612	9
UMA	-	85,130	-	85,130	(320)	84,810	84,809	-	-	84,809	1
UMF	-	9,980	-	9,980	300,000	309,980	1,794	-	-	1,794	308,186
UMS	520,500	49,451	-	49,451	(559,680)	10,271	17,999	-	-	17,999	(7,728)
MMA	-	102,726	-	102,726	130,000	232,726	15,933	-	-	15,933	216,793
Total State Funding	$17,350,000	$(2,712,555)	$-	$(2,712,555)	$-	$14,637,445	$21,451,550	$1,871,546	$(6,791,612)	$16,531,484	$(1,894,039)

[1] Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid).

[2] UM Cost Sharing.

[3] Inter-unit R&D funding transfers related to FY2020 MMA and Small Campus Initiative (SCI) awards.

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Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Interim Financing Resolution

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **BOARD ACTION: X**

BOARD POLICY:
712 – Debt Policy

UNIFIED ACCREDITATION CONNECTION:
Primary Outcomes:
Enhance fiscal positioning

BACKGROUND:
As presented to the Finance, Facilities and Technology (FFT) Committee at its January 6, 2021 meeting, the University of Maine System (UMS) engaged its financial advisor, Public Financial Management (PFM), to assist with a Request for Proposals (RFP) from qualified financial institutions to provide interim debt financing strategies. Such financing is for the purpose of funding capital needs on a short term basis in anticipation of repayment through revenue bonding or from revenues such as gifts or State capital appropriations.

PFM and System staff evaluated the 7 responses received and agreed that TDBank's solution best met UMS' financing needs providing flexibility at competitive rates. PFM summarized their observations and recommendations in the attached memo. Highlights of the recommendation include:

- Pursue the fixed rate loan alternative in lieu of the line of credit based on the extremely low fixed rates available relative to the economics of the line of credit.
- Consider a taxable financing option for ease of execution, lower tax diligence upfront, and less post issuance compliance risk given the relatively tight spread between the taxable and tax-exempt rate offers.
- Consider a 1-2 year term for the appropriate capital need currently estimated at $43 million.
- Revisit the analysis in the fall to determine the best strategy for the second wave of financing needs - continue with additional interim financing for capital projects, issue revenue bonds, or a combination of both.
- Continue negotiations with TDBank with the intention of finalizing the agreement this spring.

This Resolution request is pursuant to Board of Trustees Policy 712, which requires that debt and related agreements be approved by the Board.

2/22/2021

TEXT OF PROPOSED RESOLUTION:
That the Finance, Facilities and Technology Committee approves the following resolution to be forwarded to the Consent Agenda for Board of Trustee approval at the March 22, 2021 Board meeting:

> That the Board of Trustees, accepts the recommendation of the Finance, Facilities and Technology Committee, and authorizes the University of Maine System to finalize negotiations with and to execute a loan agreement with TDBank for short term capital financing needs.

2/22/2021

January 29, 2021

Memorandum

To: Tracy Elliott, University of Maine System

From: PFM Financial Advisors LLC

Re: Interim Financing Strategy/Results of RFP for Financing

PFM Financial Advisors LLC ("PFM") conducted an RFP on behalf of the University of Maine System ("UMS" or the "System") for interim financing to commercial banks on December 10, 2020 with responses due back on January 6, 2021. In the financing RFP PFM requested the banks to propose two financing alternatives – (1) short-term fixed rate loan(s) and (2) a line of credit – with the expectation that the outstanding balance would be repaid with proceeds of a future long-term debt issuance. Both financing vehicles are designed to satisfy the same need but structured differently. In the case of the loan the funds are disbursed at the closing of the loan where interest begins to accrue immediately and the maturity of the loan coincides with the expected repayment of the loan with long-term debt. In the case of the line of credit, it is put in place and funds are drawn as needed. Similar to the loan, the line of credit is meant to be repaid with a bond issuance. The line of credit typically has an ongoing fee for the facility expressed in basis points, interest accrues at a variable rate, and the line may be repaid at any time on or before the term of the line. The benefit of the loan is securing funds at closing and eliminating interest rate risk. The benefit of the line of credit approach is the ability to only draw down monies as needed to avoid interest carry. The results of the RFP would help inform the best strategy based on the terms and options received.

As described in the RFP, the proceeds of the interim financing are expected to provide funds for a portion of upcoming capital projects. The expectation is to draw down approximately $43 mm during calendar year 2021 and repay it with proceeds from a long-term bond deal in early calendar year 2022. UMS anticipates having a future need to spend $22 mm during calendar year 2022 and pursuing interim financing from this RFP may make sense for that need as well.

Any financing arrangement put in place may be considered as a model for future capital needs beyond that considered for this RFP.

Seven firms responded to the RFP - Bank of America, Century Bank, JP Morgan, PNC Bank, TD Bank, US Bank, and Wells Fargo. All seven firms responded to the request for a direct loan and 5 of the firms provided an option for a line of credit (TD Bank and Wells Fargo did not propose for the line of credit option however offered alternative arrangements as will be discussed later). PFM was very pleased with the number, quality, and competitiveness of the responses. Given how low short-term fixed rates currently are, one thing that immediately stood out is that the better financing solution for the immediate needs is the funded loan rather than the line of credit.

Also of note is the relatively tight spread between taxable and tax-exempt rates for the offers. With such a small differential it may make sense to consider a taxable financing option for ease of execution, lower tax diligence upfront, and less post issuance compliance risk.

PFM Recommendation

PFM recommends the pursuit of the fixed rate loan alternative in lieu of the line of credit based on the extremely low fixed rates available relative to the economics of the line of credit. Furthermore, based on the economics and overall strength of the proposal PFM recommends the TD Bank offer and suggests that the System consider a term of 1-2 years for the $43 mm of immediate needs.

With respect to the additional $22 mm of financing needs, PFM recommends continuing to analyze the alternatives but to consider not proceeding with any interim financing for that portion at this time. Instead, we suggest that UMS plan on potentially financing those needs in the bond deal anticipated for early calendar year 2022. Alternatively, PFM and UMS could revisit the analysis this coming Fall considering updated anticipated future cash flow, the interest rate environment, and TD Bank's rate offering. Then, the most advantageous approach could be selected – either continue with additional interim financing for capital project construction needs, issue revenue bonds, or a combination of both.

PFM recommends that the System consider future loans with TD Bank or whichever bank it selects through this process with the loan documentation that gets negotiated. This would be dependent on the bank providing interest rates that the System and PFM feel are competitive relative to market conditions at the time.

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Financing and Project Resolution, UM Fernald Engineering, Education and Design Center (EEDC)

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **BOARD ACTION: X**

BOARD POLICY:
712 – Debt Policy

UNIFIED ACCREDITATION CONNECTION:
Primary Outcomes:
- Increase enrollment
- Improve student success and completion
- Enhance fiscal positioning

BACKGROUND:
The University of Maine System (UMS) acting through the University of Maine (UM) requests authorization to finance costs for the new Ferland Engineering Education and Design Center (EEDC) Project on the Orono campuses. The Board has approved a total budget for this Project of $72 million to date. This total is expected to cover facility construction costs with an additional approval anticipated in the future to finalize the expenses related to final fit out such as furniture, equipment and IT fixtures in the building. The total final project budget is currently projected to be approximately $78-$80 million.

Building construction began in the Spring of 2020 for this approximate 108,000 gross square foot facility. The building includes: three collaborative classrooms; two seminar rooms; 14 student meeting rooms; Mechanical Engineering and Biomedical Engineering department offices, faculty offices, teaching laboratories and research laboratories; machine tool lab; a Campus welcome and STEM outreach center; a student commons with food service; and a student project design suite.

Project costs will be funded largely by University revenue bonds supported by State debt service funding, privately raised funds and other resources as identified by the University.

Increased enrollment is a goal of the Ferland EECD. The building will give the university the capacity to add 1,000 undergraduate and graduate engineering students. The capacity provided by the Ferland EEDC is essential to allowing engineering student enrollment to continue to grow. In addition, the Ferland EEDC is essential to providing the workforce that Maine's economy demands, both in terms of skills and numbers. Looking inside the institution, the growth in enrollment will increase revenue from tuition, thus enhancing fiscal positioning, and supporting economic growth in Maine.

A Financing and Project Resolution including Reimbursement of Project Expenditures is

enclosed for Board review and approval. This detailed Resolution complies with Treasury Regulations for this intended tax exempt bonding and allows for the use of interim financing prior to issuance of such debt. As stated in the resolution, the revenue bond issuance shall not exceed $45 million. Such maximum amount allows for any applicable capitalized interest, reserves, costs of issuance, any changes in interest rates or use of taxable bonds.

This Resolution request is pursuant to Board of Trustees Policy 712, which requires that debt and related agreements be approved by the Board and is also in compliance with U.S. Treasury Regulations regarding tax exempt bonding and reimbursement of costs. The request is to approve and to forward this matter to the Consent Agenda for the March 22, 2021 Board of Trustees meeting.

The UMS legal debt amount currently outstanding is approximately $120 million as of March 1, 2021 and, with this issuance, will remain below the statutory ceiling for UMS debt of $350 million.

A prior Board of Trustee Agenda Item Summary Sheet about the EEDC is provided as supplemental information in today's materials for reference.

TEXT OF PROPOSED RESOLUTION:
That the Finance, Facilities and Technology Committee approves the following resolution to be forwarded to the Consent Agenda for Board of Trustee approval at the March 22, 2021 Board meeting:

> That the Board of Trustees, accepts the recommendation of the Finance, Facilities and Technology Committee, and approves the Financing and Project Authorization resolution for the University of Maine Ferland Engineering, Education and Design Center project on the Orono campus with a maximum principal amount of debt of $45,000,000.

Resolution

FINANCING AND PROJECT AUTHORIZATION

WHEREAS, the Board of Trustees (the "Board") of the University of Maine System (the "System") desires to authorize the System to finance all or a portion of the costs of, and to undertake, the project which is more particularly described in the Addendum attached hereto and incorporated herein by reference and any other capital improvement for the benefit of the System which has been or is hereafter approved by the Board and each of which is hereby or will be determined by the Board to be a "project" within the meaning of 20-A MRSA §10951(6) (the "Project"); and

WHEREAS, the Board desires to authorize the issuance of University of Maine System Revenue Bonds (the "Bonds") and the sale of the Bonds for the purposes of financing all or a portion of the costs of the Project and providing for any necessary capitalized interest, reserves and costs of issuance; and

WHEREAS, the Board desires to authorize the issuance and sale of University of Maine System Notes or other evidences of indebtedness in anticipation of Bonds (the "Notes"; together with the Bonds, the "Securities"); and

WHEREAS, the Board may also authorize the payment of certain costs of the Project from certain System funds which will not be reimbursed with proceeds of the Bonds (the "Equity Contribution"), and the System desires to treat the Equity Contribution as "qualified equity" (within the meaning of the United States Treasury Regulations §1.141-6(b)); and

WHEREAS, the System is authorized to issue the Bonds pursuant to the provisions of 20-A MRSA §§10952, 10953 and 10959 and other provisions of the Maine Revised Statutes Annotated, Chapters 411 and 412, as amended (the "Act"); and

WHEREAS, the Board finds that the financing of all or a portion of the costs of the Project constitutes "assured revenue financing transactions" pursuant to the provisions of 20-A MRSA §10953, as amended; and

WHEREAS, pursuant to 20-A MRSA §10952(8), as amended, the System, as authorized by the Board, is authorized to make, enter into, execute, deliver and amend any and all contracts, agreements, leases, instruments and documents and perform all acts and do all things necessary or convenient to acquire, construct, reconstruct, improve, equip, finance, maintain and operate projects and to carry out the powers granted pursuant to the Act, or reasonably implied from those powers;

NOW, THEREFORE, be it hereby voted and resolved by the Board as follows:

RESOLVED, That pursuant to the provisions of 20-A MRSA §§10952, 10953, 10955 and 10959, as amended, and all other authority thereto enabling, and to provide funds for (a) the planning, design, acquisition, construction, reconstruction, improvement, renovation, rehabilitation and equipping of the Project, (b) paying and discharging any Notes, or Notes in renewal thereof, issued for authorized purposes, up to an aggregate amount not to exceed $45,000,000, (c) any capitalized interest on, reserves for and costs of issuance of the Bonds and (d) any other purpose authorized by law, the Treasurer of the System (the "Treasurer") is hereby authorized and empowered from time to time and in the name and on behalf of the System to borrow an aggregate amount not to exceed $45,000,000 and the Treasurer be and is hereby authorized and empowered, in the name of and on behalf of the System, to execute and deliver such loan agreements, indentures, pledge agreements, bond purchase contracts, preliminary official statements, official statements, continuing disclosure agreements, remarketing agreements, reimbursement agreements, investment agreements, financial advisory agreements, investment advisory agreements, auction agency agreements, market agent agreements, dealer agreements, standby bond purchase or other liquidity facility agreements, agreements with one or more underwriters, agreements with bond counsel and other agreements, documents and instruments as the Treasurer may deem necessary or convenient or desirable with respect to such borrowing. Such agreements, documents and instruments may (a) contain such terms and provisions, not contrary to the general tenor hereof, as the Treasurer may approve, his approval to be conclusively evidenced by his execution thereof, (b) be delivered under the seal of the System and (c) be attested by the System's Clerk or General Counsel; and further

RESOLVED, That pursuant to the provisions of 20-A MRSA §10955(3), as amended, and all other authority thereto enabling, and to provide funds for the purposes approved above, the Board hereby approves and authorizes, as evidence of the borrowing approved above, the issuance, sale and delivery of the Bonds in the aggregate principal amount not to exceed $45,000,000, in one or more series as the Treasurer shall determine, the Bonds to mature and be payable at such times and in such amounts, to bear interest at such rates, and to contain such other terms and provisions, not inconsistent herewith, as may be approved by the Treasurer, provided that none of the Bonds shall (i) bear interest at a rate in excess of 6% per annum or (ii) mature after December 31, 2056; the Bonds to be denominated by such denomination of an issue as may be selected by the Treasurer; to be manually signed by the Treasurer, sealed with the seal of the System and attested by its Clerk or General Counsel; and to be in such form and contain such other terms and provisions as the Treasurer may approve, his approval to be conclusively evidenced by his execution thereof; and further

RESOLVED, That the Treasurer is authorized on behalf of the System, from time to time, to acquire, purchase, sell, redeem, liquidate, terminate or transfer securities or other instruments constituting investments of the proceeds of the Bonds and to negotiate, enter into, execute in the name of the System and deliver on behalf of the System all investment, banking, brokerage, financial advisory, investment advisory and other agreements and instruments as are necessary or convenient to

investment and financial management of the proceeds of the Securities, all on such terms and conditions as the Treasurer determines are necessary or convenient for financing of the Project, such determination to be conclusively evidenced by execution or acquisition of such agreements and instruments by the Treasurer; and further

RESOLVED, That the Chancellor of the System, the Treasurer, and, with the express written approval of the Treasurer, the Clerk, the Controller, the General Counsel, or any one of them, be and hereby are, authorized and empowered in its name and on its behalf, to do or cause to be done any act or thing, and to negotiate, enter into, execute in the name of the System, deliver on behalf of the System, assign, transfer, modify or terminate any agreement or instrument, which any such officer may determine to be necessary or convenient or desirable with respect to the Bonds, the planning, design, acquisition, construction, reconstruction, improvement, renovation, rehabilitation and equipping of the Project and the expenditure, investment and management of the proceeds of the Bonds and that all acts and things done by the Treasurer in furtherance of the purposes of this Resolution prior to the date hereof are hereby ratified and confirmed; and further

RESOLVED, That the carrying out of the Project is hereby approved; and further

RESOLVED, The System covenants that it will, so long as any Securities are outstanding, establish, impose and collect tuition, fees and charges for its educational services, its auxiliary enterprises, including dormitory housing, food service and sale of textbooks, for use of its plant and for all other services and goods provided by the System, which tuition, fees and charges, together with other available moneys, in each fiscal year of the System, will be sufficient to permit the performance of all the covenants in, and requirements of the System under, the Securities, including the prompt payment of principal of and interest on the Securities as and when due, the prompt payment of principal of and interest on all outstanding System bonds as and when due and the prompt payment and performance of all other obligations as and when due.

RESOLVED, That the Securities shall be secured by such assignments, pledges or commitments of funds or revenues, other than appropriations from the State of Maine, as may be approved by the Treasurer; and further

RESOLVED, That the Treasurer be and is hereby authorized to covenant on behalf of the System and for the benefit of the holders of the Bonds that, except as hereafter authorized in this Resolution and in accordance with 20-A MRSA §10952(10), the System will take whatever steps, and refrain from taking any action, that may be necessary or appropriate to assure that the interest on the Bonds will remain exempt from federal and applicable state income taxes; and further

RESOLVED, That the Treasurer be and is hereby authorized in accordance with 20-A MRSA §10952(10) to agree and consent to the inclusion of interest on any of the Securities, under the United States Internal Revenue Code of 1986 or any subsequent corresponding internal revenue law of the United States, in the gross

income of the holders of any such Securities to the same extent and in the same manner that the interest on bills, bonds, notes or other obligations of the United States is includable in the gross income of the holders of such bills, bonds, notes or other obligations under the United States Internal Revenue Code or any such subsequent law (the "Taxable Bonds"); and further

RESOLVED, That the System covenants and certifies that, except with respect to any of the Taxable Bonds, no part of the proceeds of the issuance and sale of the Securities shall be used, directly or indirectly, to acquire any securities or obligations, the acquisition of which will cause the Bonds to be arbitrage bonds within the meaning of Section 148 of the Internal Revenue Code of 1986, as amended; and further

RESOLVED, That the Resolution of the Trustees of the University of Maine System entitled Reimbursement of Project Expenditures attached hereto as an Addendum is hereby approved and adopted; and further

RESOLVED, That the Securities shall provide that, in accordance with 20-A MRSA §10964, no trustee of the System, while acting within the scope of the authority of the Maine Revised Statutes Annotated, Chapter 412, as amended, may be subject to any personal liability resulting from the exercise or carrying out of any of the System's purposes or powers.

This Resolution shall take effect immediately.

ADOPTED: March 22, 2021

ADDENDUM

RESOLUTION OF THE TRUSTEES OF THE UNIVERSITY OF MAINE SYSTEM

REIMBURSEMENT OF PROJECT EXPENDITURES

Be it resolved that, for purposes of U.S. Treasury Regulation §1.150-2, the University of Maine System reasonably expects (1) to incur debt to reimburse expenditures (including expenditures made within the last 60 days) (A) temporarily advanced from University resources or through interim financing or (B) made by another person pursuant to an agreement between the System and such person, with such expenditures to be made to pay the cost, or a portion of the cost, of planning and design, acquisition, construction reconstruction, improvement, renovation, rehabilitation and equipping of the Project described below and (2) that the maximum principal amount of debt to be issued by the System, including for reimbursement purposes, for the Project is Forty-Five million dollars ($45,000,000).

PROJECT

University of Maine:

The new Ferland Engineering Education and Design Center is an anticipated 105,000 square foot building which includes collaborative classrooms; seminar rooms; student meeting rooms; engineering department offices, faculty offices, teaching laboratories; research laboratories; machine tool lab; a Campus welcome and STEM outreach center; a student commons with food service; and a student project design suite.

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This Resolution shall take effect immediately.

ADOPTED: March 22, 2021

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

AGENDA ITEM SUMMARY

1. **NAME OF ITEM**: Engineering Education & Design Center Update and Naming, UM

2. **INITIATED BY**: Dannel P. Malloy, Chancellor

3. **BOARD INFORMATION**: **BOARD ACTION:** **X**

4. **OUTCOME:**
Increase Enrollment
Enhance Fiscal Positioning

BOARD POLICY:
701 – Budgets-Operating & Capital
803 – Naming of Physical Facilities
GSF Increase

5. **BACKGROUND:**

The University of Maine System acting through the University of Maine (UM) requests authorization to expend up to an additional $63 million to proceed with construction of the Ferland Engineering Education and Design Center (EEDC), bringing the total authorization to $72 million. Additionally, this agenda serves as a request for final approval of the naming for the building as originally brought forth and approved in March of 2018.

Funding will be provided through University revenue bonds supported with State debt service funding approved by the Legislature in late 2017, privately raised funds and other resources as identified by the University of Maine Chief Business Officer and University System Treasurer.

This request is pursuant to Board of Trustees Policy 701, which requires projects with a total cost of more than $500,000 to be considered by the Board of Trustees or its Finance, Facilities and Technology Committee. Additionally Policy 803 reserves to Trustees the authority to name physical facilities. Finally, the request is also pursuant to Trustee policy prohibiting net increases in space without Trustee authorization. For all three items, the request is to approve and to forward this matter to the Consent Agenda for the March 15-16, 2020 Board of Trustees meeting.

With regard to the naming, in March, 2018 the naming of the facility was brought to the Board for consideration based on the receipt of a $10 million gift. At the time, the donor wished to remain anonymous until a later date. As such, the Board approved the naming pursuant to Policy 803 with final approval of the exact name to be submitted at a later date when timely and in collaboration with the donor.

3/5/2020

In September of 2019, the donors Eileen and James Ferland were publicly recognized by the University as the generous donors and naming beneficiaries for the facility. The proposed name of the new facility is: "E. James and Eileen K. Ferland Engineering Education and Design Center", with common reference as "Ferland Engineering Education and Design Center". This request seeks to finalize that naming.

With regard to portion of the current request related to construction, an initial request of $1 million was approved for early design services of the building in September of 2017. In May of 2018 an additional $8 million (for a total of $9 million) was authorized to complete building design and preliminary relocation and related work tied to the new building and its site. From this funding the North Engineering Annex was designed, built, and occupied in time for the spring 2020 semester and as a first step toward demolition of the existing Machine Tool Lab at the site of the new building.

Design for the building has progressed and bidding for construction is scheduled to begin in the Spring of 2020. In preparation for this, the university is requesting to increase the spending authority of the project to a total of $72 million. This is expected to cover costs of construction of the facility with an additional approval anticipated in approximately one year to finalize the expenses related to final fit out such as furniture, equipment and IT fixtures in the building. The total final project budget is currently projected to be approximately $78-$80 million.

The project has now reached the final design stage and the building is approximately 108,000 gross square feet. The building includes: three collaborative classrooms; two seminar rooms; 14 student meeting rooms; Mechanical Engineering and Biomedical Engineering department offices, faculty offices, teaching laboratories and research laboratories; machine tool lab; a Campus welcome and STEM outreach center; a student commons with food service; and the best student project design suite in the Northeast!

The project cost will be funded largely by University revenue bonds supported with State debt service funding, as well as by privately raised funds and other resources as identified by the University. Through fundraising, more than $19 million - more than has ever been privately raised for a capital project in the history of the University of Maine System, has been raised and efforts continue in earnest. This current request is for approval to expend the amount necessary to enter into a construction contract for the construction of the facility and related site work.

The net increase in square footage resulting from this project is approximately 101,000 gross square feet (gsf) including the offset of space for demolition of the Machine Tool Lab (12,800gsf) and the added square footage for the North Engineering Annex (5,900gsf). While not necessarily in direct connection with this project, the need for which was based on increased enrollment and Maine's need for more engineers as is further described below, the campus is actively planning for additional square footage reductions.

Increased enrollment is a goal of the Ferland EECD. The building will give the university the capacity to add 1,000 undergraduate and graduate engineering students. As of January 24, 2020, the number of students accepted into the College of Engineering was up 16 percent over the same date in 2019. The capacity provided by the Ferland EEDC is essential to allowing engineering student enrollment to continue to grow.

Moreover, the demand for UMaine engineering graduates is at record levels. According to Burning Glass Technologies, there were more than 1,500 job postings for engineers in Maine in 2019. As a result of this demand, there were a record 170 companies at the October 2019 Engineering Job Fair and the most recent placement rate for UMaine engineering graduates was 99.9 percent.

The Ferland EEDC is essential to providing the workforce that Maine's economy demands, both in terms of skills and numbers. Looking inside the institution, the growth in enrollment will increase revenue from tuition, thus enhancing fiscal positioning, and supporting economic growth in Maine. Biomedical engineering research labs comprise roughly half of the third floor. Biomedical engineering is a growing sector of Maine's economy that must be supported by robust research and economic development. This will be directly supported by the Ferland EEDC.

The added annual costs for operation of this building are estimated to be approximately $750,000 and will be borne by campus E&G beginning in FY 2023.

Additional supplemental information and prior Trustee agenda information sheets about the EEDC are included in today's materials for reference.

The Finance, Facilities and Technology Committee approved this recommendation to be forwarded to the Board of Trustees for approval at the March 15-16, 2020 Board meeting. Following discussion at the meeting, the Committee in keeping with updated pending practices for larger projects, voted unanimously to send the matter to the Board meeting for discussion and action, rather than the Consent Agenda.

6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the recommendation of the Finance, Facilities and Technology Committee and authorizes the University of Maine System acting through the University of Maine: a. to increase the project authorization of the Engineering Education and Design Center by $63 million, bringing the total authorization to expend up to $72 million, funding for which will come from a combination of State debt service, University Revenue bonds and private giving; b. to increase square footage by approximately 101,000 gross square feet; c. to finalize the name of the facility as the "E. James and Eileen K. Ferland Engineering Education and Design Center" with common reference as "Ferland Engineering Education and Design Center."

Attachments:
Prior Board Approvals for the UM Engineering Education & Design Center
UM Engineering Education & Design Center Presentation

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

5

NAME OF ITEM: University of Maine Rolling Capital Master Plan update

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: X **BOARD ACTION:**

BOARD POLICY:
701 – Budgets, Operating & Capital

UNIFIED ACCREDITATION CONNECTION:
Given the Unified Accreditation initiative, the Harold Alfond Foundation (HAF) grant totaling approximately $200 million for capital upgrades at UMaine, the impacts of COVID-19 on our physical space needs and UMaine's aging physical plant, UMaine leadership set out to update its 10-year capital plan in the form of a Rolling Capital Master Plan. It is expected that this method of capital planning will provide the necessary flexibility to address these broad and diverse needs over the next decade with an overarching strategy built around the institution's Strategic Vision and Values priorities.

BACKGROUND:
UMaine leadership will present a PowerPoint update of our Rolling Capital Master Plan which is intended to provide the Board of Trustees with an update of our growth strategy for the next decade and the impact of the HAF transformational grant to realize this growth strategy. This presentation also serves to brief the Board on proposed HAF capital projects (all exceeding $5 million which require a three step approval process with the first step to present information items in anticipation of future action/approval). The two HAF capital projects for facility expansion and improvements include:

- Maine College of Engineering, Computing, and Information Science ($50 million/$50 million match)
- Black Bear Athletics ($90 million/$20 million match)

2/22/2021

5.1

1865 THE UNIVERSITY OF MAINE

Rolling Capital Master Plan

FY21 through FY31

March 3, 2021

5.1

This is a special point in time for UMaine.

The university faces an unprecedented set of dynamics for its capital portfolios:

- Rapid increase in demand for major facility projects, with attendant capital spending as research grows and external gifts increase
- Continued strategic balancing of space reduction and space addition/modernization
- Emerging opportunities in research and economic engagement
- Strategic planning for post-pandemic renewal and engagement
- Opportunities and obligations of unified accreditation
- Transformational investment in programs and facilities

There is a generational opportunity to align the University's capital plant and processes with its forward, post-pandemic, changed climate, academic, research and economic environment.

There are additional factors to consider for capital programs

5.1

Facilities are not very flexible.

- University buildings have 75+ year life (with 15 & 25 yr rehab cycles)
- Shift from retrenchment to growth requires thoughtful space management
- Unknowns – climate shift and post-Covid changes - are likely to add extra uncertainty to projections of all kinds, and may lead to change in the fundamental assumptions used in capital planning

Delivering facilities takes time.

- Major projects (>$7M) typically take 5 years each
- Simultaneous multiple projects require process adjustments and expanded delivery capacity

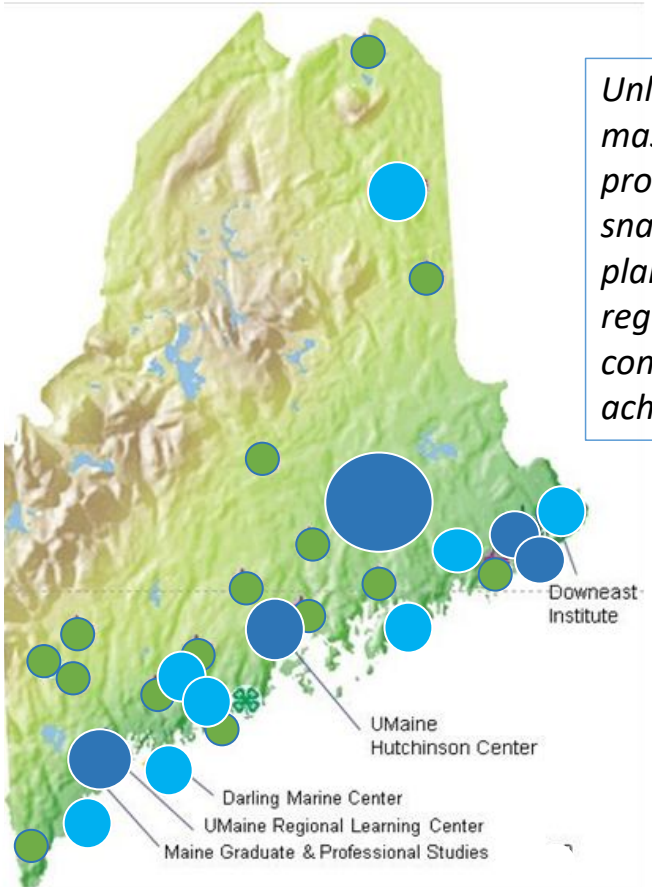
Valid facility needs and desires usually exceed the institution's ability to fund and deliver everything.

- Balance the achievement of strategic goals and the obligations of long-term stewardship
- Thorough capital planning – funds and facilities – enables the best available outcomes

5.1

We plan to proceed with rolling master capital planning.

- Is comprehensive, informed, flexible, strategic and tactical
- Operates within the UMS overall strategic framework, and UMaine vision and values
- Integrates strategies with capital program and capital spending plans
- Incorporates recent and ongoing planning
- Clear project processes and realistic timelines for major capital and annual projects
- Space committee advises executive cabinet



Unlike traditional master plans which provide a fixed snapshot, rolling plans adjust regularly to changing conditions and achievements.

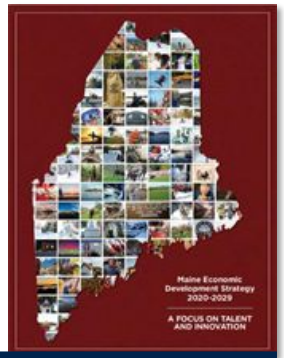
UMaine is Statewide

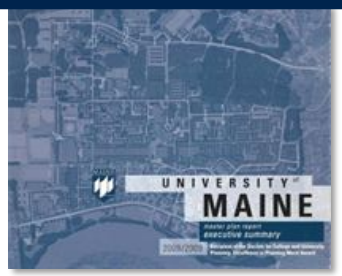
- *Academic*
- *Research, Marine Research & Farms*
- *Cooperative Extension*

Boldness + Frugality!

Our current initiatives include capital challenges and opportunities.

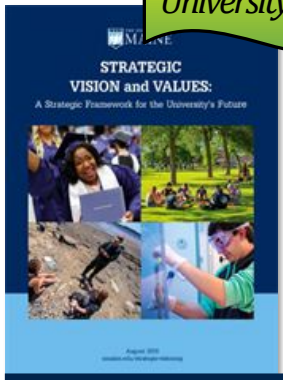
5.1



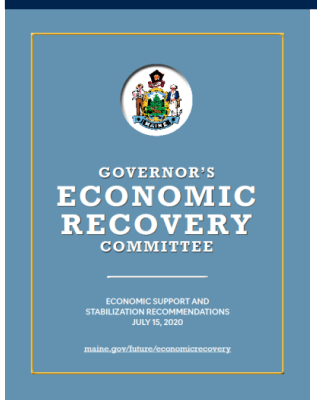


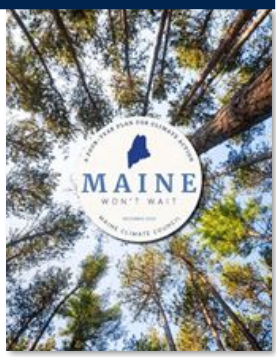
- Growth needed for sufficient modern space
- Facility impact of unified accreditation
- System-wide planning and implementation
- Energy and climate action opportunities & requirements
- Planning for a post-Covid environment
- Cost and time to implement a large capital program
- Aging physical plant with ongoing cyclical need for reduction, modernization and expansion

President's Commission on Excellence and Equity at the University of Maine 2025



Harold Alfond Foundation Grant

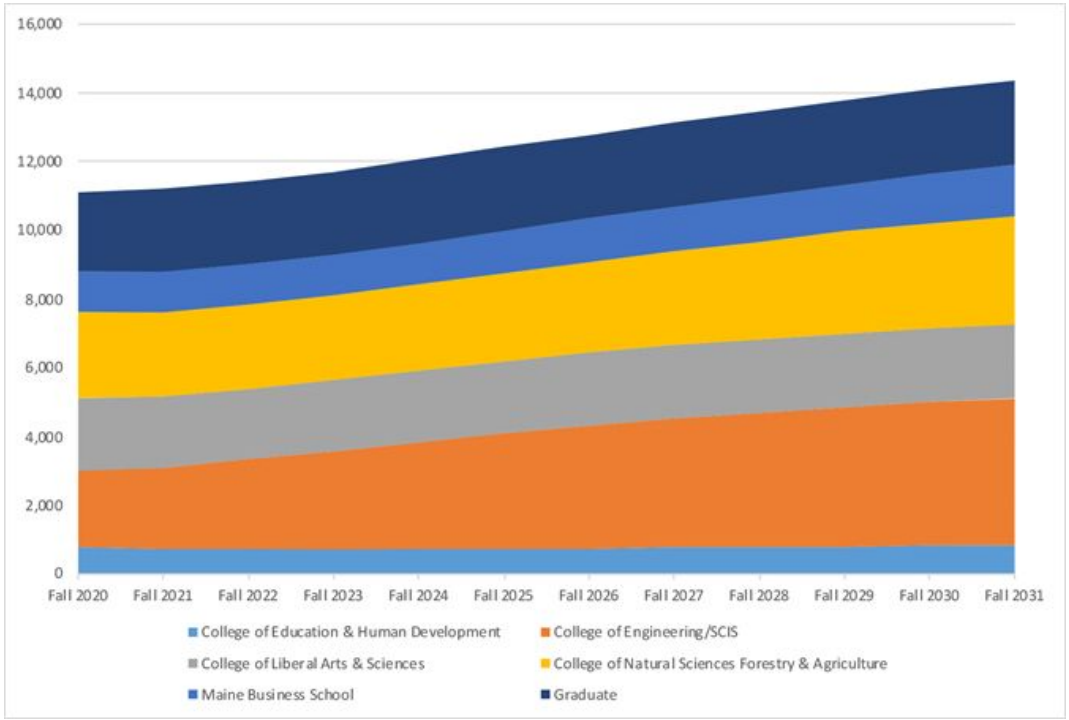




We are projecting a growth context for enrollment.

5.1

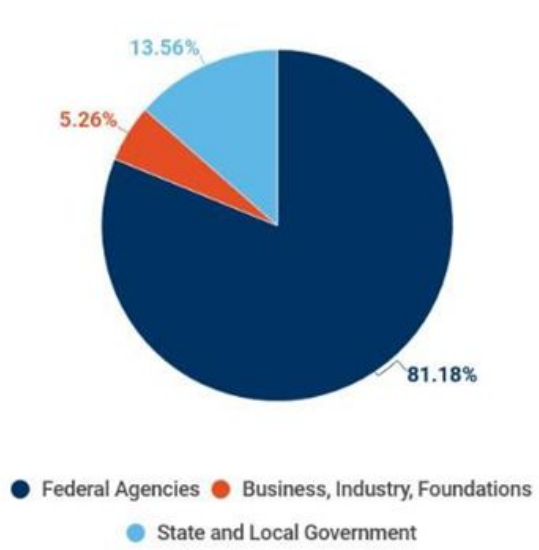
- UMaine facilities will need to accommodate growth and change.
- Traditional instructional and research spaces often do not accommodate contemporary practice – newer spaces are larger, more open, with more technology and tools and more flexible.
- Graduate student enrollment growth can be a major driver of increased space need.
- Replacement and modernization of campus spaces are usually important to support achievement.



We had record breaking year and four-year growth trends in research and development.

Funding by the numbers FY2020

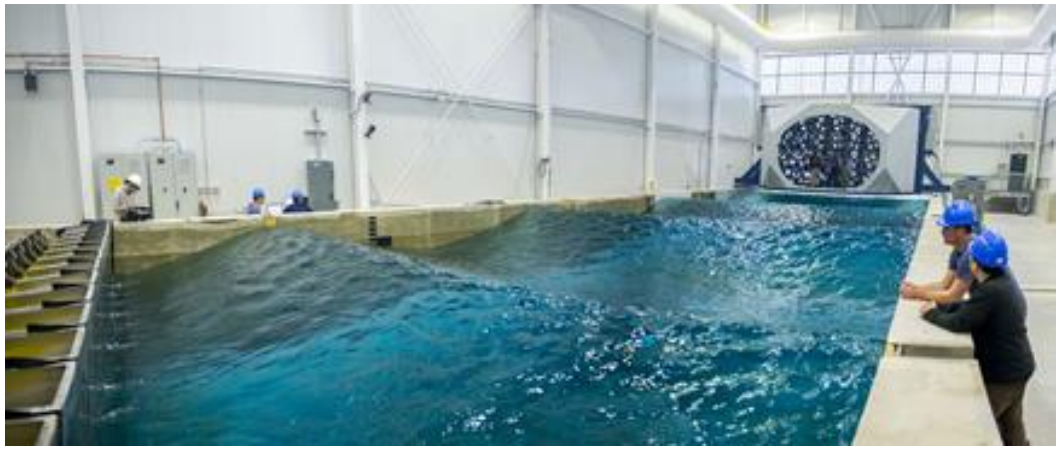
New R&D Awards Received	New R&D Funding Received	University Contributions (Cost-Share)	Indirect Costs Awarded
716	$125,188,029	$13,804,430	$16,541,807



A modern research university striving for R1 status faces facilities challenges.

Continued Progress Toward Achieving R1 Status

- Upgrades and financing of specialized facilities to support new research
- Maintenance and overall footprint interact with research programs
- Grant funding is often for equipment, with limited availability for facilities



Rolling capital planning must consider energy and climate change challenges.

UMaine Energy Center (UMEC)

- Our 4 goals remain the same (Reliable, Renewable, Economical, and Predictable)
- Responsive to changes in law and pressures from COVID-19
- Finish negotiations, execute the Project Development Agreement
- Commence Phase 2 of the UMEC Project (Schematic Design), expected to last approximately 12 months
- Pursue demand-side energy conservation effort
- Our commitment to zero carbon emissions goals

Rolling capital planning can consider a future with unified accreditation

5.1

Opportunities:

- Ability to make optimized use of existing and new facilities
- Support research efforts through faster access to specialty facilities
- Improved capacity to balance and allocate capital resources to address most urgent needs
- Increased opportunities for innovation and collaboration in research, teaching, and service

Issues:

- Developing/reconciling accurate facility data across campuses
- Refining guidelines for cross-campus/cross program use

Here are the elements of our rolling plan.

5.1

Rolling Plans

- Align actions with strategic vision and values
- Make the most of funding and facility opportunities
- Coordinate funding
- Coordinate physical actions to maximize overall effectiveness and value
- Avoid schedule & spatial conflicts
- Manage infrastructure
- Integrate multiple locations & campuses
- Engage project teams

Iterative engagement

Major capital projects

Major Capital Research Projects

Space Management, Property Disposition, Space Reduction, Space Guidelines

Partnership *(P3)* & Real Estate

Stewardship

- *Annual call projects*
- *Preventative maintenance*
- *Deferred maintenance*
- *Bi-annual updates to cabinet and senate of progress and plans*

5.1

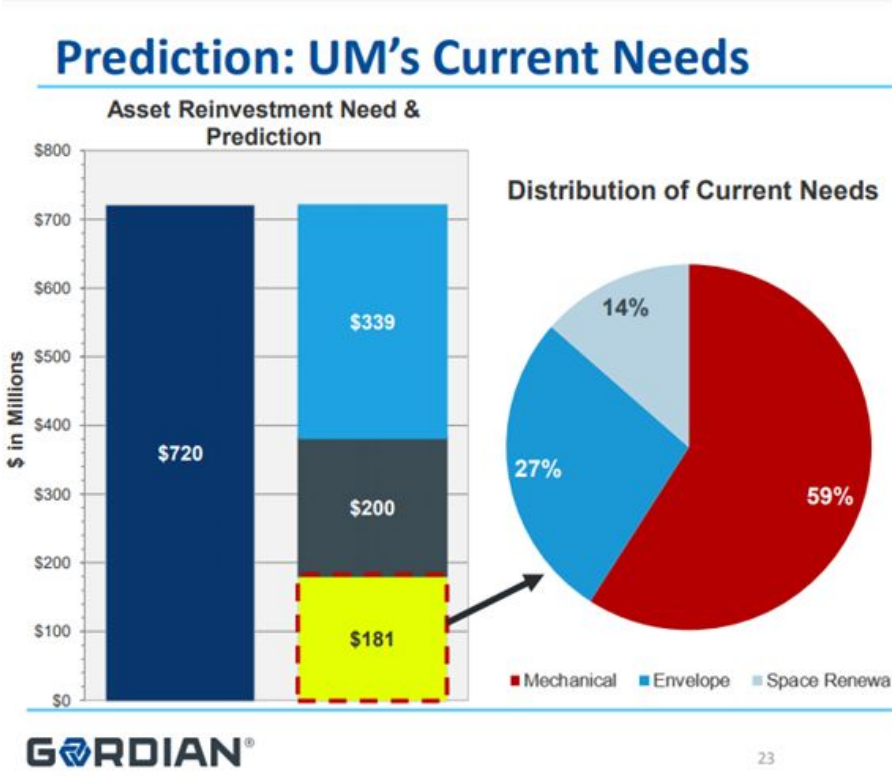
Space reduction and attentive stewardship will be part of space management

Space Committee

- Balance total amount of space
- Replace aging facilities
- Allow for contemporary, competitive facilities

Stewardship of UMaine's capital assets

- Preventive and deferred maintenance
- Management and coordination of ongoing "churn"



5.1

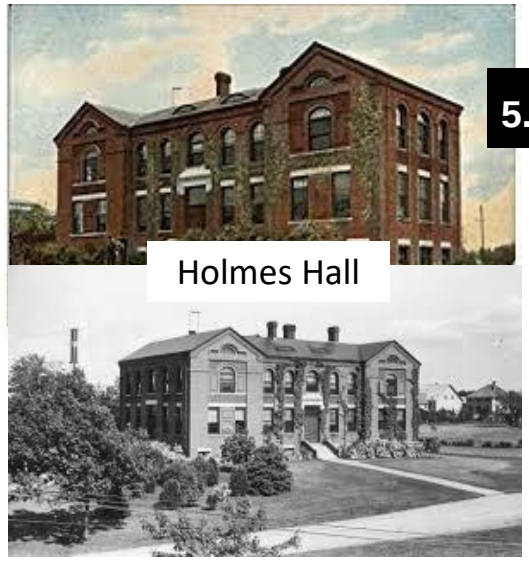
Our capital Performance needs to coincide with investment targets.

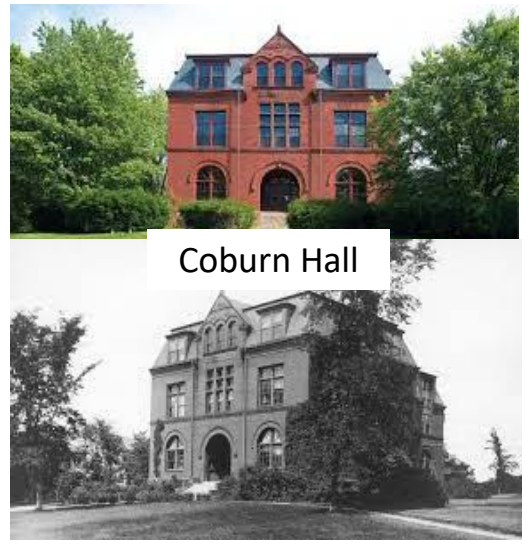
- Ongoing space reduction
- Coordination of rolling plans, capital projects, and annual calls
- Employ downsizing, modernizing and direct space removal

5.1

UMaine P3 for Historical Buildings Redevelopment

- Request for Qualification (RFQ) process, October 2020
- An RFP was issued to the qualified firms in December 2020. Four proposals were delivered on February 15, 2021.
- Core Team for this project is engaged in an in-depth review and evaluation of the proposals.
- Interviews with the developer teams are scheduled to be held on February 26, 2021.
- Initial negotiations will begin in March 2021.
- Board of Trustees approval will be sought prior to final commitments and agreements being executed for any selected firm(s).


Holmes Hall


Coburn Hall

5.1

There are major capital projects underway at UMaine.

- Ferland Engineering Education and Design Center, *in Construction*
- UMEC Replacement Energy Plant, *in design*
- Life Sciences Building, *in planning*
- GEM and aquaculture, *in planning*
- Informational items for Harold Alfond grant projects
  - Engineering Phase Three Master Plan (HAF)
  - Athletics Phase One Master Plan (HAF)
- Early planning studies

5.1

The University of Maine has an Engineering Phase III Master Plan.

UNIVERSITY OF MAINE SYSTEM

TRANSFORMS

Maine's Public Universities

The Harold Alfond Foundation has committed to advance the Maine College of Engineering, Computing and Information Science (MCECIS) through facilities renovation with a match of $50M, for an estimated project cost of $100M.

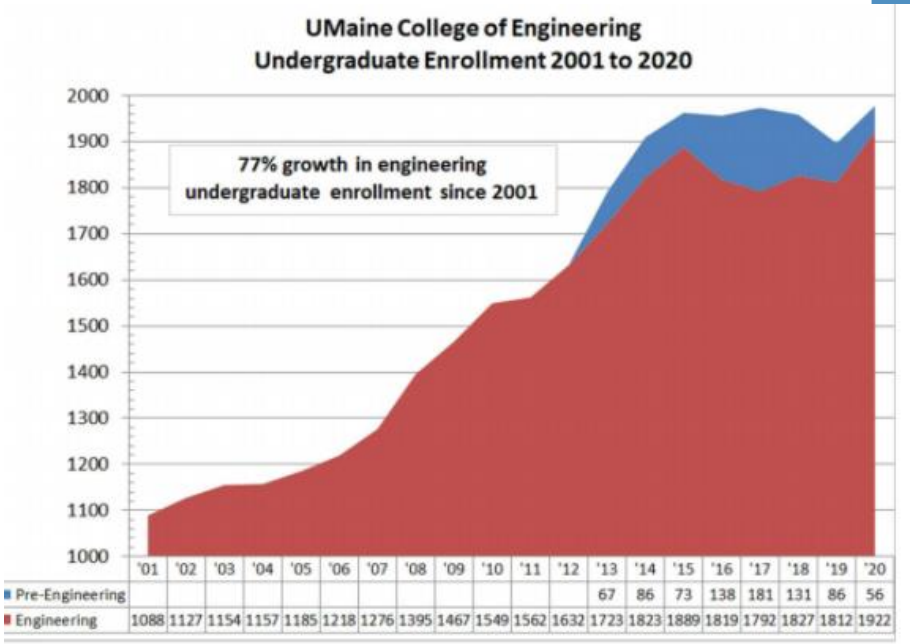
5.1

Next steps for MECIS include undertaking a master plan for phase 3 development at UMaine and consideration of other UMS engineering facilities needs

- Building programs and attracting student and faculty talent
- Improving facilities at UMaine
- UMaine as anchor, strong UMaine-USM collaboration, UMS-wide connections

Fall'20
470 1st year students (+15%)
104 transfer students (+12%)
574 total

Factoid
UMaine grants **93%** of eng. BS degrees & **100%** of eng. graduate degrees in UMS

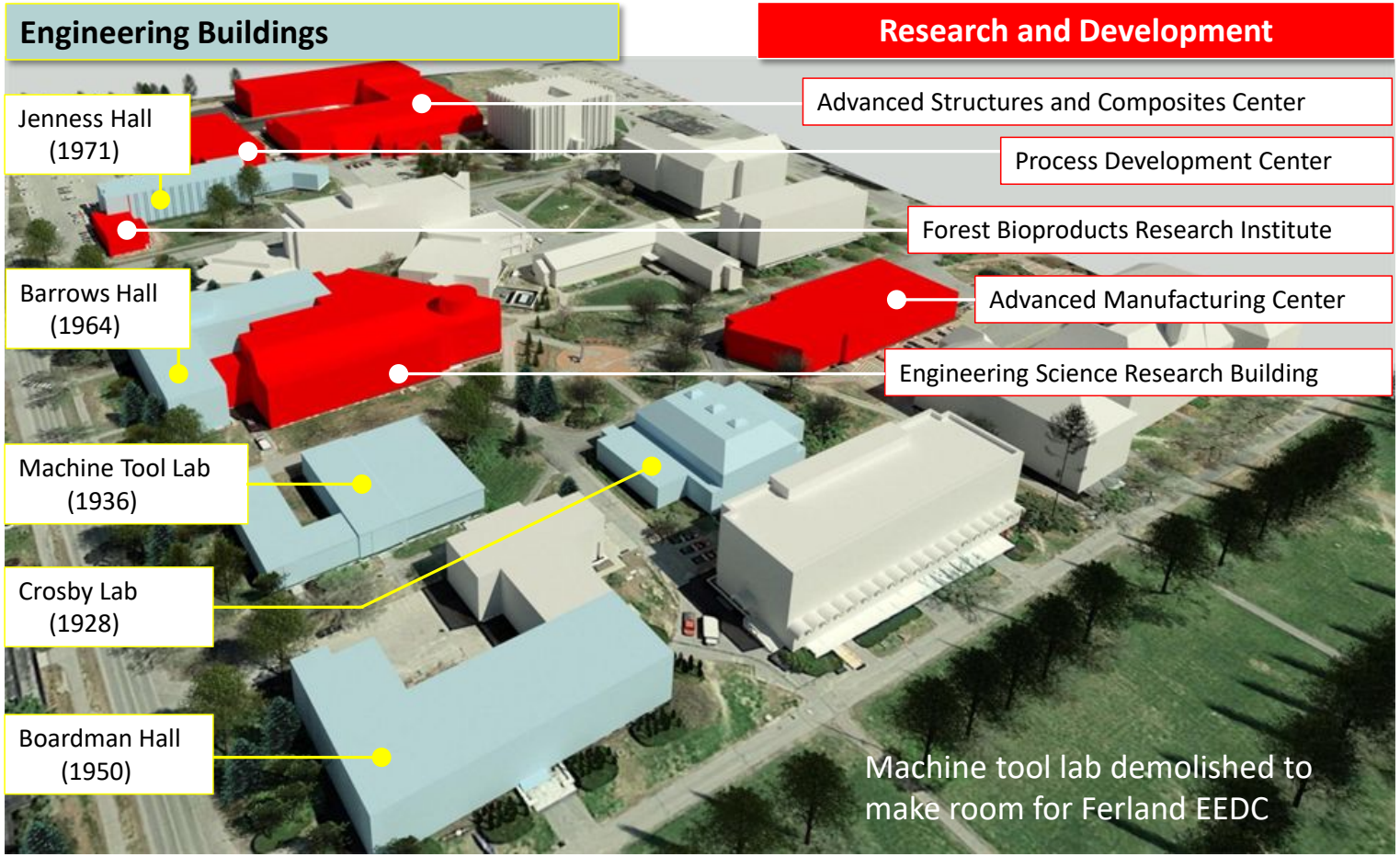


5.1

UMaine has a multi-phase engineering master plan

- Plan will consider both instructional and research activities.
- Options for individual facilities will consider the full range of options.
- Interaction of facility resources – as a campus district and state resource - will also be addressed.

Existing Engineering District (North Engineering Annex not shown)



5.1

The UMaine athletic facilities master plan was announced February 17, 2021

UNIVERSITY OF MAINE SYSTEM

TRANSFORMS

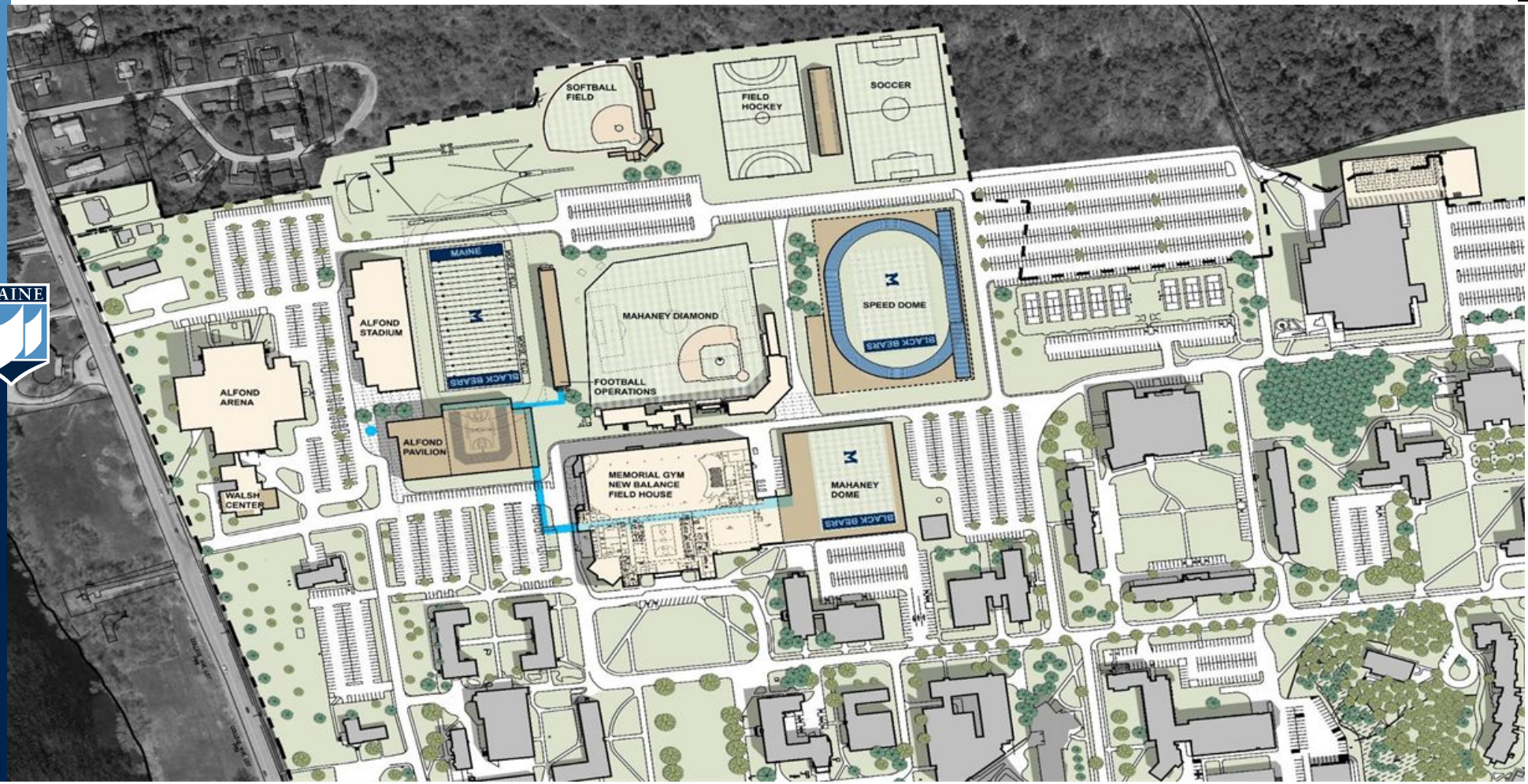
Maine's Public Universities

MAINE

The Harold Alfond Foundation committed up to $90M to support the University of Maine athletic facilities master plan for capital improvements; together with a match of up to $20M in University-raised sources, the total project budget is at least $110M.

UMaine Division I Athletics Facilities Conceptual Plan

5.1



5.1

The athletics facilities master plan has many elements.

- Improvements to Alfond Arena and expansion of the Shawn Walsh Center
- New playing fields (including SpeedDome)
- New multipurpose center (would host basketball and campus events)
- Replace and enlarge Mahaney Dome
- Add new football operation center
- Add strength and conditioning and sports medicine spaces for football and basketball.
- New athletic department offices
- Upgrades to Memorial Gym (office spaces, locker rooms, Latti Fitness Center)

5.1

Renderings of Alfond improvements and Walsh Center expansion

Our goal is to capture opportunities, over time, to create an intentional renewed physical setting for the current and next generations of UMaine facilities?

- Fully fund depreciation and space management (annual stewardship) including space reduction
- Maximize effective use of state and federal grant funds
- Maximize use of available debt capacity
- Maximize fundraising capacity in support of capital goals and heighten focus in UM Foundation fundraising toward capital plans
- Utilize Public Private Partnerships as appropriate

5.1

We have a conceptual spending plan and are preparing multi year financial projections for a growth model

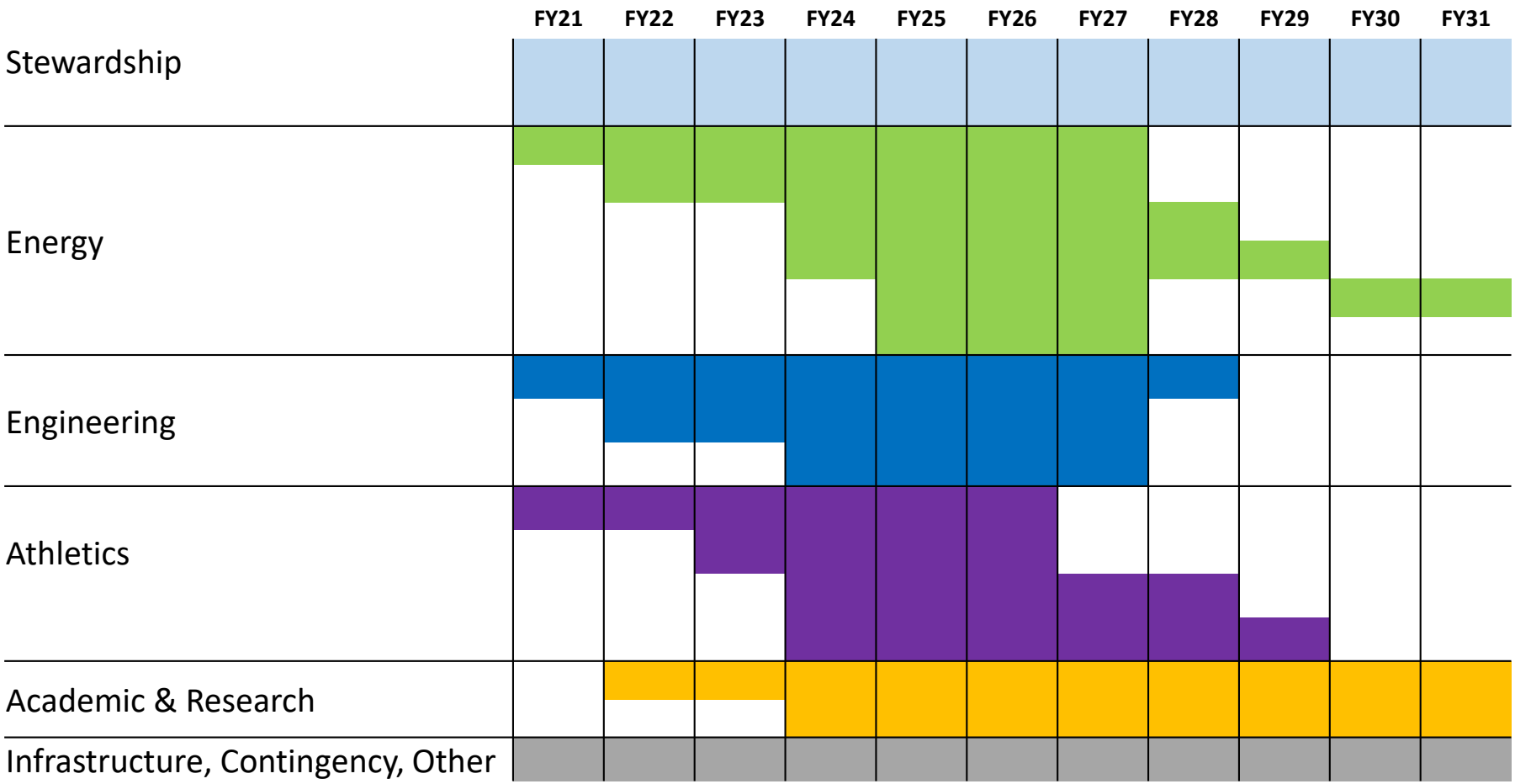
Total Facility Capital Spending, 2021 - 2031	2020 $millions low	2020 $millions high	State Funding	Federal Support	Revenue Bonds	Alfond Grants	Fundraising Match	P3	Operating Funds	Subtotals
FERLAND	$78	$78	$12		$40		$24		$2	$78
UMEC	$130	$130			$130					$130
ENGINEERING PHASE 3	$100	$130	$20		$40	$50	$20			$130
ATHLETICS	$110	$110				$90	$20			$110
GEM, AQUACULTURE, OTHER RESEARCH	$50	$100	$50	$50						$100
NATURAL SCIENCES, FORESTRY, AGRICULTURE*	$90	$135	$50		$65		$20			$135
STEWARDSHIP, DEFERRED MAINTENANCE	$100	$150	$25		$25				$100	$150
PUBLIC PRIVATE PARTNERSHIP**	$30	$40						$40		$40
	$688	$873	$157	$50	$300	$140	$84	$40	$102	$873

*This range also includes Murray Hall for $45 million in the higher range. Murray Hall is a replacement project

** could be larger if housing is built via P3

5.1

This diagrams the approximate timeline for cash flow, assuming timely implementation for projects of this scale.



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Space committee membership

Co-Chairs

Jake Ward, Vice President for Innovation & Economic Development
Joanne Yestramski, Interim Vice President for Finance and Administration

Members

Ali Abedi, Associate VP for Research Hannah Carter, Dean of Cooperative Extension
Jason Charland, Director of Research Development
Andrea Grant, Coordinator of Athletic Facilities
Stewart Harvey, Executive Director of Facilities and Capital Management Services
Monique LaRocque, Associate Provost Division of Lifelong Learning
Chris Lindstrom, Vice President CHRO
Michael Scott, Lecturer in New Media
Kenda Scheele, Associate VP and Senior Associate Dean
Claudia Torres, Administrative Specialist, Office of the President
Dick Young, Interim Executive Director Auxiliary Services

Advisors

Carolyn McDonough, Director of Capital Planning & Project Management
Debra Poodry,, Planning Consultant Facilitator
Claude Jenkins/Ryan Ward/ Katina St. Jeor– facilitators and minutes

5.1

1865 THE UNIVERSITY OF MAINE

Thank you!

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Capital Project Status and Bond Project Status Report, UMS

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **X** **BOARD ACTION:**

BOARD POLICY:

UNIFIED ACCREDITATION CONNECTION:

BACKGROUND:

Overview:
Attached is the Capital Project Status Report for the March 3, 2021 meeting of the Finance, Facilities and Technology Committee. The report reflects a total of 18 projects; three projects have been removed and no new projects have been added since the last report.

COVID-19 Impact on Capital Construction:
While most projects continue to move forward at this time under the various provisions of state and federal pandemic guidance, some impacts continue.

- Three of four projects previously placed on hold remain so. The viability of and alternative options for these projects will continue to be reviewed for potential future resumption.
- Previously reported impacts continue to be relevant.

Bond Project Status Report:
The special portion of this report calling out only bond projects continues to reflect thirty-five (35) projects. One project was removed from the list as the funding sources changed and no longer included bond funds; and two new projects were added. The projects are currently estimated to account for more than $39 million of the $49 million in voter approved general obligation bond funding. About $12 million of that has been expended.

Supplemental funding is being leveraged for some of these projects and the total estimated project value across all funds currently stands at approximately $60 million, including the bond funding and other project resources. The University continues to invest in additional projects as well.

- Twelve of the bond projects are complete and another one is substantially complete.
- Eleven (11) of these bond projects also appear on the Capital Project Status Report with approved budgets above board threshold.

- Five (5) projects are expected to be brought to the board for additional authorization as design progresses but are currently in design and pre-design phases with budgets below the board approval threshold.
- The remaining bond funded projects do not have budgets that meet the threshold for Board of Trustees consideration and are therefore not present on the Capital Projects Status Report. As projects are completed, they will remain on this report for documenting purposes until all Bond Projects are completed.

Future reports will be updated to reflect additional active Bond projects as the information becomes available.

Harold Alfond Foundation (HAF) Grant funded projects

Earlier this year it was announced that UMS was awarded $240M of HAF grant funds to be disbursed over the next twelve years. Within the overall grant are funds intended to pay or secure bonded debt for various construction or renovation projects as well as align and improve specific academic areas and functions. There is also a significant match requirement for these funds. The System has set up a core team including Financial and Capital Planning personnel to manage the roll out of these funds and related projects. These projects will be included in updates to the regular capital planning process including the one year and long-term capital plans. More information is expected to be presented to the Board in the coming months.

UM Historic Building P3 initiative update

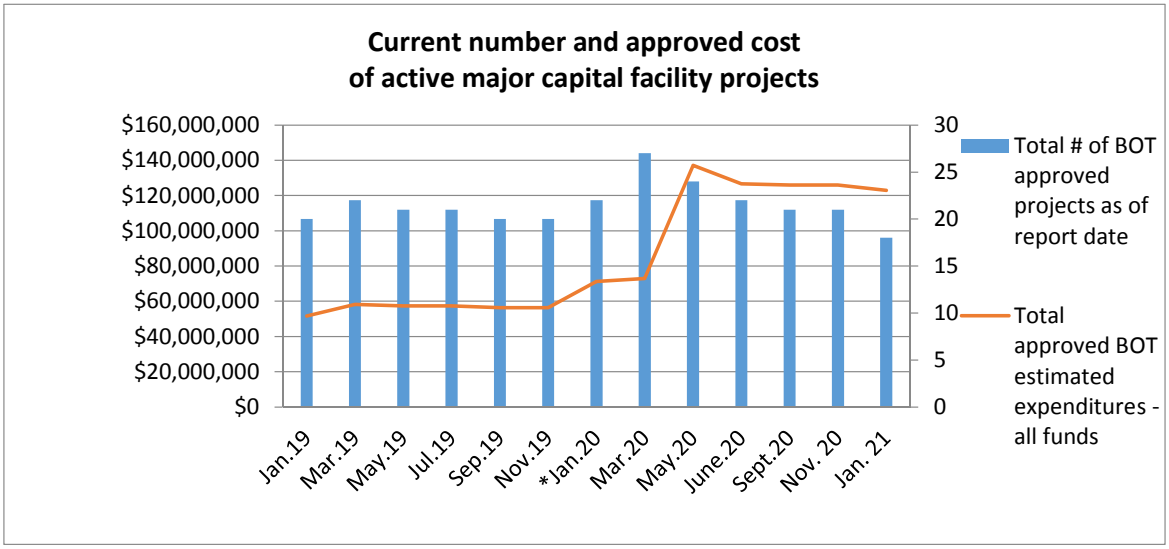
The University of Maine continues to pursue a Public Private Partnership opportunity for reuse of the historic Coburn and Holmes Halls. An update regarding this will be presented as part of the UM Rolling Master plan informational agenda item.

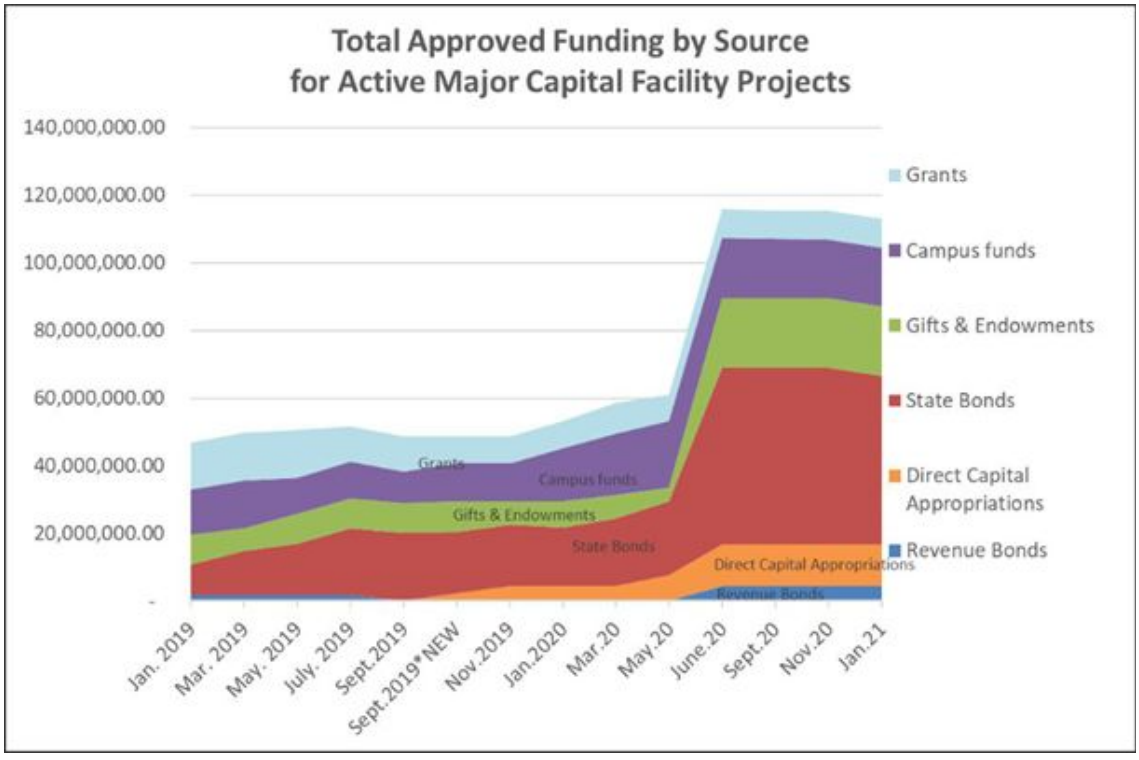
USM Structured Parking update

The University of Southern Maine and CPPM continue to work with the selected design team on the final location and form of a structured parking facility for the Portland campus to align with the requirements of the new residential facility. A thorough review of possible sites for the structure was completed over the winter months. The design team will begin the permitting process and continue the design over the next few months with the intent to bring forward an updated agenda item at the next Board meeting in May. The project remains on schedule to be completed prior to the residence hall completion in 2023.

Update to UM Ferland Engineering Education & Design Center Project:

Construction is ongoing. The final structural beam was placed along with a beam topping ceremony on Friday 2/12. Metal deck installation will continue through February, and as temperatures rise exterior framing and interior concrete and rough in work will begin.





*Direct Capital Appropriations funds consist of capital appropriations in anticipation of revenue bonding, as well as MEIF funds.

2/22/2021

**Please note that the graph reflecting Total Approved Funding by Source for Active Major Capital Facility Projects, two sets of data for the month of September are captured to reflect a change in methodology. The new methodology does not reflect any change in resources but does reflect a refinement in how those resources are categorized. Following months will return to a single set of data for each month.

Capital Project Status Report

Board Approved Projects

March 2021 - Finance, Facilities and Technology Committee

With Grand Totals and % of Current Approved Estimates

Campus, Project Name (Project ID)	Funding Source(s) & each source's share of expenditures to date	Status	Original Estimated Completion	Current Est. Completion	Original Approved Estimate	Current Approved Estimate	Total Expense to Date	% Expended of Current Approved Estimate	Prior Actions, Information & Notes
UMA									
Augusta Welcome Center (1100077)	2018 State Bond (100%)	Hold	2021	2021	$6,850,000	$6,850,000	$350,388	5%	Board approved $6.85M in January 2020.
Handley Hall HVAC System Upgrade (1200029)	2018 State Bond (100%)	Design in Progress	2020	2021	$575,000	$575,000	$26,433	5%	Board approved $575K in September, 2019.
UM									
Advanced Structures and Composites Center Expansion/ASCC Equip W2-Thermoplastics Lab/ASCC Equip W2 Tow Carriage (5100316, 5100414, 5100432)	2010 State Bond (49%), Grants (44%), Gifts (6%), Campus E&G Funds (1%)	Project 5100316 is Complete, Project 5100414 Design in Progress, Project 5100432 is Complete	2014	2021	$6,400,000	$10,400,000	$9,517,995	92%	Board approved $6.4M in November, 2012. Board approved $1.6M in March 2014. Board approved increase of $871,000 in March 2015. BOT approved additional $1.5M in May 2016 for equipment project.
Darling Marine Center Waterfront Infrastructure (5100459, 5100460, 5100461)	Grants (64%), Campus E&G Funds (36%)	Construction in Progress	2017	2021	$3,000,000	$5,200,000	$4,135,153	80%	Board approved $3M in July, 2017. Board approved increase of $2.2M in September, 2019.
UM Ferland Engineering, Education and Design Center (5100458, 5100493, 5100546, 5200604)	Gifts (7%), Campus Funds (4%), Campus Reserves (6%), State Appropriations (83%)	Construction in Progress	2024	2024	$1,000,000	$72,000,000	$13,570,252	19%	Board approved $1M in September, 2017. Board approved additional $8M in May, 2018. Additional $63M BOT approved March, 2020 Initial occupancy of this facility is expected in 2022; final completion in 2024.
ASCC Renovation - Mezzanine Office Expansion (5100525)	Campus E&G Funds (31%) Grants (69%)	Construction in Progress	2020	2021	$450,000	$1,400,000	$452,077	32%	Board approved $1,400,000 March, 2020
UM Energy Center Phase II (5100516, 5100517)	Campus (91%) / Grants 9%)	Pre-Design in Progress	2023	2022	$5,700,000	$5,700,000	$335,599	6%	Board approved $5.7M March, 2019.
***Wells Commons Generator (5100433)	Campus Auxiliary Operating (62%) Campus Auxiliary Reserves (38%)	Complete	2019	2020	$525,000	$525,000	$332,094	63%	Board approved $525,000 January, 2018.
UMF									
**Dearborn Gym HW Upgrades (2100087)	2018 State Bond (100%)	Complete	2019	2021	$600,000	$850,000	$803,228	94%	Board approved $600K in March, 2019. Board approved additional $250K in May, 2019.

Capital Project Status Report

Board Approved Projects

March 2021 - Finance, Facilities and Technology Committee

With Grand Totals and % of Current Approved Estimates

Campus, Project Name (Project ID)	Funding Source(s) & each source's share of expenditures to date	Status	Original Estimated Completion	Current Est. Completion	Original Approved Estimate	Current Approved Estimate	Total Expense to Date	% Expended of Current Approved Estimate	Prior Actions, Information & Notes
UMFK									
UMFK Enrollment/Advancement Center (3100042)	State Bond (100%)	Construction in Progress	2022	2021	$3,249,000	$3,249,000	$1,013,995	31%	Board approved $2.99M in Bond Funding, March, 2020. Plus, $259K for a total of $3,249,000.
USM									
Bailey Hall Fire Protection and Electrical Upgrades (6100316, 6100323)	2018 State Bond (44%), Campus E&G (56%)	Project 6100316 is Construction in progress, Project 6100323 is Complete	2019	2021	$2,580,000	$4,388,000	$3,339,406	76%	Board approved $2.58M in January, 2019.
**Career and Student Success Center and Portland Residence Hall (6100325, 6100338)	2018 State Bond (42%), Campus E&G (58%)	Bidding in Progress	2020	2023	$1,000,000	$5,700,000	$4,766,637	84%	Board approved $1M in January, 2019. Board approved predevelopment expenditures of up to $5.7M combined for the two projects in January 2020. The total project cost remains under development and subject to change.
**USM Center for the Arts (6100300)	Gifts (100%)	Design in Progress	2022	2023	$1,000,000	$1,000,000	$367,045	37%	Board approved $1M in January, 2018.
Port Parking Garage Study (6100331)	Campus E&G Funds (100%)	Pre-Design in Progress	2022	2022	$1,200,000	$1,200,000	$135,737	11%	Board approved in March 2020. Initial spending limit $400,000 with addtl $800,000 to be authorized by the Chancellor and Vice Chancellor for Finance and Administration and Treasurer and contingent upon site location approval from the City of Portland
Wishcamper Parking Lot (6100330)	Campus E&G Funds (100%), Capital Reserves (0%)	Hold	2020	2021	$1,710,000	$1,710,000	$269,036	16%	Board approved $1.71M in January, 2020.
Fitness Equipment Purchase and Space Renovation (0000000)		Hold	2020	2021	$700,000	$700,000	$0	0%	Board Approved March, 2020. No expenditures as of yet.
UMPI									
UMPI Solar Array (7100023)	Campus E&G Funds (100%)	Bidding	2020	2021	$700,000	$700,000	$129,347	18%	Board approved $700K June, 2020.

Capital Project Status Report

Board Approved Projects

March 2021 - Finance, Facilities and Technology Committee

With Grand Totals and % of Current Approved Estimates

Campus, Project Name (Project ID)	Funding Source(s) & each source's share of expenditures to date	Status	Original Estimated Completion	Current Est. Completion	Original Approved Estimate	Current Approved Estimate	Total Expense to Date	% Expended of Current Approved Estimate	Prior Actions, Information & Notes
UMPI									
Folsom 105 Nursing Renovation (7100026)	Bond (100%)	Substantially Complete	2020	2021	$800,000	$800,000	$707,776	88%	Board approved $800K March, 2020.
Explanatory Notes: * Project is new as of this report. ** Details of this project include updates since the last report. *** This project has been completed since the last report and is not expected to appear on the next report.	Funding source(s) reflects primary source(s) for project.		Calendar Year unless otherwise noted.						Percentage expended reflects total expended as of January 31, 2021 as a percentage of the current approved project estimate.

Bond Project Status Report

Active Bond Projects

March 2021 - Finance, Facilities, and Technology Committee

With Grand Totals and % of Current Approved Estimates

Campus, Project Name (Project ID), Project Manager	Status	Original Estimated Completion	Current Est. Completion	Funding Source(s) & each source's share of expenditures to date	Estimated Bond Funding for Project	Bond Funding Expended	Total Estimated Project Cost	Prior Actions, Information & Notes
UMA								
Augusta Campus Welcome Center (1100077)	Hold	2021	2021	Bond (100%)	$2,885,000	$350,388	$6,850,000	Board approved $6.85M in January 2020.
**Handley Hall A/C Replacement (1200029)	Design in Progress	2020	2021	Bond (100%)	$26,433	$26,433	$575,000	Board approved budget of $575,000 in September, 2019
**Bangor Welcome Ctr Planning (1100534)	Design in Progress	2021	2021	Campus E&G (100%)	$475,000	$0	$475,000	
Jewett Hall Boiler Design Work (1200062)	Construction in Progress	2021	2021	Bond (100%)	$305,000	$251,212	$305,000	
				Total Bond for Campus	**$3,691,433**	**$628,033**	**$8,205,000**	
UMF								
**Dearborn Gym Hot Water Upgrades (2100087)	Complete	2019	2021	Bond (100%)	$850,000	$803,228	$850,000	Board approved $600K in March, 2019. Board approved additional $250K in May, 2019.
274 Front St Acquisition (2100089)	Complete	2019	2019	Bond (100%)	$855,000	$850,820	$855,000	Board approved $855K in January, 2019.
Scott Hall Renovations (2100092)	Construction in Progress	2019	2022	Bond (100%)	$200,000	$178,690	$200,000	
**Dakin Hall Shower Renovations (2100093)	On Hold	2019	2021	Bond (100%)	$200,000	$88,332	$200,000	
**Lockwood Hall Shower Renovations (2100094)	On Hold	2019	2021	Bond (100%)	$200,000	$84,199	$200,000	
**Stone Hall Shower Renovations (2100095)	Construction in Progress	2019	2022	Bond (100%)	$200,000	$29,074	$200,000	
UMF Campus Paving (2100097)	Complete	2019	2019	Bond (100%)	$97,338	$97,338	$97,338	
274 Front St Renovation (2100096)	Pre-Design in Progress	2020	2022	Bond (100%)	$450,000	$18,744	$1,000,000	Approved budget of $450,000, as it remains in study/design phase.
FRC Floor Renovation (2100098)	Complete	2019	2019	Bond (100%)	$200,729	$209,503	$200,729	
Exterior Painting Merrill Hall (2200096)	Pre-Design in Progress	2020	2021	Bond (100%)	$40,000	$764	$40,000	
Olsen Center Renovations (2100102)	Pre-Design in Progress	2023	2023	Bond (100%)	$1,900,000	$21,074	$1,900,000	Approved budget of $300,000, as it remains in study/design phase.
**Mantor Library Renovations (2100103)	Construction in Progress	2021	2022	Bond (100%)	$300,000	$218,866	$300,000	
**Campus ADA Ramps (2100104)	Construction in Progress	2021	2021	Bond (100%)	$115,000	$10,194	$100,000	

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Bond Project Status Report

Active Bond Projects

March 2021 - Finance, Facilities, and Technology Committee

With Grand Totals and % of Current Approved Estimates

Campus, Project Name (Project ID), Project Manager	Status	Original Estimated Completion	Current Est. Completion	Funding Source(s) & each source's share of expenditures to date	Estimated Bond Funding for Project	Bond Funding Expended	Total Estimated Project Cost	Prior Actions, Information & Notes
UMF								
Dakin Flooring, Ceiling, Light (2100105)	Construction in Progress	2021	2021	Bond (100%)	$250,000	$206,187	$250,000	
*Roberts HVAC Upgrade (2100106)	Design in Progress	2021	2021	Bond (100%)	$150,000	$6,893	$150,000	
*Merrill Hall HVAC Upgrade (2100107)	Design in Progress	2021	2021	Bond (100%)	$400,000	$0	$400,000	
				Total Bond for Campus	**$6,408,067**	**$2,823,907**	**$6,393,067**	
UM								
Neville Hall Renovation (5100534)	Design in Progress	2021	2022	Bond (100%), Campus E&G (0%)	$300,000	$53,738	$1,500,000	Approved budget of $300,000 as it remains in study/design phase.
				Total Bond for Campus	**$300,000**	**$53,738**	**$1,500,000**	
UMFK								
UMFK Enrollment/Advancement Center (3100042)	Construction in Progress	2022	2021	Bond (100%)	$3,249,000	$1,013,995	$3,249,000	Board approved $2.99M in Bond Funding, March, 2020. Plus, $259K for a total of $3,249,000.
				Total Bond for Campus	**$3,249,000**	**$1,013,995**	**$3,249,000**	
UMM								
UMM Science Building Roof Replacement (4100042)	Complete	2020	2020	Bond (100%)	$325,000	$280,487	$325,000	
UMM Dorward Hall Roof Replacement (4100043)	Complete	2020	2020	Bond (100%)	$300,000	$296,092	$300,000	
**UMM Sennett Roof Replacement (4100044)	Complete	2020	2020	Bond (100%)	$152,000	$152,000	$152,000	
UMM Reynolds Center Roof Repair (4200044)	Complete	2020	2020	Bond (100%)	$164,000	$154,226	$164,000	
UMM Site Work (4200045)	Complete	2020	2020	Bond (100%)	$60,000	$57,365	$60,000	
				Total Bond for Campus	**$1,001,000**	**$940,170**	**$1,001,000**	
USM								
**Woodward Hall Renovations (6100301)	Complete	2019	2019	Bond (86%), Campus E&G Funds (14%)	$1,008,395	$1,008,395	$1,172,840	
Ricci Lecture Hall Renovations (6100308)	Complete	2019	2020	Bond (31%), Gifts (43%), Campus E&G Funds (26%)	$150,000	$150,000	$564,197	

Bond Project Status Report

Active Bond Projects

March 2021 - Finance, Facilities, and Technology Committee

With Grand Totals and % of Current Approved Estimates

Campus, Project Name (Project ID), Project Manager	Status	Original Estimated Completion	Current Est. Completion	Funding Source(s) & each source's share of expenditures to date	Estimated Bond Funding for Project	Bond Funding Expended	Total Estimated Project Cost	Prior Actions, Information & Notes
USM								
**Career and Student Success Center (6100325)	Bidding in Progress	2021	2023	Bond (100%)	$19,000,000	$1,966,477	$26,551,000	Board approved $1M in January, 2019. Board approved predevelopment expenditures of up to $5.7M combined with the residence hall project in January 2020. The total project cost remains under development and subject to change.
Bailey Hall Fire Protection and Electrical Upgrades (6100316, 6100323)	Project 6100316 Construction in Progress, Project 6100323 is Complete	2019	2021	Bond (48%), Campus E&G Funds (52%)	$1,460,000	$1,456,999	$4,388,000	Board approved $2.58M in January, 2019. Board approved additional $1.808M in January, 2020.
Nursing Simulation Lab Science (6100327)	Complete	2021	2021	Bond (100%)	$1,500,000	$1,150,486	$1,500,000	Board approved $1.5M in January, 2020.
Robie Andrews Renovation (6100339)	Design in Progress	2021	2021	Bond (100%)	$491,605	$19,553	$491,605	
				Total Bond for Campus	**$23,610,000**	**$5,751,911**	**$34,667,642**	
UMPI								
Wieden Renovation Bond (7100025)	Design in Progress	2020	2021	Bond (100%)	$125,000	$66,359	$4,000,000	Approved budget of $125,000, as it remains in study/design phase.
Folsom 105 Nursing Renovation (7100026)	Substantially Complete	2020	2021	Bond (100%)	$800,000	$707,776	$800,000	Board approved $800K March, 2020.
				Total Bond for Campus	**$925,000**	**$774,135**	**$4,800,000**	
				Totals:	**$39,184,501**	**$11,985,888**	**$59,815,709**	
Explanatory Notes: * Project is new as of this report. ** Details of this project include updates since the last report. Completed projects will remain on this report unless otherwise specified.	Funding source(s) reflects primary source(s) for project.	Calendar Year unless otherwise noted.						Bond Funding expended reflects total expended as of January 31, 2021.

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Sightlines Annual Facilities Report, UMS

INITIATED BY: James O. Donnelly, Chair

7

BOARD INFORMATION: **X** **BOARD ACTION:**

BOARD POLICY:
N/A

UNIFIED ACCREDITATION CONNECTION:
N/A

BACKGROUND:
Sightlines will present its annual facilities benchmarking and analysis findings regarding the University of Maine System's facilities and facility management operations.

Sightlines will be available to present and discuss the annual report. While the entire updated report is attached for Trustees' information, in the interest of time, only selected slides will be reviewed during the live presentation.

A key metric formally adopted by Trustees – density, as a measure of the intensity or efficiency of the use of our space saw a slight reduction in FY2020 but has generally flattened vs the longer-term downward trend. This is illustrated on Slide 11 in the slide numbering sequence. The FY2020 reduction is likely tied directly to the slight decrease in enrollment over FY2020. The near-term flattening and slight increase trend indicates the Trustee's commitment to constrain space combined with the stabilizing and slightly strengthening in user population of students, staff and faculty is making a difference. That commitment to space constraint is continuing in the current fiscal year as space reduction projects continue. Combined with a change in Sightlines methodology several years ago which had the effect of lifting UMS's baseline density, UMS has now attained the interim density goal, though UMS remains far less dense than public higher education overall and has a significant way to go to reach the established long term goal.

Beyond density, the Sightlines data continues to reflect a challenging situation in which the condition of the University's facilities as measured by renovation age and net asset value have continued to decline. More than half of all University space this year has reached a renovation age of 50 years old or older, and the University is on pace to see that grow to 60 percent by 2025. This is illustrated on Slide 22 in the slide numbering sequence.

The measures of condition or quality of the University's facilities such as renovation age and net asset value are not expected to measurably improve overall until and unless substantially more financial investment is consistently made in existing facilities each year. For more than a decade, the University generally has invested $20 million +/- in its existing facilities each year. The current Sightlines target would have the University investing at least twice that amount

annually in existing facilities.

For a visual representation of this challenge, please see slide 61 (using the deck slide numbers) of the Sightlines deck. Corresponding slides showing the campus view of this investment challenge are being included in this year's Fiscal Year 22 budget presentations to illustrate the challenge at each campus.

To help address this, the University has continued its focus on removing space and constraining the growth of space. The current financial crisis potentially provides the framework to make changes that have been evident to this group for some time. Continued work on a space management plan will focus discussions on which assets are not essential to the core mission and strategy of each institution. Divesting facilities will increase density and Net Asset Value.

The University also has been seeking new and novel sources of investment. Revenue bonds, public-private partnerships, potential new state support, energy services company agreements and other revenue sources are all being pursued or are in progress above and beyond more traditional E&G, grant or general obligation bond resources.

Additional slides of potential particular interest may include:

- Slide 7 shows the total gross square feet of space as tracked by Sightlines snice FY12.
- Slide 11 shows the stabilizing density, which had met the Trustees interim goal in FY19, but fell slightly in FY20 due to decreases in enrollment and staffing. UMS remains well below the Public Higher Education average for density.
- Slides 17 and 18 show the continued increase in renovation age of the UMS portfolio, another measure of condition and investment. Over half of all UMS facility space now has a renovation age of 50 years old or greater.
- Slides 61 and 62 illustrates the ongoing gap between current investment levels and the levels that would be needed to stabilize and improve the net asset value of existing facilities.
- Slide 68 illustrates the long-term trend of deteriorating facility condition.
- The appendix (starting on Slide 73) contains an annual accounting of key performance indicators previously identified by Trustees in this area.

The University of Maine System

FY20 Return on Physical Assets
Final Presentation

March 3, 2021

University of the Sciences in Philadelphia
University of Toledo
University of Vermont
University of Washington
University of West Florida
University of Wisconsin - Madison
Vanderbilt University
Virginia Commonwealth University
Wake Forest University
Washburn University
Washington State University
Washington State University - Tri-Cities Campus
Washington State University - Vancouver
Washington University in St. Louis
Wayne State University
Wellesley College
Wesleyan University
West Chester University
West Virginia Health Science Center
West Virginia University
Western Oregon University
Westfield State University
Widener University
Williams College
Worcester Polytechnic Institute

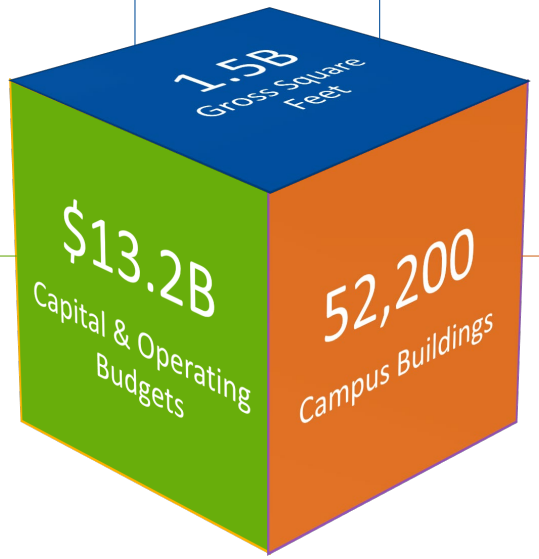
GORDIAN®

Gordian and Sightlines

Owners of the largest verified facilities database in higher education

450+
Unique Campuses in 42 states and 5 Canadian Provinces

1.5B
Gross Square Feet of campus space



$13.2B
In capital and operational budgets currently being tracked

52,200
Campus Buildings across North America

Sightlines members serve **over 20%** of US College Enrollment

GORDIAN®

Vocabulary for Return on Physical Assets (ROPA)

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.

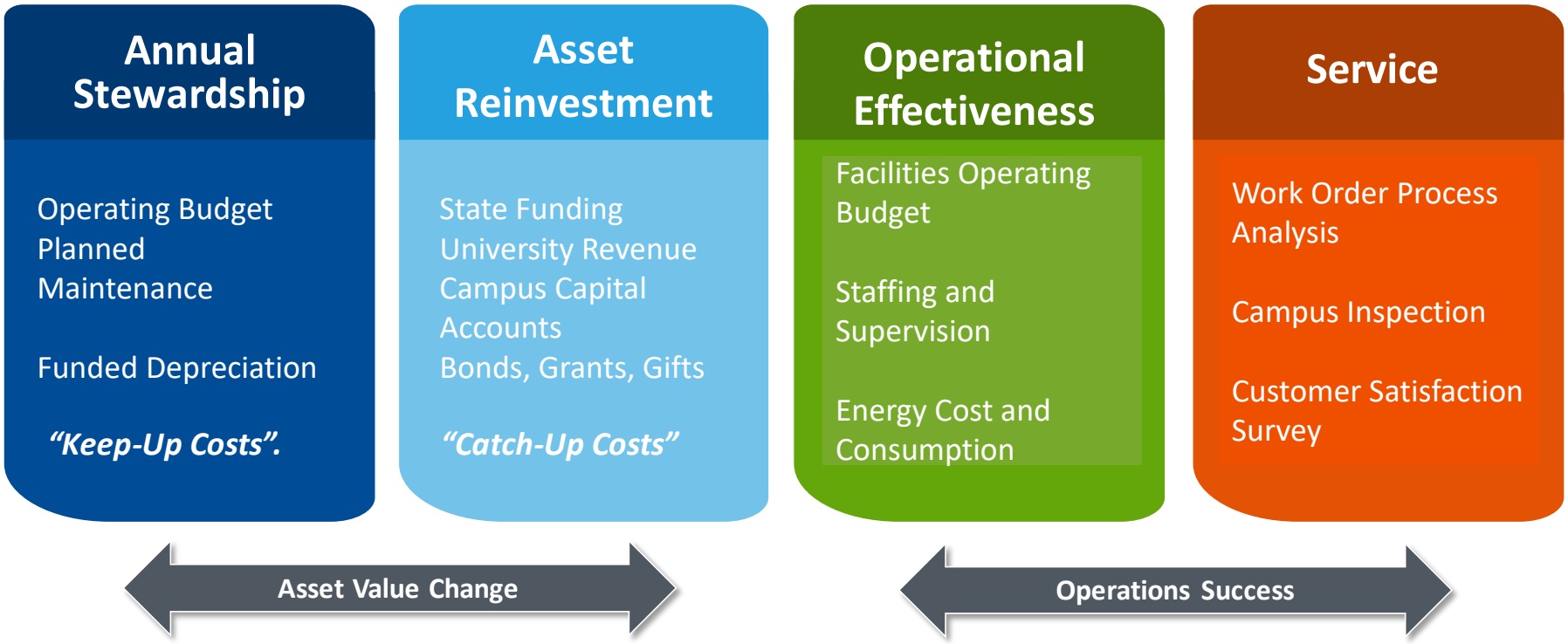
Service

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

Asset Value Change

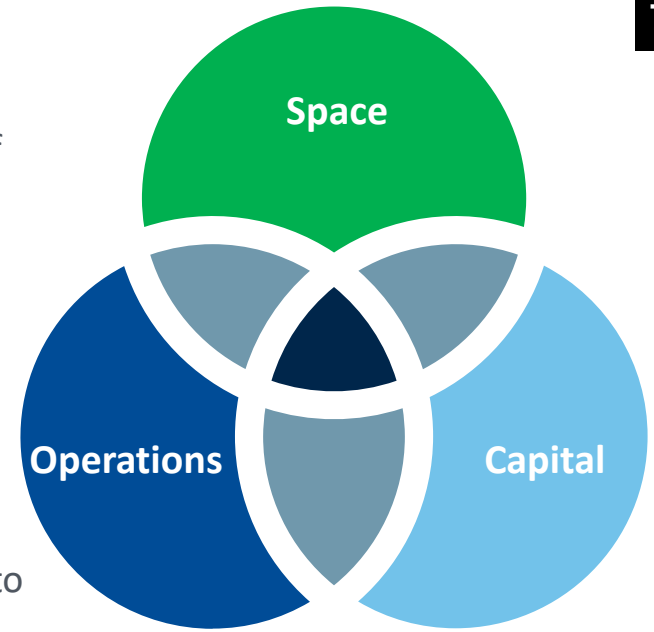
Operations Success

Vocabulary for Return on Physical Assets (ROPA)



Integrated Campus Stewardship

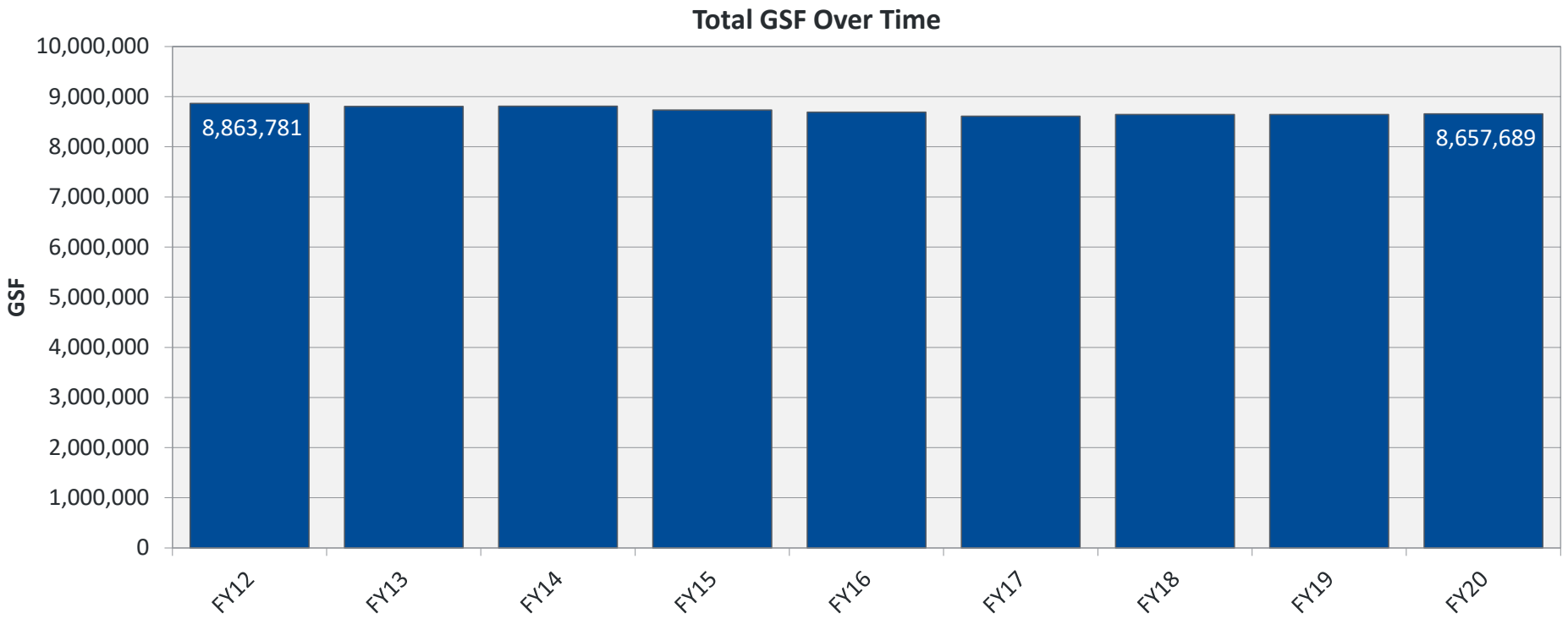
- FY2020 GSF and density are commensurate with FY2019 data.
- Space continues to age. Over the next 10 years the UMS will face dual waves of life cycles coming due.
- Capital investment into existing space to keep up with these lifecycles, despite increasing in FY20 is not able to slow the aging process of System assets.
- Energy consumption decreased across the UMS as campuses shuttered due to COVID-19.
- Service process improves with AIM. Opportunities to increase communication to customers and campus use of reporting exists.



Throughout the presentation UMS will be compared to the Gordian Public Higher Ed. Database Average for FY20. This subset of the database includes institutions like the University of Massachusetts, University of New Hampshire, University of Iowa, University of New Mexico and University of Washington.

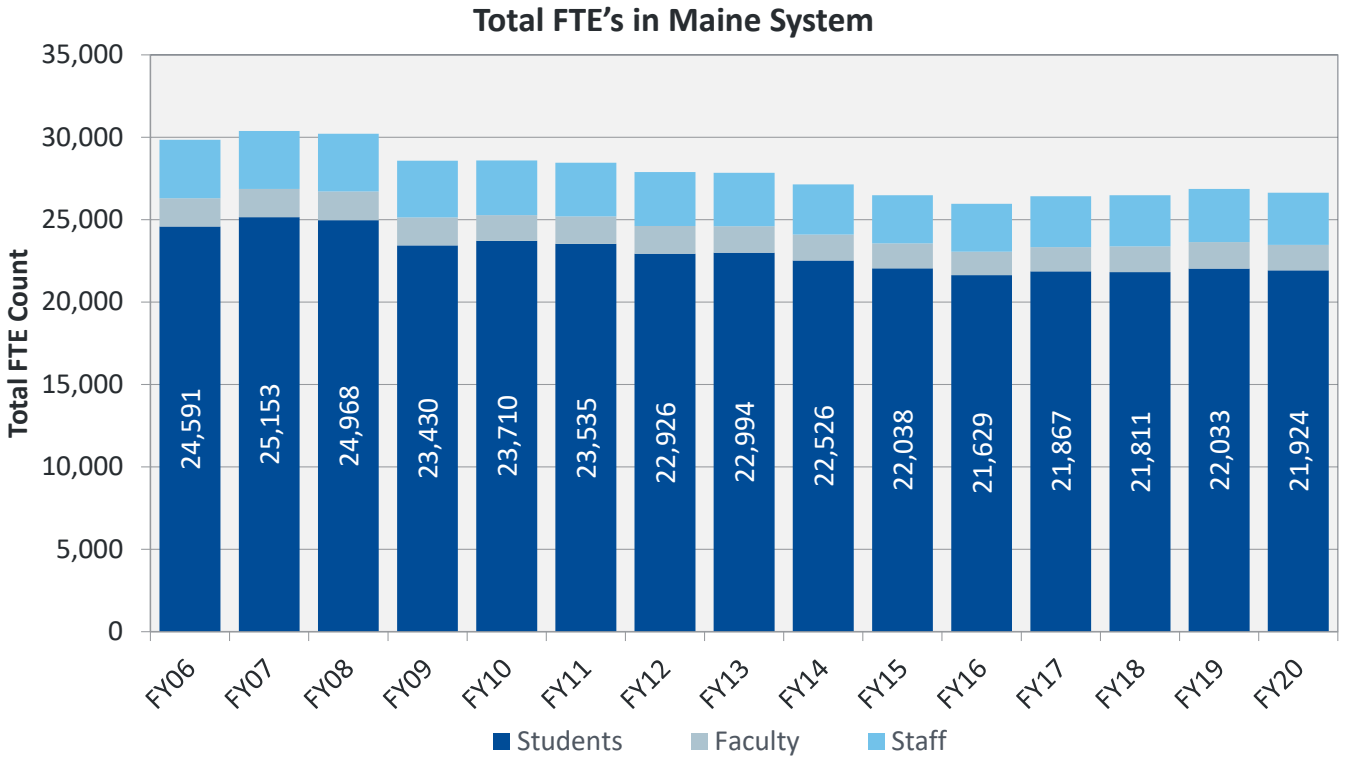
Space Profile

UMS GSF Holds Steady in FY2020



FY20 Student Enrollment Similar to FY19

Student enrollment has decreased 11% since FY06



Density Affects:

7.1

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

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

Wear and Tear of Facilities
High traffic and space usage result in earlier lifecycle replacement.

Density: Measures number of users per 100,000 GSF
Users include all student, faculty and staff FTEs
Measures campus building usage on a daily basis

GORDIAN®

Does not take into account reductions in occupancy due to remote teaching, learning and work in the spring and summer.

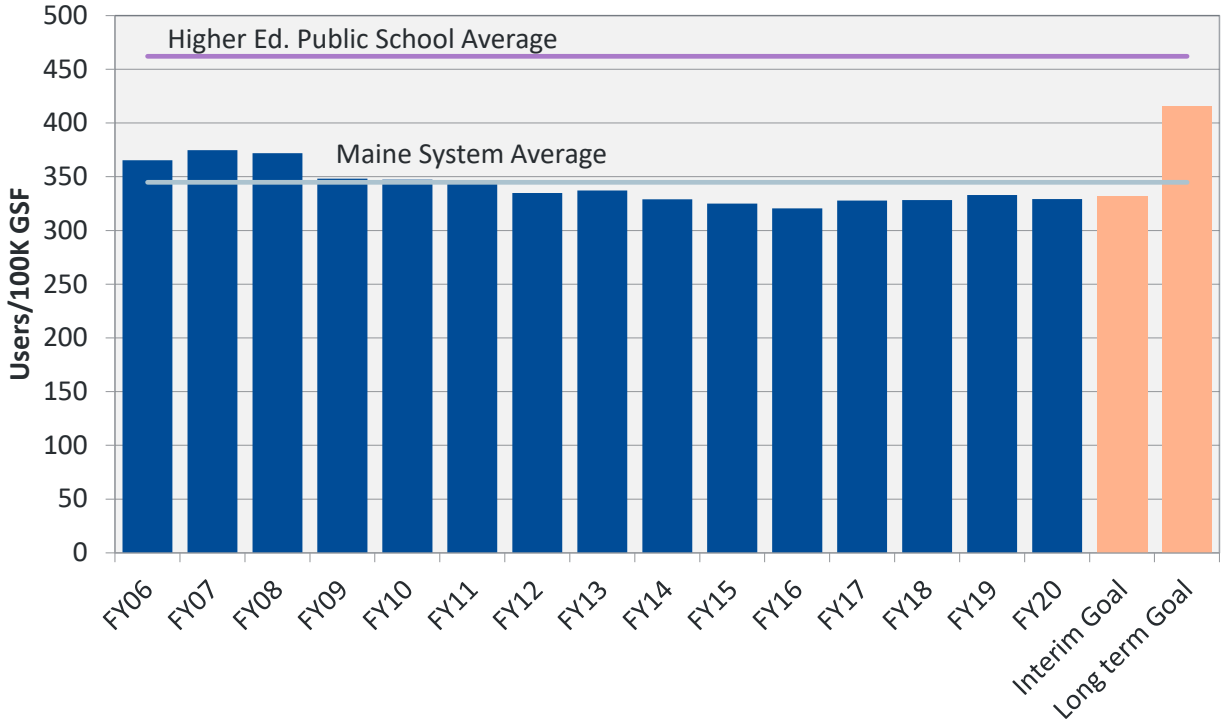
10

Enrollment information comes from the Fall 2019 System Enrollment Report

Density Across the Maine System Decreases

Density has decreased to 329 users/100K GSF in FY20

Density at Maine System Level



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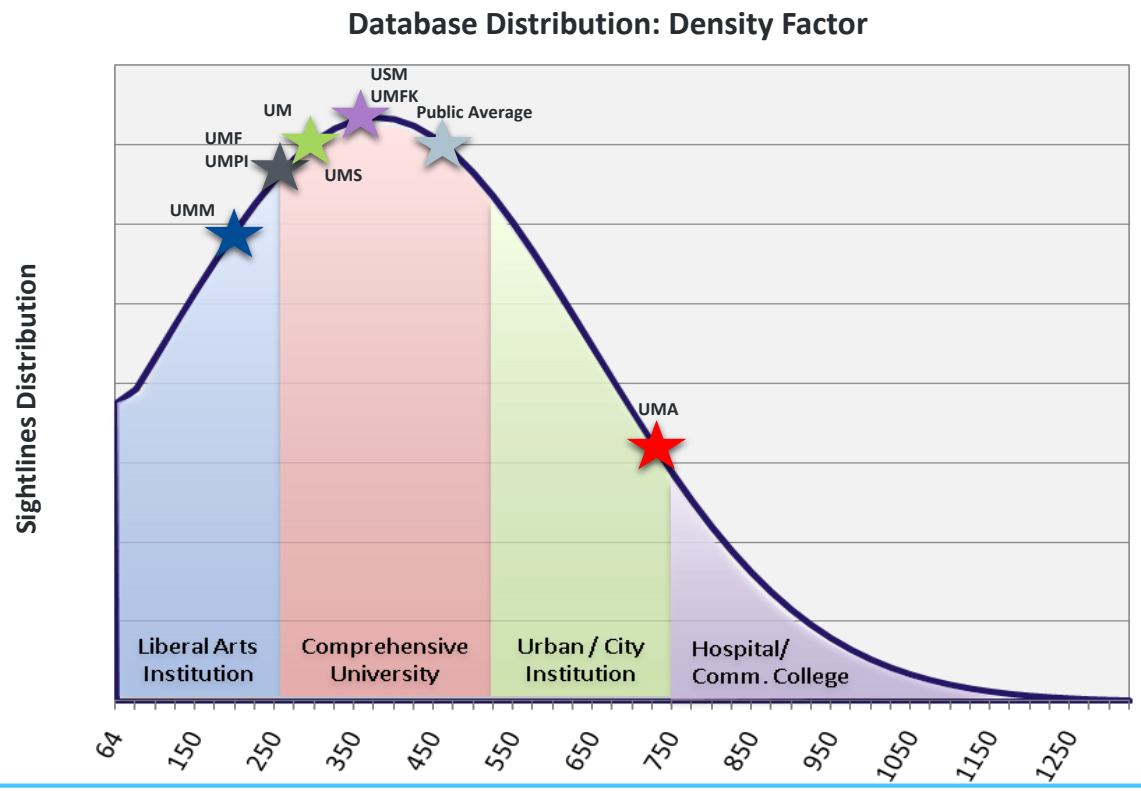
Measures campus building usage on a daily basis

Does not take into account reductions in occupancy due to remote teaching, learning and work in the spring and summer.

Density Across the System is Variable

UMA is only institution above Sightlines' public-school average



Density Affects:

7.1

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

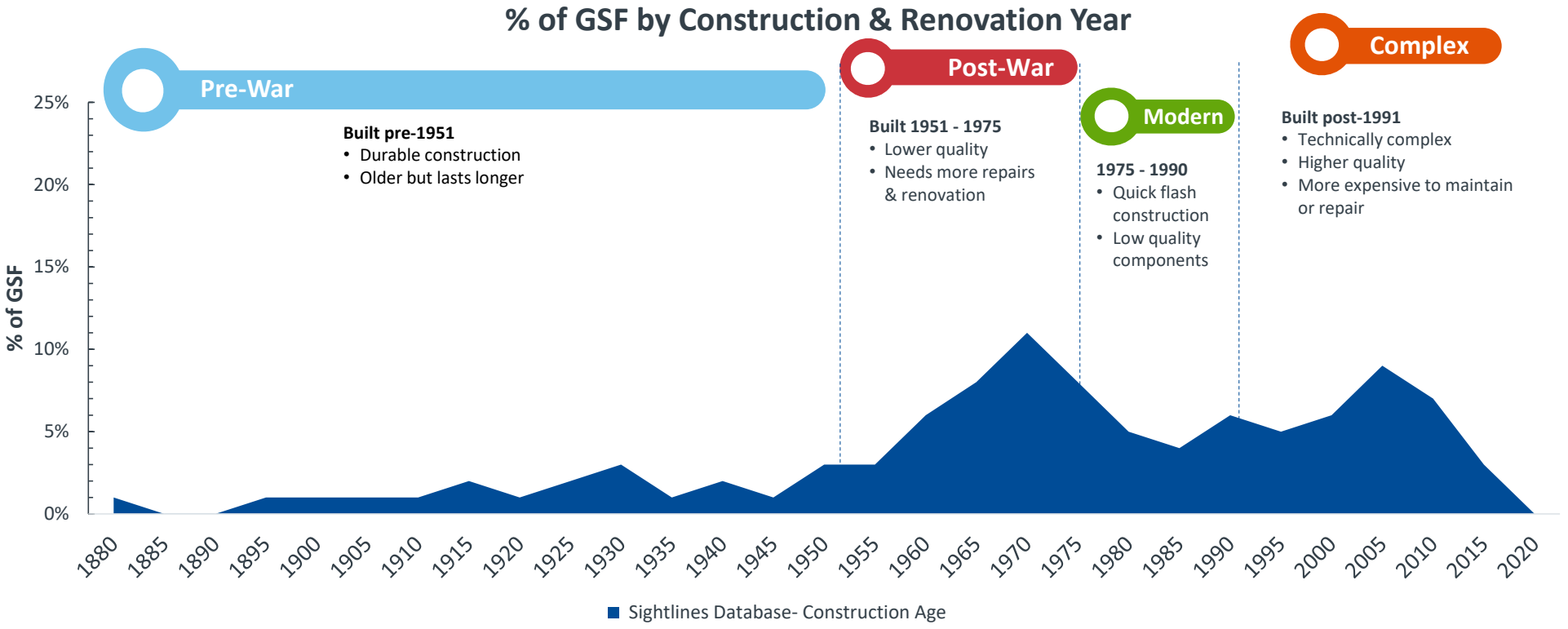
Material and Supplies
Material and supply demand influenced by how often the space is used.

Wear and Tear of Facilities
High traffic and space usage result in sooner lifecycle replacement.

Density: Measures number of users per 100,000 GSF
Users include all student, faculty and staff FTEs
Measures campus building usage on a daily basis

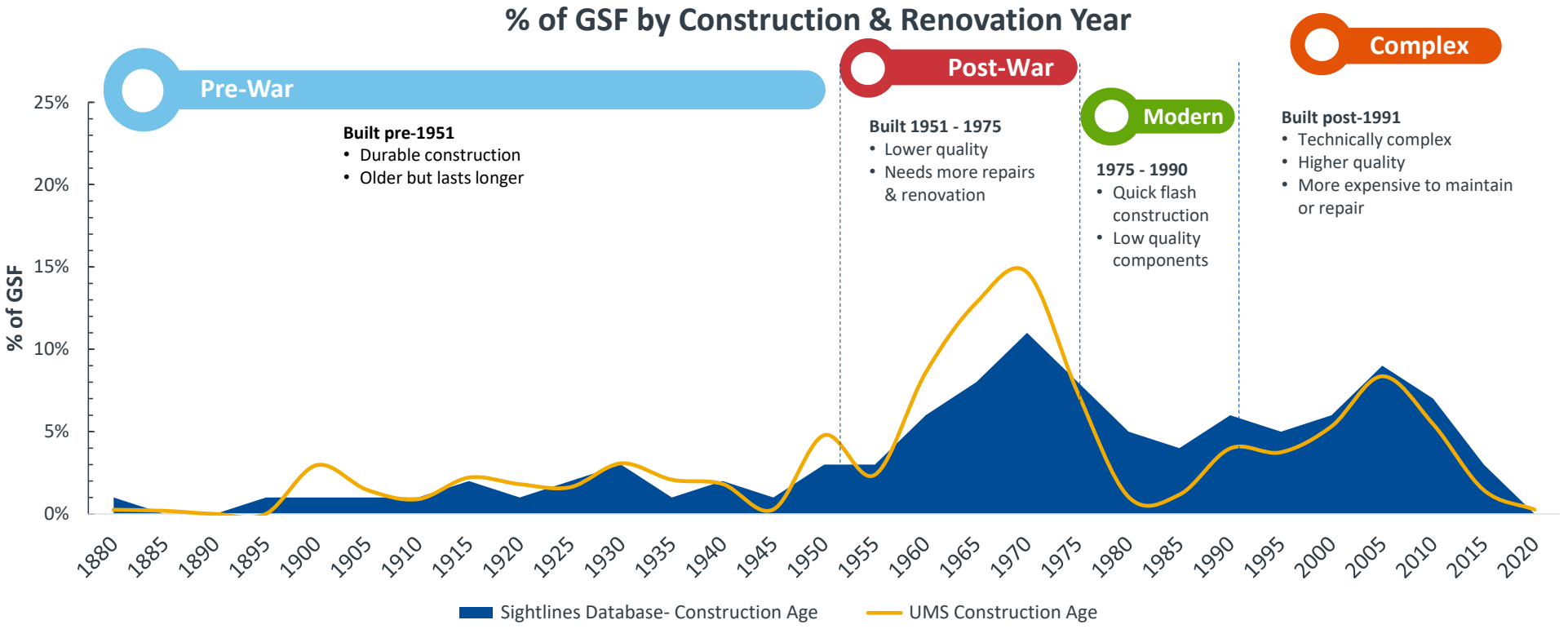
National Construction Trending in Higher Education

Funding sources should be allocated based on age and condition of the buildings

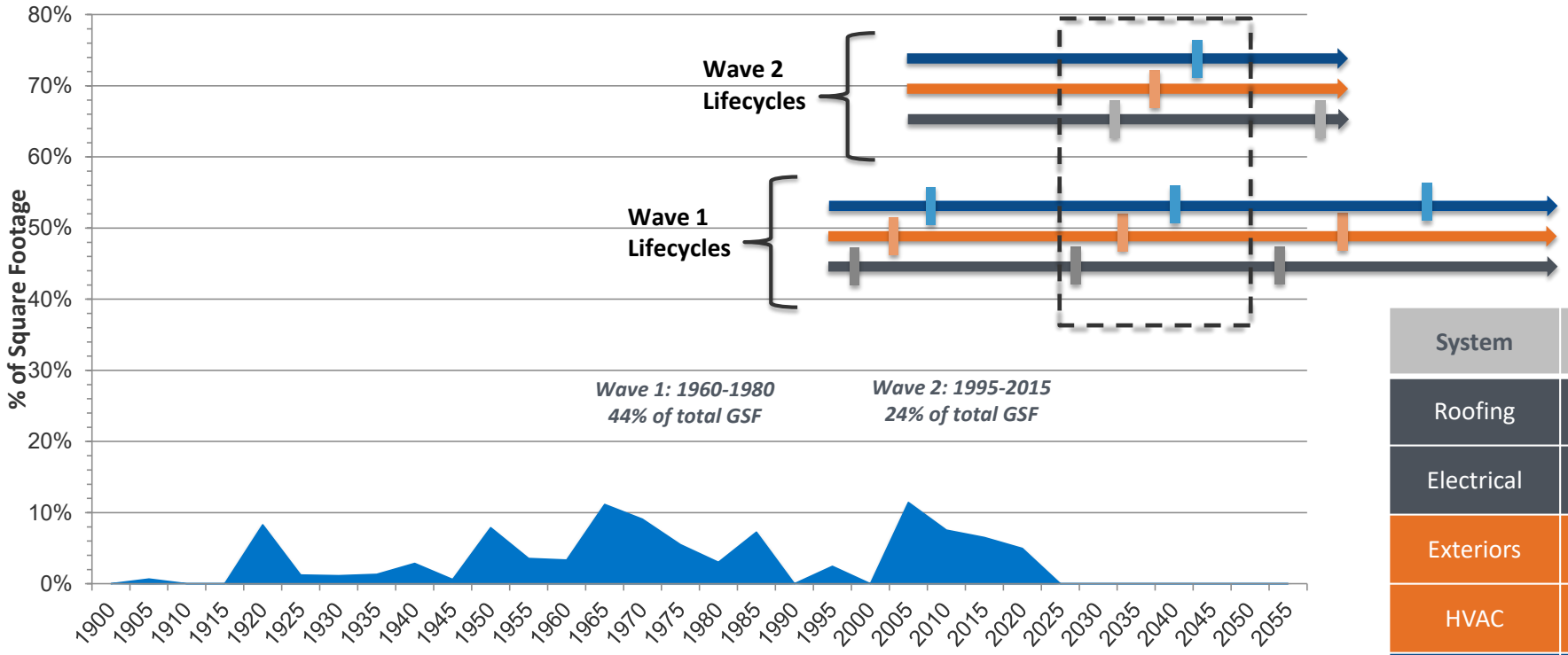


52% of Space Built in Post-War and Modern Eras

Funding sources should be allocated based on age and condition of the buildings



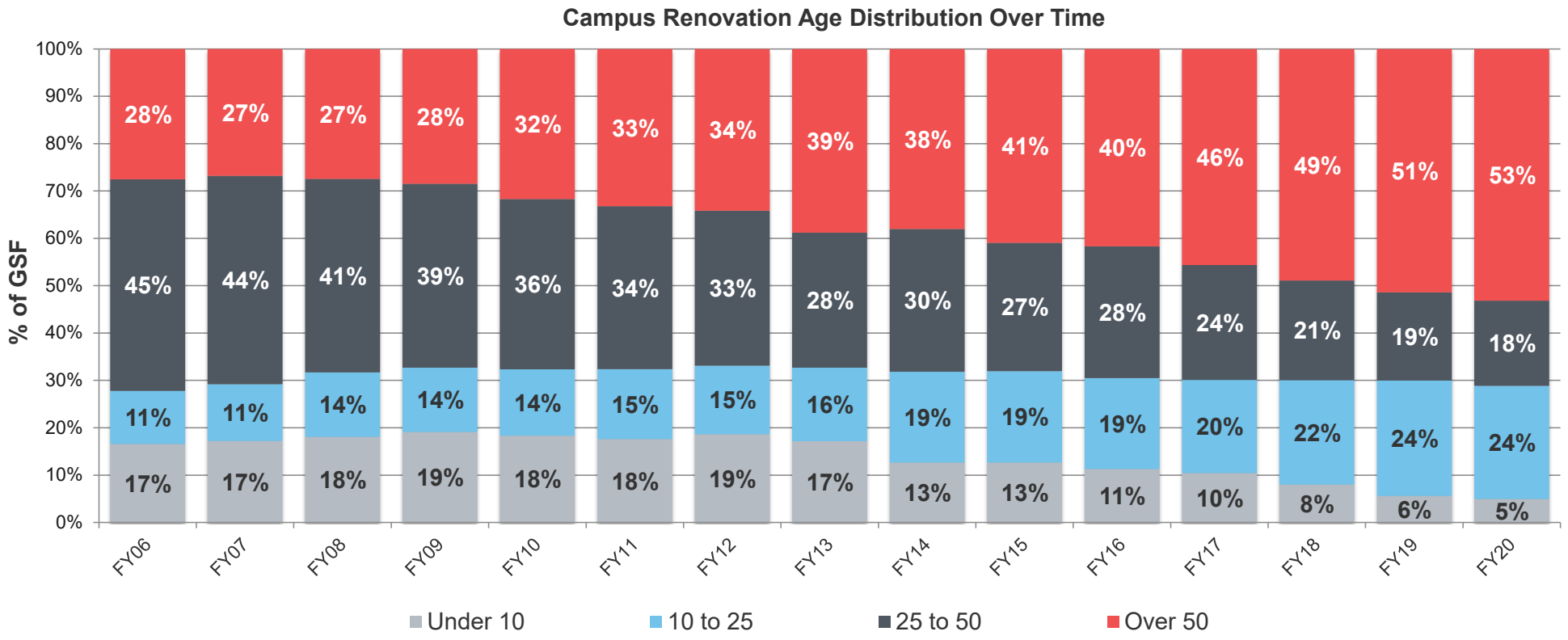
Future Forecast Determined by Life Cycle Models



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

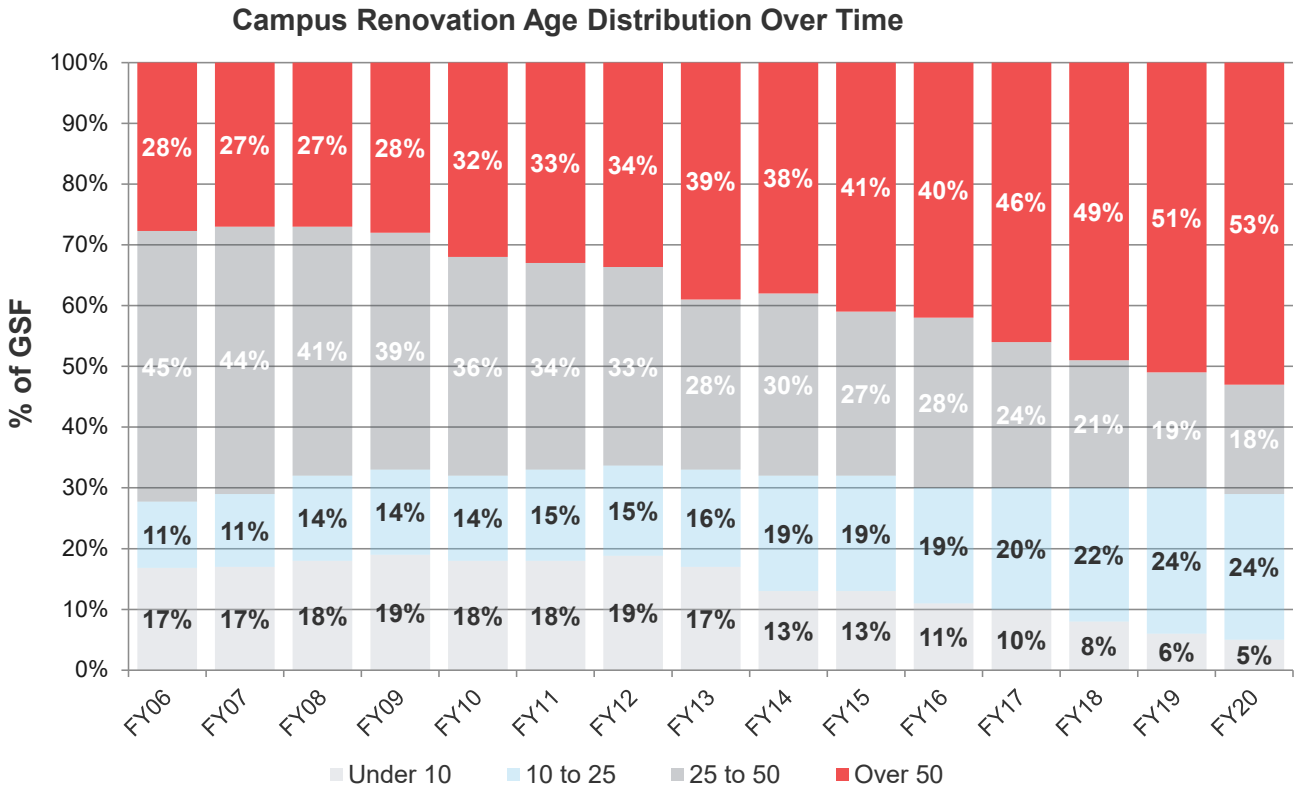
Maine System Continues to Age Over Time

Percent of GSF Over 50 Increases to 53% in FY20



Space Over 50 is Growing

Space Over 50 Years Old has grown 25% since FY06



Buildings Over 50

Life cycles of major building components are past due. Failures are possible. Core modernization cycles are missed.

Highest risk

Buildings 25 to 50

Major envelope and mechanical life cycles come due. Functional obsolescence prevalent.

Higher Risk

Buildings 10 to 25

Short life-cycle needs; primarily space renewal.

Medium Risk

Buildings Under 10

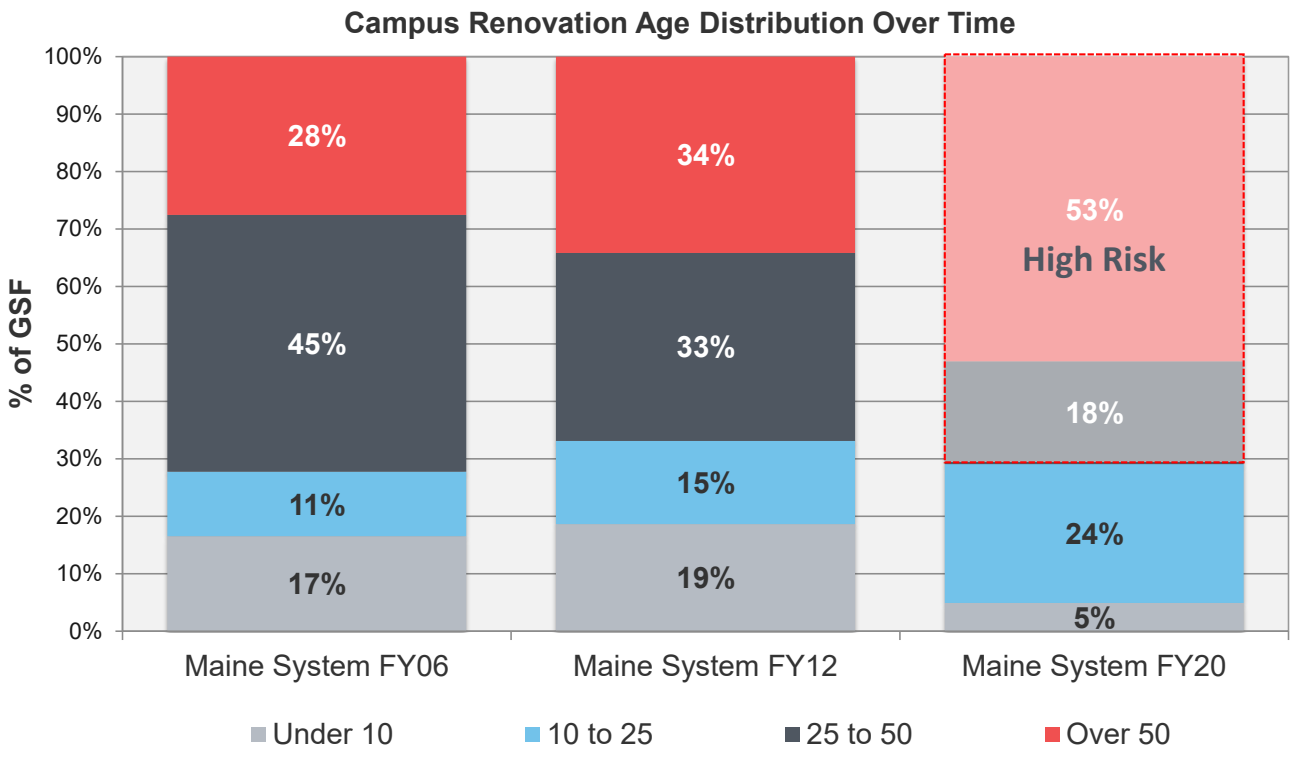
Little work. "Honeymoon" period.

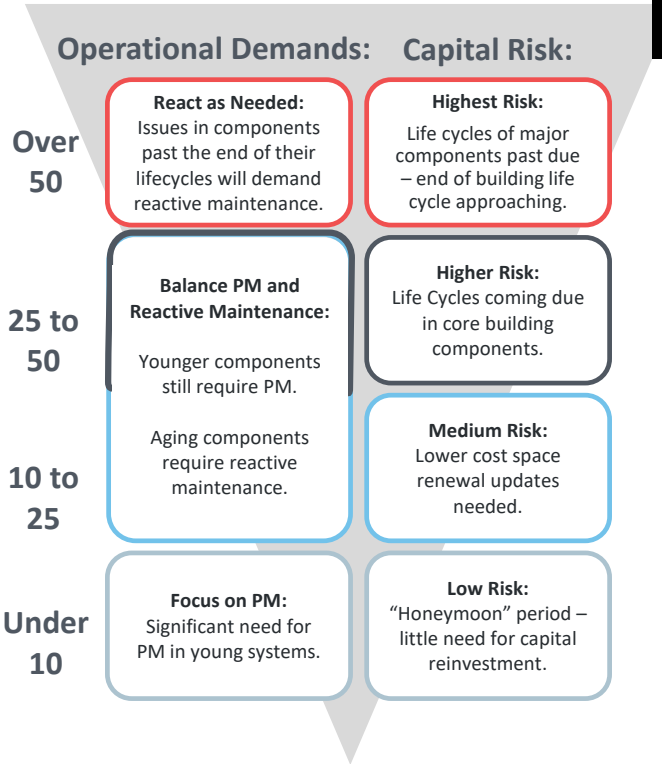
Low Risk

7.1

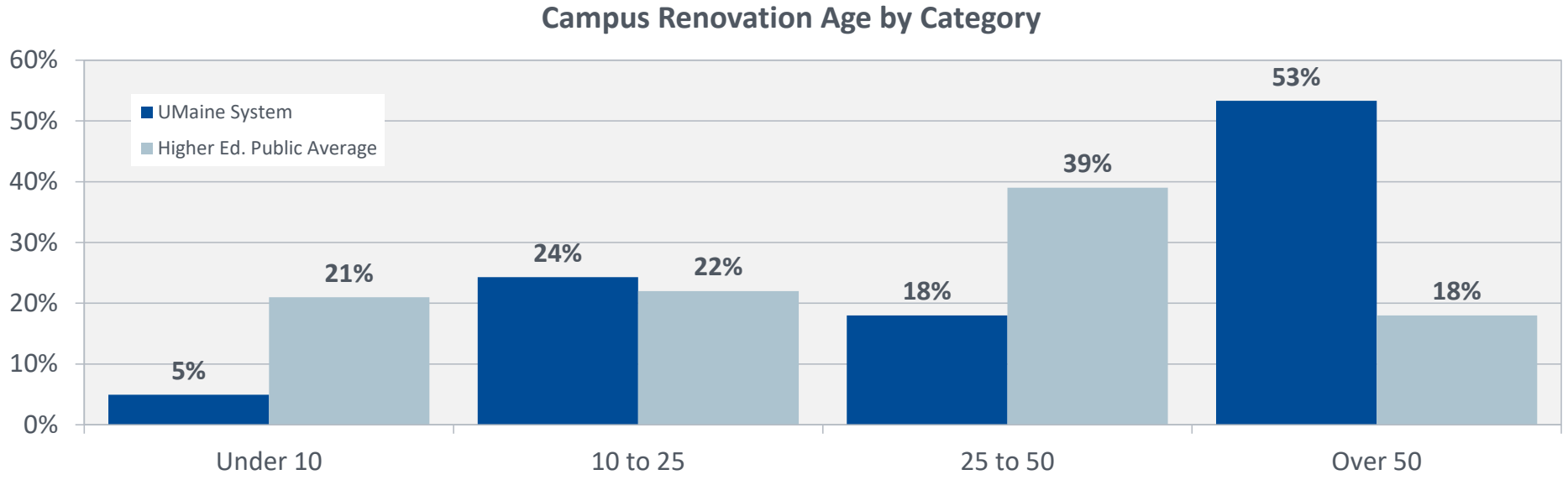
70% of Space Drives Investment Needs at UMS

Buildings over 25 years old require increased capital and operational demands





UMS' Age Profile is Older Than Public Institutions



Capital Needs

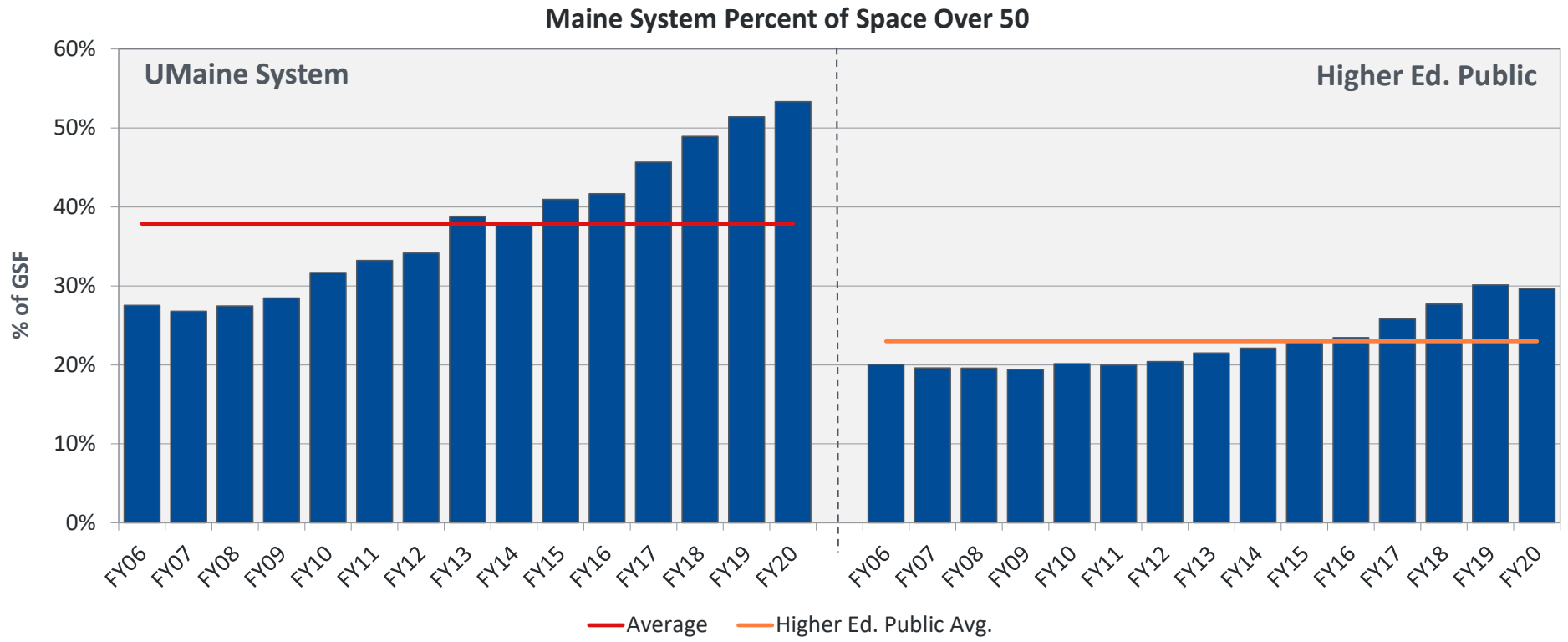
Preventive Maintenance

Reactive Maintenance

GORDIAN®

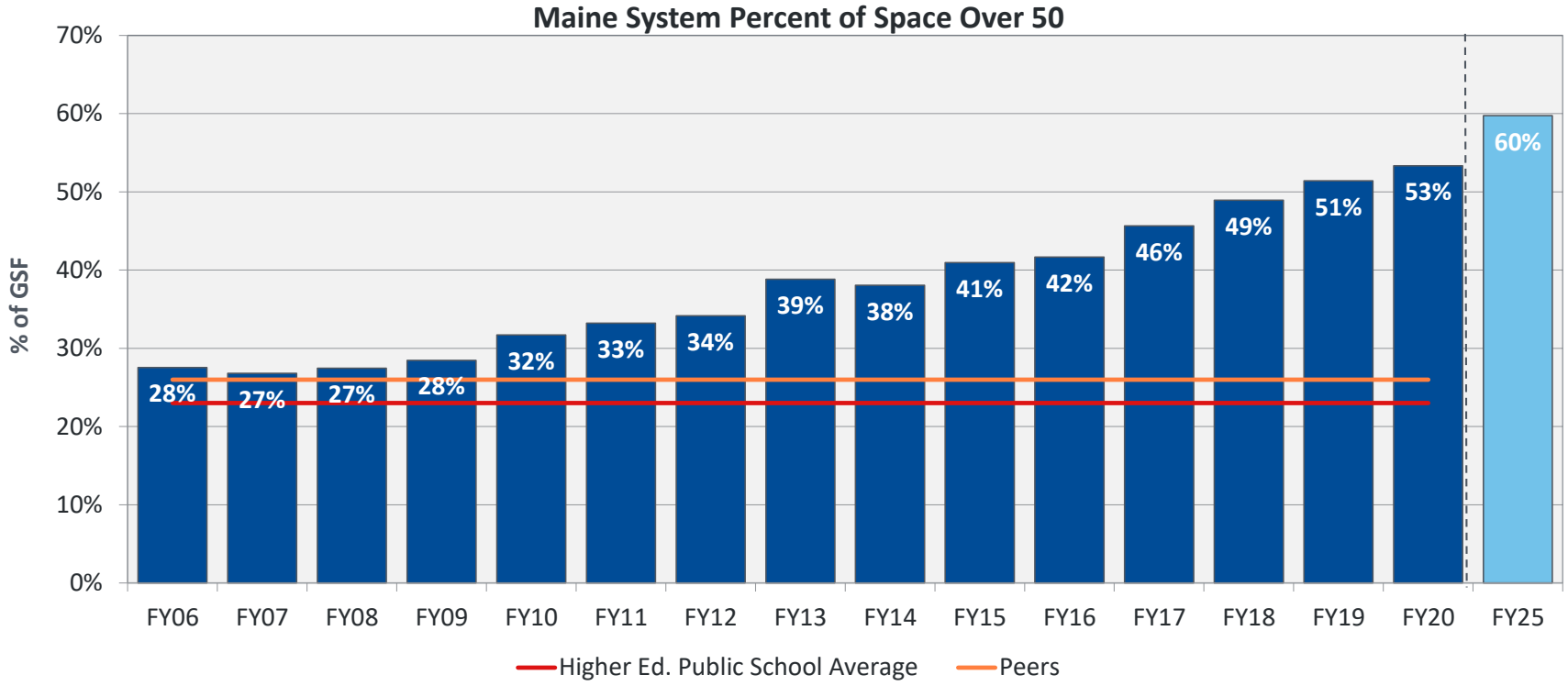
Public Institutions Operate With 23% Less High-Risk Space

UMS increases High Risk space YOY as Higher Ed Public decreases from FY19 to FY20



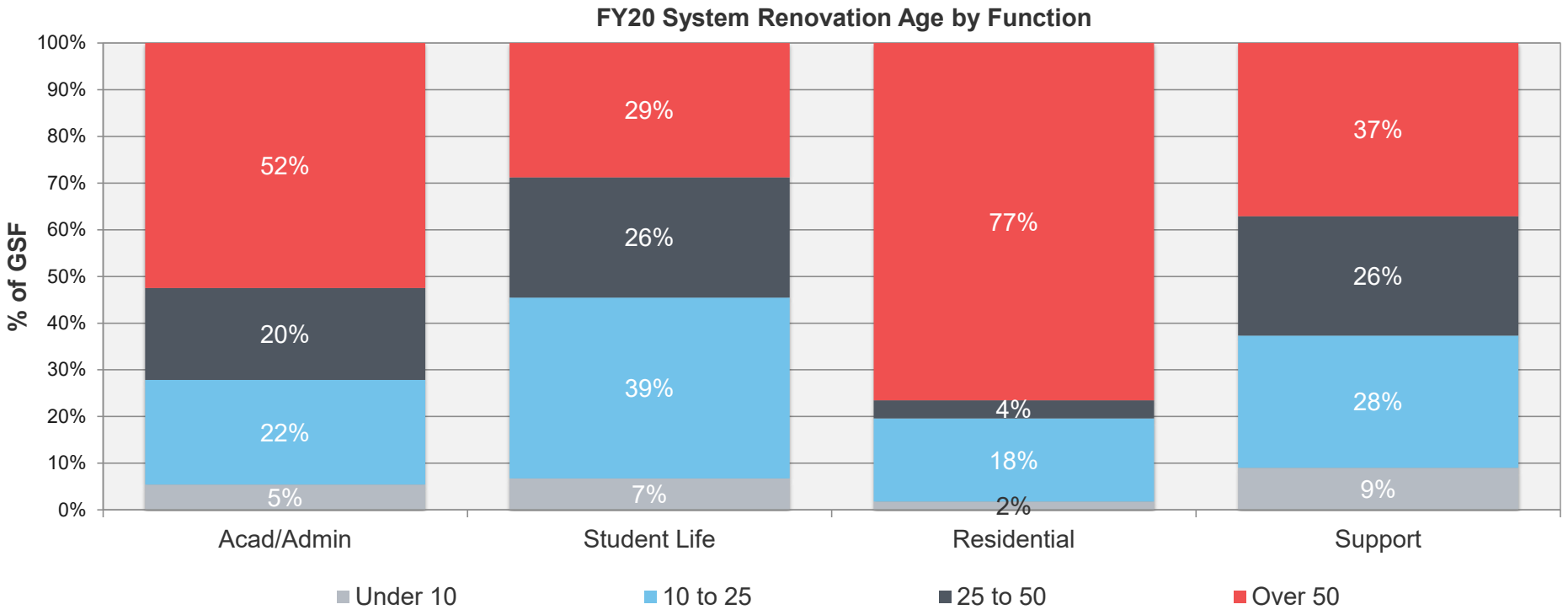
60% of Space Will be Over 50 Years Old by FY25

Plan now for major life cycle replacements in these buildings



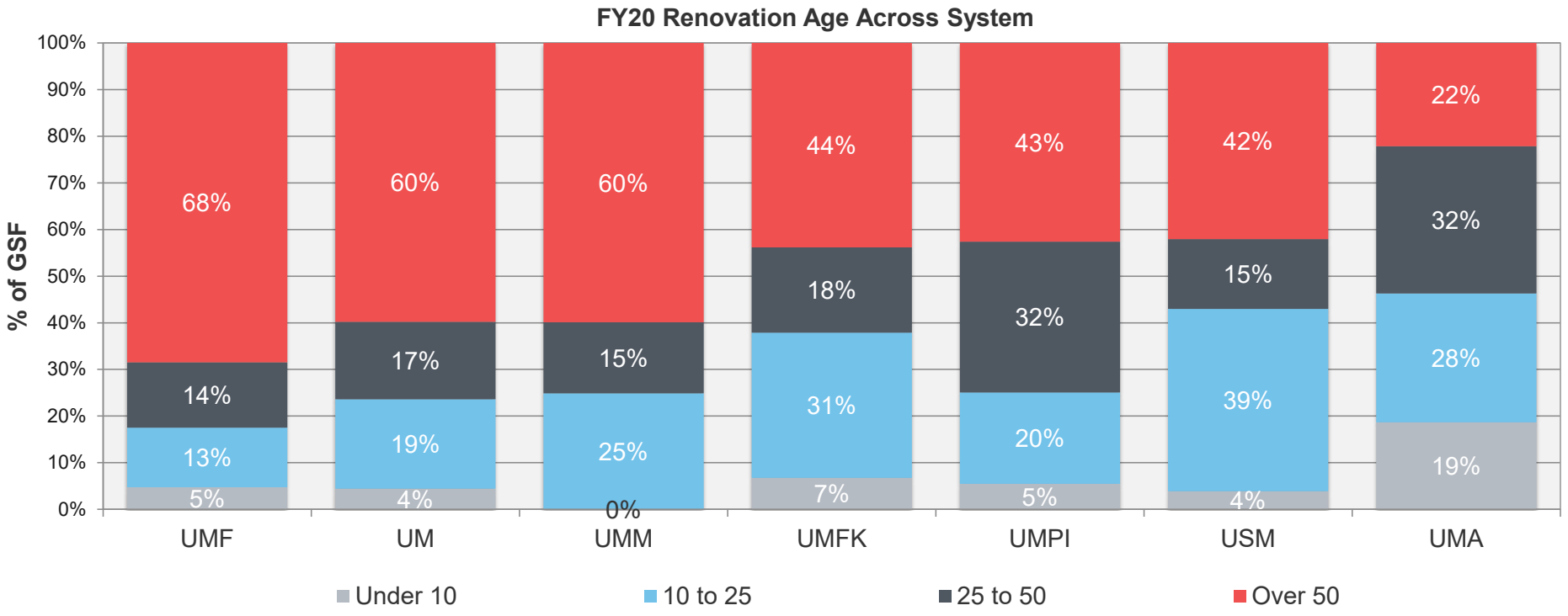
*FY25 is calculated as campus is today, with no changes to the space profile

Residential Space Has Largest Amount of Space Over 50



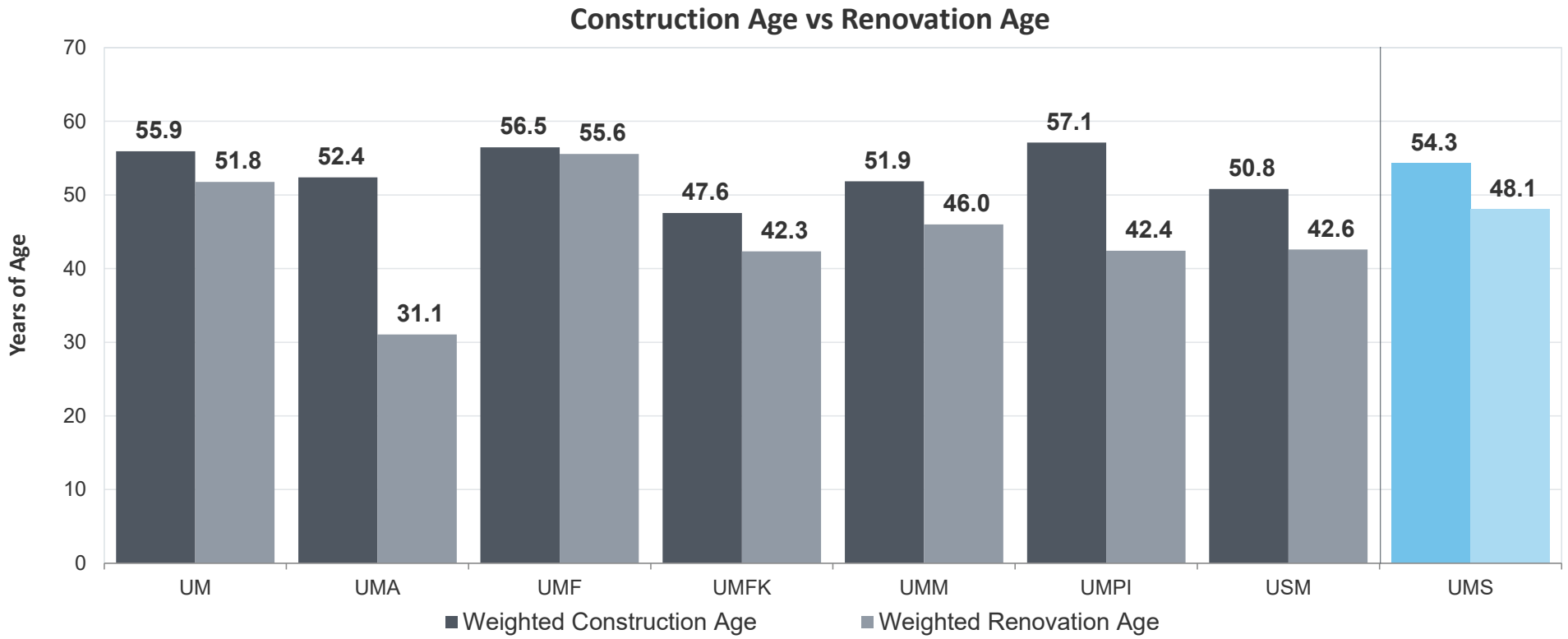
High Risk Profile Above 50% At All Campuses

UMPI, UM, UMM, and UMF have the highest risk based on age profile over 25 years old



Construction Age vs. Renovation Age by Campus

UMA has offset its age the most through renovations: 21 Years



7.1

Strategies to Reduce % of Space Over 45

Renovations and Removal of Buildings from the Inventory

Over 45 Template Distributed to Every Institution

Sample taken from UMS

Institution Name	Building Name	Campus	GSF	NAV	Replacement Value	Program Use
University of Maine at Augusta	Acadia Hall	Bangor	3,000	32%	$ 766,779	Storage/Support
University of Maine at Fort Kent	Acadia House	Fort Kent	4,848	9%	$ 949,872	Residence House
University of Maine at Augusta	Alumni Center-Augusta-East Wing	Augusta	5,600	80%	$ 539,497	Administrative
The University of Maine	ALUMNI HALL	E&G	32,367	13%	$ 10,008,686	Administrative
University of Maine at Farmington	Alumni Theater	Farmington	13,166	12%	$ 3,621,975	Academic
University of Southern Maine	Anderson Hall	Gorham	29,291	30%	$ 8,430,644	Student Life
The University of Maine	ANDROSCOGGIN HALL	AUX	59,373	52%	$ 19,483,675	Residence Hall
The University of Maine	AQUACULTURE RESEARCH CTR	E&G	13,440	55%	$ 3,223,008	Research
The University of Maine	AROOSTOOK HALL	AUX	49,699	43%	$ 16,309,082	Residence Hall
The University of Maine	AUBERT HALL	E&G	100,562	41%	$ 40,615,556	Science Building
University of Southern Maine	Bailey Hall	Gorham	143,645	38%	$ 51,144,921	Acad/Admin
The University of Maine	BALENTINE HALL	AUX	34,568	35%	$ 11,343,736	Residence Hall
University of Maine at Augusta	Bangor Hall	Bangor	10,984	67%	$ 1,346,134	Acad/Admin
The University of Maine	BARN-CALF	E&G	720	57%	$ 109,049	Support
The University of Maine	BARN-HORSE, WF	E&G	14,428	53%	$ 2,185,224	

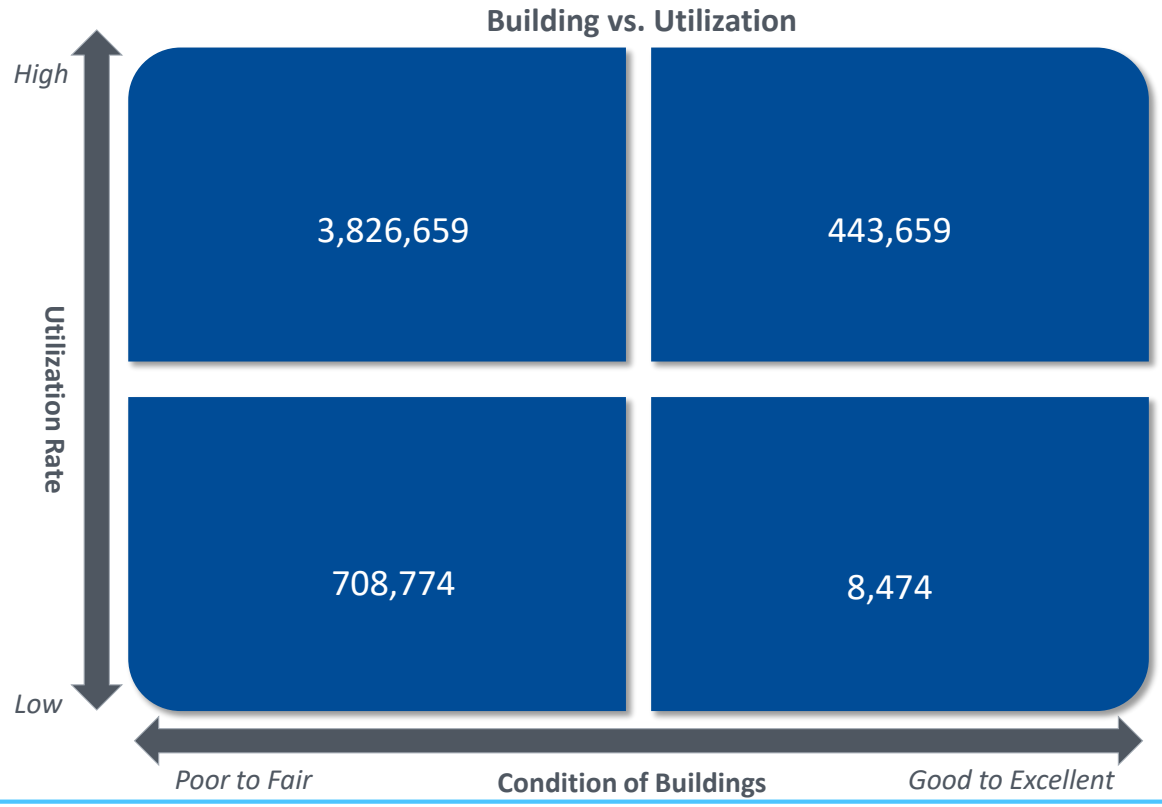
Assessment of Space for all buildings over 45 years old in Renovation Age

- What is the utilization of the space?
- What is the condition?

Determine if the building is a candidate for major renovation or removal from inventory.

Total Maine System Findings

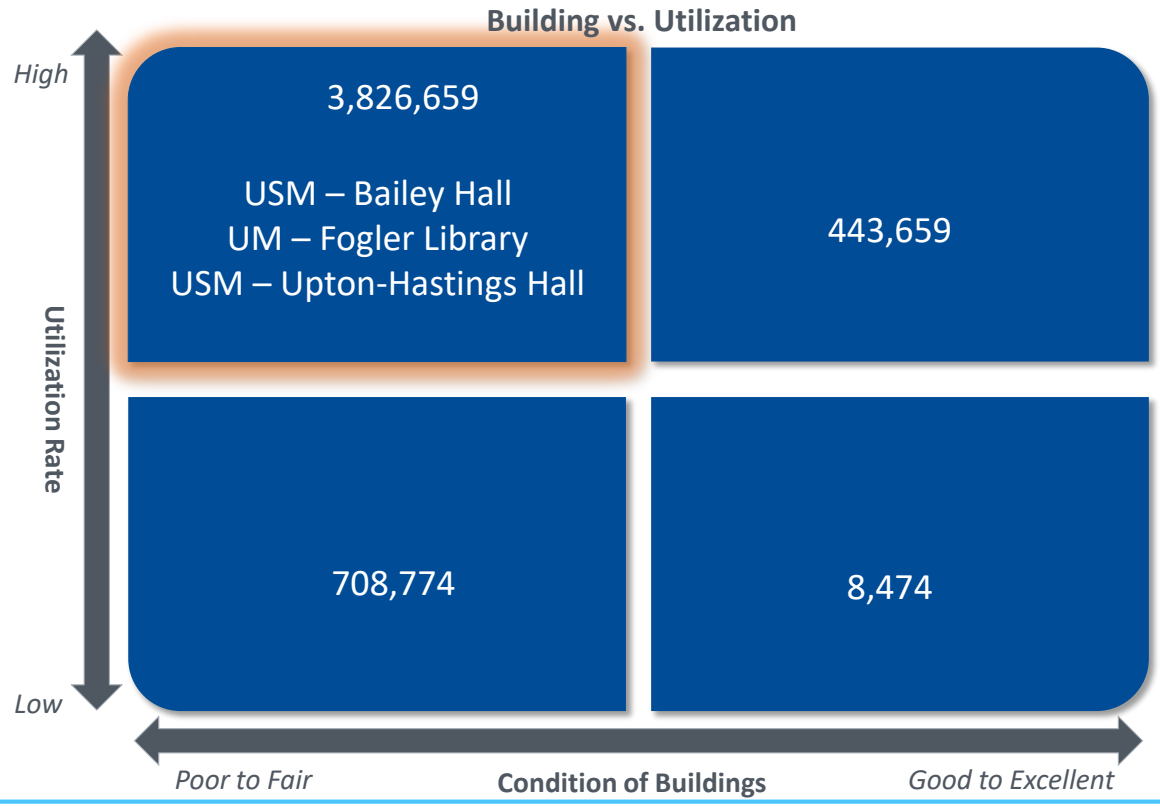
Comparing condition with utilization across the system



7.1

Candidates for Potential Renovation

Comparing condition with utilization across the system



The University of Maine	2,067,763.00
University of Maine at Augusta	41,378.00
University of Maine at Farmington	455,282.00
University of Maine at Fort Kent	103,492.00
University of Maine at Machias	170,445.00
University of Maine at Presque Isle	147,465.00
University of Southern Maine	840,834.00
Grand Total	**3,826,659.00**

7.1

Candidates for Potential Renovation

All buildings broken out by campus (High Utilization, Poor & Fair Condition)

UM (2,067,763 GSF)

ALUMNI HALL	32,367.00
ANDROSCOGGIN HALL	59,373.00
AROOSTOOK HALL	49,699.00
BALENTINE HALL	34,568.00
BARROWS HALL-ORIG	52,979.00
BENNETT HALL	52,979.00
BOARDMAN HALL-ORIG	48,906.00
CHADBOURNE HALL	41,926.00
CHILD STUDY CENTER-ORIG	3,931.00
CHILDRENS CENTER, COLLEGE AVE-113	4,527.00
CORBETT HALL	49,433.00
CROSBY LAB	19,673.00
CUMBERLAND HALL	59,373.00
DAYCARE FACILITY	2,198.00
DEERING HALL	50,001.00
DUNN HALL	49,447.00
EAST ANNEX	20,780.00
FOGLER LIBRARY-AD1	57,531.00
FOGLER LIBRARY-ORIG	116,896.00
GANNETT HALL	59,373.00
HANCOCK HALL	68,610.00
HART HALL	60,410.00
HAUCK AUDITORIUM	46,735.00
HITCHNER HALL, ANIMAL SCIENCE WING-AD1	25,844.00
HITCHNER HALL-ORIG	9,366.00
KENNEBEC HALL	49,009.00
KNOX HALL	76,468.00
LENGYEL HALL	37,079.00
LIBBY HALL	24,208.00
LITTLE HALL	50,808.00

MACHINE TOOL LAB	12,816.00
MAINE BOUND ADVENTURE CTR	6,840.00
MAPLES, THE	8,313.00
MERRILL HALL-ORONO	26,729.00
MURRAY HALL	47,953.00
NEVILLE HALL-GSF CORRECTION	24,085.00
NEVILLE HALL-ORIG	48,660.00
OXFORD HALL	76,468.00
PENOBSCOT HALL	49,481.00
PICS BLDG-KEYO	24,300.00
SERVICE BLDG B	25,770.00
SHIBLES HALL	41,296.00
SOMERSET HALL	76,468.00
STEVENS HALL CENTER	32,596.00
STEVENS HALL NORTH	23,670.00
STEVENS HALL SOUTH	24,598.00
UNIV PK BLDG 12	2,198.00
UNIV PK BLDG 13	2,198.00
UNIV PK BLDG 14	5,062.00
UNIV PK BLDG 15	2,198.00
UNIV PK BLDG 16	5,062.00
UNIV PK BLDG 17	2,198.00
UNIV PK BLDG 18	5,062.00
UNIV PK BLDG 20	2,198.00
UNIV PK BLDG 23	5,062.00
UNIV PK BLDG 24	5,062.00
UNIV PK BLDG 25	5,062.00
UNIV PK BLDG 26	5,062.00
UNIV PK BLDG 27	5,062.00
UNIV PK BLDG 28	5,062.00

UNIV PK BLDG 32	2,198.00
UNIV PK BLDG 33	5,062.00
UNIV PK BLDG 34	2,198.00
UNIV PK BLDG 35	5,062.00
UNIV PK BLDG 36	2,198.00
UNIV PK BLDG 37	5,062.00
UNIV PK BLDG 38	2,198.00
WINGATE HALL	14,580.00
WINSLOW HALL	25,292.00
YORK HALL	82,825.00

7.1

Candidates for Potential Renovation

All buildings broken out by campus (High Utilization, Poor & Fair Condition)

UMA (41,378 GSF)

Acadia Hall	3,000.00
Bangor Hall	10,984.00
BD KATZ LIBRARY	21,632.00
Farmhouse-Uma - West Wing	4,082.00
Maintenance Garage, Ucb	1,680.00

UMF (455,282 GSF)

Dakin Hall	39,320.00
Dearborn Gym	29,890.00
Facilities Mgmt Bldg	12,425.00
Franklin Hall, Main St-252	14,815.00
Lockwood Hall	29,645.00
Mallett Hall	35,584.00
Merrill Hall	16,144.00
Olsen Student Center	39,004.00
Olsen Student Center Complex -	15,378.00
Preble-Thomas Hall	22,582.00
Purington Hall	36,344.00
Ricker Hall	19,932.00
Roberts Learning Ctr	42,507.00
Scott Hall-North	33,820.00
Scott Hall-South	38,779.00
Stone Hall	29,113.00

UMFK (103,492 GSF)

Blake Library	10,388.00
Crocker Hall	17,965.00
Cyr Hall	19,533.00
Fox Auditorium	20,937.00
Nowland Hall	8,680.00
Old Model School	7,986.00
Old Powell Hall	12,298.00
Physical Plant	2,545.00
St. David House	3,160.00

UMM (170,445 GSF)

Dorward Hall-North Wing-B	22,129.00
Dorward Hall-West Wing-A	21,139.00
Powers Hall	33,525.00
Reynolds Health Center-Gym	33,741.00
SCIENCE BLDG-MACHIAS	24,183.00
Sennett Hall- South Wing C	12,612.00
Sennett Hall-Center Wing-B	10,558.00
Sennett Hall-North Wing-A	12,558.00

UMPI (147,465 GSF)

EMERSON HALL	43,440.00
KELLEY COMMONS	18,683.00
MERRIMAN HALL	19,532.00
PARK HALL	26,148.00
VEHICLE STORAGE BUILDING	1,854.00
Wieden Hall Total GSF	37,808.00

USM (840,834 GSF)

Anderson Hall	29,291.00
Bailey Hall	143,645.00
Brooks Student Ctr	45,645.00
Corthell Hall	47,970.00
Costello Sports Complex, Hill Gy	43,478.00
Law Bldg- Original	85,475.00
Luther Bonney Hall	77,040.00
Payson Smith Hall	52,517.00
Robie-Andrews Hall	78,122.00
Russell Hall	29,480.00
SCIENCE BLDG-A WING, Tower/P	84,947.00
Upton-Hastings Hall	102,656.00
Woodward Hall	20,568.00

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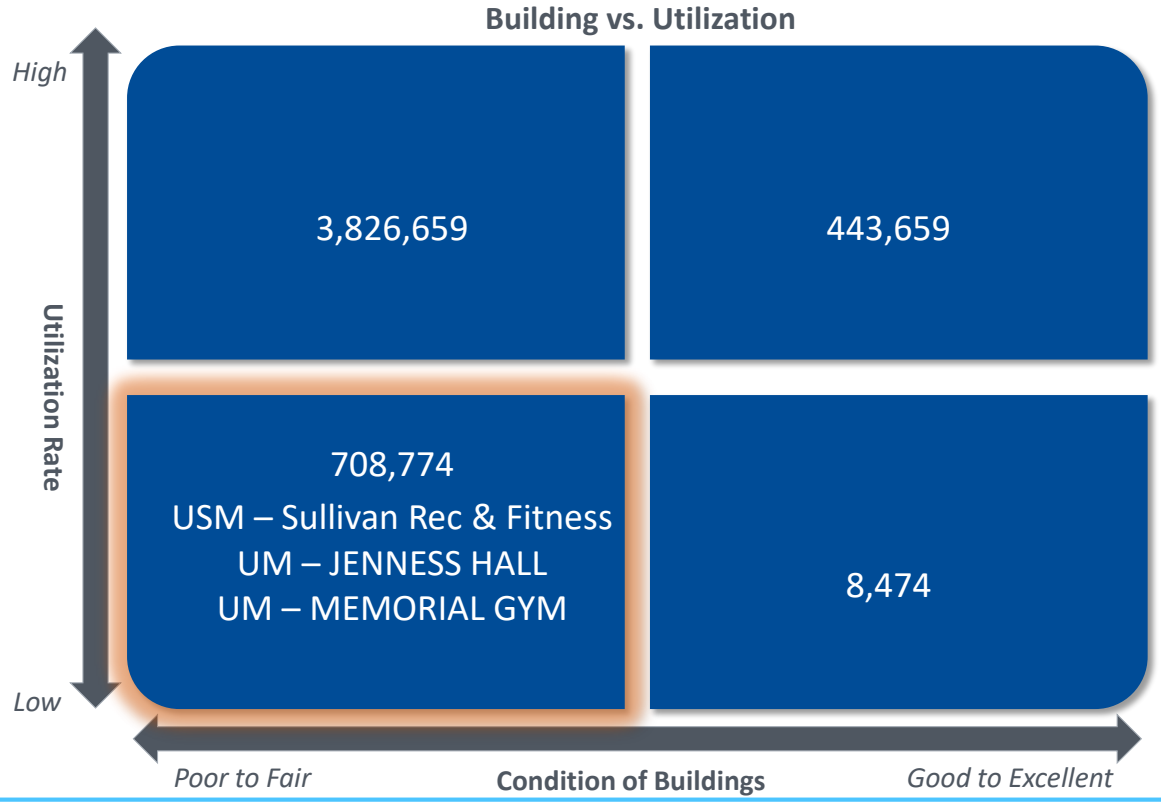
Potential Candidates for Removal

Comparing condition with utilization across the system: (Low/Moderate Utilization & Poor/ Fair Condition)



The University of Maine	456,851
University of Maine at Augusta	17,851
University of Maine at Farmington	65,721
University of Maine at Fort Kent	17,171
University of Maine at Machias	5,000
University of Maine at Presque Isle	409
University of Southern Maine	145,771
Grand Total	**708,774**

7.1

Low Utilization and Poor Condition Space

Removing historical buildings and storage structures from the equation

The University of Maine	456,851
University of Maine at Augusta	17,851
University of Maine at Farmington	65,721
University of Maine at Fort Kent	17,171
University of Maine at Machias	5,000
University of Maine at Presque Isle	409
University of Southern Maine	145,771
Grand Total	**708,774**

Less Historic Buildings

The University of Maine	277,390
University of Maine at Augusta	17,851
University of Maine at Farmington	65,721
University of Maine at Fort Kent	17,171
University of Maine at Machias	5,000
University of Maine at Presque Isle	409
University of Southern Maine	135,237
Grand Total	**518,779**

Low Utilization and Poor Condition Space

Removing historical buildings and storage structures from the equation

The University of Maine	277,390
University of Maine at Augusta	17,851
University of Maine at Farmington	65,721
University of Maine at Fort Kent	17,171
University of Maine at Machias	5,000
University of Maine at Presque Isle	409
University of Southern Maine	135,237
Grand Total	**518,779**

Less Storage

The University of Maine	259,280
University of Maine at Augusta	15,576
University of Maine at Farmington	65,221
University of Maine at Fort Kent	12,251
University of Maine at Machias	5,000
University of Maine at Presque Isle	409
University of Southern Maine	135,237
Grand Total	**492,974**

Low Utilization and Poor Condition Space

Removing historical buildings and storage structures from the equation

UM (259,280 GSF)

AQUACULTURE RESEARCH CTR	13,440
BARN-CALF	720
BARN-LIVESTOCK	8,557
BARN-SHEEP	1,700
COLLEGE AVE-109, FAC MGMT GREENHOUSE	3,995
COLLEGE AVE-154, CANADA HSE	5,000
COLLEGE AVE-378, NAVY ROTC	2,400
COLLEGE AVE-495	2,300
CUTLER HEALTH CENTER, AMBULANCE BAY	588
CUTLER HEALTH CENTER-ORIG	29,954
DEPOT-FIRE STATION	6,653
ENTOMOLOGY BLDG	1,539
ENTOMOLOGY GREENHOUSE	2,304
ENVIRONMENTAL SCIENCES LAB	7,175
FARM HOUSE	2,256
FARM SHOP-WF	4,273
FARM STORE	1,486
FORAGE RESEARCH LAB	900
GARAGE-COLLEGE AVE-378, NROTC	783
GARAGE-CWRU	1,200
GARAGE-TRACTOR 2	2,680
ISOLATION BLDG 5	1,200
JENNESS HALL-ORIG	33,368
MACHINE SHOP	4,000
MEMORIAL GYM COMPLEX, WALLACE POOL-AD2	33,086
PARK ST-204, RESIDENCE	1,320
PERKINS HALL-AG LAB	7,781
POTATO HANDLING RESEARCH	1,600
ROGER CLAPP GREENHOUSE-GSF CORRECTION	981
SERVICE BLDG A-AD1	22,795
SERVICE BLDG A-ORIG	30,627
SHEEP HOUSE	2,000
SIGMA CHI HERITAGE HOUSE	12,370
SMALL ANIMAL FACILITY	4,280
STEAMFITTERS SHOP	2,086
STORAGE-DEERING	68
STORAGE-GAS, RF	60
STORAGE-SHED	156
STORAGE-STEWART	372
UNIVERSITY PARK	27
UTILITY BLDG-DF	1,200

Low Utilization and Poor Condition Space

Removing historical buildings and storage structures from the equation

UMA (15,576 GSF)

Fitness Center	11,416
Mod I	960
Mod II	960
Mod III, Maine Cite	640
Pottery Shop	1,600

UMF (65,221 GSF)

Alumni Theater	13,166
Brinkman Hse, Main St-228	4,602
Lincoln St-125, Honors Center	4,034
Maguire St-112, Daycare	10,766
Main St-234, Psychology	9,759
Main St-242, Ferro Alumni Hse	7,899
Mainely Outdoors Building	4,149
Quebec St-149	2,586
South St-101	4,019
South St-115, Creative Writing Hse	4,241

UMFK (12,251GSF)

Acadia House	4,848
Cyr House	2,514
Gagne Residence	1,597
Haenssler Honors Center	3,292

UMM (5,000 GSF)

Obrien House	5,000

UMPI (409 GSF)

KILN	409

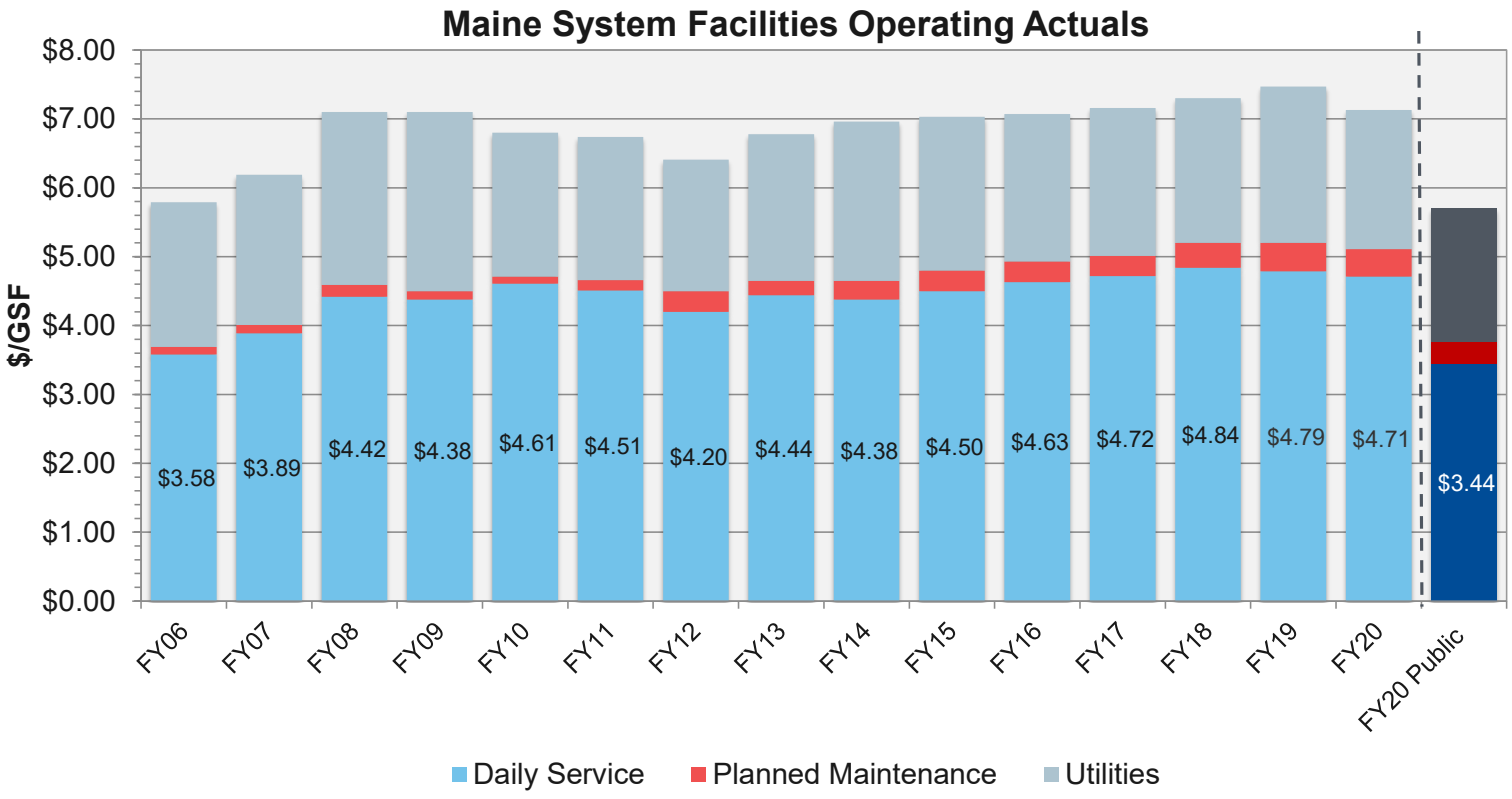
USM (135,237 GSF)

Bedford St-092	5,975
Bedford St-094	2,859
Bedford St-098	3,020
Bedford St-102	3,682
Bedford St-106	3,837
Bedford St-118	4,355
Bedford St-126	5,371
College Ave-019	4,109
Deering Ave-222	2,792
Deering Ave-228	3,842
Exeter St-047	3,732
Exeter St-059-061	6,610
Mclellan House	6,718
Print Making Studio	1,555
School St-062	3,313
School St-128	8,668
Sullivan Rec & Fitness Center-Orig	54,452
The Farm House	10,347

Operations Success

FY2020 Decrease in Operating Expenditures

Utilities decrease $.25/GSF from FY19 to FY20



National Impacts of COVID-19 on facilities budget:

Daily Service

- *Vacant positions not being filled*
- *Incentivized early retirement*
- *Increased cleaning & maintenance standards/frequency*
- *Reduced operational strain with buildings being vacant/complying with social distancing*

Planned Maintenance

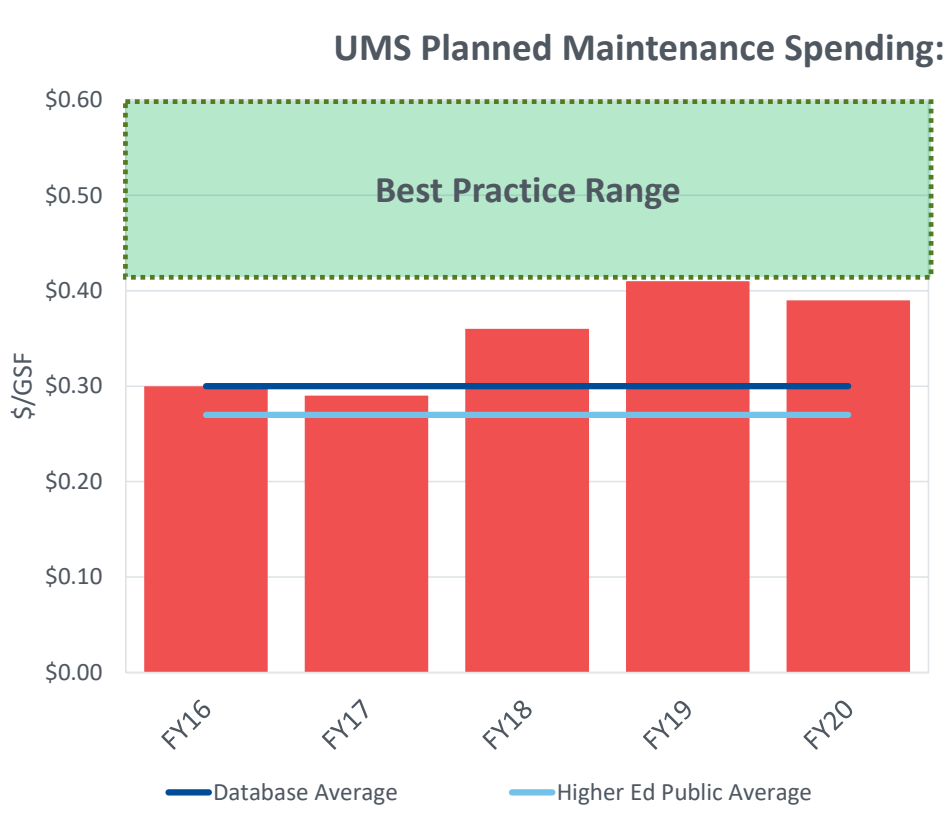
- *Potential for increased PM with reduced frequency of reactive work orders*
- *Potential for decreased PM if budget is cut to mitigate revenue losses*

Utilities

Reduced energy consumption/cost with buildings being vacant or complying with social distancing

FY20 Public: Gordian Public Higher Ed. Database Average for FY20

Planned Maintenance Strategic Opportunities



THEORY

$1.00 invested in PM now

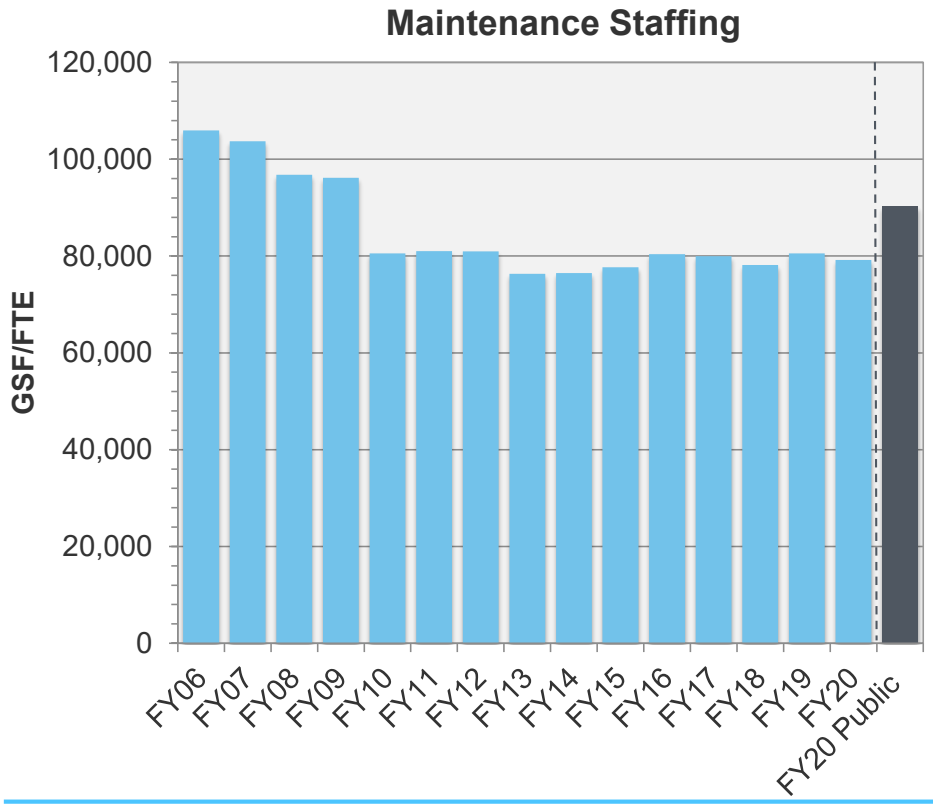
SAVES $2.78 in reactive maintenance later

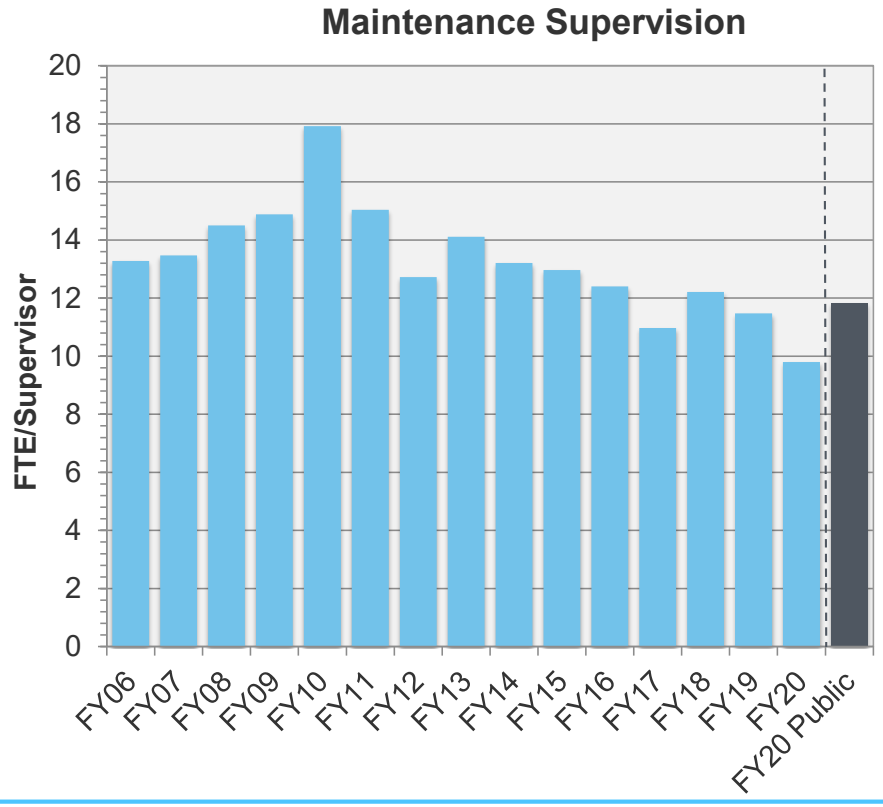
Strategic Deferral of PM

- Usually in buildings/systems over 50 years old targeted for renovation or replacement
- Reallocates resources from the older buildings/systems to younger buildings and systems.
- Use Assessment in coordination with work order reporting to start identifying these opportunities.

Maintenance Operations

Staff covered less GSF/FTE, has more supervision to Public Higher Ed. in FY20





FY20 Public: Gordian Public Higher Ed. Database Average for FY20

7.1

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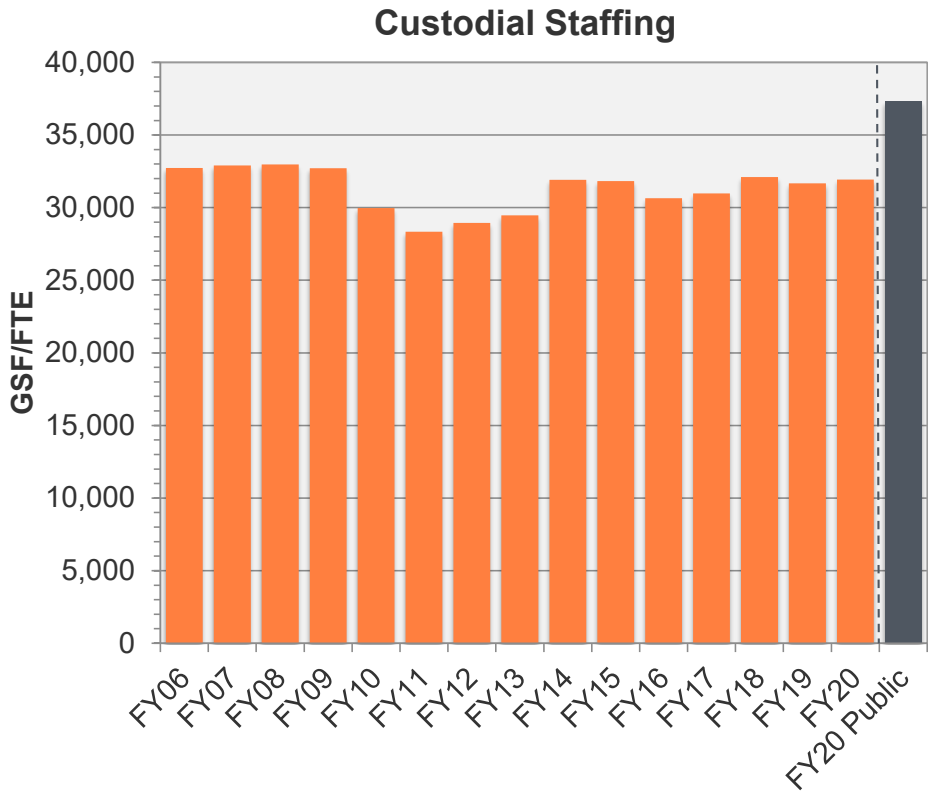
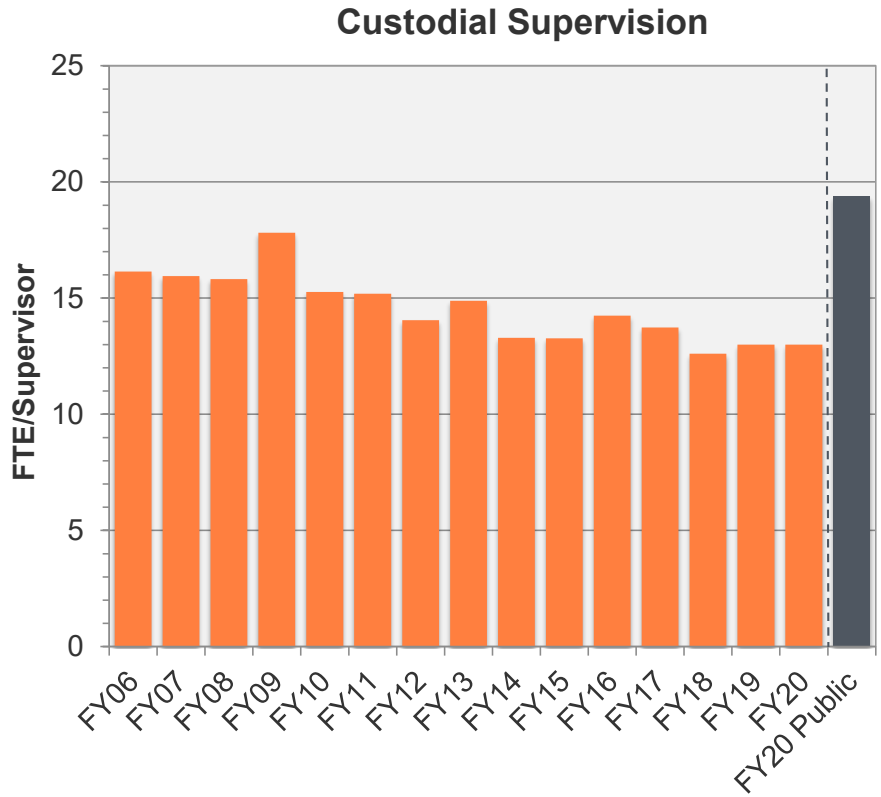
Custodial Operations

UMS has more custodial staff with closer supervision than public school average

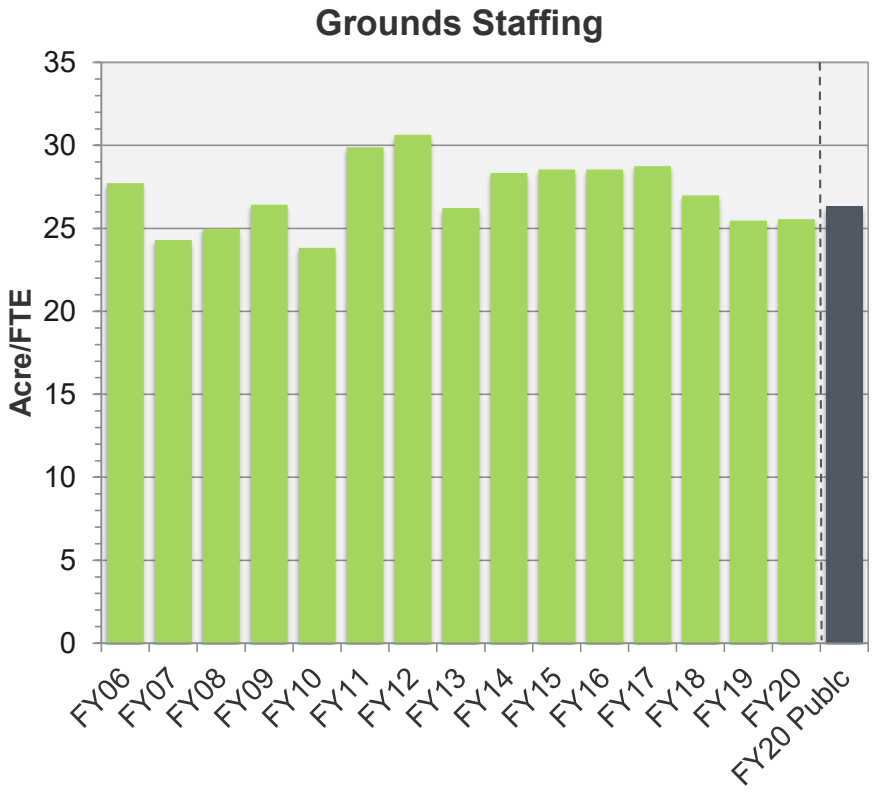


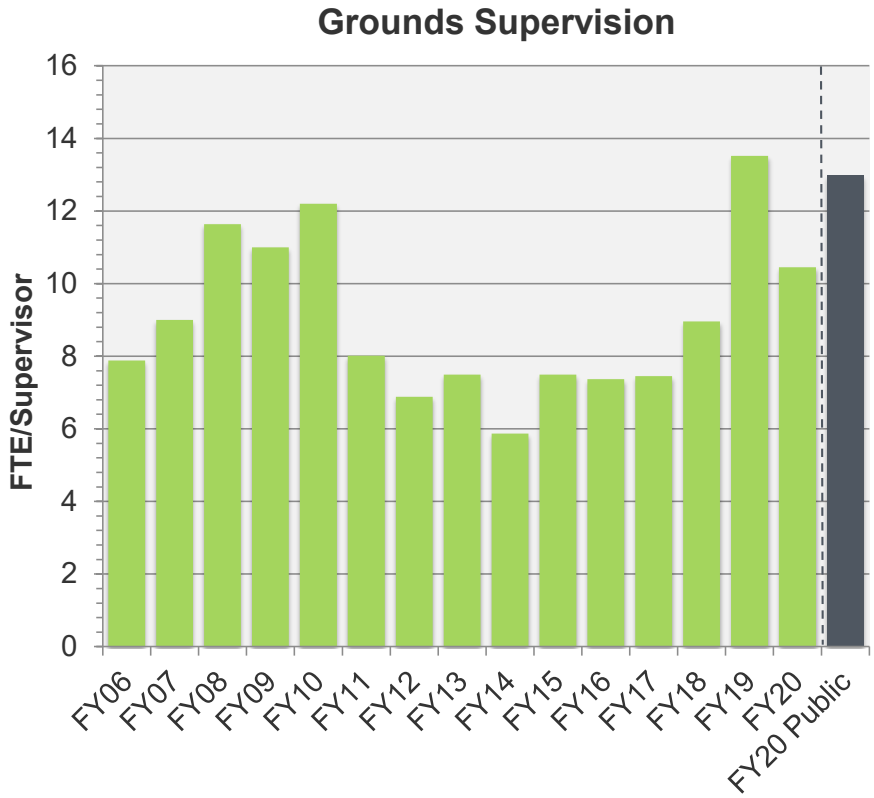


FY20 Public: Gordian Public Higher Ed. Database Average for FY20

Grounds Operations

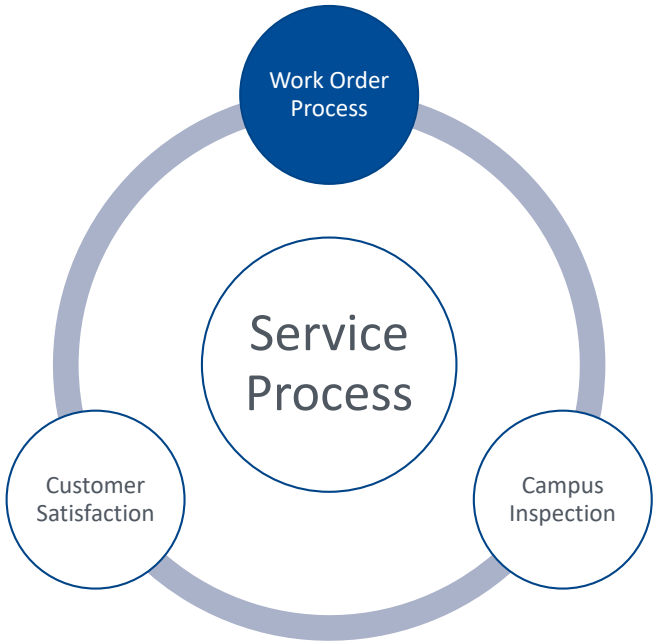
Grounds staff responsible for similar acres as peers while being more closely supervised

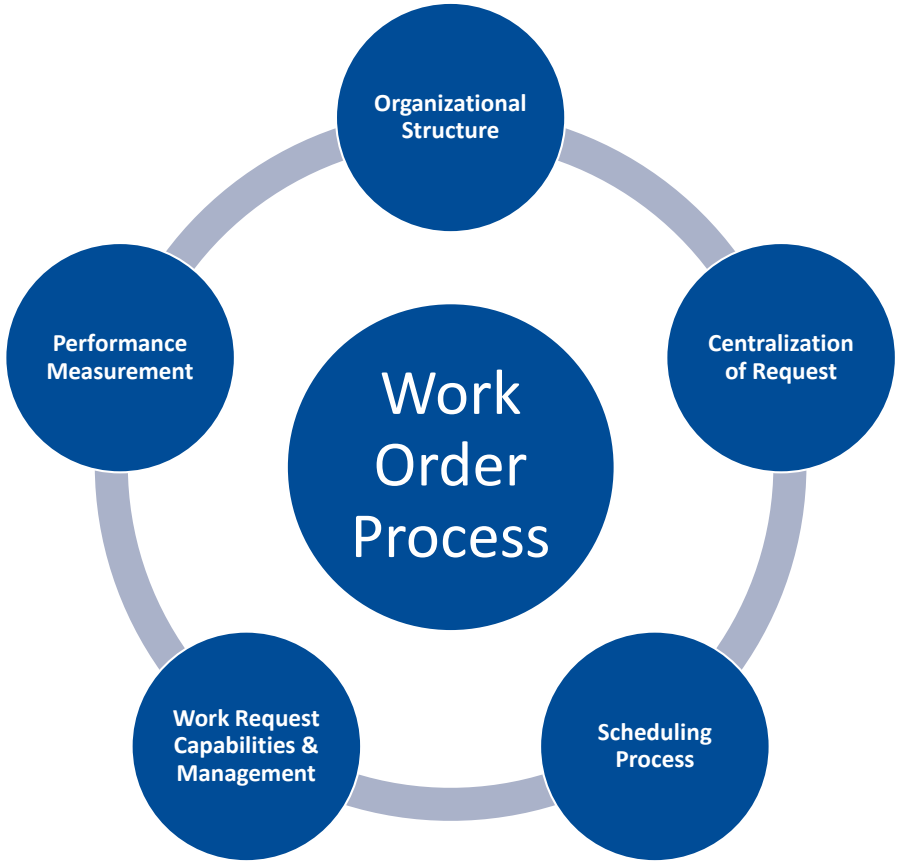




FY20 Public: Gordian Public Higher Ed. Database Average for FY20

AIM Boost Service Process Abilities Across the System





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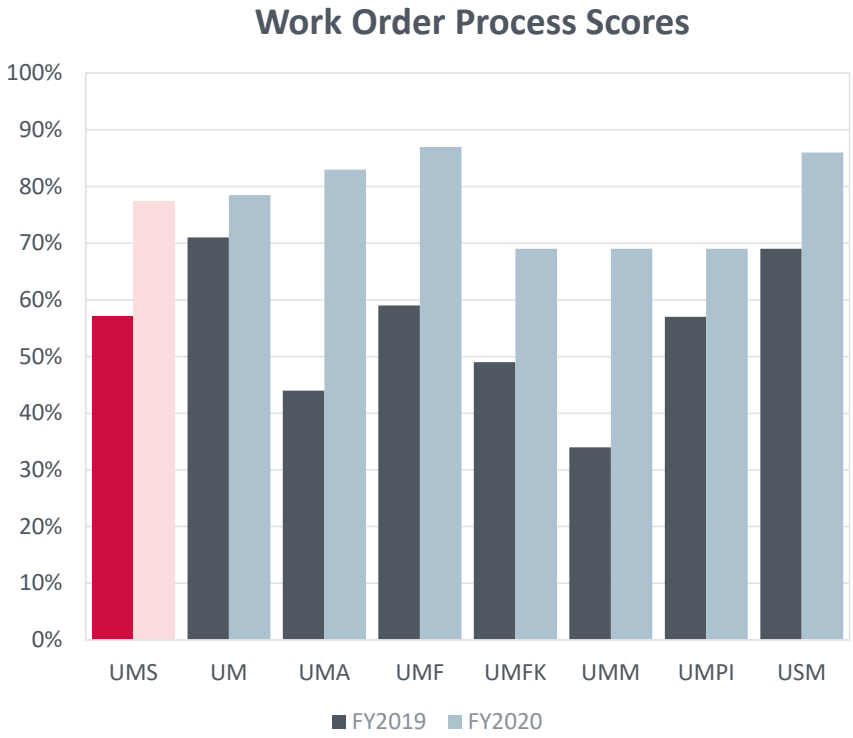
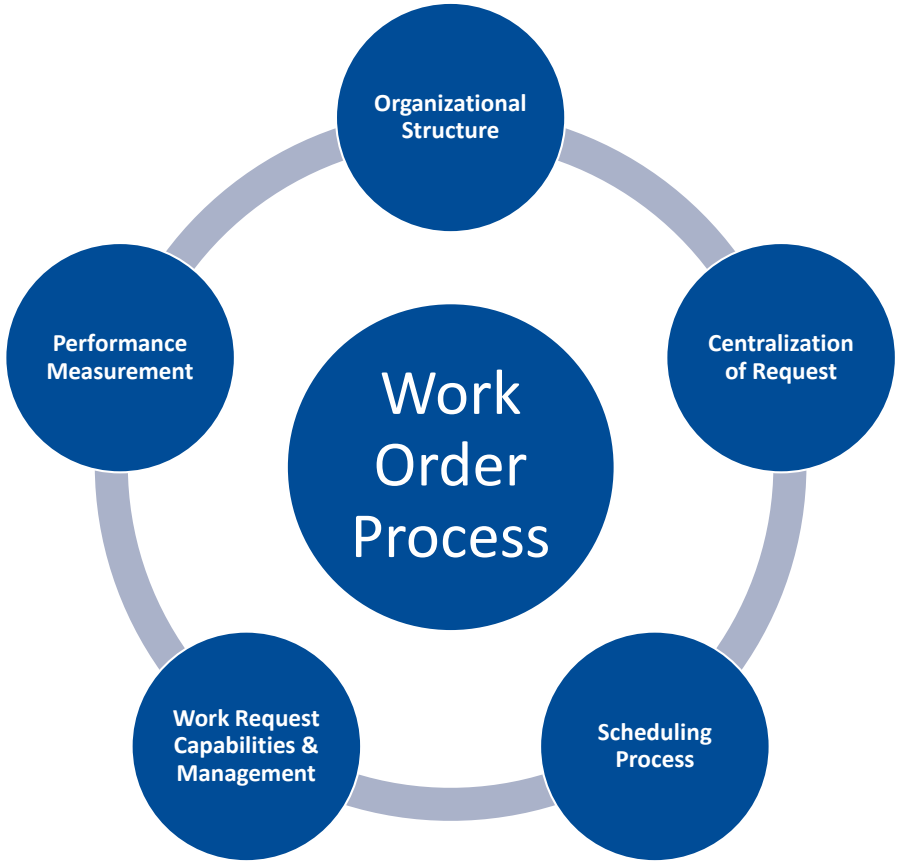
AIM Boost Service Process Abilities Across the System





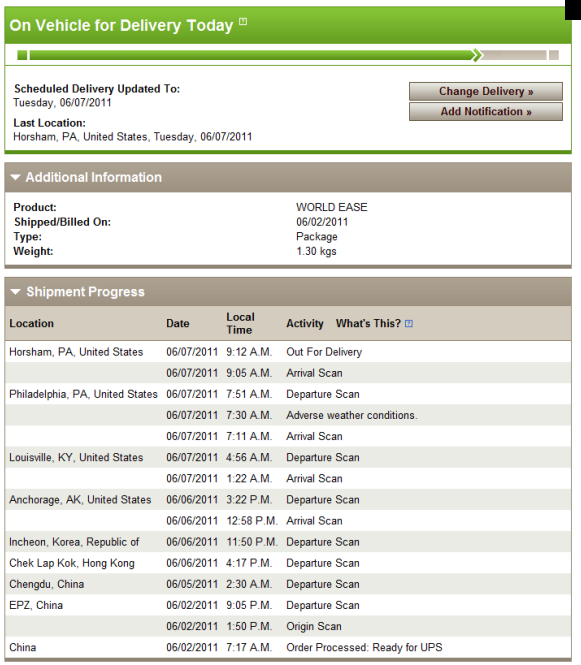
7.1

Improving Scheduling and Services Levels

Scheduling Process	
Service desk assigns priority	Yes
Service desk assigns schedule	Yes
Shop supervisor assigns personnel	Yes
Schedules are communicated to the customer	No
Changes in the schedule are communicated to the customer	No
Customers can access the current status of work requests through a web-based system	No
Changes to work request status are communicated to customer	Yes
Customer satisfaction is surveyed after work request is completed	No

comcast

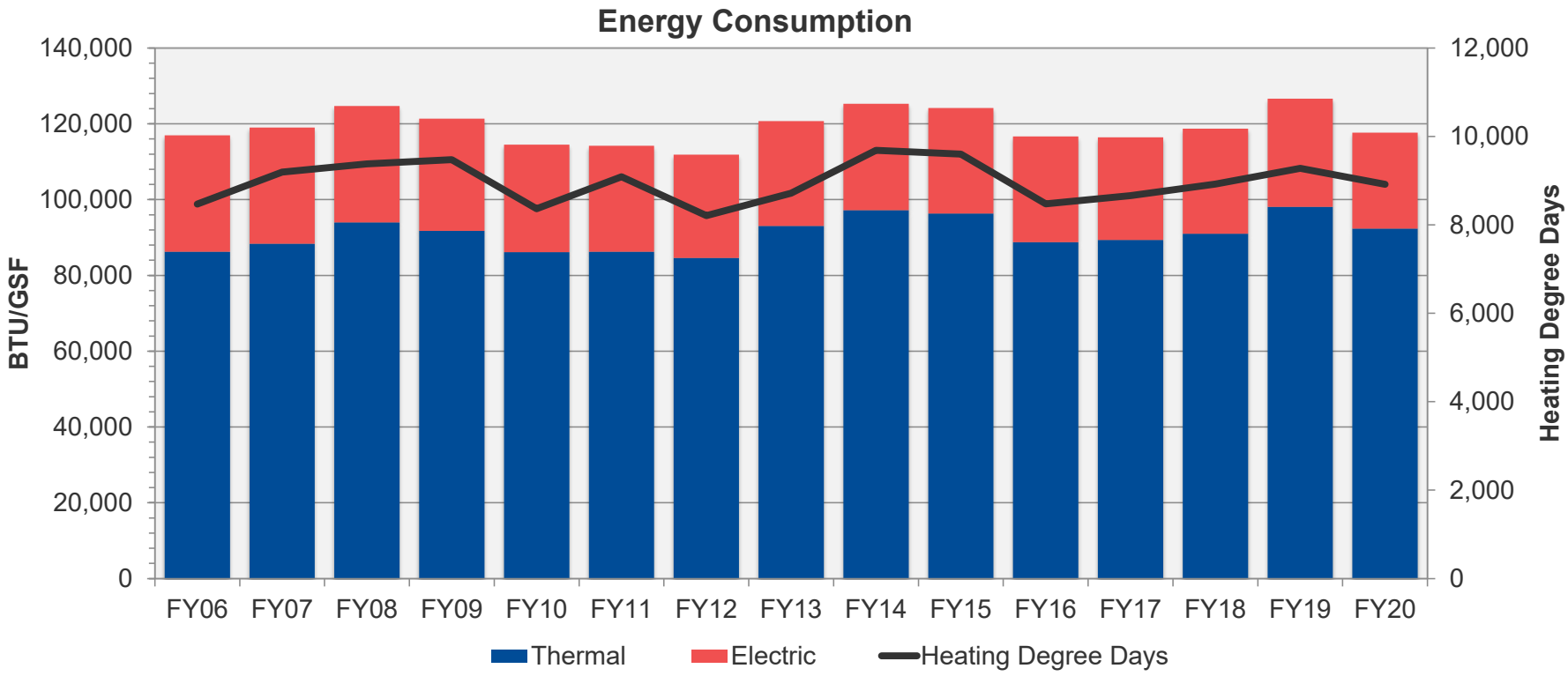
We'll be there Thursday between 8am-12pm



7.1

Energy Consumption Decreased for First Time Since FY17

Consumption Decreases as Heating Degree Days Decrease in FY20



**Degree days noted are based on the Orono, Maine location*
***Thermal contain all heating fuel sources, including alternative fuel sources (ie biomass, wood chips, etc.)*

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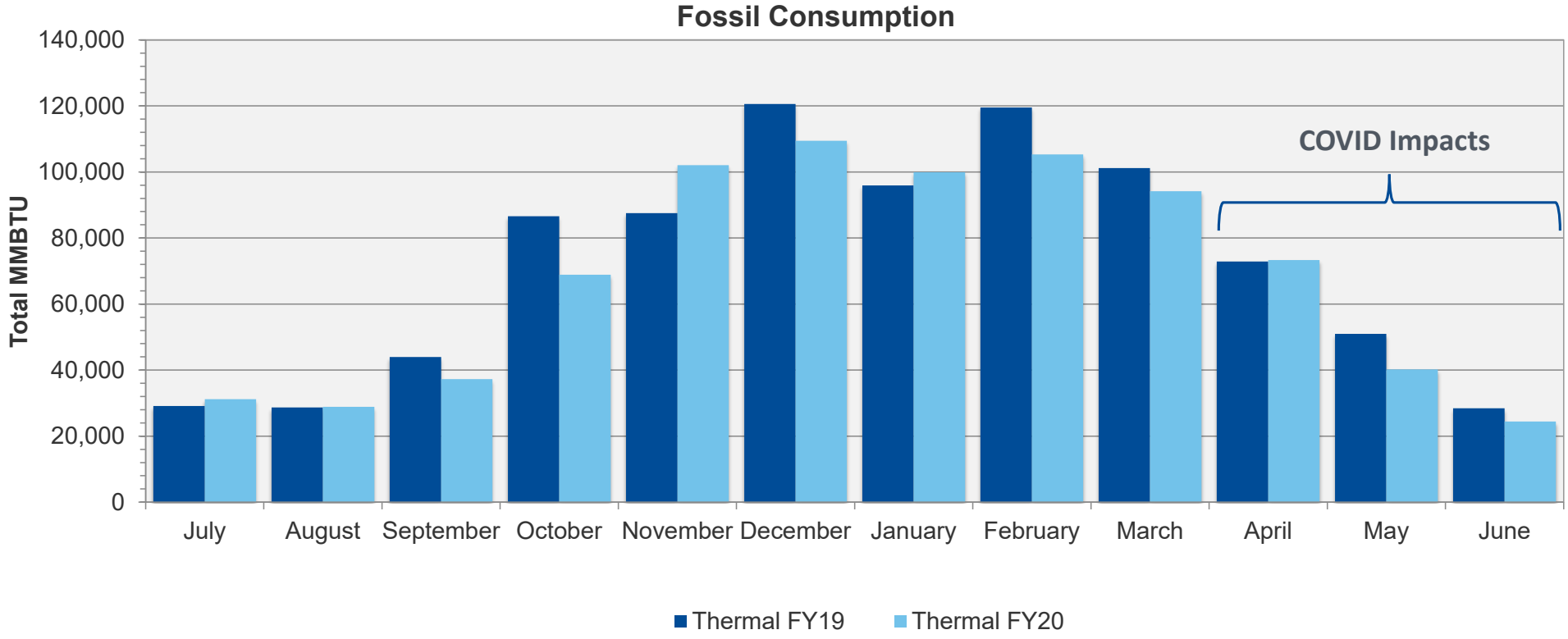
Total Thermal Consumption by Month

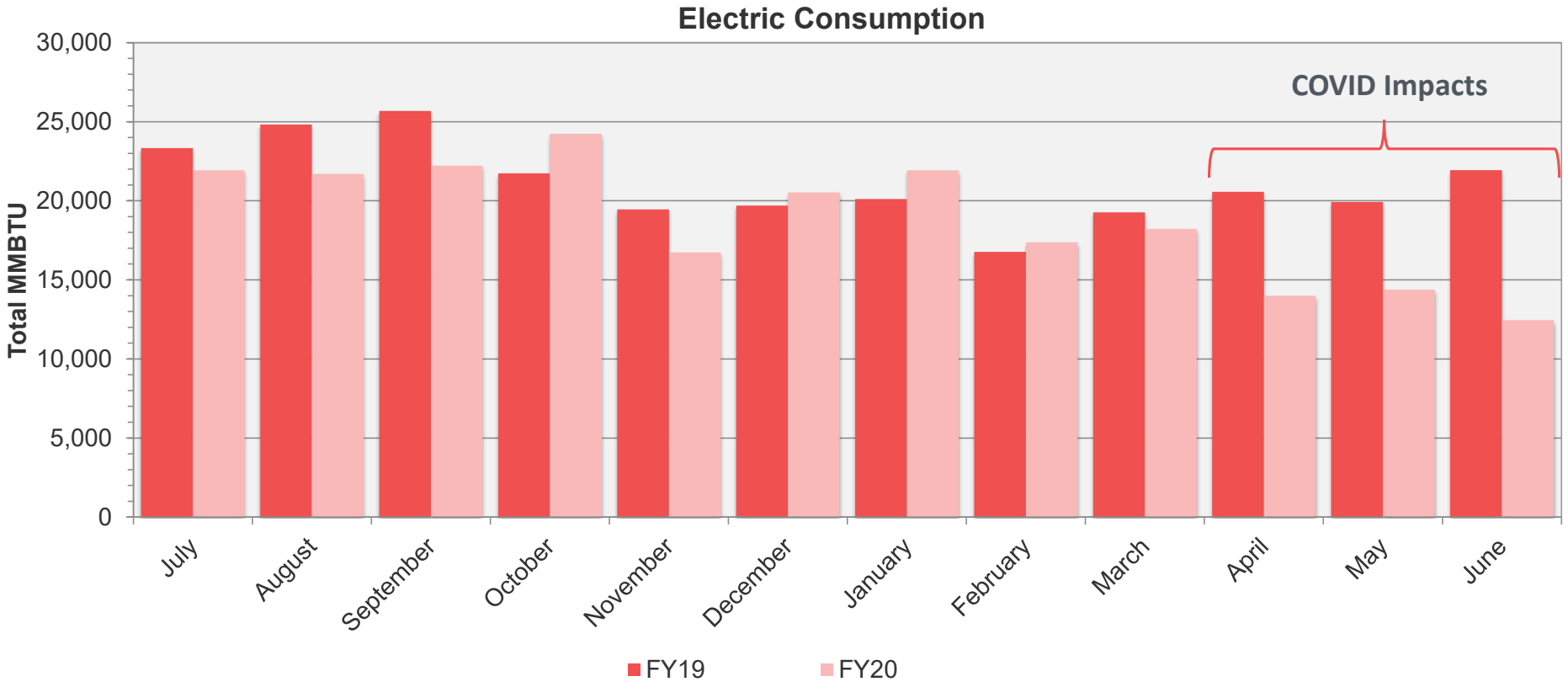
Decreased Thermal Consumption across FY20 when compared to FY19



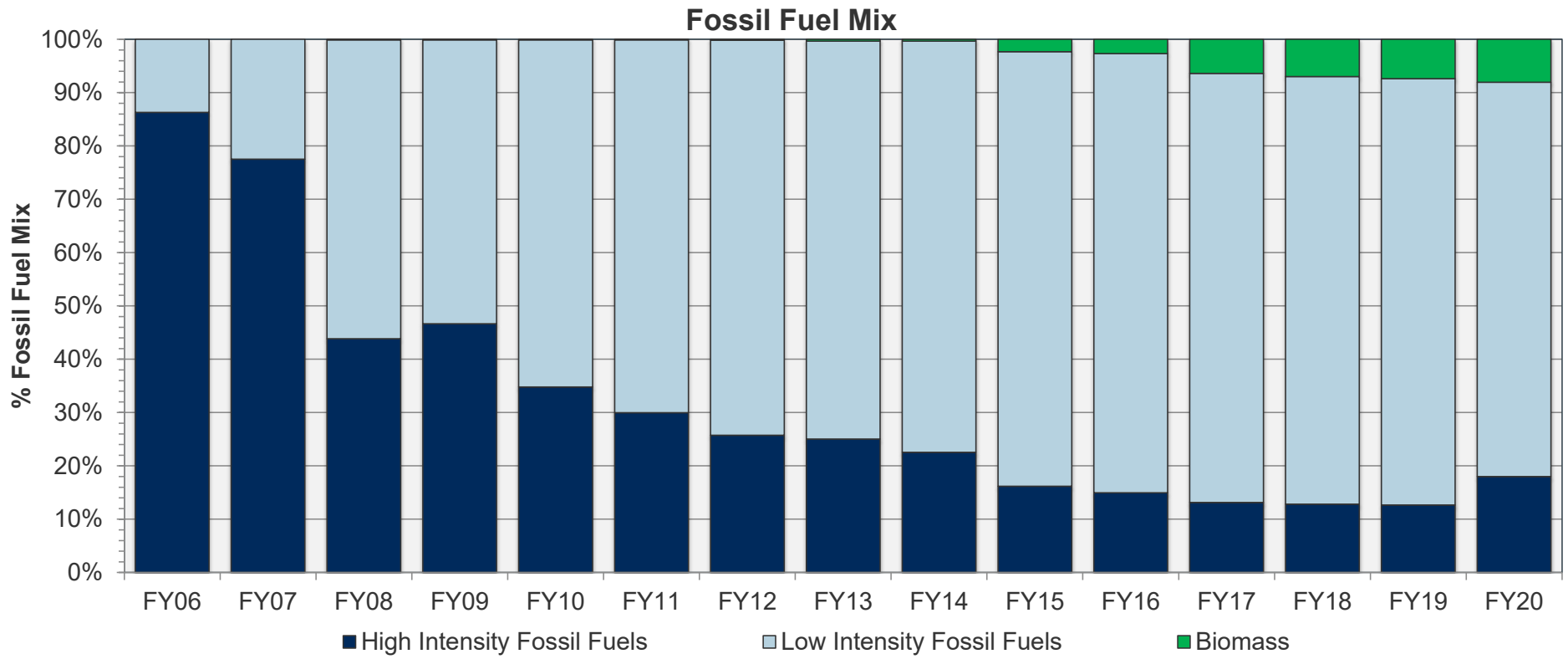
***Thermal contain all heating fuel sources, including alternative fuel sources (ie biomass, wood chips, etc.)*

Total Electric Consumption by Month

COVID Decreases Electric Consumption Heavily from April-June



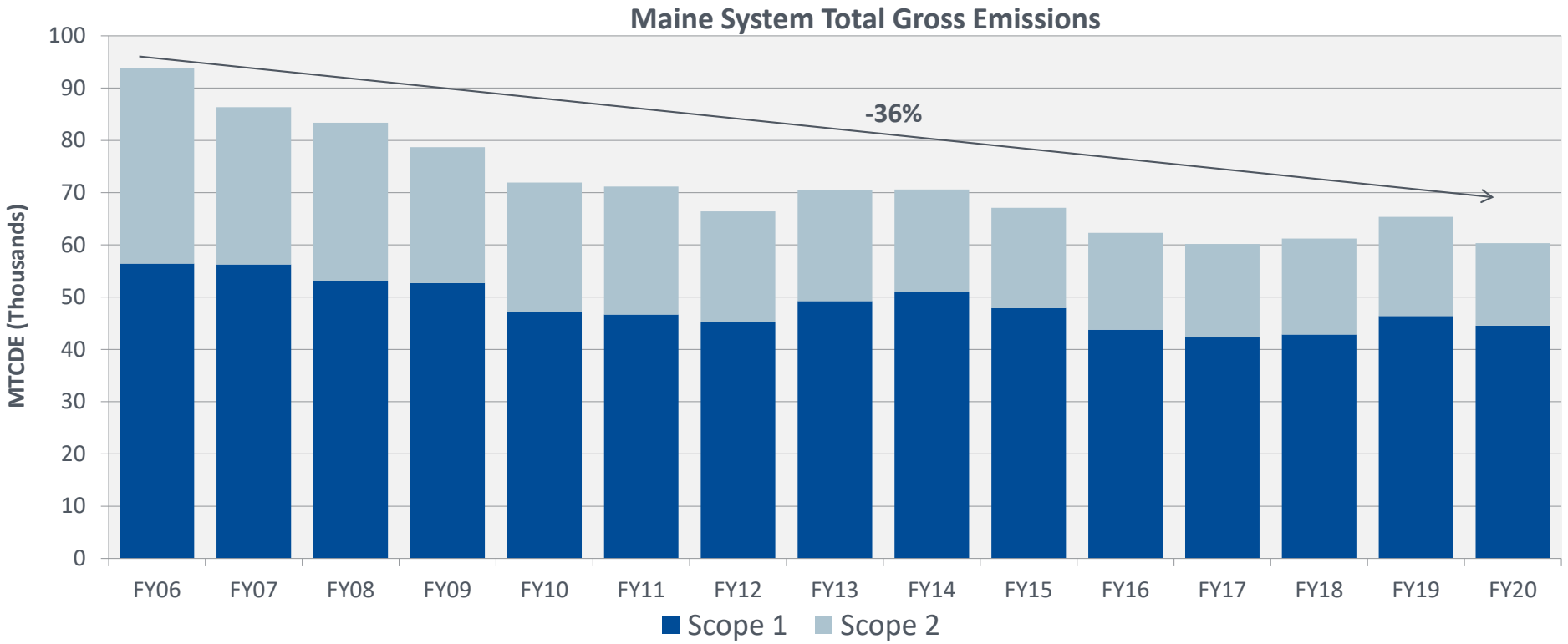
High Intensity Fossil Increases as Low Intensity Decreases



**High intensity fuels include oil #2 and oil #6*

***Low intensity fuels include natural gas and propane*

Fuel Mix and Consumption Drive Emission Rates



MTCDE = Metric Tons of Carbon Dioxide Equivalent

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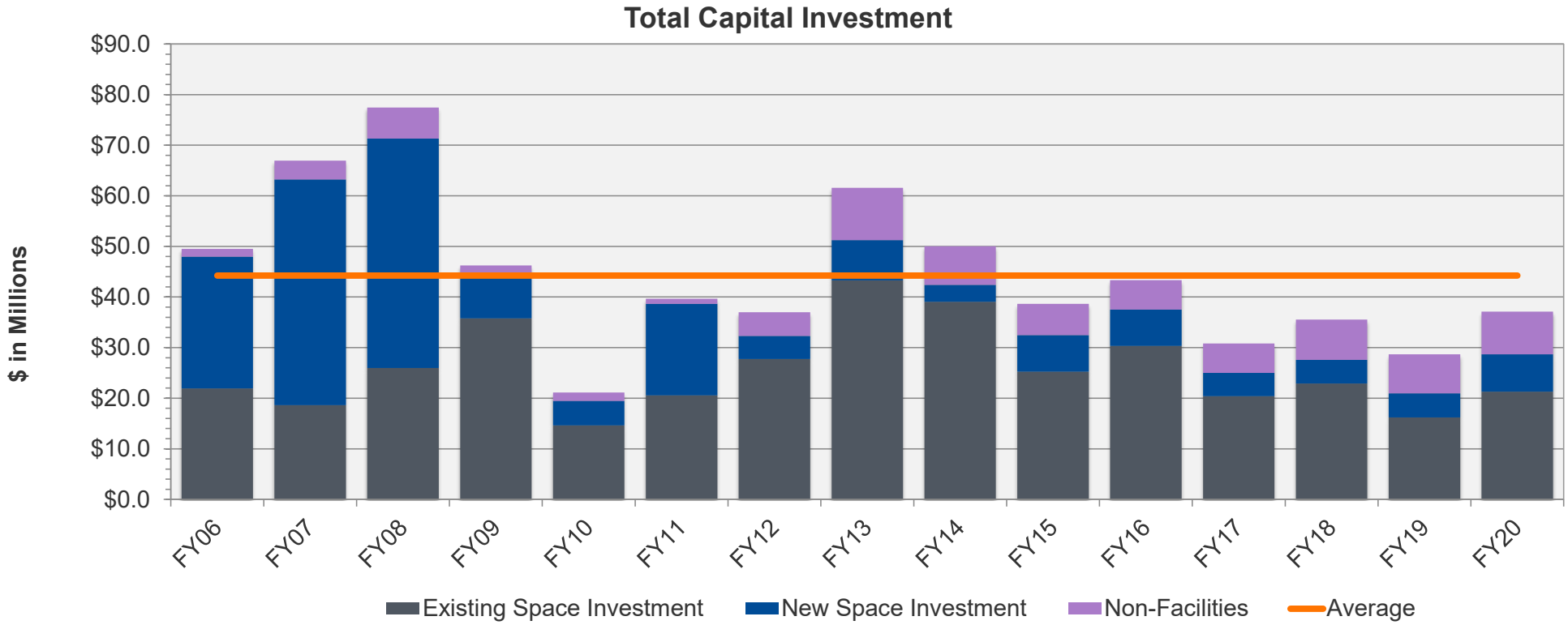
7.1

Asset Value Change

Total Capital Investment Increases $8.4M in FY20

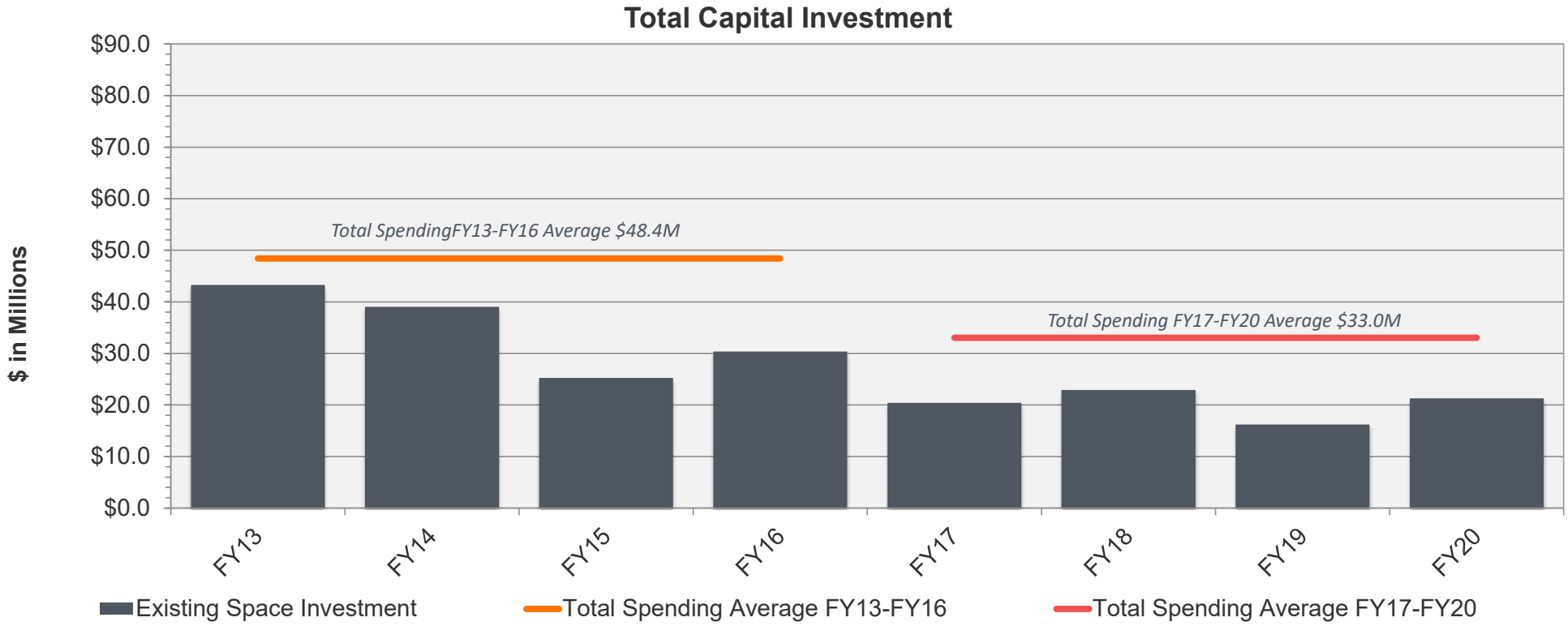
Total Capital Investment at Highest Level Since FY16



Examples of Non-Facilities work include: Study/Design fees, IT work, and demolition costs. These are necessary capital costs for Facilities Operations but do not add value/enhance existing buildings.

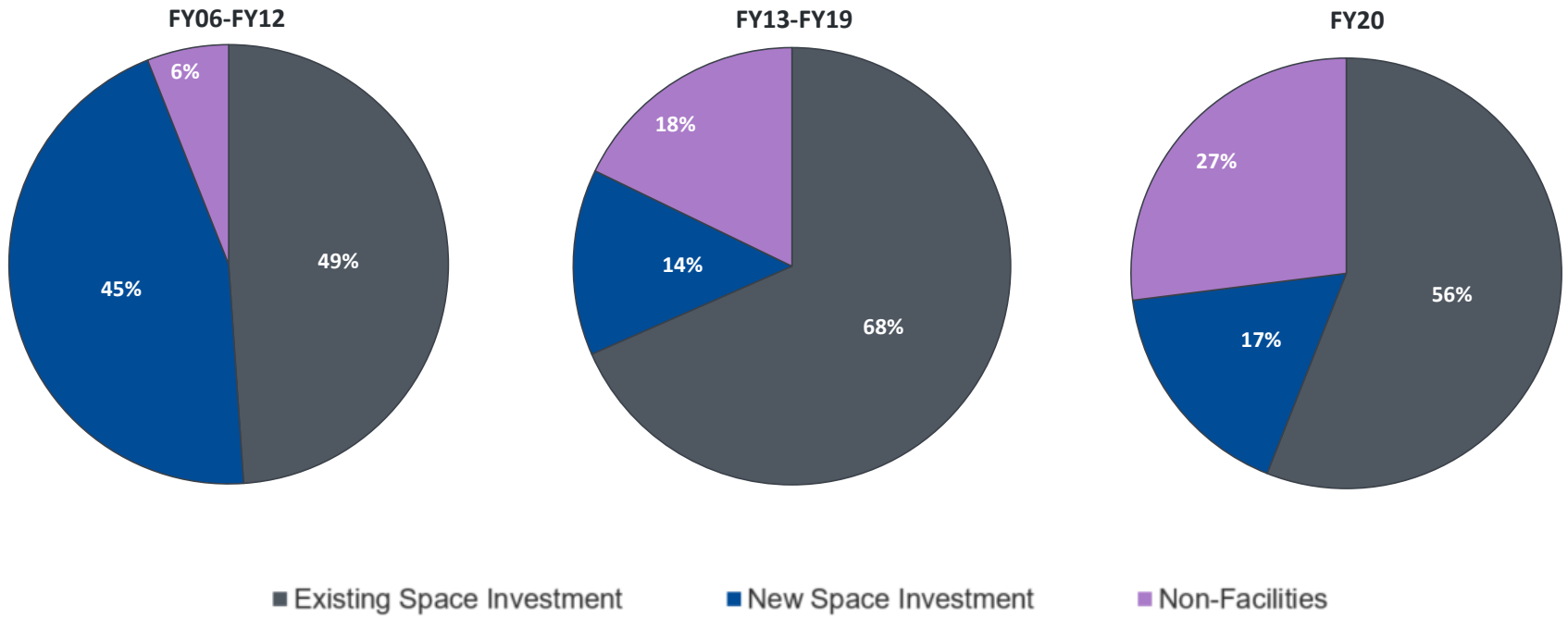
Capital Investment Profile Decreases Over Time

FY17-FY20 Capital Investment Decreases 31% from FY13-FY16 Average



Investments Focus on Existing Space in FY20

Existing space investments help to slow backlog growth



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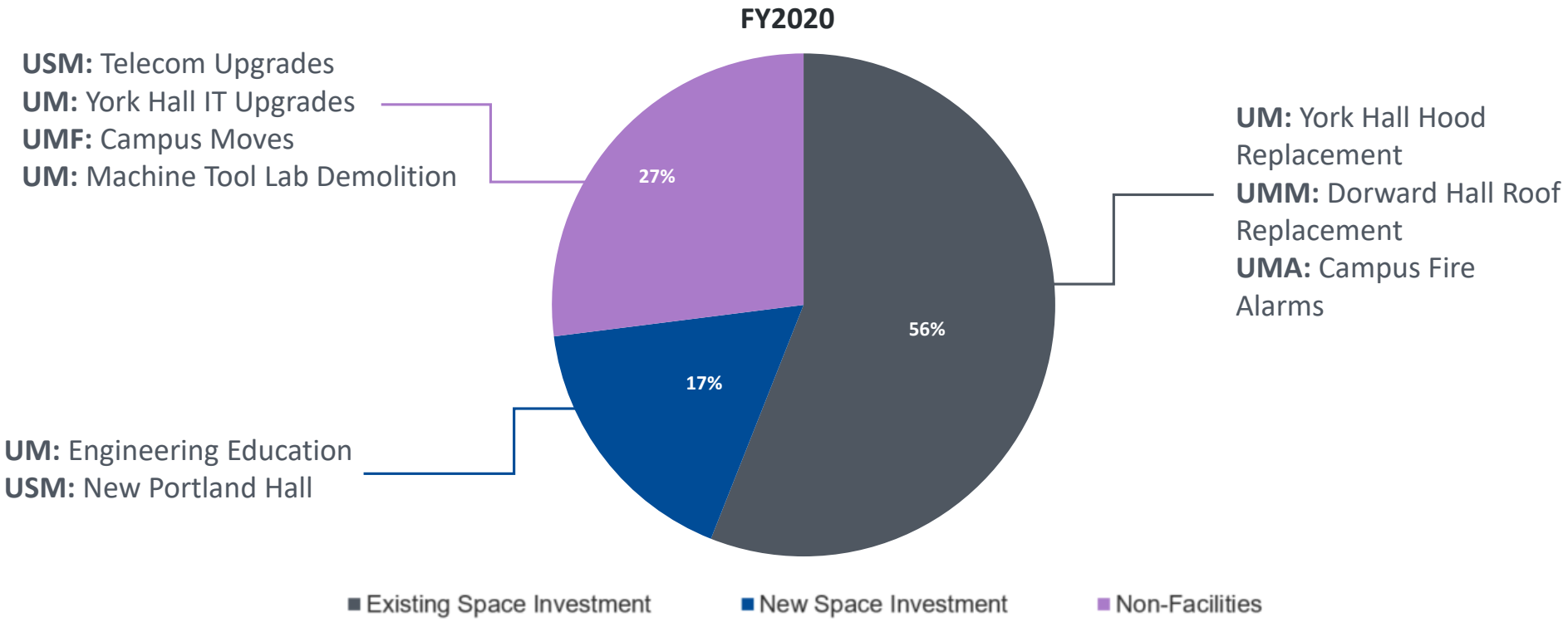
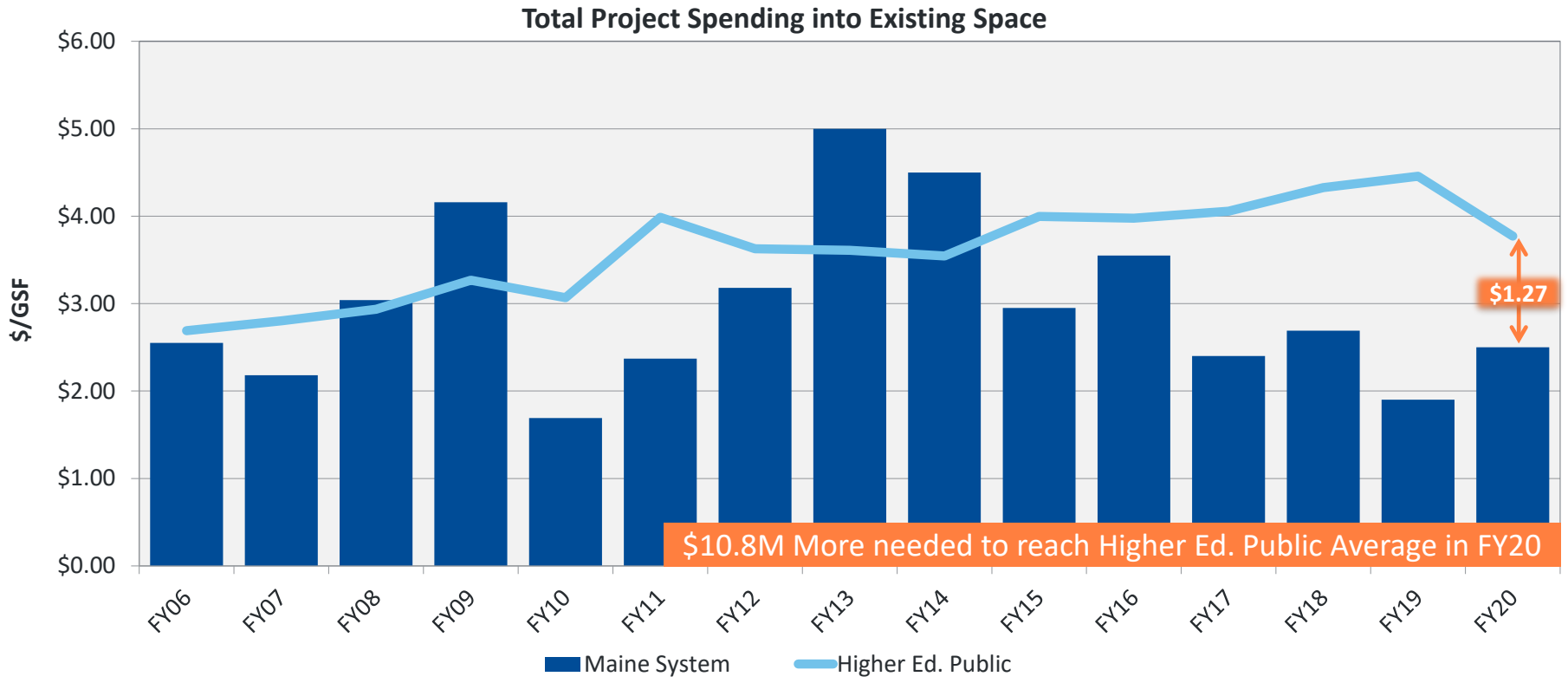


Examples of Non-Facilities work include: Study/Design fees, IT work, and demolition costs. These are necessary capital costs for Facilities Operations but do not add value/enhance existing buildings.

Gap In Investment Against Peer Systems Decreases in FY20

UMaine System closes gap to Public Institutions to $1.27/GSF in FY20



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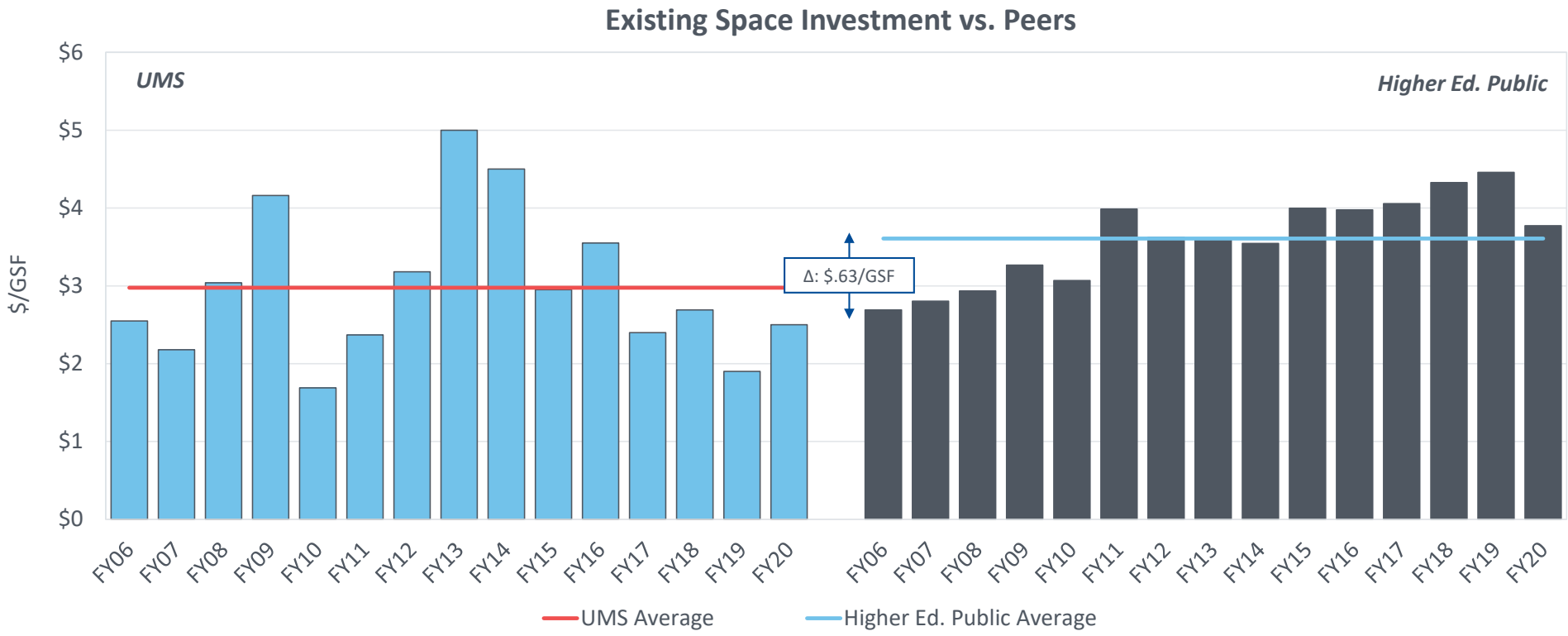
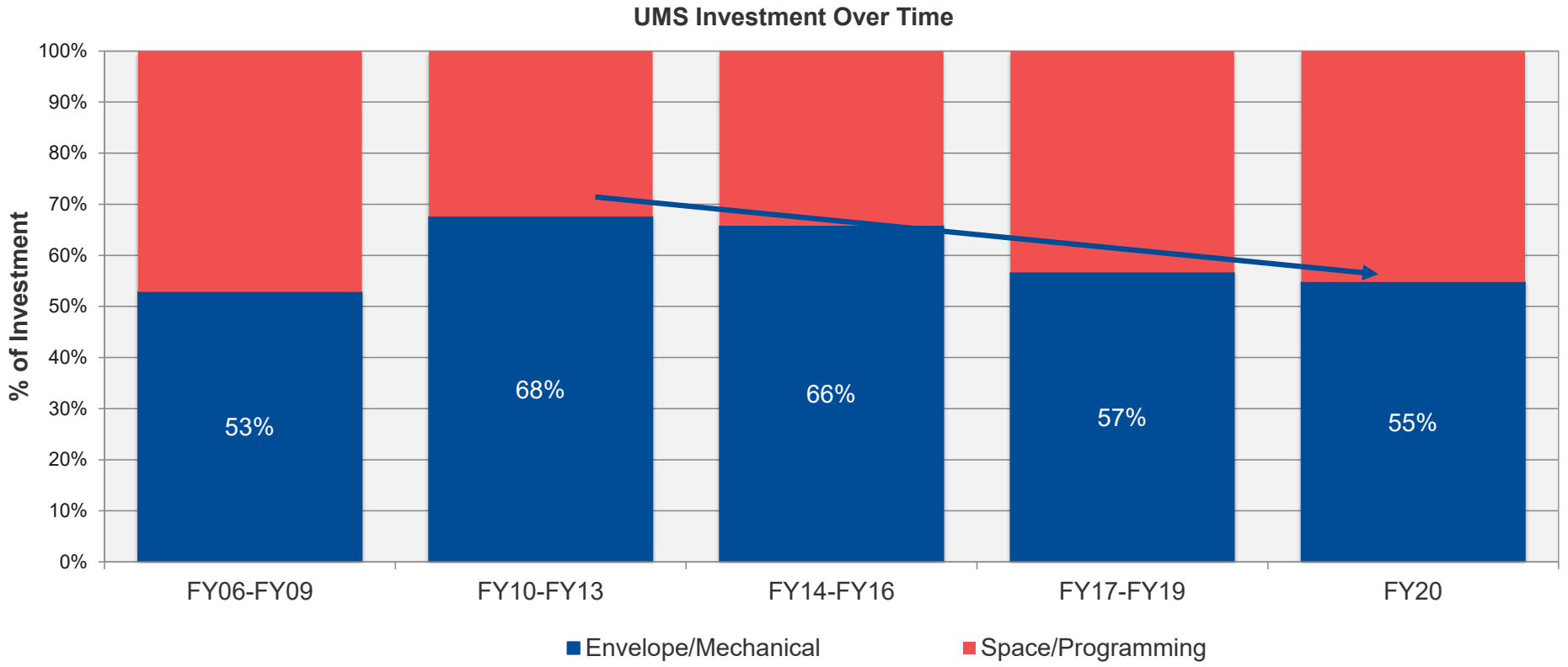
Existing Space Investment vs. Public Institutions

Peers invest an average of $.63/GSF more than UMS from FY06-FY20



Investment Focus Shifts Towards Space/Program

ROI is higher in envelope/mechanical investments than space/program

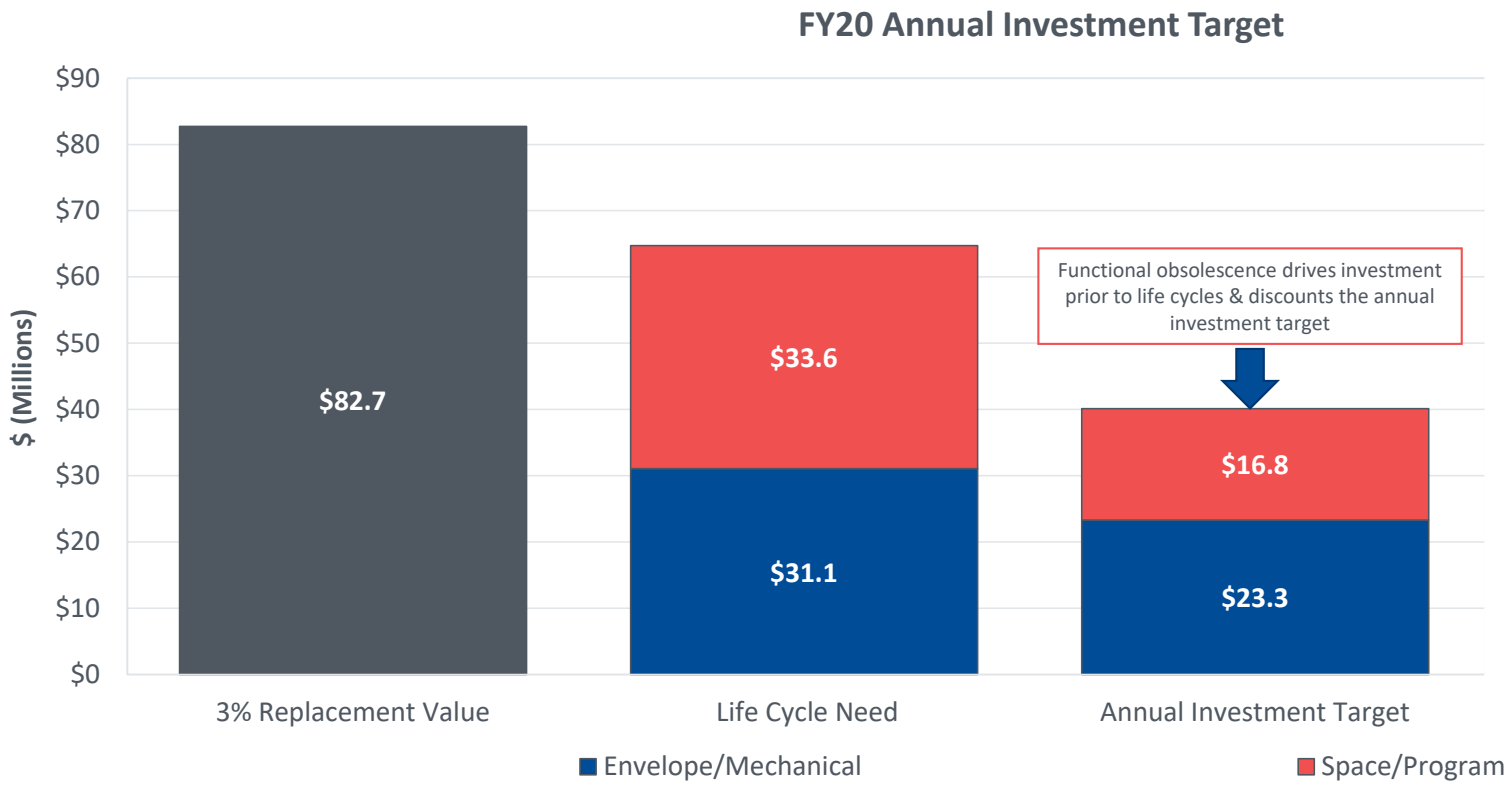


Does not include infrastructure investments.

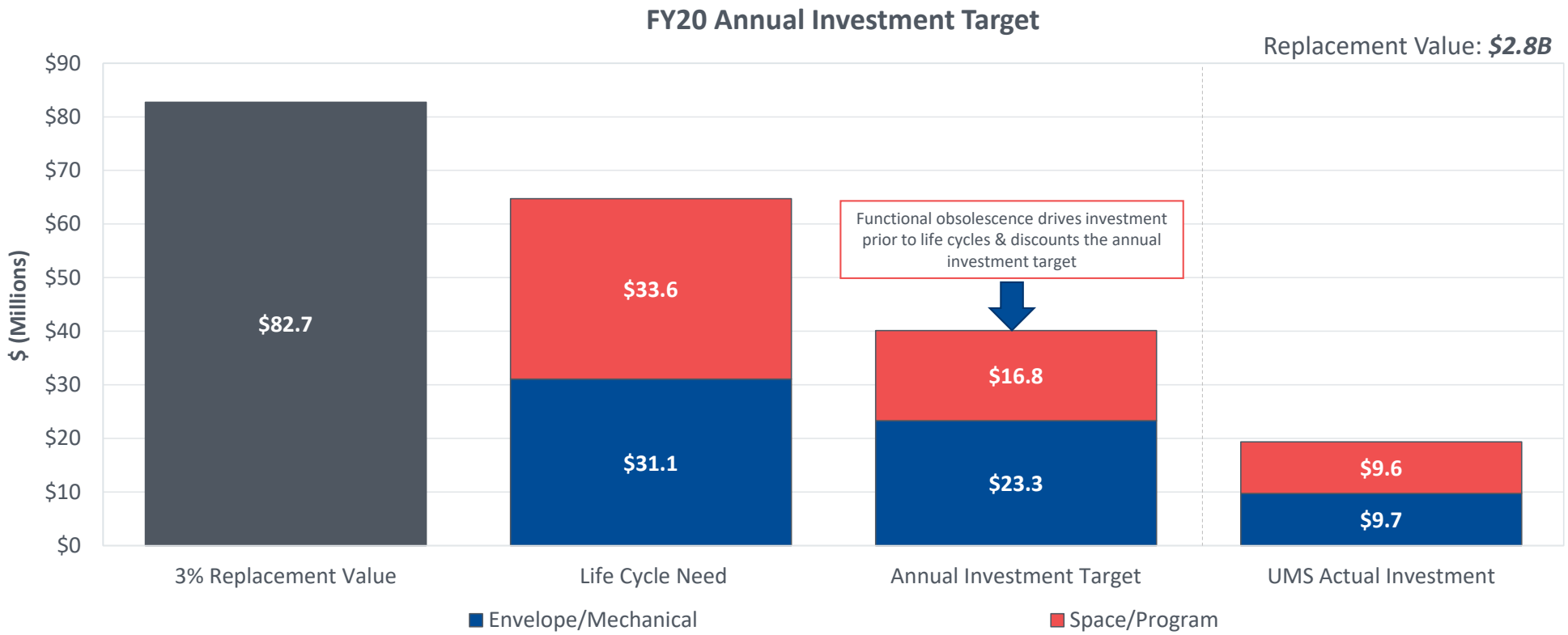
UMS FY20 Annual Investment Target: $40.1M

Replacement Value: ***$2.8B***

7.1

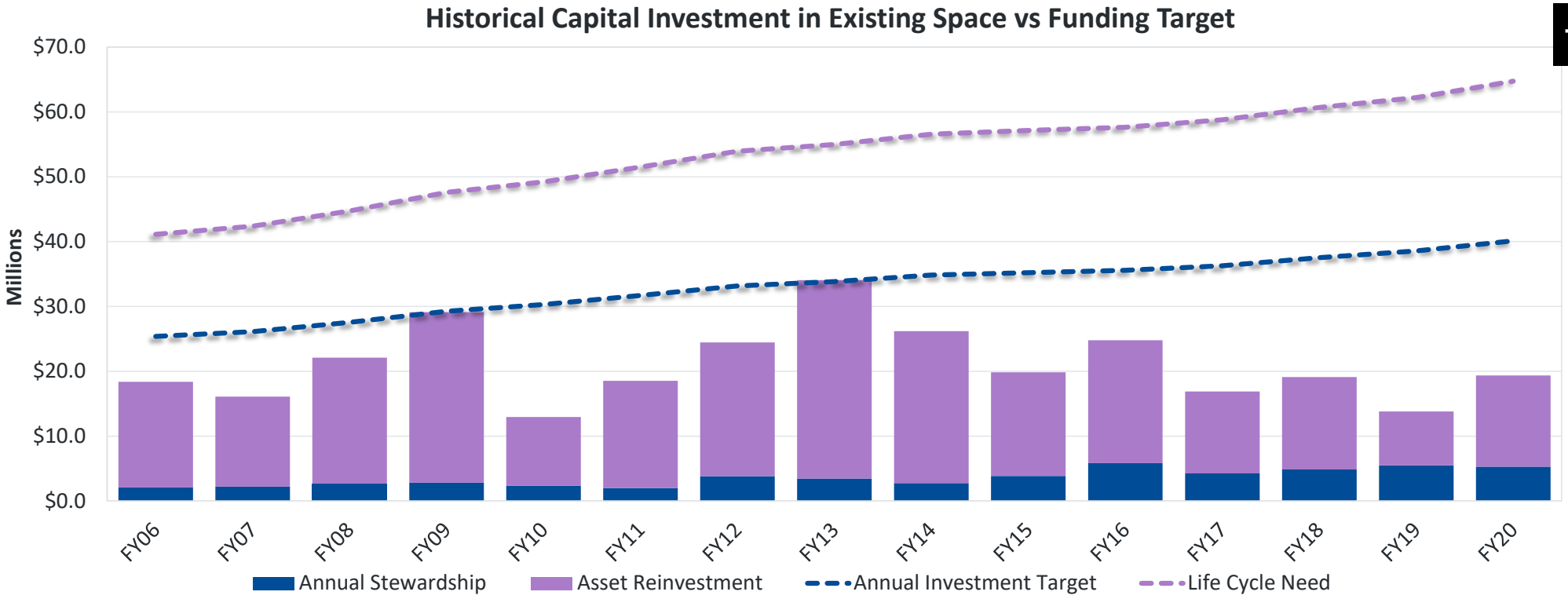


UMS FY20 Annual Investment Target: $40.1M



UMS Falls $20.8M Short of Annual Investment Target in FY20

Deferral to Backlog of Need Continues in FY20



Does not include infrastructure, new space or non-facilities spending

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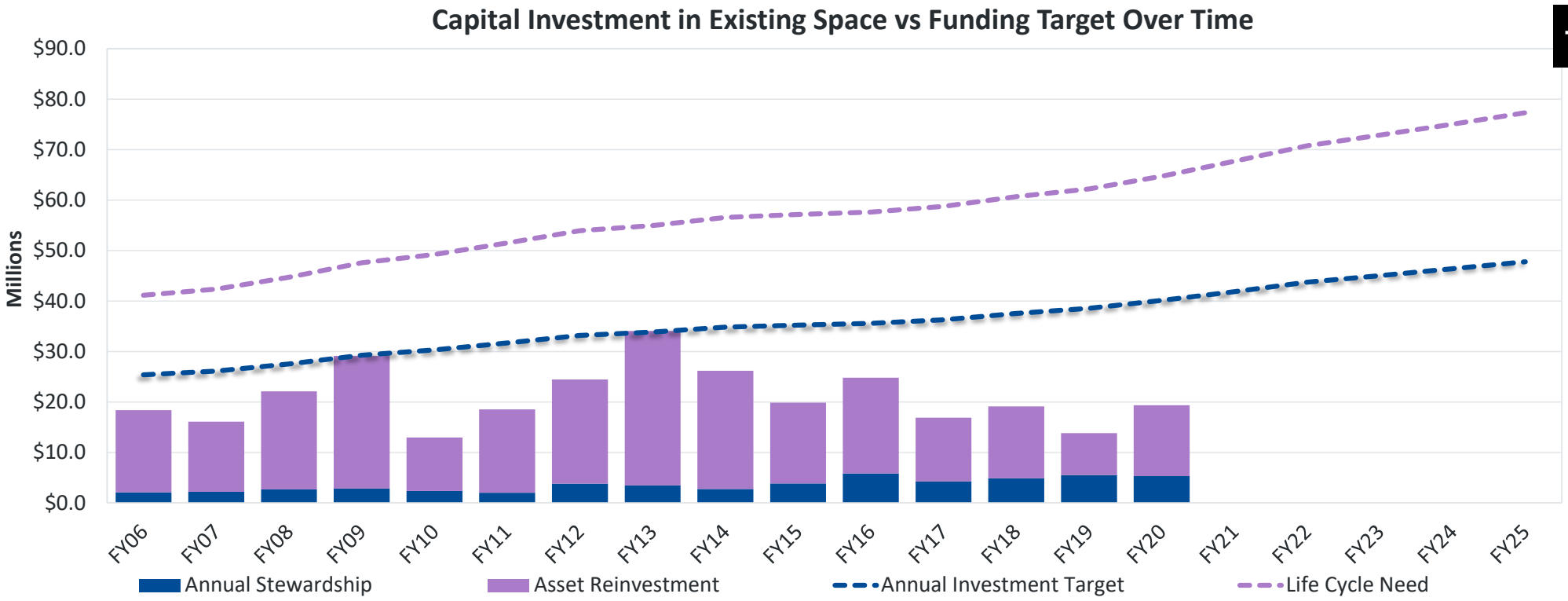
Sightlines' Targets Continue to Increase Over Time

Approximately $50-$60M needed each year to keep System assets at steady NAV



Does not include infrastructure, new space or non-facilities spending

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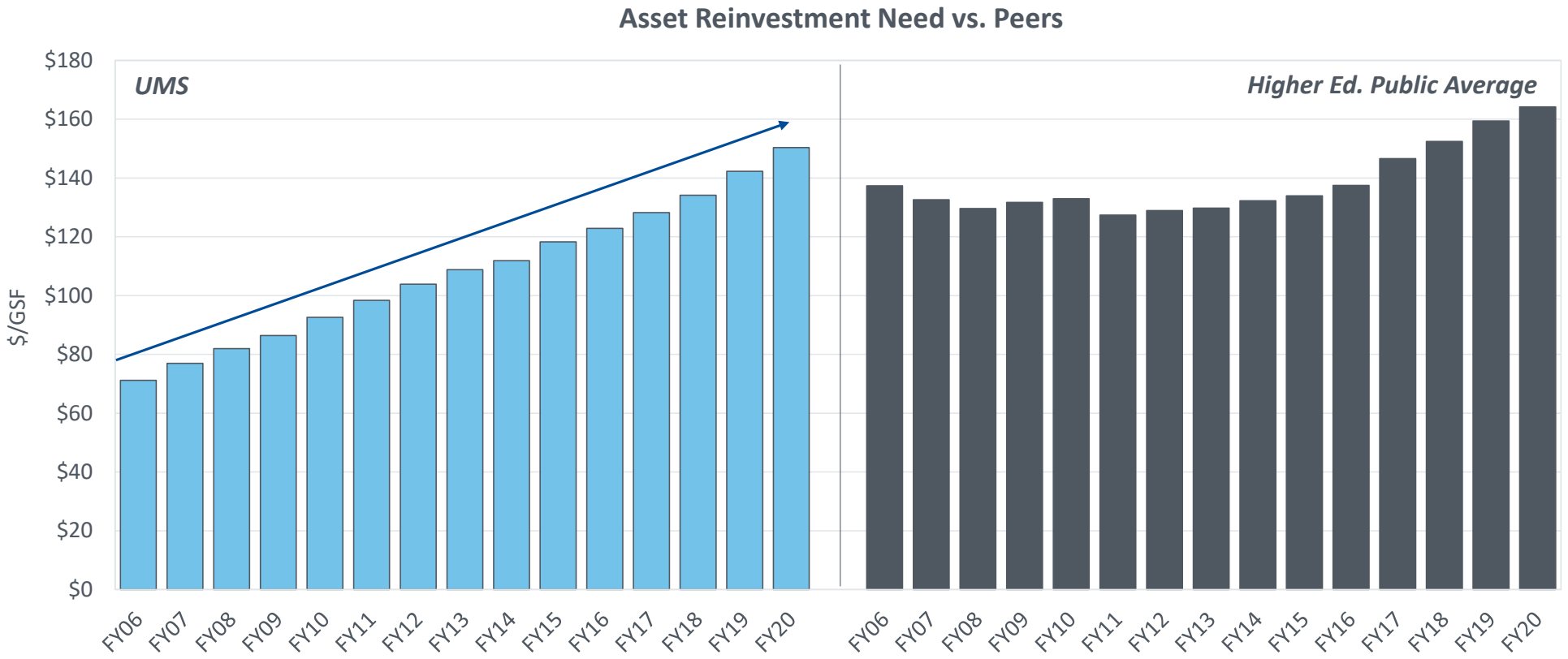
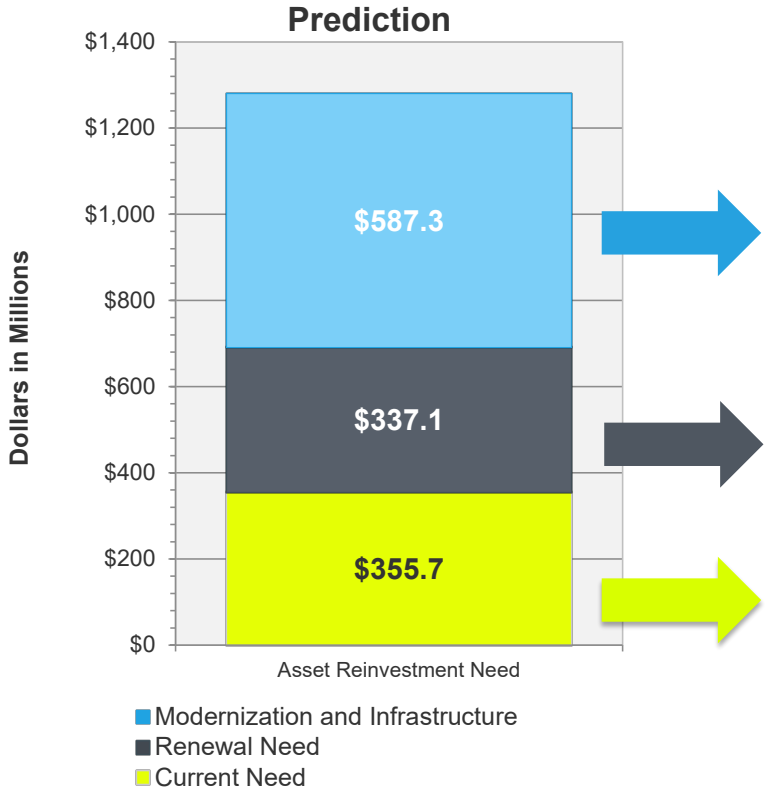
Asset Reinvestment Need Growth Similar to Higher Ed. Public



$1.28B of Need at UMS Over the Next 10 Years

Current Need or Deferred Maintenance accounts for 28% of total need, $355.7M



- ✓ Modernization and Infrastructure Needs
- ✓ Estimated using a combination of the Sightlines' database and BPS analyses.

✓ Combination of Funds

- ✓ Life Cycle Needs coming due between FY21 – FY30

✓ "Keep-Up" Funds

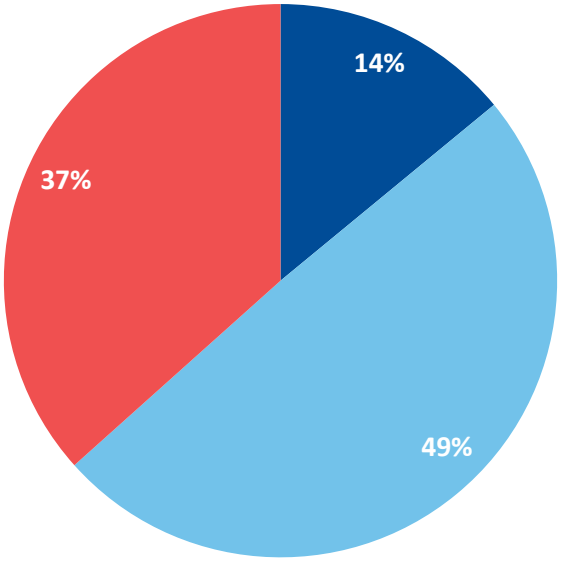
- ✓ Deferred Maintenance
- ✓ The subsystem has already failed
- ✓ The subsystem is functioning with substantial degradation of efficiency or performing at increased cost

✓ "Catch-Up" Funds

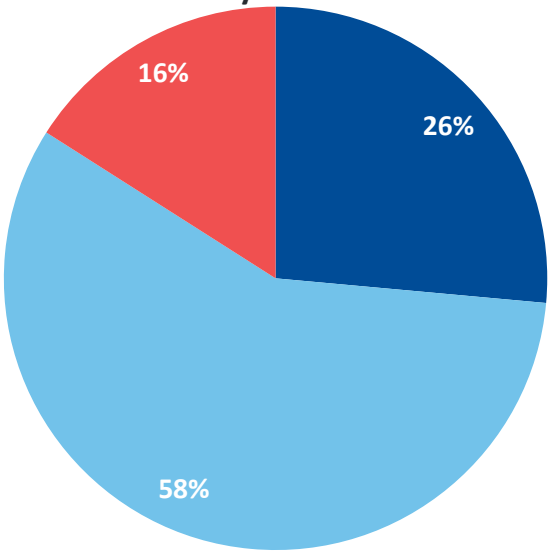
UMS Aligns Spending With Highest Need: Mechanical

Continued investment in mechanical and envelope work needed in future years

FY06-FY20 Historical Project Investment



Distribution of Maine System Need* by System



Envelope Mechanical Interiors

$296M Invested

$554M of Need

**Need includes backlog and renewal projects, not modernization or infrastructure work*

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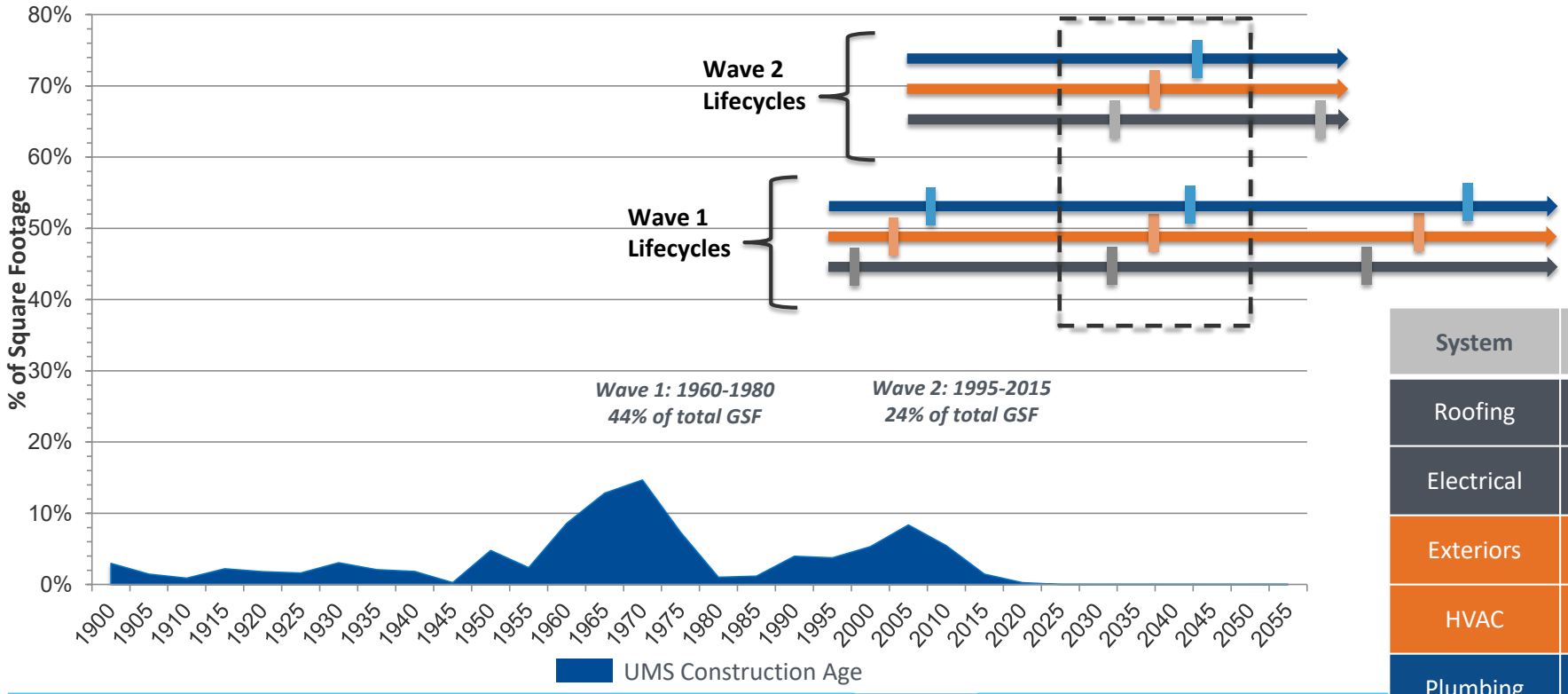
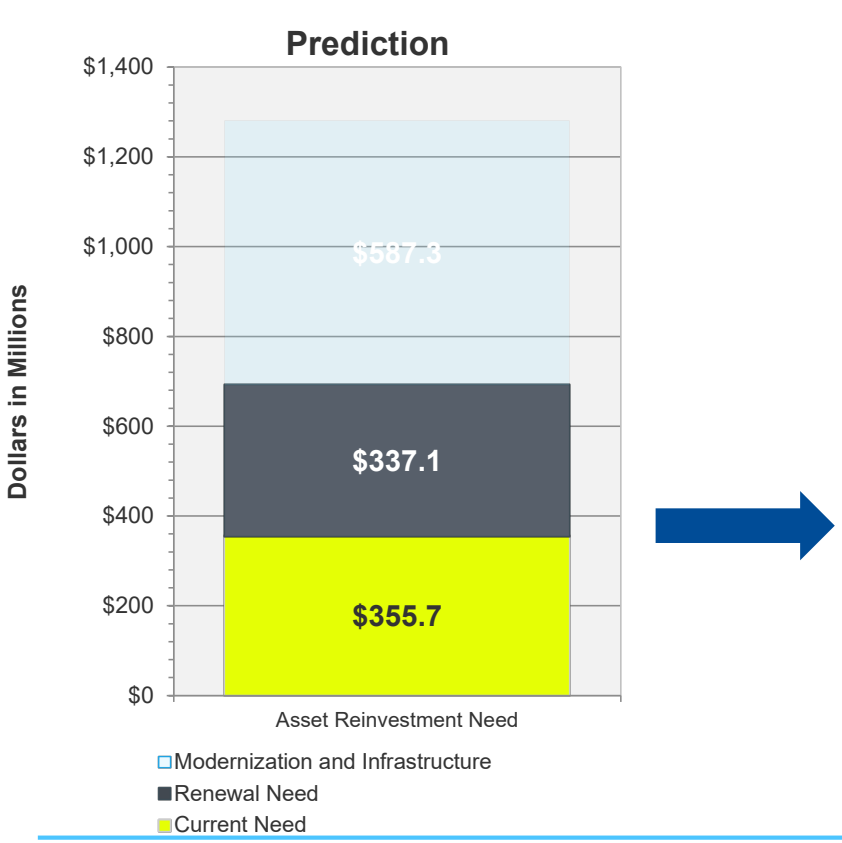
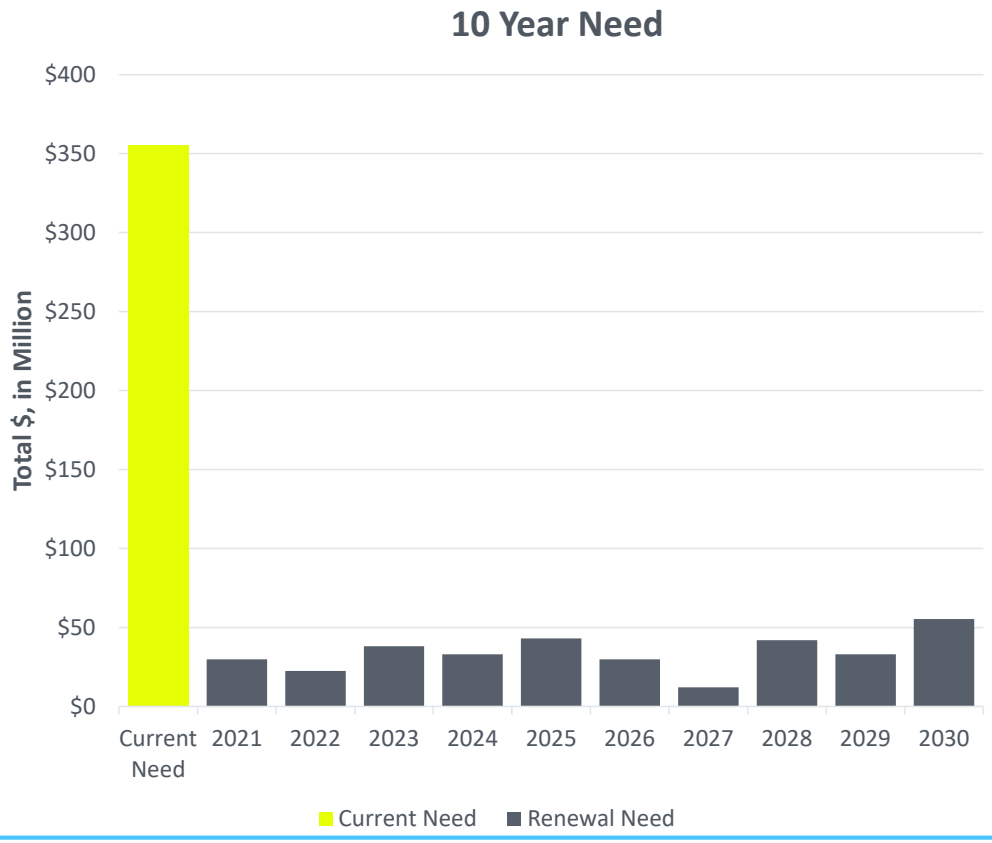
Future Forecast Determined by Life Cycle Models



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

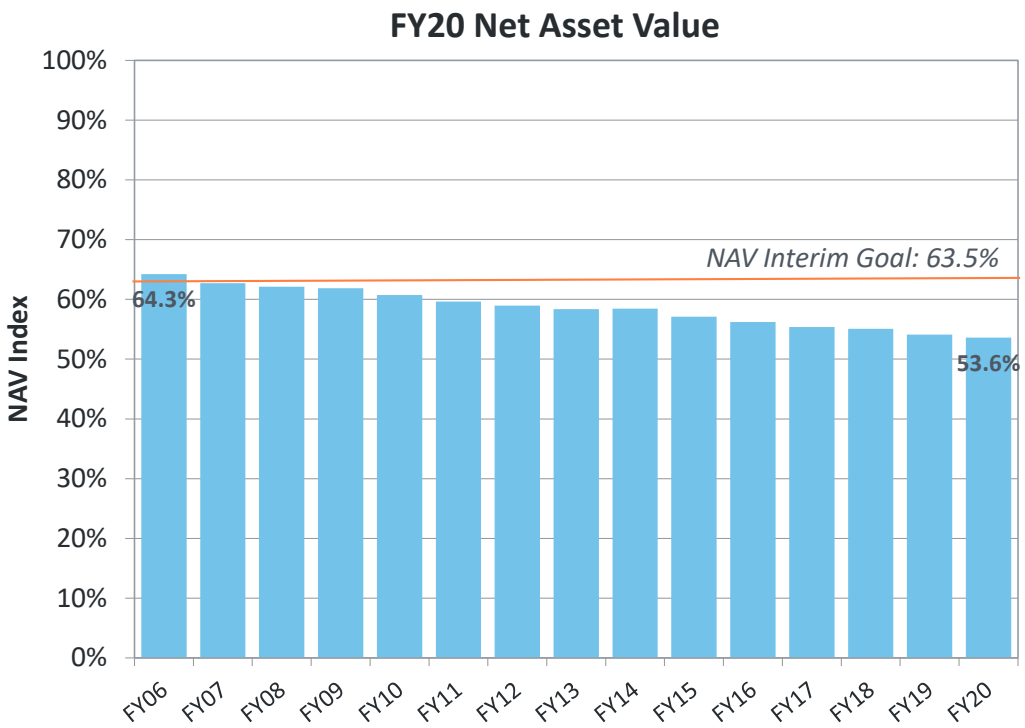
Planning Investments Over the Next Ten Years

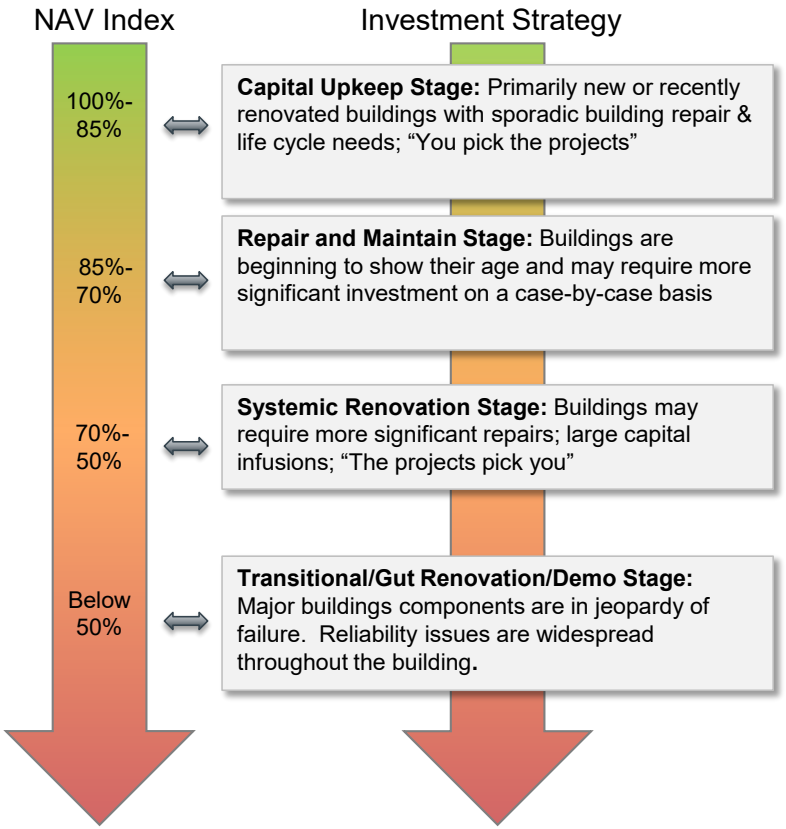




7.1

Rate of Deferral Slows But NAV Continues to Decrease





$$\text{Net Asset Value} = \frac{\text{Replacement Value} - \text{Backlog}}{\text{Replacement Value}}$$

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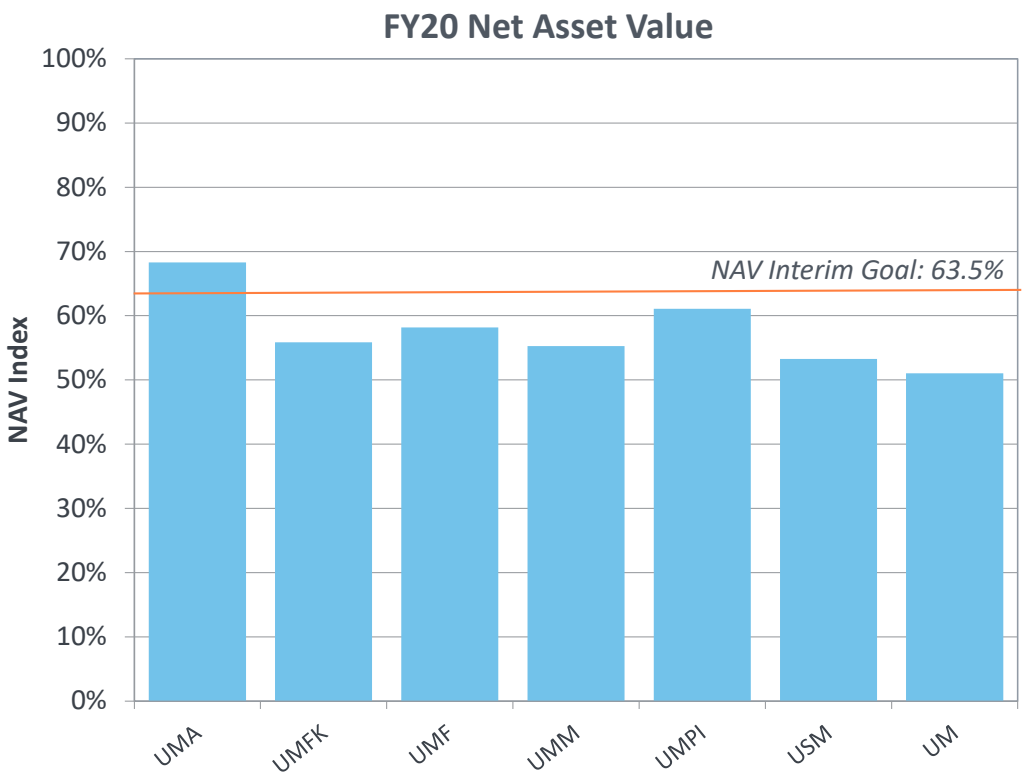
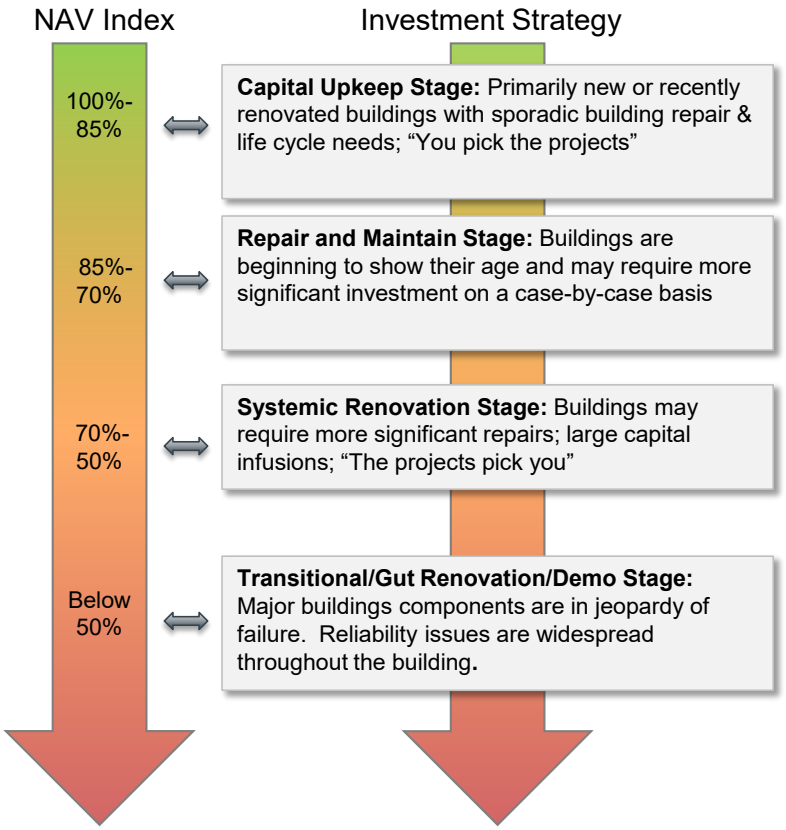
FY20 Net Asset Value By Campus





7.1

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$$\text{Net Asset Value} = \frac{\text{Replacement Value} - \text{Backlog}}{\text{Replacement Value}}$$

7.1

Concluding Comments

Key Takeaways

- **Campus is aging and will face a series of life cycles coming due. These life cycles will require investments for replacement/updates in the next 10 years and will be competing for the same resources.**
  - UMS will need $50-$60M each year to slow the aging process and mitigate deferred maintenance.

- **UMS has an opportunity to improve customer satisfaction and reporting consistency through the work order process. Campuses facilities should work to understand what data helps tie capital needs to operational costs in a manner that is easily communicated to those outside of facilities.**
  - How can data be used to target limited resources to the highest needs?

- **How will campus shift in the post pandemic era regarding space management? Will similar space be needed if employees and students operate in a more remote fashion?**
  - Which assets are not long term assets?
  - Which assets are core to the mission/strategy of the institution?

7.1

Questions and Comments

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Appendix: UMS Key Performance Indicators

Using Sightlines Data to Monitor UMS KPIs

1. Density: Number of users ▪ Current UMS measure: 297 ▪ Interim Goal: 332 ▪ Peer/Industry standard: 460 ▪ Long-term System goal: 415	**2. NAV: Net Asset Value** ▪ Current UMS measure: 59% ▪ Interim Goal: 63.5% ▪ Peer/Industry standard: 75% ▪ Long-term System goal: 70%	**3. Capital Expenditures on Existing Space;** *%CRV* ▪ Current UMS measure: 1.88-2.34% ▪ Peer/Industry standard: <1.5% ▪ Periodic reporting recommended.
4. Annual Facilities Operating Expenses; *Maintenance, Custodial, Grounds, & Paid Utilities % GIR* ▪ Current UMS measure: 9.67% ▪ At this time, there are no commonly accepted standards in this area. UMS will continue to track, report, & internally benchmark their progress.	**5. Total Cost of Ownership (TCO);** ▪ UMS should formally consider lifetime cost of a facility and other KPIs in planning and decision making, not only one-time construction costs.	**6. Energy Cost;** *per GSF* ▪ Current UMS measure: $1.72 ▪ Peer/Industry standard: $1.98 ▪ Periodic reporting recommended.
7. Annual Facilities Operating Expenses; *Maintenance, Custodial, Grounds, & Paid Utilities % CRV* ▪ Current UMS measure: 2.89 - 3.60% ▪ Peer/Industry standard: TBD ▪ Periodic reporting recommended.	**8. Annual Facilities Operating Expenses;** *Maintenance, Custodial, Grounds, & Paid Utilities per GSF* ▪ Current UMS measure: $6.70 ▪ Peer/Industry standard: $6.13 ▪ Establishment of specific goals to be revisited in FY17.	**9. Preventive Maintenance/ Demand Maintenance;** *% Annual Expenditures* ▪ Current UMS measure: 3% ▪ Peer/Industry standard: in evaluation ▪ Establishment of specific goals to be revisited in FY17.
10. Coverage: FTE (Maintenance, Custodial, Grounds); *per GSF* ▪ Continue to monitor GSF/FTE ratios. ▪ Strive to meet or exceed APPA/Sightlines benchmarks, i.e.: Custodial target zone: 29,213 – 37,000 GSF/FTE	**11. Energy Cost;** *per Million BTUs* ▪ Current UMS measure: $17.73 ▪ Peer/Industry standard: $19.00 ▪ Periodic reporting recommended.	**12. Energy BTUs;** *per GSF* ▪ Current UMS measure: 97,015 ▪ Peer/Industry standard: 121,131 ▪ Continue to meet/exceed peer/industry standards, strive to improve existing UMS performance, & establish specific goal for FY16.

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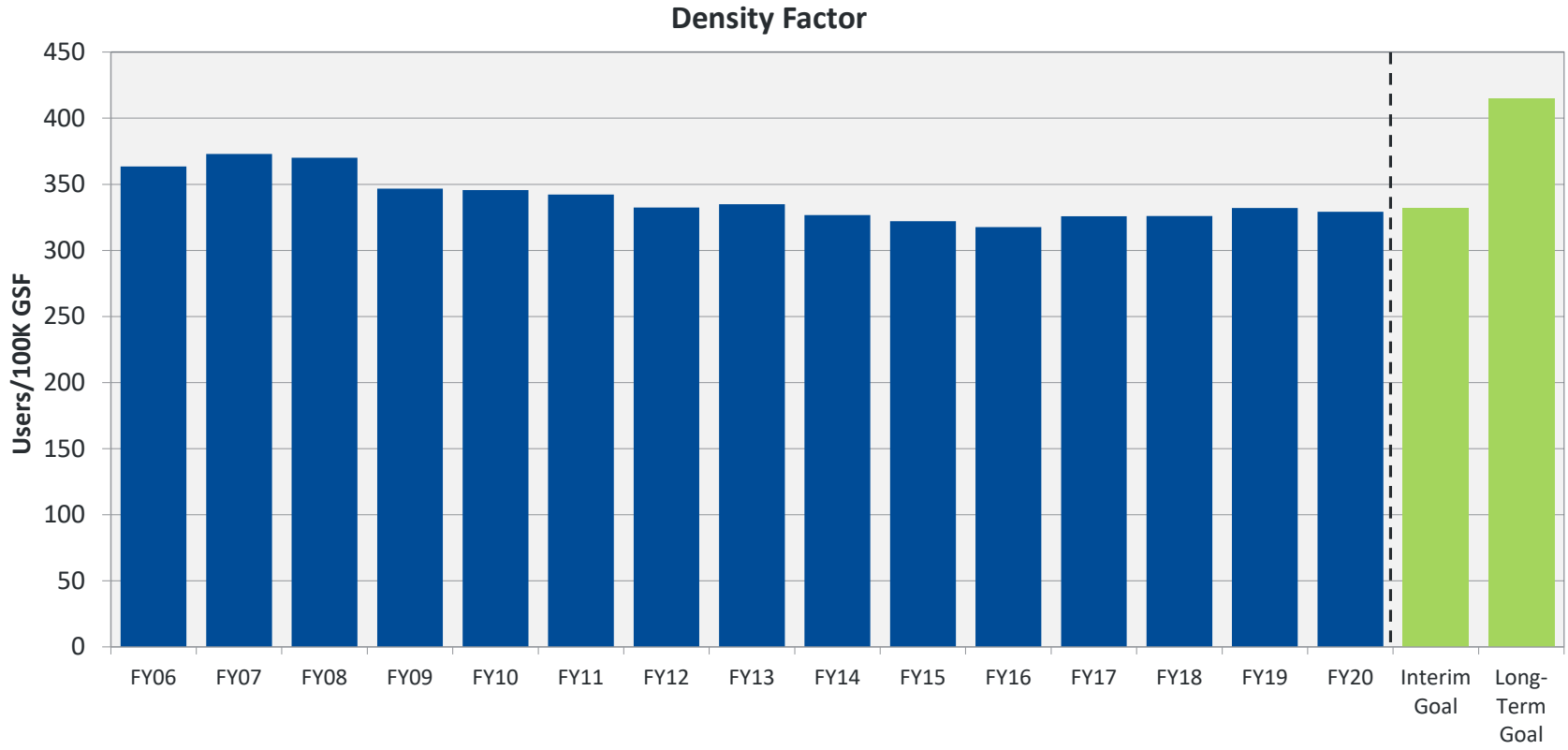
Density Factor

Density: Measures number of users per 100,000 GSF



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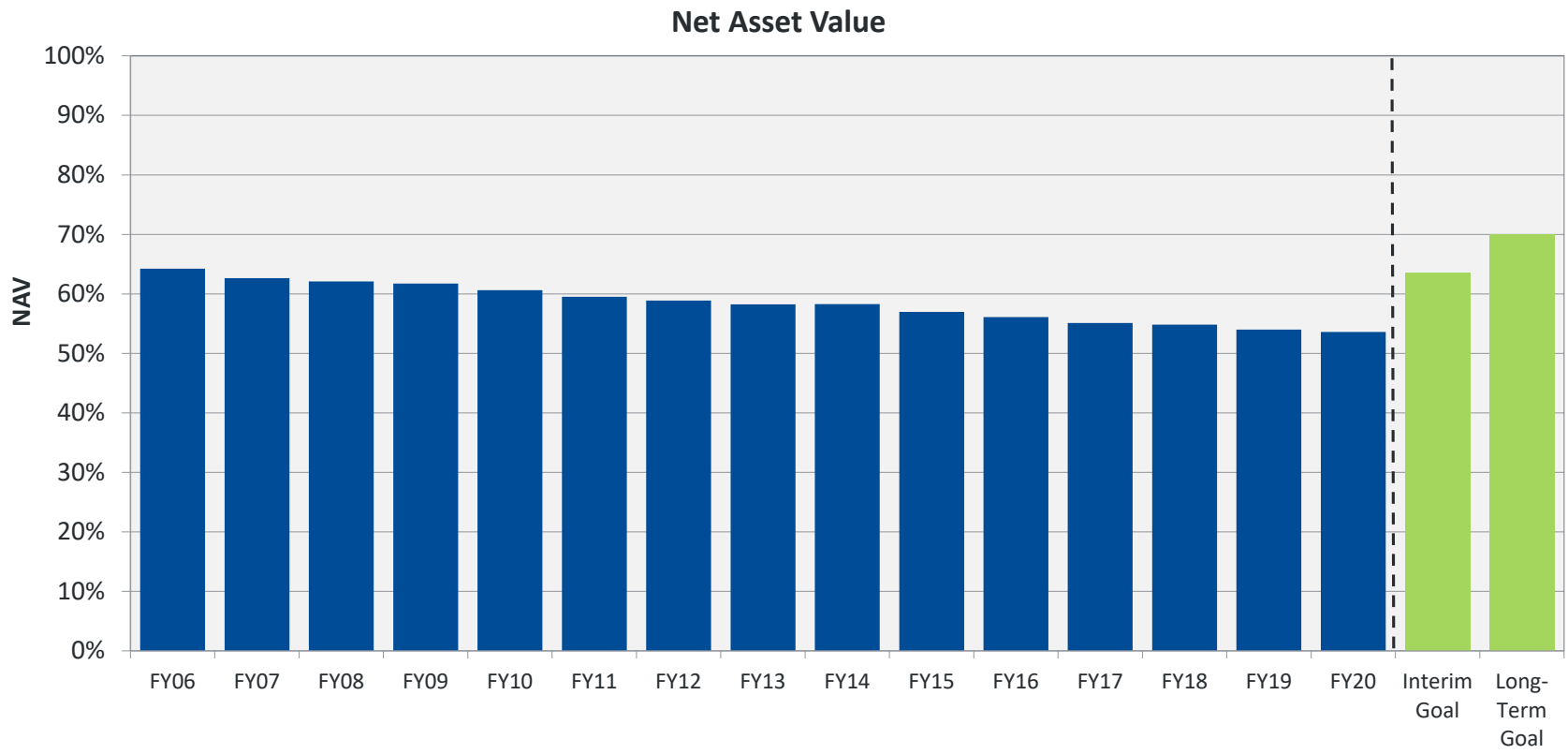
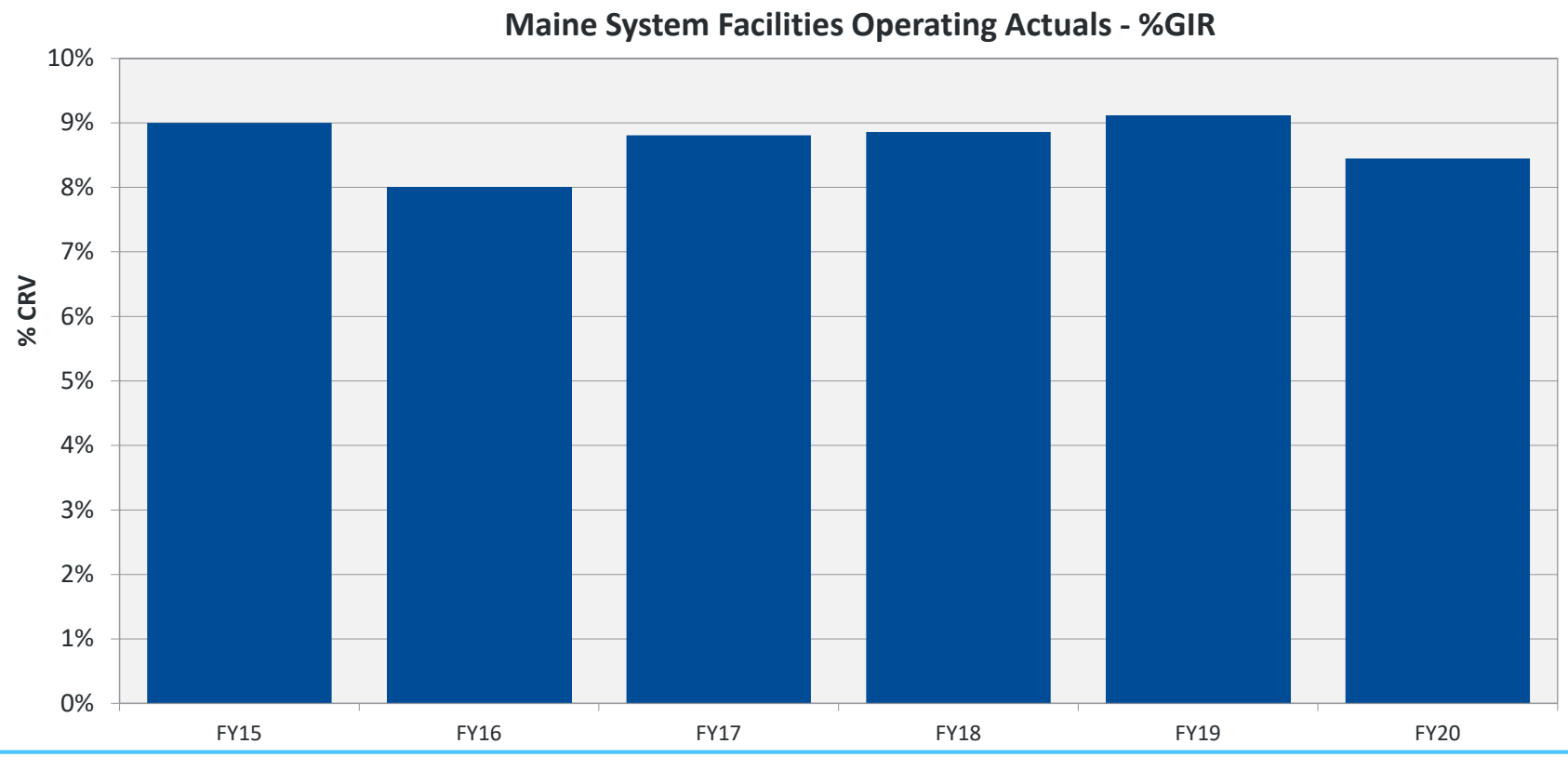
Net Asset Value



Facilities Operating Actuals as % of GIR



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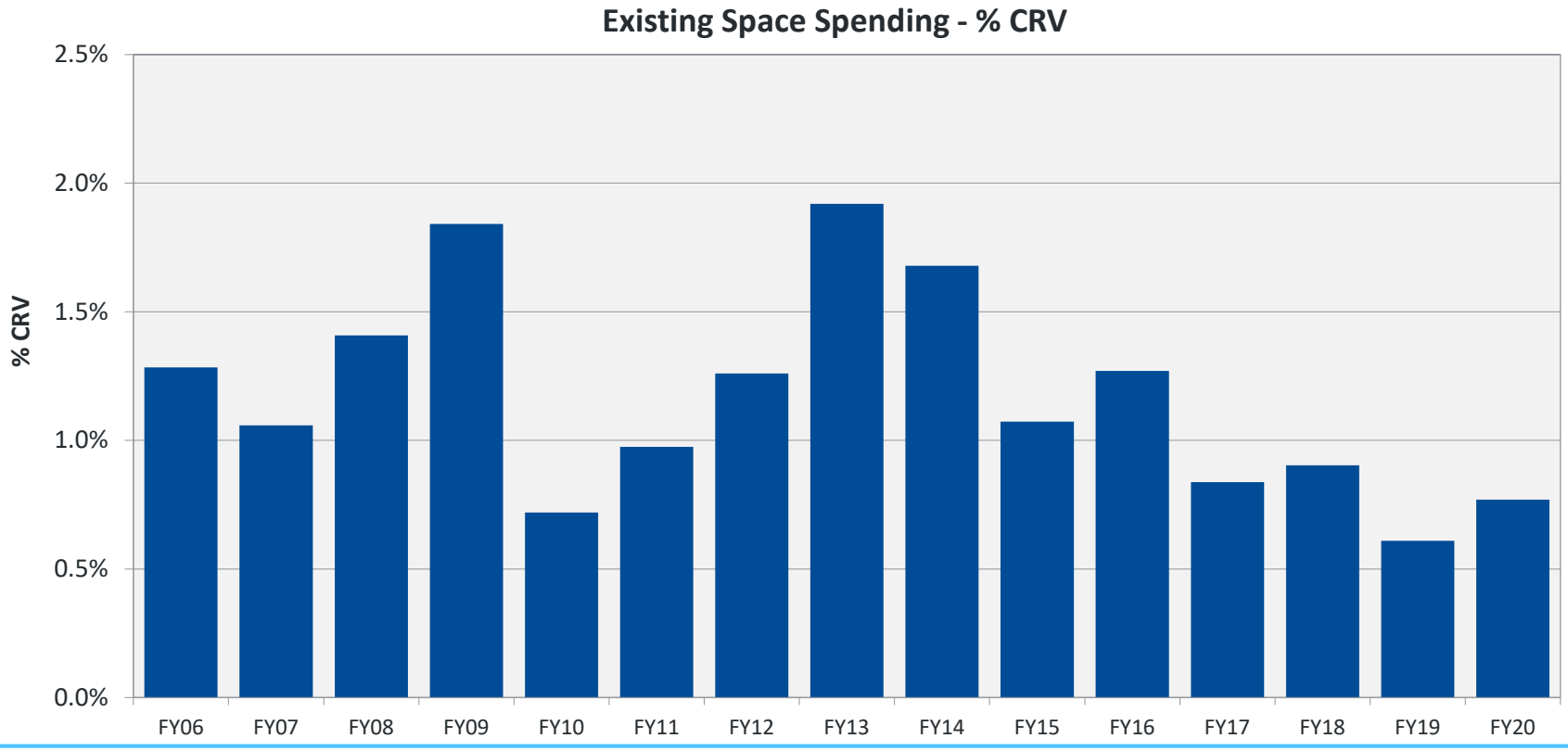
GORDIAN®

Capital Spending - % CRV

Existing space investment only



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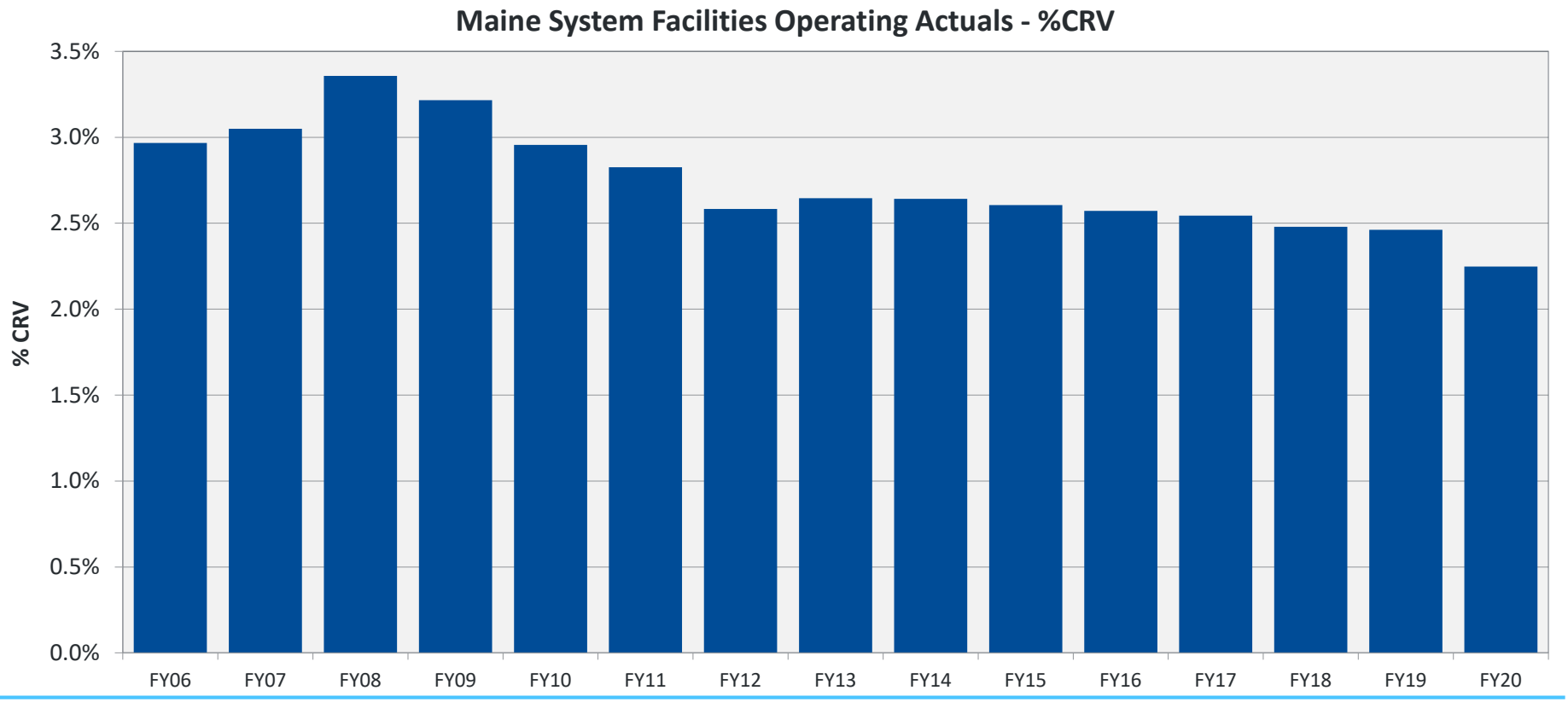
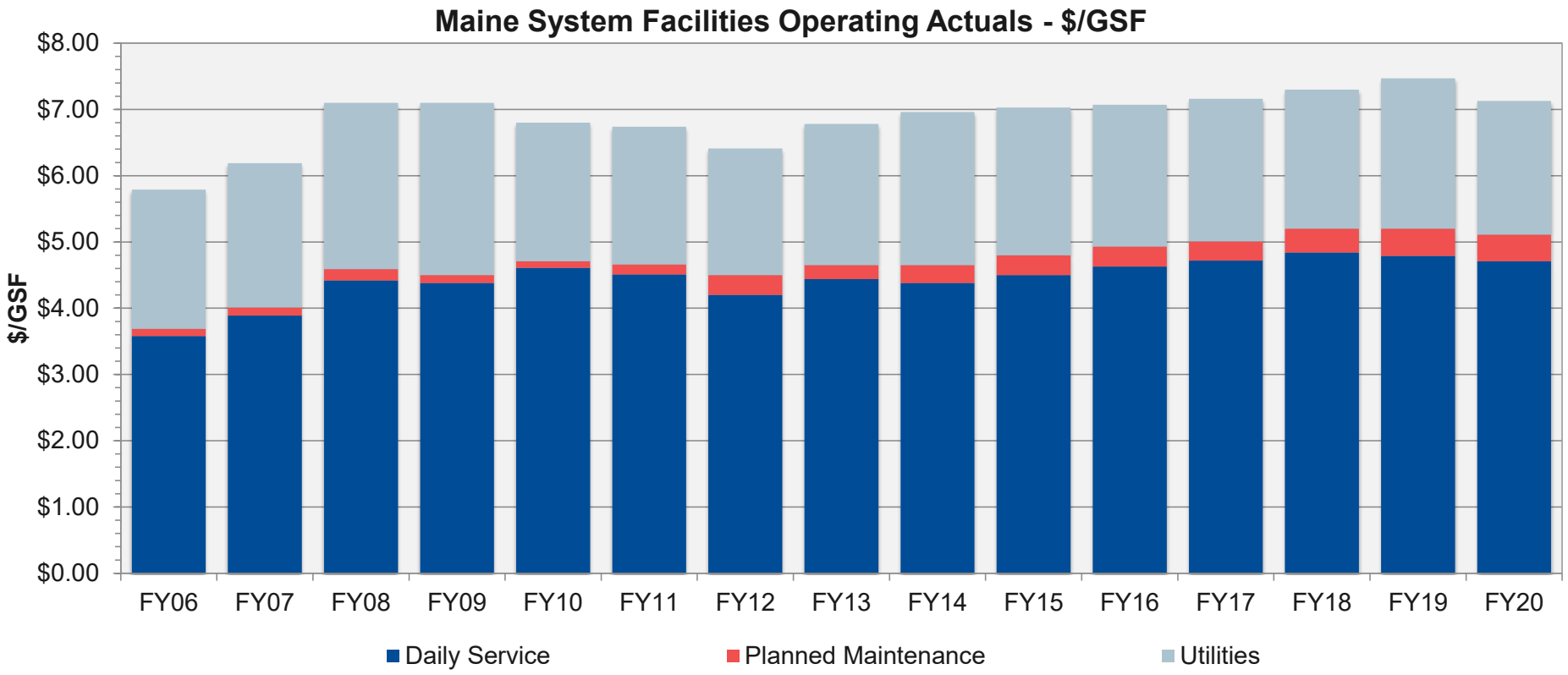
GORDIAN®

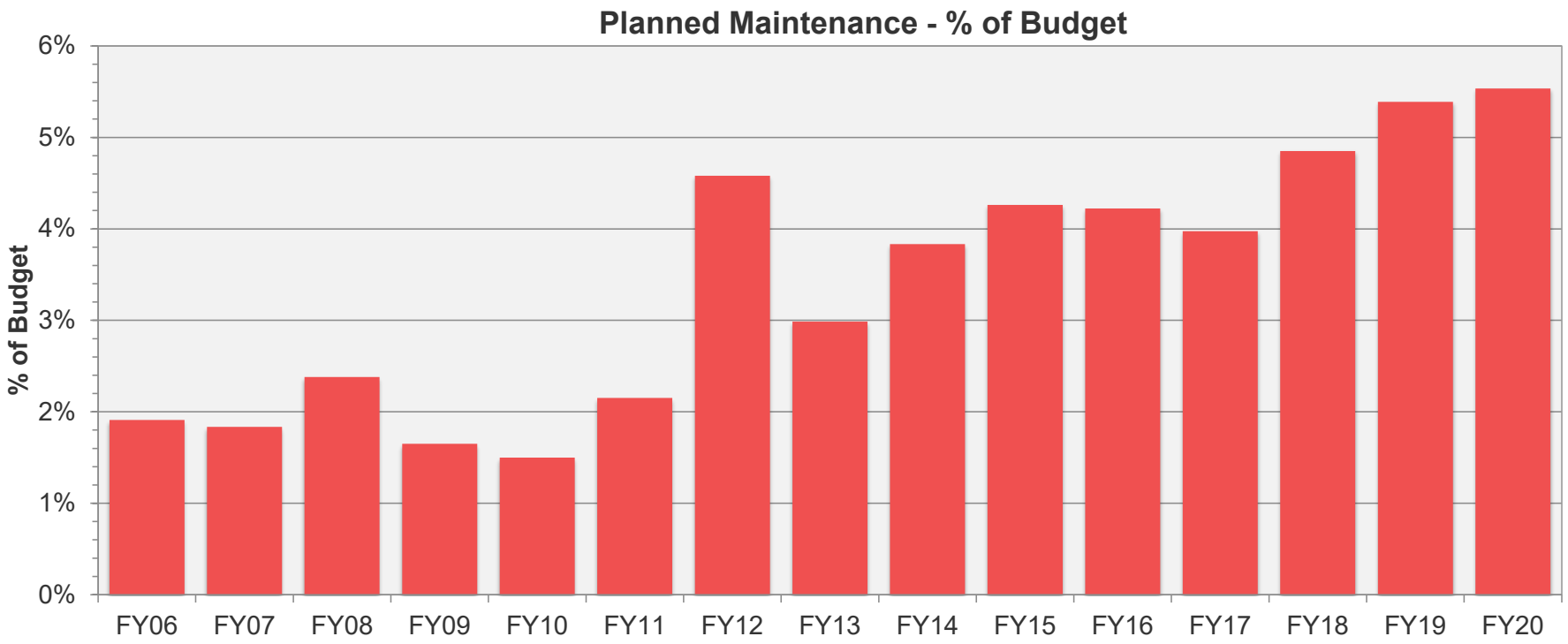
Facilities Operating Actuals as % of CRV



Facilities Operating Budget Actuals



Planned Maintenance



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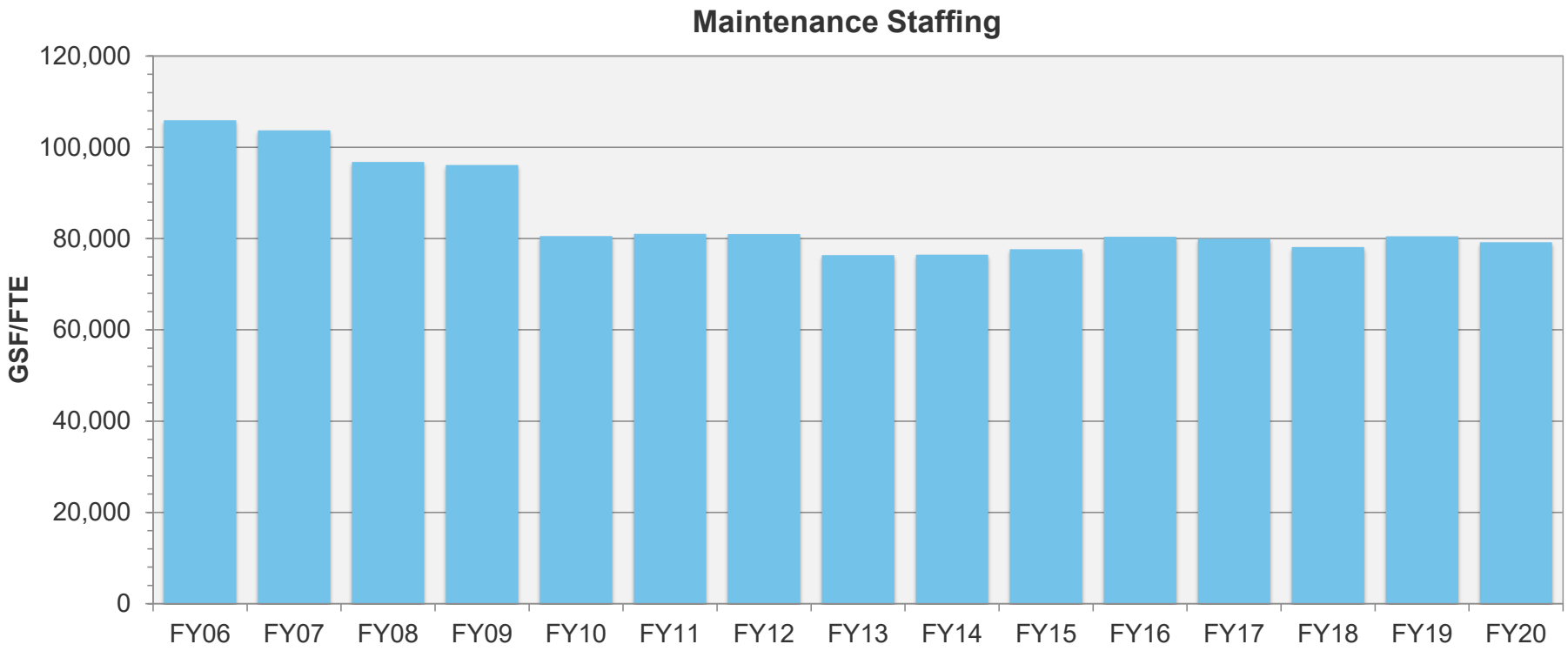
Maintenance Staffing



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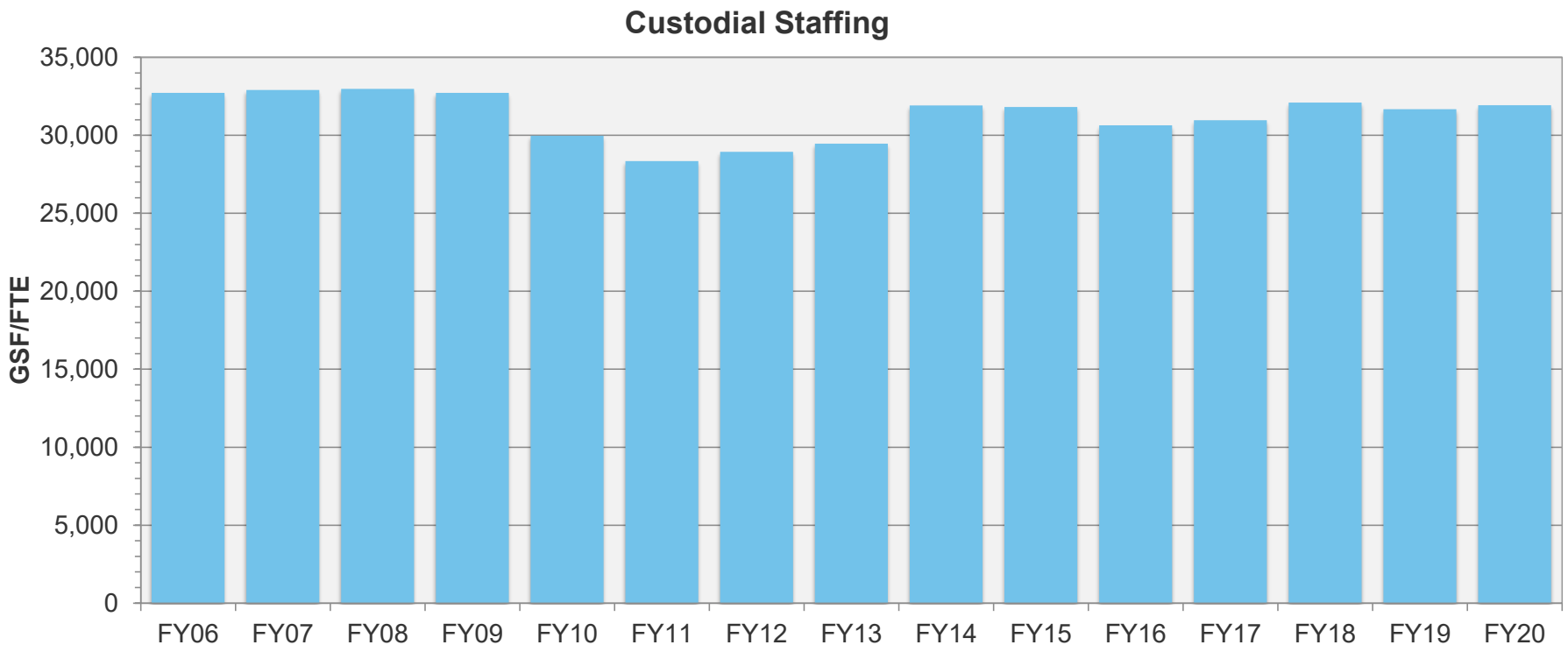
Custodial Staffing



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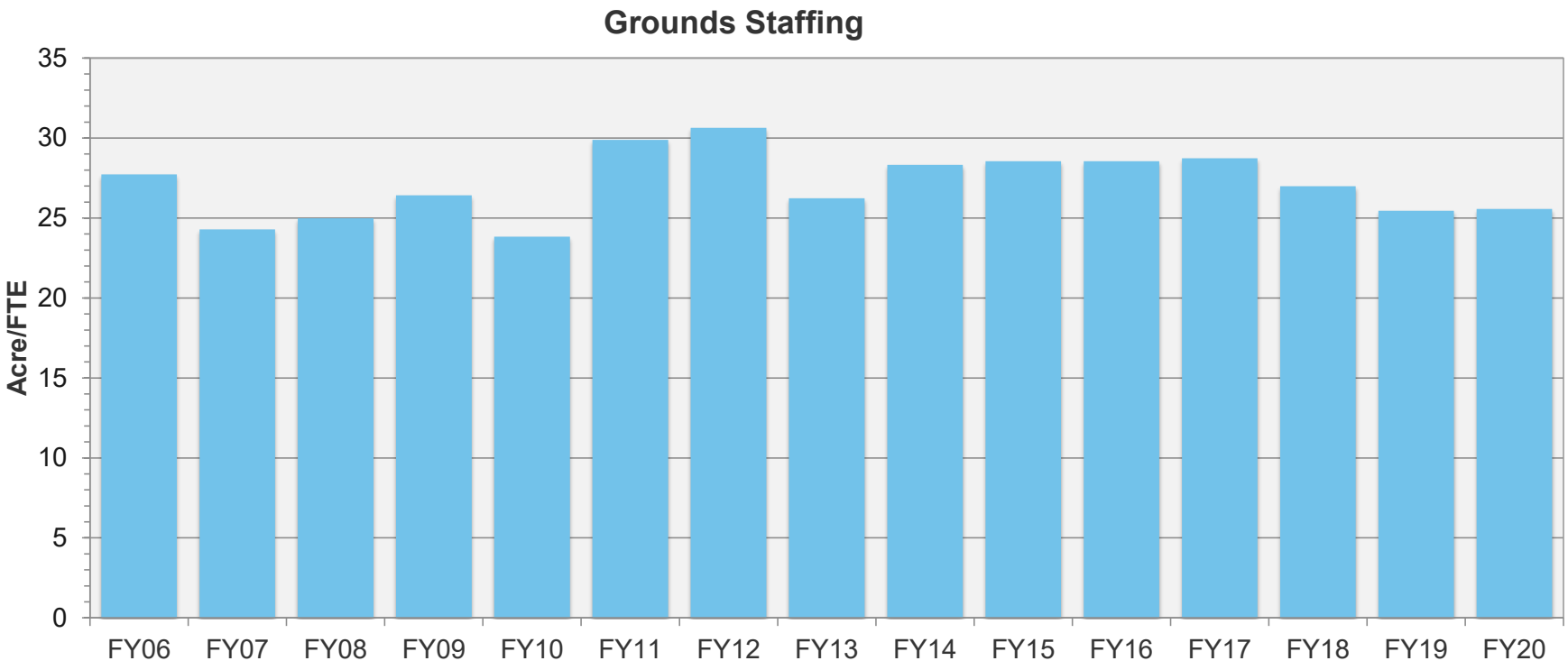
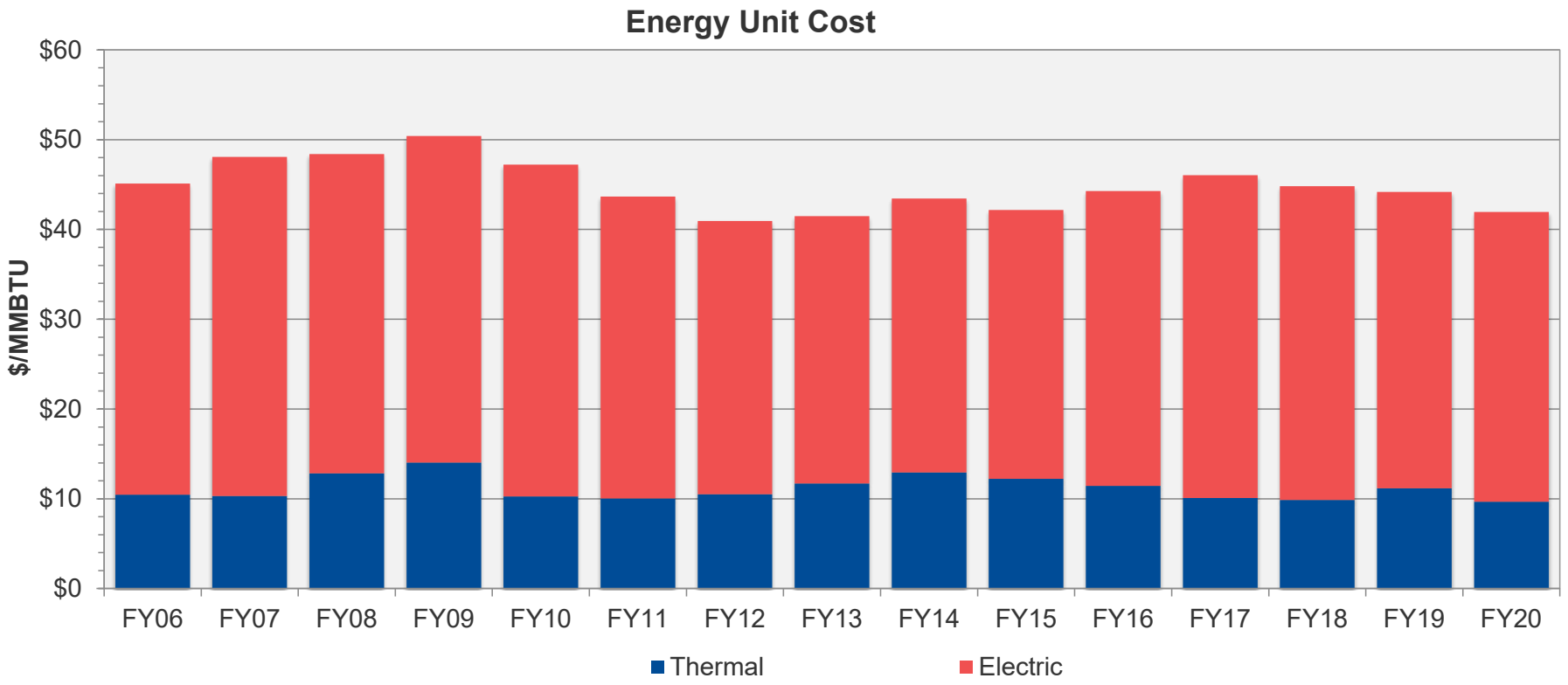
Grounds Staffing

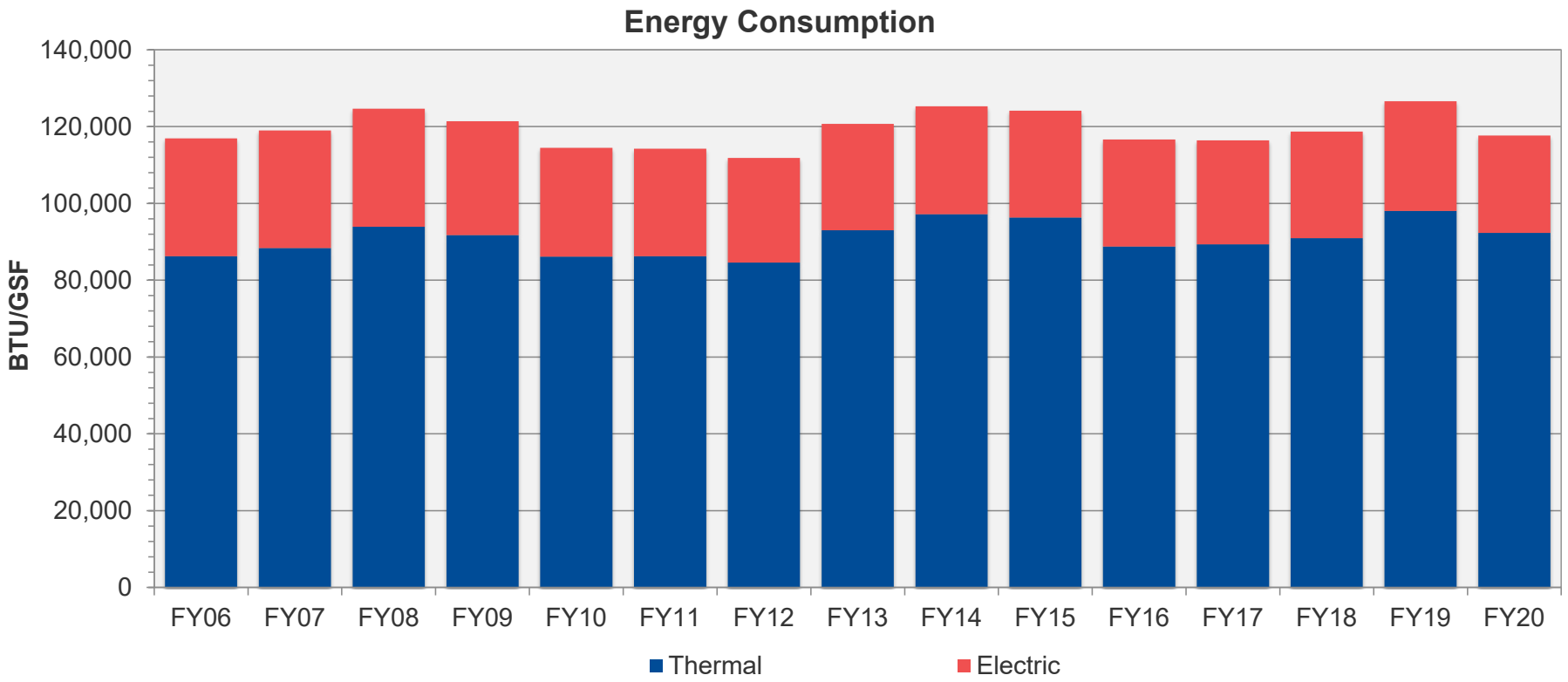


Energy Costs



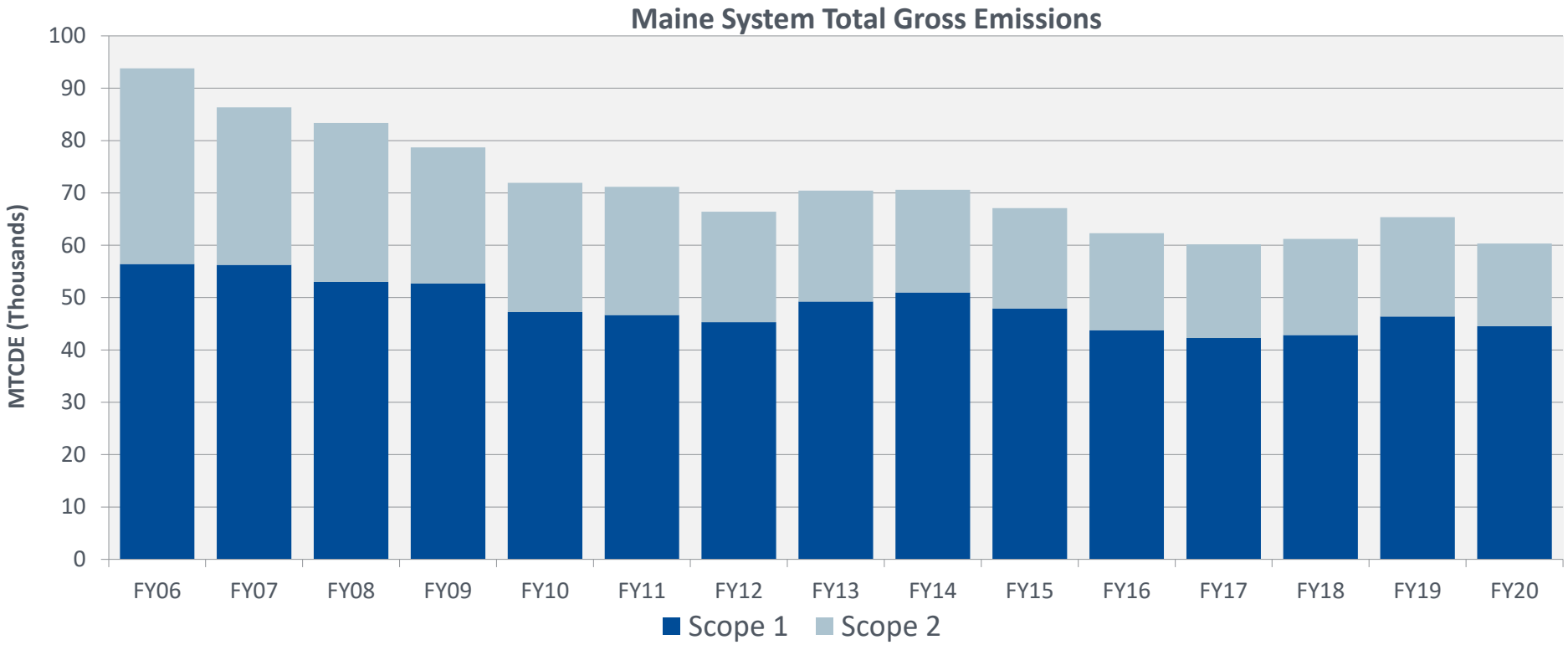
***Thermal contain all heating fuel sources, including alternative fuel sources (ie biomass, wood chips, etc.)*

Energy Consumption



***Thermal contain all heating fuel sources, including alternative fuel sources (ie biomass, wood chips, etc.)*

Emission Rates



MTCDE = Metric Tons of Carbon Dioxide Equivalent

7.1

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Housing Public Private Partnership (P3), UMF and UMPI

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **X** **BOARD ACTION:**

BOARD POLICY:
802 – Disposition of Real Properties

UNIFIED ACCREDITATION CONNECTION:
Enhanced student experiences

BACKGROUND:
The University of Maine at Farmington and the University of Maine at Presque Isle have been working with P3 consultant Brailsford & Dunlavey to explore scenarios to strategically address challenges and needs within their respective housing systems. Both universities' housing reinvestment plans must improve the physical condition and operational efficiency of their housing systems to generate positive cash flow that will support renovation and maintenance projects.

The most efficient way to achieve this outcome is to replace existing residence halls with high deferred maintenance needs with highly efficient new student housing developments. The new student housing developments capture new market and generate new revenue that results in the positive cash flow needed to reinvest in other existing residence halls. Both universities plan to commence their reinvestment plans with a new student housing development that will open in fall 2023.

The two universities are currently pursuing a public-private partnership model to finance and deliver the new student housing projects. They decided to pursue a joint solicitation for a potential private development partner as their housing needs were similar and bundling the projects would provide a scale of projects which would be more marketable to developer communities and result in efficiencies that would benefit the campuses.

The project schedule includes initiating an RFQ in March to gauge interest in the project from potential developers followed by an RFP with the intent of selecting a partner and negotiating a contract over the summer of 2020. Board of Trustees approval will be sought prior to final commitments and agreements being executed for any selected firm(s). Design would be completed by spring 2022 with construction taking place between spring 2022 and summer 2023.

2/22/2021

8.1

Student Housing Informational Update

UMPI AND UMF STUDENT HOUSING REINVESTMENT PLANS

February 2021

BRAILSFORD & DUNLAVEY

Introduction

February 2021

Purpose of Today's Discussion

- UMPI and UMF developed reinvestment plans to **address the shared challenges** within their **respective housing systems.**
- Both reinvestment plans **begin** with the **replacement of one or more existing halls with a new student housing project** to **attract new student residents** from the off-campus market, **generate positive cash flow,** and **create stability** within their **housing financial system.**
- UMPI and UMF's **risk transfer preferences** for the new student housing development **align with a public-private partnership financing and delivery structure**, and **bundling the projects** together **creates value** for both campuses.
- Both projects are slated to be **delivered by fall 2023** and are therefore preparing to move toward the **solicitation of a private development partner** this **spring.**
- The **purpose of today's discussion** is to share the **reinvestment plans** with the FFT/BOT and **seek informal approval to proceed with the public solicitation process**.

Introduction

UMPI and UMF's Student Housing Systems Share Critical Needs and Required Outcomes

Current Student Housing Situation

Both UMPI and UMF must develop a plan that addresses the following shared challenges:

- **Significant deferred maintenance needs** that **limit marketability** and drive **additional operating costs**
- **Low current housing system Net Asset Value ("NAV")** that will continue to decline without significant investment
- **Inability** under current housing systems' financial performance to **generate sufficient cash flow** to **fund deferred maintenance and renovations**
- Negative impacts **of limited housing configurations** and **physical deterioration of facilities** on student satisfaction, resulting in **loss of residential population to off-campus market**

Introduction

UMPI and UMF's Student Housing Systems Share Critical Needs and Required Outcomes

Required Student Housing Outcomes

Both UMPI and UMF must develop a plan that results in the following required outcomes:

- **Improve physical condition** and **operational efficiency** of housing facilities
- **Maintain positive cash flow** from housing systems to each university while making critical reinvestments
- **Increase net cash flow** within housing systems to **fund necessary deferred maintenance and reinvestments**
- **Enhance the strategic value of the residential experience** for each university

UMS engaged Brailsford & Dunlavey, Inc. for advisory services related to the development of feasible strategic reinvestment alternatives for UMPI and UMF to enhance their residential experiences

Introduction

UMPI and UMF Student Housing Reinvestment Plan Development

8.1

Jan – Jun 2020

- Initial student housing surveys and demand analyses for UMPI and UMF
- Market analyses
- Program development

July – Dec 2020

- Project socialization on each campus
- Deal structure and financing discussion for a bundled project

Jan – Feb 2021

- Stakeholder engagement within UMS
- Student housing demand confirmation and analysis at UMPI and UMF

March – May 2021

- Obtain FFT informal approval to begin joint solicitation
- Solicit and select development partner

Student Housing Demand Confirmation

- The campuses resurveyed students to determine the impact of the COVID-19 pandemic on student demand for on-campus housing and integrate occupancy risk mitigation measures within the reinvestment plans
- Survey and demand results were compared to the results of the previous survey effort to understand the dynamics behind any shifts in student interest in on-campus housing

UMPI

Total 2021 Survey Respondents: 331

Total 2020 Survey Respondents: 223

- **Confidence interval: 95%**
- **Margin of Error: 4.3%**

UMF

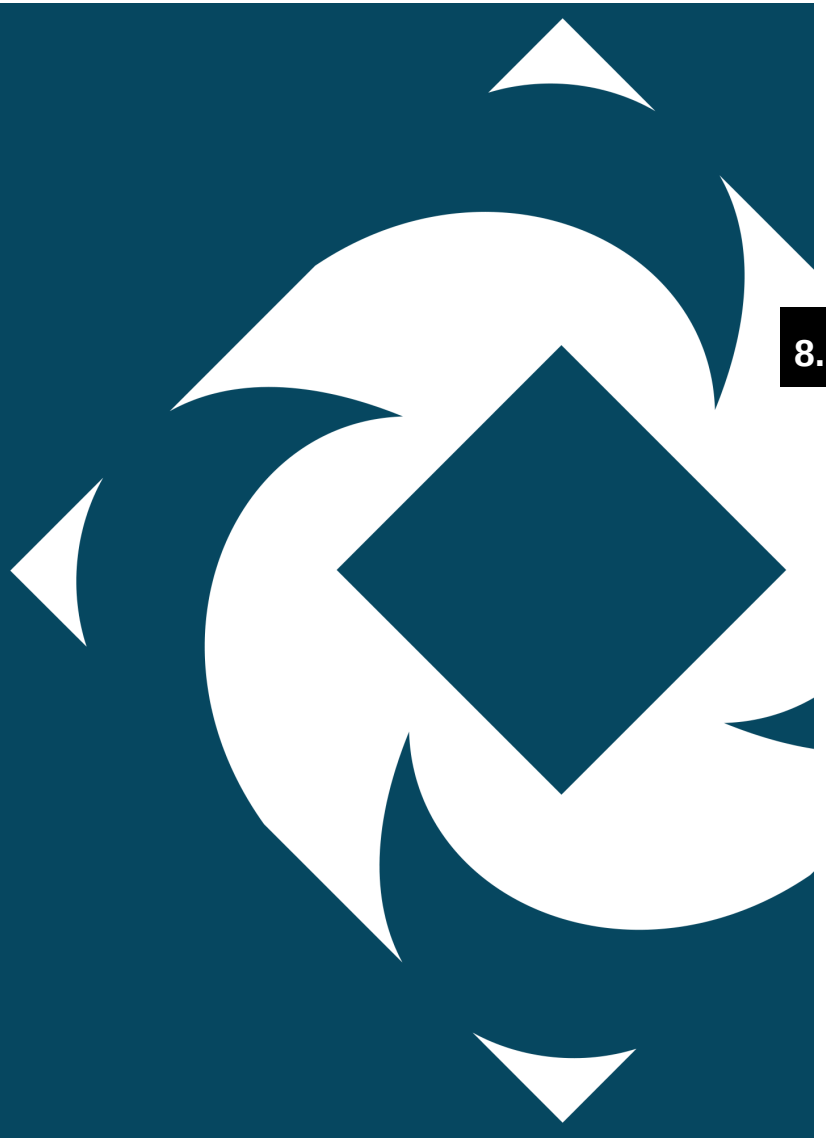
Total 2021 Survey Respondents: 397

Total 2020 Survey Respondents: 353

- **Confidence interval: 95%**
- **Margin of Error: 4.3%**

01

UMPI Student Housing Reinvestment Plan



BRAILSFORD & DUNLAVEY

UMPI Student Housing

Reinvestment Strategy to Accomplish Required Outcomes

Reinvestment Strategy for UMPI

- **Generate new revenue and enhance strategic value** by realigning existing inventory of unit types to gain new student market, thereby increasing participation in the residential experience
- **Maximize revenue-generating square footage** to increase housing system net income efficiently
- **Minimize and address deferred maintenance needs** to increase value of existing housing facilities and reap long-term benefits of sustainable, updated facilities
- **Strategically repurpose housing assets** that have an alternative “higher and better use” for UMPI
- **Ensure the housing system’s cash flow remains positive** and therefore can support future reinvestment housing projects
- **Leverage the post-renovation bed count of existing halls** to nimbly respond to future enrollment and on-campus student housing demand conditions

UMPI Student Housing

Preliminary Demand Findings

Demand for on-campus housing at UMPI has decreased since 2019-2020, mirroring UMPI's COVID-19-impacted enrollment decline.

Enrollment

- UMPI's target market of **degree-seeking undergraduate student population (excluding YourPace students) declined approximately 10% since 2019-2020**, resulting in 92 fewer students within the target market.
- Should UMPI's degree-seeking enrollment population resume its pre-pandemic trend, demand for on-campus student housing beds would have been approximately the same as in 2019-20, which suggests demand changes stem primarily from the scale of the target market.

Student Demographic Profile

- Based on the results of the spring 2021 survey, the demographic composition of UMPI's target market student population has remained consistent with 2019-20, which indicates that **demand decreases stem more from the scale of the target market (i.e., enrollment decline in this population), not from a demographic shift in the target market toward subpopulations with a lower propensity to live on campus.**

Competitive Value of On-Campus Housing

- Although small, the COVID-19 pandemic has had an impact on UMPI students' living preferences. Approximately **85%** of students report that their experience during **the pandemic has not impacted their decision of where to live once the pandemic abates**.

UMPI Student Housing

Reinvestment Strategy to Accomplish Required Outcomes

Reinvestment Strategy for UMPI

1. Replace Merriman Hall with New Suite-Style Housing Project

- ✓ Provide appropriate unit typology
- ✓ Provide new, efficient facility
- ✓ Increase residential population
- ✓ Eliminate Merriman deferred maintenance needs
- ✓ Generate cash flow to support Emerson renovation

2. Renovate Emerson Hall; Reserve Park Hall

- ✓ Address Emerson deferred maintenance needs
- ✓ Adjust Emerson bed count through (de-)densification, design, or conversion of common spaces into beds
- ✓ Reserve additional bed capacity flexibility with Park Hall

3. Repurpose Skyway Suites into Faculty/Staff Housing

- ✓ Achieve additional value in faculty/staff recruitment

New Student Housing Project

200 - 220 beds

~50%

Two-bedroom semi-suite units

~50%

Two-bedroom full-suite units

UMPI Student Housing

Student Housing Reinvestment Strategy

Plan Imperative

- The imperative for UMPI to reinvest in their housing portfolio remains. To fulfill UMPI's institutional mission of preparing students to lead successful professional careers, UMPI must deliver an **affordable**, **high-value on-campus residential experience** to its students.
- UMPI must **improve the physical condition and operational efficiency** of its housing system to accomplish its mission.

Critical First Step

- To **increase the residential population** and **create new revenue necessary** to commence renovation and repurposing projects, the student housing reinvestment plan must **begin with the new construction of a new facility.**
- The ability to deliver the new student housing development through alternative financing requires **minimal upfront investment from UMPI**, allowing UMS to preserve its debt capacity for other strategic projects.

Mitigate Occupancy Risk

The plan allows UMPI to monitor and most appropriately respond to future enrollment and student housing demand trends by:

- **Pursuing a flexible renovation strategy** of Emerson Hall that selectively (de)densifies bed count based on UMPI's future enrollment and on-campus student housing demand conditions
- **Reserving Park Hall for future use,** retaining the option to bring the hall back online to accommodate additional capacity needs

8.1

UMPI Student Housing

Outcomes Accomplished

New Development Outcomes

The new student housing development will immediately achieve the following outcomes:

- **Elimination of $3M in deferred maintenance** through replacement of Merriman Hall
- **Attraction of new market to campus,** and therefore **generation of new revenue** through providing in-demand unit types
- **Utilization for swing space** as existing halls are taken offline for future projects

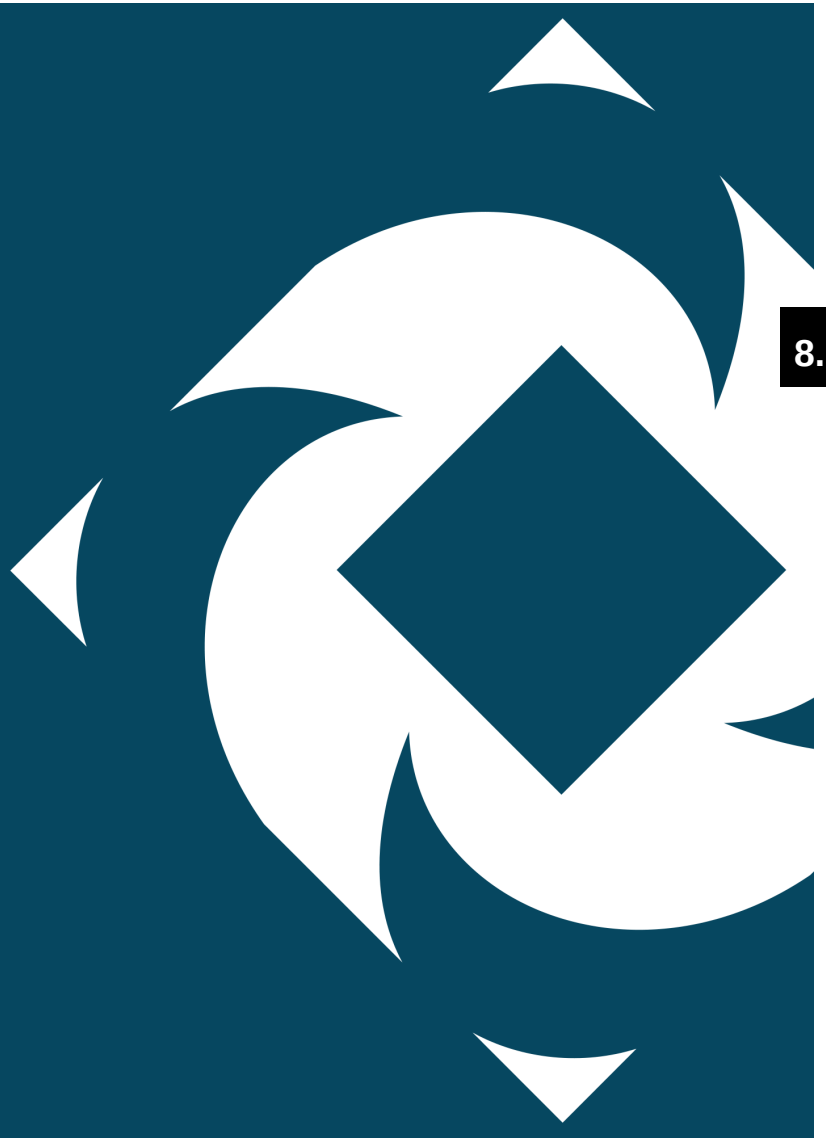
Further Reinvestment Plan Outcomes

The continuation of the housing reinvestment strategy will allow UMPI to achieve the following outcomes:

- **Address remaining deferred maintenance needs within existing residence halls**, improving their physical condition and market position.
- Replacement and renovation projects increase housing system **net asset value** from **45% (2019) to 86% (projected 2025).**
- Restructuring of UMPI's existing rental rates to **preserve student affordability** while **competing most effectively with the off-campus market.**

02

UMF Student Housing Reinvestment Plan



BRAILSFORD & DUNLAVEY

UMF Student Housing

Reinvestment Strategy to Accomplish Required Outcomes

Reinvestment Strategy for UMF

- **Enhance strategic value of residential experience** by providing new unit types that support upper-division developmental needs
- **Generate new revenue** by offering new housing product that attracts some students back from the off-campus market
- **Reinvest to capitalize on value of existing facilities;** pursue renovation and maintenance projects for facilities with strategic and/or long-term financial value
- **Maximize revenue generation** by improving physical and operational efficiencies within the housing system (GSF/bed)
- **Re-structure system-wide rental rates** to align with off-campus market and best practices while maintaining the affordability of the residential experience
- **Reduce operating expenses** across the repositioned housing system to increase positive cash flow
- **Leverage the post-renovation bed count of existing halls** to nimbly respond to future enrollment and on-campus student housing demand conditions

UMF Student Housing

Preliminary Demand Findings

A high-value on-campus housing experience is an integral component of the holistic student experience envisioned by UMF's strategic plan. Over the last year, demand for on-campus housing has declined due to enrollment decline, shifting student demographics, and COVID-19 pandemic impacts.

8.1

Enrollment

- UMF's **full-time undergraduate student population declined approximately 6% since 2019-2020**, resulting in 89 fewer students on campus.
- If UMF's undergraduate enrollment had maintained its pre-pandemic trend, demand would have decreased since 2019-20, but less dramatically. This suggests demand decline was impacted by enrollment decline.

Student Demographic Profile

- Based on the results of the Spring 2021 survey, demographic composition of full-time, degree-seeking UMF students has changed since last year, resulting in a **higher percentage of students with a low propensity to live on campus**.
  - Local students increased by approximately 33% in 2021
  - Single students without dependents decreased by approximately 7% in 2021

Competitive Value of On-Campus Housing

- The COVID-19 pandemic has had an impact on **UMF students' living preferences and their perception of the value of living on campus** compared to the off-campus market.
  - More students report that the COVID-19 pandemic has impacted their housing decision in 2021 than in 2020.
  - The local multi-family housing market in Farmington is positioned as an abundant and affordably priced alternative to living on campus.

UMF Student Housing

Reinvestment Strategy to Accomplish Required Outcomes

Reinvestment Strategy for UMF

1. Replace Lockwood and Dakin Halls with New Townhouse-style Apartment Community

- ✓ Eliminate Lockwood and Dakin deferred maintenance needs
- ✓ Deliver new unit types to campus in the most efficient configuration possible, reducing overall housing system square footage by 600 GSF
- ✓ Attract new market to campus
- ✓ Fulfill Master Plan priority by designing a residential campus green
- ✓ Increase cash flow to support renovation and maintenance projects

2. Renovate Mallett, Purington, Scott-North, Scott-South, and Stone

- ✓ Address deferred maintenance needs
- ✓ Adjust Mallett and Purington bed count through (de-)densification, design, or conversion of common spaces into beds
- ✓ Enhance GSF per Bed

3. Maintain Scott-West and Francis Allen Black

- ✓ Address deferred maintenance needs

New Student Housing Project

192 beds

Phase 1: 96 beds
Phase 2: 96 beds

4-BD Townhouse Apartments

**Reference floor plans from Camino del Sol, American Campus Communities*

Phase 1: Fall 2023 Delivery
Phase 2: Fall 2024 Delivery

UMF Student Housing

Student Housing Reinvestment Strategy

Plan Imperative

- As the University of Maine System's only **residential liberal arts college**, UMF's mission is to cultivate a campus experience that **maximizes student engagement and supports student development and success.**
- The student housing reinvestment plan is an integral component of the **holistic student experience envisioned by UMF's strategic plan**.
- It is of strategic importance to UMF to **address the needs of its housing system in the near term**.

Critical First Step

- The housing system is not currently generating **sufficient positive cash flow** for the University to support needed improvements.
- The first step in initiating a 15-year housing reinvestment plan is to **develop a new student housing project** to **attract new students to** live on campus and **generate positive cash flow.**
- UMF must **maintain 915 occupied** beds on campus, at a minimum, in order to generate positive cash flow throughout the implementation of the housing reinvestment plan.

Mitigate Occupancy Risk

- Pursuing a public private partnership will allow UMF to proceed through an alternative financing vehicle that **requires minimal upfront investment,** thus preserving UMS debt capacity for future projects.
- To mitigate the risks associated with fluctuating student demand, UMF must **monitor and most appropriately respond to future enrollment** and student housing demand trends by leveraging **Mallett and Purington's post-renovation bed count**.

8.1

UMF Student Housing

Outcomes Accomplished

New Development Outcomes

To generate sufficient positive cash flow and attract new market to campus, the first step in UMF's student housing reinvestment plan must be the construction of a new student housing development. The new student housing development will immediately achieve the following outcomes:

- **New revenue generation** by providing **market-responsive, highly efficient unit types that** attract new market to campus
- **Elimination of $8.7M in deferred maintenance** through replacement of Lockwood and Dakin halls
- **Utilization of swing space** as existing halls are taken offline for future projects

Further Reinvestment Plan Outcomes

The continuation of the housing reinvestment strategy will allow UMF to achieve the following outcomes:

- The renovation of **Mallett and Purington Halls** provides bed capacity flexibility of **up to 50 beds**, allowing UMF to **mitigate future occupancy risk**.
- Full implementation of the 15-year housing reinvestment plan increases **housing system NAV from 55% (2019) to 84% (2038).**
- Restructuring of UMF's existing rental rates to **preserve student affordability** while **competing most effectively with the off-campus market.**

8.1

03

UMPI & UMF Student Housing: Process & Timeline

BRAILSFORD & DUNLAVEY

UMPI & UMF Student Housing

Bundling Benefits

8.1

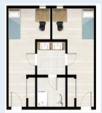
Bundling is intended to attract a wider range of national housing developers to respond to a P3 partner solicitation process:

- Combining projects into single solicitation maximizes efficiency of process for UMPI, UMF, and UMS
- Sufficient scale in bed count will offer greater financial return to potential development partners.
- Relative proximity of projects allows developer teams to gain efficiencies in traveling to project site.
- The simultaneous process allows developer teams to gain time and operational efficiencies and reduce the total project cost.

New Student Housing Project

200 - 220 beds

~50%
Two-bedroom semi-suite units



~50%
Two-bedroom full-suite units

Summer 2023 Delivery

New Student Housing Project

96 beds
Phase 1

4-BD Townhouse Apartments

**Reference floor plans from Camino del Sol, American Campus Communities*

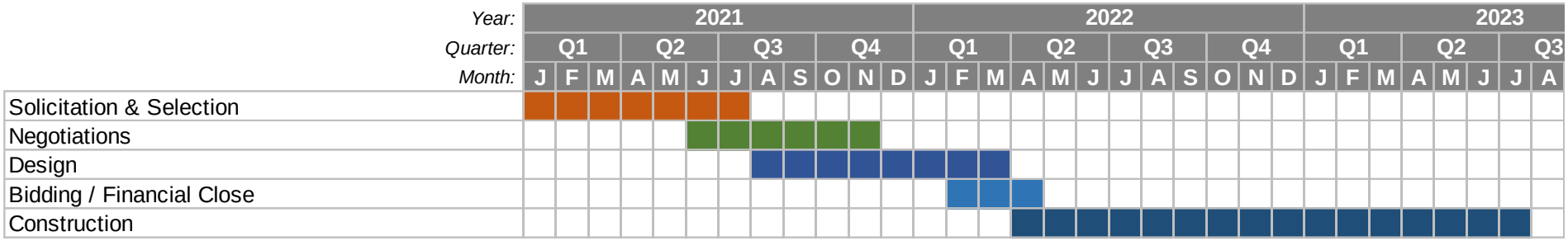
Phase 1: Summer 2023 Delivery

Bundled Project Scale

392 - 412 beds

UMPI & UMF Student Housing

New Project Delivery Timeline



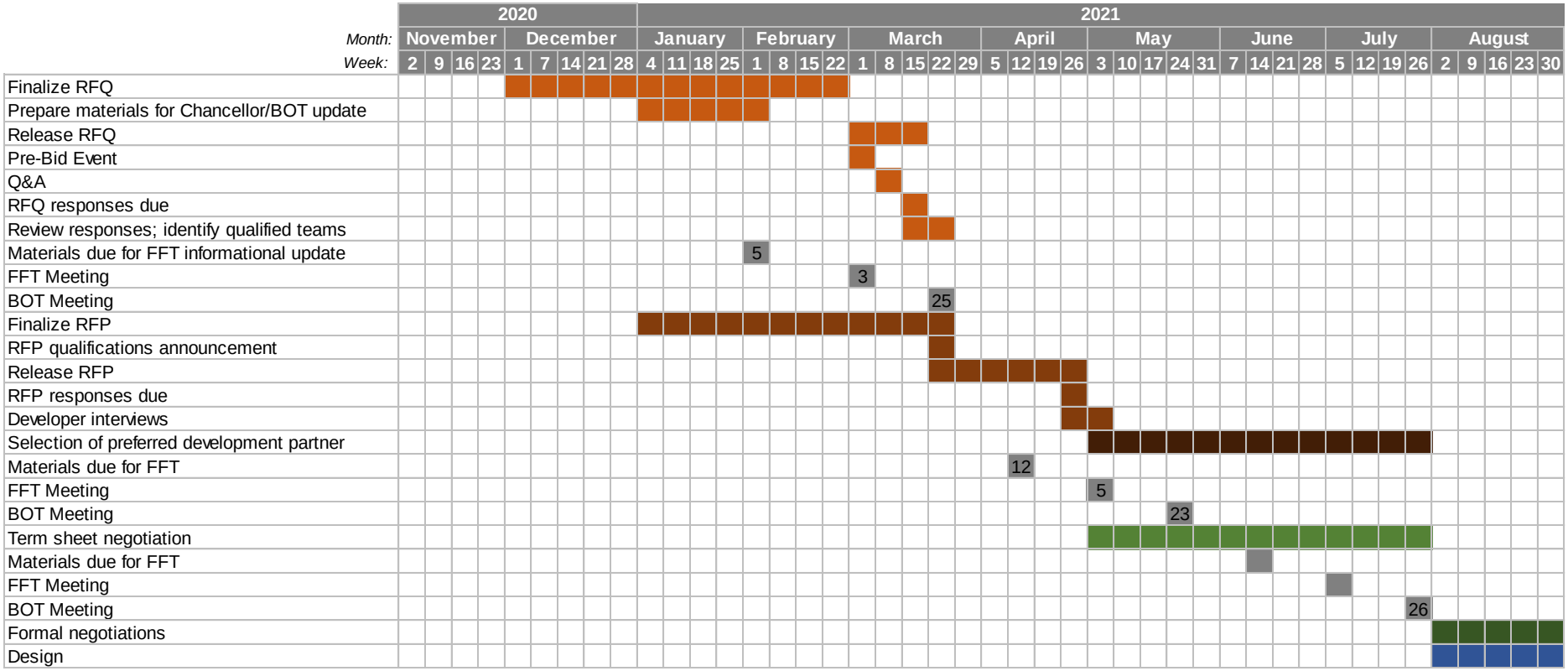
- The ideal time to **deliver the new housing projects is fall 2023**, as it allows both campuses to make significant short-term improvements to the housing system.
- The **optimal time to begin the solicitation of a development partner is spring 2021**, commencing a 31-month long process from solicitation of the development partner through delivery of each of the two new developments.

2021 UMS BOT MEETINGS

- 3/21-22/2021 Share Reinvestment Plan, RFQ/P Informal Approval
- 5/23-24/2021 Share Preferred Partner Recommendation, Seek BOT Approval to Official Select Partner

Solicitation Timeline

RFQ Released After 3/3 FFT Meeting



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Next Steps

February 2021

- Seek FFT and BOT informal approval to begin the solicitation process for a private development partner to finance and deliver a bundled student housing project at UMPI and UMF.
- Release a Request for Qualifications (“RFQ”) to confirm market interest in the project and solicit qualifications from interested development firms.
- Qualify interested firms to participate in a Request for Proposals (“RFP”) process.

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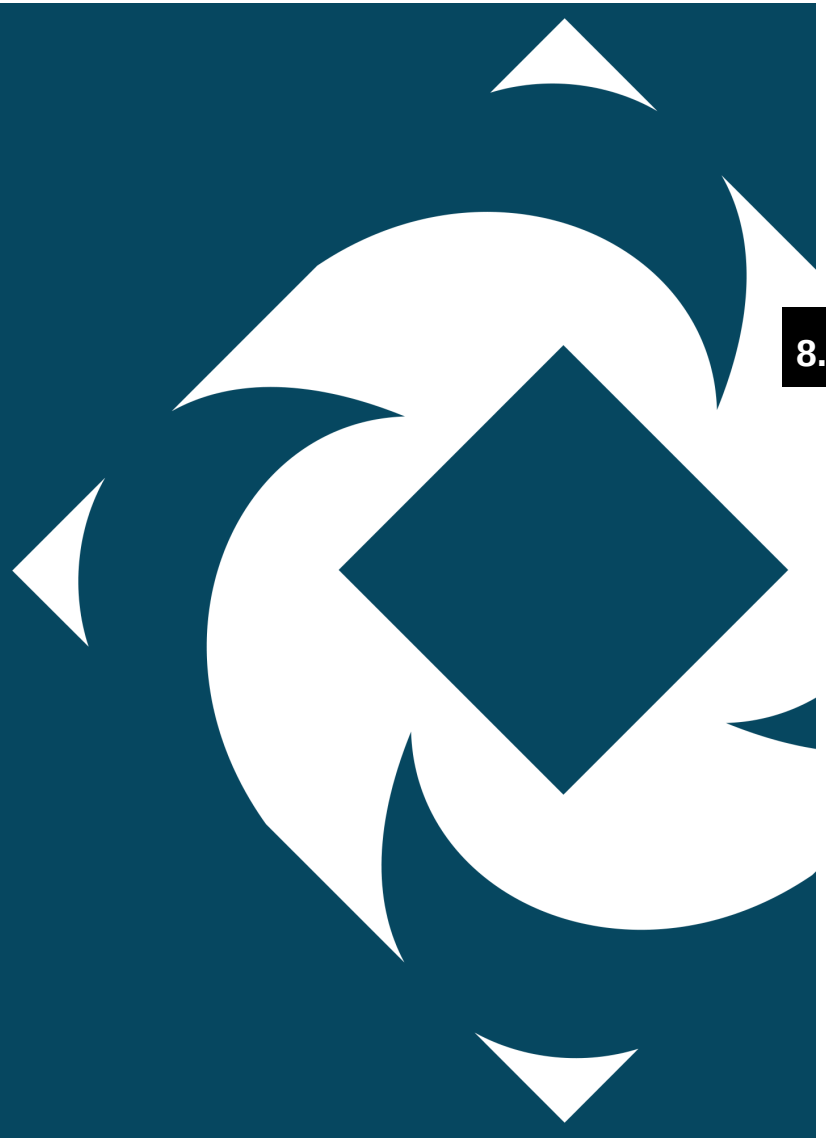
Thank you.

VISIT **BDCONNECT.COM**
FOR MORE INFORMATION.



University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Review of Projects with a Value of $250,000 or Greater

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **X** **BOARD ACTION:**

BOARD POLICY:
N/A

UNIFIED ACCREDITATION CONNECTION:
N/A

BACKGROUND:

Dr. David Demers, Chief Information Officer, will provide information on the following projects with a value of $250,000 or greater:

- Classrooms for the Future
- Classroom Summer Upgrades – Web Conferencing
- UMS Wireless Infrastructure
- MaineStreet Improvements
- VoIP – UMF
- VoIP – UMPI
- VoIP – USM
- ERP Assessment
- Optical Network Equipment Refresh for the Northern Ring

2/22/2021

Status Update – February 2021

Classrooms for the Future

Overall status:		Change from previous report:	None
Budget status:		Change from previous report:	None
Schedule status:		Change from previous report:	None

Overview

This project will involve renovations to existing classrooms across the entire University of Maine System. The project team will focus on the data obtained during the earlier classroom assessment phase and resulting classroom ratings in order to prioritize work at each campus. The team will also develop standards for equipment in all classrooms. Vendors will be used for the larger renovations and campus services/classroom technology staff will be used for minor renovations and upgrades. Once the rooms have been updated, they will be re-assessed and scored accordingly.

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget*	Budget Committed to date	Budget % Committed	Project % Complete	Comments
4/2016	David Demers	12/2019 (updated 11/18)	12/2020	$4,945,075	$4,945,075	100%	96%	Total estimated budget reflects additional allocation provided Dec. 2017 as well as contingency funds added in December 2018

Status

The UMA campus will use the remaining contingency funds to put toward updating video conferencing rooms. These funds will combine with RUS grant funds to help upgrade several existing video conferencing rooms. Some of this work was started over winter break and will continue into Summer 2021.

Room selections are also underway for remaining contingency funds at UMaine and UMPI. Once rooms are selected, projects will be created and equipment will be ordered. Work will be completed over Summer 2021.

BUDGET SUMMARY

Campus	Allocation	% Committed to Date	$$ Not Yet Budgeted	% Complete
PROJECT TOTAL	$4,945,075	100%	-0-	97%
UMM	$240,900	100%	-0-	99%
UMF	$415,976	100%	-0-	100%
UMaine	$1,681,630	100%	-0-	100%
UMPI	$360,276	100%	-0-	96%
USM	$1,238,980	100%	-0-	98%
UMFK	$287,348	100%	-0-	99%
UMA	$719,965	100%	-0-	85%

Summary by Campus and Classroom Project

Reference: Campus Room Renovations

Campuses	Rooms By Project Setup	% Complete
UMA	Music Arts 124	100%
	RRSC 248 & 255	100%
	UC Bath/Brunswick 114	100%
	UC Norway SoPar 114 & 206	100%
	UC Saco 111	100%
	UC Ellsworth 2 & 7	100%
	UC Rockland 410 & 413	100%
	Jewett 124, 180, 189, 190 & 291	100%
	RRSC 246	100%
	UC Rockland 403, 410, 412 (Phase 2)	100%
	Fine Arts 122	100%
	Jewett 284, 293, 297	100%
	Katz 5, 15, 51	100%
	Katz 14	100%
	Katz 16	100%
	Handley Hall	100%
	LAC 162J, 162K, 162L, 216A, 216B, 218, 222C	100%
	Bangor 135, 142	100%
	Camden 101, 105, 304	100%
	Randall 253/255	95%
	Jewett 156	100%
	Jewett 284, 293, 297	100%
	Katz 7 & 210	21%
	Saco 110	90%
	Bath/Brunswick 115, 119 (RUS)	93%
	Dental Clinic 109 (RUS)	90%
	East Millinocket 1 (RUS)	90%
	Ellsworth 3 (RUS)	21%
	Houlton 119 (RUS)	21%
	LAC 222C (RUS)	18%

	LAC 118 & 119 (RUS)	93%
	LAC 125 (RUS)	22%
	Rockland 412 (RUS)	93%
	Rumford 309 (RUS)	21%
	Saco 107 (RUS)	93%
UMF	Roberts 205 & 207	100%
	Ricker Addition 202, 205	100%
	Roberts C23 & 131	100%
	Ricker Addition 217	100%
	Preble 117	100%
	Roberts 105, 107, 201, 203	100%
	South 115	100%
	Education Center 6 & 113	100%
	Tech Commons Fusion Center	100%
	Roberts 3, 101, 103	100%
	Education Center 103, 106, 110, 114	100%
UMaine	Shibles 202	100%
	DPC 105	100%
	Neville 101	100%
	Estabrook 130, 152	100%
	Bennett 215	100%
	Dunn 315 & 316	100%
	South Stevens 106D	100%
	DPC 107, 115, 117	100%
	Boardman 116	100%
	Boardman 118	100%
	Shibles 217, 313, 316	100%
	Nutting 100	100%
	Aubert 354	100%
	Hitchner 157	100%
	Jenness 102, 104, 108	100%
	Lengyel 127	100%
	Libby 220	100%
	Little 110, 120, 202, 206, 220	100%

	Lord 200	100%
	Colvin 401	100%
	Memorial Gym Complex 106 & 110 (ROTC Army)	100%
	Merrill 228a	100%
	Murray 102 & 106	100%
	N Stevens 235	100%
	Rogers 206	100%
	ROTC Navy 201 & 203	100%
	Deering 101c	100%
	Barrows 123, 131, 133	100%
	Balentine 129	100%
	Dunn 1, 44, 401	100%
	Barrows 124	100%
	Bryand Global 100	100%
	Deering 17	100%
	North Stevens 235	100%
	South Stevens 232-B	100%
	Neville 116, 118	100%
	Neville 120	100%
	Little 212	100%
	Aubert 165	100%
	Barrows 128	100%
	Class of 44 100	100%
	Colvin 401	100%
	DPC 111	100%
	Little 350	100%
	Center Stevens 155	100%
	Darling Marine Center Brooke Hall	100%
	PAIL Necropsy Lab	100%
	Libby 220	100%
	Nutting 213	100%
	Boardman 210	100%
	Lengyel 125, 127	100%
	Center Stevens 355	100%

	Deering 17, 113	100%
	Little 211, 212, 219	100%
UMM	Torrey Hall 230, 232, 234 - Phase 1	100%
	Torrey Hall 102	95%
	Torrey Hall 106	100%
	Powers 208 & 209	100%
	Science 114	100%
	Science 102 & 120	100%
	Reynolds Center 14	100%
	Torrey 230, 232 & GIS Lab - Phase 2	100%
	Performing Arts Center	100%
	Science 13, 115	100%
UMFK	Powell 123	100%
	Cyr 113	100%
	Old Model School 11	100%
	Cyr 200 & 201	100%
	Cyr 203	100%
	Cyr 200, 201, 204, 209	100%
	Nadeau Telecom Room	100%
	Powell 123 - Phase 2	100%
	Old Model School 112	95%
	Armory 119	100%
	Cyr 200-Contingency	100%
	Cyr 204, 205-Contingency	100%
UMPI	Folsom 206	100%
	Pullen 113, 212, 216	100%
	Folsom 204 & 205	100%
	Houlton 110	100%
	Folsom 203	100%
	Pullen 212	100%
	Pullen 213	100%
	Preble 239	100%
	Gentile Athletic	100%
	Weidan Training	100%

	Houlton 109	95%
	Houlton 120	49%
	Houlton 124	100%
	Houlton 125	95%
	Pullen 111, 214	100%
	Pullen 215	95%
	Pullen 113, 210, 213, ART	95%
	Folsom 303	100%
	Folsom 301, 304	100%
USM	405 Bailey	100%
	John Mitchell 217	100%
	Payson Smith 301A	100%
	LB 103	100%
	Masterson 113	100%
	Bailey 320	100%
	Bailey 10, S113, 201, 202, 204, 205, 206, 207, 208, S213, S215, 218, S312, S313, 315, L319, 320, L321, C402, C403, C, 405,	100%
	Corthell 112, 211, 212	100%
	John Mitchell 151, 164, 181	90%
	John Mitchell 233, 242, 252, 265, 270	85%
	John Mitchell 252	100%
	LAC 287	100%
	LAC 210, 211, 212, 214, 216, 218, 224	100%
	LB 208, 209, 241, 302, 303, 310, 326, 327, 402, 403, 410, 424, 425, 502, 503, 509, 510, 523, 524	100%
	Payson Smith 1, 41, 42, 44, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 211, 303, 304, 306	100%
	Wishcamper 103, 113, 417/419, 427	95%
	Science 203	95%
	Science 403	95%
	Law 118	100%
	Payson Smith 42 & 44 - Phase 2	100%
	Payson Smith 206	95%
	Payson Smith 201, 304, 306 - Phase 2	95%
	Bailey 218 & 312	100%

	Bailey 313	95%
	Bailey 402	95%
	LAC 104, 106	100%
	Glickman Library 423/424	100%
	Luther Bonney 209	100%
	Science 157	100%
	Science 533	100%
	Russell 1 and Dance Studio	100%
	Masterton G38	100%
	Hill Gym 201	100%
	Ice Arena 154	100%
	LB 410, 524	100%
	Corthell 320	100%
	LAC 105, 108, 110	100%

*Summary Table Note - Phase 1 refers to Summer 2017 projects and Phase 2 refers to Summer 2018 projects.

Risks

- Potential COVID-19 impact of work on campus
- Potential delays in shipping and equipment shortages due to higher equipment demand

Status Update – February 2021

Classrooms for the Future Web Conferencing Projects

Overall status:		Change from previous report:	N/A
Budget status:		Change from previous report:	N/A
Schedule status:		Change from previous report:	N/A

Overview

The Board of Trustees recently approved funding for adding web conferencing equipment to several UMS classrooms that were upgraded in the CFTF Phase I project. The majority of work will take place this summer, with any remaining installations to be completed over winter break. The budget includes funds for web conferencing carts as well as four temporary employees to assist UMS IT staff with installations. Vendors will also be engaged for work in the UM Law School large lecture hall and for classrooms requiring programming changes. Once the rooms have been updated, they will be re-assessed and scored accordingly.

Initiation Date	Sponsor	Estimated Completion Date*	Estimated Budget	Budget Committed to date	Budget % Committed	Project % Complete	Comments
5/2020	David Demers	2/1/2021	$2,563,650	$2,289,900	90%	93%	*Expected to complete majority of rooms this summer with remaining rooms to be completed over winter break

Status

The majority of winter break web conferencing installations have been completed. Two rooms at UMPI are currently on hold because they contain asbestos. The UMaine campus also has rooms on hold that have not been scheduled for use this semester. UMaine is reviewing these rooms to determine whether they will be used going forward or if the web conferencing equipment should be installed in other classrooms. USM has two rooms that are on hold because they are currently being used as student lounges. The rooms will be upgraded with web conferencing equipment once they are no longer needed for lounge spaces.

Documentation has been added to the completed classrooms, and reassessments will be completed on these rooms in the near future. Additional cameras will be installed in some of the rooms with remaining funding for the project. In addition, some campuses will select additional classrooms to upgrade with the remaining funds.

Summary of Web Conferencing Upgrades

Campus	Number of Rooms	Number of Carts	Summer Rooms Completed	Number of Winter Rooms	Winter Rooms Completed	Percentage Complete
UMA	27	10	16	11	10	94%
UMF	11	4	9	0	0	83%
UM	56	10	42	15	10	91%
UM-Law	5	1	2	3	2	90%
UMM	10	2	7	3	2	94%
UMFK	6	2	6	0	0	100%
UMPI	10	2	6	4	4	96%
USM	47	11	32	15	13	94%

Summary by Campus and Classroom Project

Campuses	Rooms By Project Setup	% Complete
UMA	Brunswick 114	100%
	Ellsworth 2	100%
	Ellsworth 7	100%
	LAC 162K*	5%
	Rockland 410	100%
	Rockland 413	100%
	Saco 108	100%
	Civic Center 257*	90%
	Fine Arts 124	100%
	Jewett Hall 124*	100%
	Jewett Hall 156	100%
	Jewett Hall 180	100%
	Jewett Hall 284	100%
	Jewett Hall 293	100%
	Jewett Hall 297	100%
	Katz 5	100%
	Katz 53	90%
	Randall Student Ctr 253*	100%
	Randall Student Ctr 255*	95%
	Camden Hall 101*	90%
	Camden Hall 105*	90%
	Camden Hall 304* changed to Dental 142	90%
	College Center 135	100%
	College Center 142*	90%
	Eastport Hall 135	100%
	Eastport Hall 136*	90%
	Eastport Hall 138	100%
UMF	Education Center 103	100%
	Education Center 106	100%
	Education Center 111	100%
	Education Center 113	100%

	Education Center 114	100%
	Preble 117	100%
	Ricker Addition 217	100%
	Roberts 5* (on hold)	5%
	Roberts 101* (on hold)	5%
	Roberts 131	100%
	Roberts C23	100%
UMaine	Aubert 316*	90%
	Aubert 421	100%
	Aubert 422	100%
	Barrows 123*	90%
	Barrows 124	100%
	Barrows 130	100%
	Barrows 131*	90%
	Bennett 102	100%
	Bennett 140	100%
	Bennett 141	100%
	Boardman 115* changed to 210	90%
	Bryand Global 100	100%
	Deering 17*	90%
	Deering 101C* changed to Bennett 201	90%
	Deering 113	100%
	DPC 100	100%
	DPC 105	100%
	DPC 107	100%
	DPC 115	100%
	DPC 117	100%
	Dunn 115	95%
	Dunn 316	95%
	Hitchner 157	90%
	Hutchinson Center 102	100%
	Hutchinson Center 129*	4%
	Jenness 100	100%
	Jenness 102	100%

	Jenness 104	100%
	Jenness 106	100%
	Jenness 108	100%
	Lengyel 125	100%
	Lengyel 127	100%
	Little 110	100%
	Little 120	100%
	Little 130	100%
	Little 140	100%
	Little 202* (on hold)	61%
	Little 206* (on hold)	64%
	Little 211	100%
	Little 219*	100%
	Little 220* (on hold)	5%
	Lord 200* (on hold)	10%
	Merrill 228a (on hold)	11%
	Merrill 114	90%
	Murray 102	100%
	Murray 106	100%
	Neville 100	100%
	Neville 101	100%
	Neville 208	100%
	Neville 227	100%
	Nutting 100	100%
	Nutting 102	100%
	Nutting 213	100%
	Nutting 257	100%
	Shibles 217	100%
	Shibles 313	100%
	Shibles 316	100%
	Stevens/Center 155* changed to Little 204	90%
	Stevens/Center 355*	90%
	Stevens/North 235	100%

	Stevens/North 237* changed to Hitchner 157	90%
UM LAW	Moot	93%
	Middle*	95%
	First Year	90%
	506*	90%
	522A*	80%
UMM	Science 115	100%
	Science 120	100%
	Science 13*	53%
	Torrey 104	100%
	Torrey 106	100%
	Torrey 226	100%
	Torrey 228*	90%
	Torrey 230	100%
	Torrey 232	100%
	Torrey 234*	95%
UMFK	Armory 119	100%
	Cyr 113	100%
	Cyr 204	100%
	Cyr 205*	100%
	Old Model School 103*	100%
	Powell 123	100%
UMPI	Folsom 101A	100%
	Folsom 204	100%
	Folsom 205	100%
	Folsom 206	100%
	Folsom 303	100%
	Pullen 111*	90%
	Pullen 210*	90%
	Pullen 212	100%
	Pullen 214*	90%
	Pullen 216*	90%
	Weidan PTA	100%
USM	Bailey 10* (on hold)	21%

	Bailey 113	100%
	Bailey 201	100%
	Bailey 202	100%
	Bailey 204	100%
	Bailey 205	100%
	Bailey 206*	90%
	Bailey 207*	92%
	Bailey 218	100%
	Bailey 312	100%
	Bailey 315	100%
	Bailey 319	100%
	Bailey 402*	95%
	Bailey 403	100%
	John Mitchell 151	100%
	John Mitchell 242	100%
	John Mitchell 252	100%
	LAC 104*	90%
	LAC 108/109	100%
	LAC 158*	95%
	LAC 210	100%
	Luther Bonney 103*	89%
	Luther Bonney 209	100%
	Luther Bonney 241*	90%
	Luther Bonney 302	100%
	Luther Bonney 303*	90%
	Luther Bonney 326	100%
	Luther Bonney 402*	90%
	Luther Bonney 403*	90%
	Luther Bonney 410	100%
	Luther Bonney 502*	90%
	Luther Bonney 503	100%
	Luther Bonney 510	100%
	Luther Bonney 523	100%

	Masterton 113*	90%
	Masterton G08	100%
	Masterton G38	100%
	Payson 42	100%
	Payson 44	100%
	Payson 200	100%
	Payson 201	100%
	Payson 202	100%
	Payson 204	100%
	Science 533	100%
	Wishcamper 133* (on hold)	21%
	Wishcamper 419/427*	95%

***denotes rooms scheduled for winter break**

Risks

- Potential equipment delays due to increased demand for equipment.

Status Update – February 2021

UMS Wireless Infrastructure

Overall status:  Change from previous report: None

Budget status:  Change from previous report: None

Schedule status:  Change from previous report: None

Overview

This project is a wireless technology connectivity Initiative to upgrade wireless service and associated cabling and equipment at all campuses to bring wireless capacity to gigabit speeds to support learning and living spaces.

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete	Comments
4/2016	Jeffrey Letourneau	12/2018	6/2021	$13,215,000	$12,500,403	99%	

Status

Cabling is complete in Sullivan Gymnasium and the NetworkMaine team is working on completing this building. Work at Lewiston-Auburn Campus continues in coordination with phone system upgrades. The team is evaluating the fiber infrastructure on the USM campus and additional buildings for upgrades. The estimated completion date has been extended to June 2021 as we continue to identify needs at USM.

At UM, Facilities Management is completing some related items. No additional work is currently underway or being planned as part of this project.
At UMPI, no work is currently underway or being planned as part of this project.
At UMA, no work is currently underway or being planned.
At UMM, project work is complete on the UMM campus.
At UMF, project work is complete on the UMF campus.
At UMFK, project work is complete on the UMFK campus.

BUDGET SUMMARY

Campus	Allocation	% Budgeted to Date	$$ Not Yet Budgeted	% Expended & Encumbered to Date	$$ Expended & Encumbered	$$ Not Yet Expended/Encumbered
PROJECT TOTAL	**$13,215,000**	**98%**	**$314,604**	**95%**	**$12,500,403**	**$714,597**
Equipment in Inventory					$189,459	
System-wide Services	$620,000	100%	-$452	100%	$620,452	-$452
UM - Machias	$733,200	100%	$0	101%	$743,998	-$10,798
UM - Farmington	$1,674,800	100%	$0	100%	$1,681,512	-$6,712
UMaine	$3,294,600	99%	$17,875	100%	$3,280,237	$14,363
UM - Presque Isle	$700,200	100%	$0	99%	$692,709	$7,491
USM	$5,017,600	94%	$284,850	82%	$4,112,114	$905,486
UM - Fort Kent	$614,600	100%	$0	103%	$632,255	-$17,655

UM - Augusta	$560,000	98%	$12,331	98%	$547,669	$12,331

(*) = original $11.2M allocation plus reallocation of $980k plus $620K required from contingency funding for system-wide licensing. 12/2018 - additional $415,000 from contingency.

BUILDING SUMMARY

Complete[1]		**Installation & Deployment Scheduled / In Progress**[2]		**Planning - Not yet Budgeted**
University of Maine at Augusta				
Lewiston Katz Jewett Randall	Eastport Camden Belfast Civic Center College Center			
University of Maine at Farmington				
Mantor Library Dakin Black Mallett Lockwood Purington	Stone Scott North Scott West Scott South Campus Fiber			
University of Maine at Fort Kent				
Powell The Lodge Crocker	Blake Library Cyr Hall			
University of Maine at Machias				
Torrey Hall / Merrill Library Reynolds Powers	Science Kilburn Dorward Sennett			
University of Maine at Presque Isle				
Park Emerson Merriman	Folsom-Pullen Wieden Library Campus Fiber			
University of Maine				
Fogler Library Shibles Bennett Rogers Jenness Lord Bryand Global Science Boardman Murray Hall[4] Aubert Wells Stewart Merrill	Little Class of 1944 Lengyel Estabrook Core Hitchner Hart Core Donald P Corbett Winslow Barrows / ESRB NuttingDeering Center Stevens North Stevens South Stevens Fernald			
University of Southern Maine				

9.1

Drawing Studio Print Studio Academy Building Wishcamper Abromson Masterton Hall Wireless Only Law Building	Glickman Library Luther-Bonney Payson-Smith Brooks Dining JMC (wired) Russell Corthell Costello Complex	In Progress Science (99%) Bailey (99%) Lewiston-Auburn (95%) Sullivan Complex (99%)		

[1] Networks are online and functioning; some testing and close-out paperwork may remain to be done
[2] Dates are estimated start dates for cable installation & deployment – subject to change
[3] Insufficient funding to upgrade entire building; minimal upgrades to support Classrooms for the Future or future upgrades
[4] Partial upgrade due to building limitations

9.1

Risks

- Campus closures and increased health and safety regulations due to COVID-19 pandemic are impacting project schedule.
- Identification of asbestos containing materials (ACBM) at USM in an area that was not anticipated has led to a higher awareness of and need to test for ACBM. Both the need for increased testing and the probability of higher than anticipated abatement needs will impact both project schedule and cost. The degree of impact will not be known until test results are completed.
- The project team is working closely with the Classrooms for the Future project team to coordinate efforts. Campus decisions to prioritize upgrades in residence halls over classroom buildings may negatively impact the Classrooms for the Future project.
- Many of the buildings require modifications by Facilities Management prior to network installation. The project team is working with each campus to plan this work. Resource availability and scheduling for this work may cause project delays.
- A risk to perceived success is unreasonable stakeholder expectations. Although a ubiquitous system-wide upgrade is needed, this project will only partially meet that need given the constraints of limited resources (schedule, budget, staffing, construction limitations, and coordination with other campus resources).
- Many buildings have network infrastructure that will need to be upgraded before new wireless networks can be installed. In some cases, this may include new fiber installation and/or the need for facility renovations.
- The phased funding approach will necessitate maintaining two separate WiFi networks on most if not all campuses driving up the ongoing operational costs and efforts for US:IT while creating inconsistent wireless service levels building to building on the campuses.
- There are a large number of factors and variables that will affect this project's timeline. There are other sizeable projects taking place at the same time. Another factor affecting the timeline will be the coordination among involved entities in setting priorities and timing.

Status Update – February 2021

MaineStreet User Experience Enhancements

Overall status:		Change from previous report:	None
Budget status:		Change from previous report:	None
Schedule status:		Change from previous report:	None

Overview

This project is deploying the HighPoint User-Interface Platform to streamline and improve usability, navigability, and utility of the MaineStreet environment for students and faculty alike.

Project	Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Initial Budget	Current Budget Balance	Project % Complete	Comments
UX Enhancements	September 2018	David Demers	January 2019	*May 2021	$1,148,237	$632,499	85%	* Completion date for Spring 2021 Student Pilot

Summary Status

On January 4, the "New MaineStreet Experience" pilot with UMM students and faculty was launched. Students, staff and faculty have now been using the HighPoint Campus Experience (HCX) module to interact with MaineStreet Student Self-Service functions in the production environment for over a month. Anecdotal feedback from faculty and staff has been positive, and project teams are currently developing a student survey to solicit additional feedback.

On February 11, several updates were applied to HCX in the production environment. Functional users performed testing both beforehand in a test environment and after the technical updates were applied; the update was a success and the downtime for MaineStreet Campus Solutions was shorter than anticipated.

Recently Completed

- Update of HCX in production environment (February 11)
- Additional round of user acceptance testing prior to HCX update to production environment
- Development of draft student surveys
- Two demonstration/ information sessions with ITSS staff in preparation for pilot launch
- Demonstration/ information session with UMM Faculty in preparation for pilot launch
- Completion of student and staff support documentation and video

In Progress

- Outreach to students regarding HCX user experience and general feedback
- Preparation for point release updates of HCX in production environment alongside with PUM 20 PeopleSoft Regularly update in March

Risks & Mitigation Strategies

Risk	Risk Management Plan
Impact of the COVID-19 pandemic include a shift in resource availability, including students, for testing and feedback	Leverage staff resources efficiently and targeted, virtual outreach to students to solicit input
Failure to complete the project on schedule	Proactive planning, strong communication, and coordination processes, regular project team meetings, and clearly defined escalation path for identifying and resolving issues.

Resource contention due to competing demands	Proactive project management approach with respect to planning and scheduling activities. Leverage qualified Highpoint resources to augment UMS resources when needed.
Changes to project scope	Perform fit/gap analysis and execute the change control process throughout the project.
A high volume of change within a short time period can result in training and support challenges.	Engaging with stakeholders at an early stage will help inform decisions regarding functional deployment, communication, and training.
Many MaineStreet self-service functions are customized and HighPoint modules are designed to work with native Peoplesoft functionality. Users will need to be able to access the appropriate features and functions of MaineStreet in the HighPoint environment.	Conducting a comprehensive analysis of functionality and customizations with functional and technical stakeholders will inform the development of the optimal user experience.

Status Update – February 2021

VoIP – UMF

Overall status:		Change from previous report:	None
Budget status:		Change from previous report:	None
Schedule status:		Change from previous report:	None

Overview

This project will upgrade the UMF telecom system to utilize voice-over-IP (VoIP) and mitigate risk associated with the aging Avaya phone system.

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete	Comments
4/2019	Jeffrey Letourneau	9/2021	09/2021	$499,000	$318,240	99%	

Status

Clean up of the old system and eWaste disposal was not finished over winter break. The timeline for this is pending the availability of resources within the UMF Facilities Management department which will likely happen after the end of the spring semester

The project team is looking at outstanding infrastructure issues which may impact long-term stability and supportability of the voice system at UMF.

Remaining project budget funds will be used to upgrade infrastructure in additional buildings such that IP phones can be deployed in those locations. The team has accessed building needs, including an asbestos study in Roberts Hall. It has been determined that work in Roberts Hall will require more funding than is currently available so the team is compiling cost estimates for upgrading equipment in the other buildings.

The project end date has been extended to the original expected end date to account for both the timeline to dispose of eWaste and to upgrade additional building infrastructure.

Risks

- Delays in other projects caused by COVID-19 response may impact this schedule.
- The legacy Avaya phone system has shown signs of failing. There is a risk that we will not be able to migrate all services from this system before failure occurs. This risk is being mitigated by temporarily moving lines to analog voice gateways.
- Due to the mitigation plan noted above, many users will be required to transition multiple times. This poses a risk of customer dissatisfaction and will necessitate a more comprehensive communication strategy.
- The network infrastructure in many buildings on the UMF campus is not adequate for deploying VoIP phones. This poses a risk to both project schedule and budget.
- Availability of human resources is a risk to this project. Resources needed for this project will also be working on telecommunications upgrades at UMPI and USM as well as providing operational support for all campuses.

Status Update – February 2021

VoIP – UMPI

Overall status:		Change from previous report:	None
Budget status:		Change from previous report:	None
Schedule status:		Change from previous report:	None

Overview

This project will upgrade the UMPI telecom system to utilize voice-over-IP (VoIP) and mitigate risk associated with the aging Avaya phone system.

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete	Comments
6/2019	Jeffrey Letourneau	9/2021	6/2021	$291,000	$238,321.96	73%	

9.1

Status

Cabling was completed in South Hall and Campus Center and IP phones have been deployed in both buildings.

The team will focus on finishing phone deployments, clean-up and decommissioning the old system during the spring semester with an anticipated project completion of 6/30/2021.

Building	Count of Extensions	% Complete	Building	Count of Extensions	% Complete
Normal	13	92%	Campus Center	30	60%
Emerson Annex	10	90%	Emerson	18	0%
Physical Plant	10	90%	Merriman	1	0%
Wieden	27	89%	Park	16	0%
CIL	24	79%	President's House	2	0%
Gentile	9	78%	South	48	90%
Folsom-Pullen	24	63%	Building not Identified	64	0%
Preble	72	81%			

(highlighted cells indicate a change since last report)

Risks

- Delays in other projects caused by COVID-19 response may impact this schedule.
- There is a risk that we will not be able to migrate all services from this system before failure of the legacy system occurs.
- The network infrastructure in some buildings on the UMPI campus is not adequate for deploying VoIP phones. This poses a risk to both project schedule and budget.
- Availability of human resources is a risk to this project. Resources needed for this project will also be working on telecommunications upgrades at UMF and USM as well as providing operational support for all campuses.

Status Update – February 2021

VoIP – USM

Overall status:  Change from previous report: None

Budget status:  Change from previous report: None

Schedule status:  Change from previous report: None

Overview

This project will upgrade the USM telecom system to utilize voice-over-IP (VoIP) and mitigate risk associated with the aging Nortel phone system.

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete	Comments
6/2019	Jeffrey Letourneau	9/2022	9/2022	$809,000	$379,879	46%	

9.1

Status

Progress since December has been slowed by lack of available resources. IT Support Services has recently assigned a person to work on phone deployments part time and we expect that this will accelerate progress over the next several months.

Status by Building: (highlighted cells indicate a change since previous report)

Building - Portland	% Complete	Building - Gorham	% Complete
LUTHER BONNEY HALL	87%	FIELD HOUSE, COSTELLO SPORTS COMPLEX	91%
SCIENCE BLDG, PTLD	86%	MCLELLAN HOUSE	93%
WOODBURY CAMPUS CENTER	89%	RUSSELL HALL	65%
CENTRAL HEAT PLANT-P	17%	SCHOOL ST-134	75%
EXETER ST-045	9%	CENTRAL HEAT PLANT-G	58%
BEDFORD ST-102	18%	FACILITIES MANAGEMENT BUILDING	100%
BEDFORD ST-092	5%	COLLEGE AVE-007	100%
ABROMSON COMM ED CTR	76%	BROOKS STUDENT CTR	100%
PAYSON SMITH HALL	2%	BAILEY HALL	86%
USM PARKING GARAGE	14%	CORTHELL HALL	79%
BEDFORD ST-025, FACMGT	100%	JOHN MITCHELL CTR	83%
LAW BLDG	1%	HASTINGS HALL	0%
GLICKMAN FAMILY LIBRARY	74%	UPTON HALL	71%
BEDFORD ST-120	92%	CARPENTER SHOP	50%
WISHCAMPER CTR	96%	HILL GYM, COSTELLO SPORTS COMPLEX	72%
BEDFORD ST-106	100%	ICE ARENA, COSTELLO SPORTS COMPLEX	56%
BEDFORD ST-126	100%	COLLEGE AVE-051	60%

SULLIVAN REC & FITNESS CTR	23%	ADMISSION BARN	14%
		HUSKEY DRIVE-028, PUBLIC SAFETY	5%
LEWISTON-AUBURN CENTER	**50%**	SCHOOL ST-128	25%

Risks

- Campus closures and changes in health and safety regulations in response to the COVID-19 are impacting project schedule.
- Construction, office moves, and other facilities changes planned for the next 12-24 months may cause project delays.
- Constantly changing staff phone assignments and lack of clear processes for notifying IT when staff leave or are hired is a risk to a complete and accurate migration.
- There is a risk that we will not be able to migrate all services from this system before failure of the legacy system occurs.
- The network infrastructure in some buildings on the USM campus is not adequate for deploying VoIP phones. This poses a risk to both project schedule and budget.
- Availability of human resources is a risk to this project. Resources needed for this project will also be working on telecommunications upgrades at UMF and UMPI as well as providing operational support for all campuses.

Status Update – February 2021

ERP Assessment

Overall status:		Change from the previous report:	N/A
Budget status:		Change from the previous report:	N/A
Schedule status:		Change from the previous report:	Y

Project Overview

The evaluation of the University of Maine System's (UMS) MaineStreet applications commenced in mid-July with Huron Consulting Services to assess current business processes, identify opportunities for improvement, and develop a plan to optimize processes and technology to support UMS' strategic objectives, particularly the requirements driven by Unified Accreditation. The desired outcomes for this engagement are:

- Evaluation of the current state of the shared ERP PeopleSoft (MaineStreet) environment
- Identification of deficiencies created by the current platform configuration, business processes, and underlying data architecture
- Summary of functionality required for a unified, future-state ERP environment fully supporting the strategic priorities of the UMS, including Unified Accreditation and Collaborative Degree Programs.
- Identification of efficiencies that may be attained through technological improvements or innovations including leveraging cloud-native solutions when feasible and realistic
- Evaluation of opportunities for improvements within the current ERP platform to deliver future-state functionality and support current and emerging business needs, including a shared, unified course catalog.
- A recommended plan to achieve UMS strategic outcomes through the realignment of technological tools, processes, and policies

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Initial Budget	Current Budget Balance	Project % Complete	Comments
July 2020	David Demers	Nov 2020	March 2021	$275,000	$200,000	96%	

Status

Huron completed its current state assessment of all areas - Human Resources, Finance, Student, Reporting, and Technology, and is now focused on drafting its roadmap and future state recommendations. On January 13, Huron presented to the President's Council its vision of Unified Accreditation as it pertains to the ERP Roadmap.

Following David Demers' review of Huron's recommended Roadmap options with the VC of Finance & Administration and VP of Budget & Financial Analysis for input, Huron will present the recommendations to the President's Council for additional input.

The final deliverable for this project, targeted for March 2021, will be Huron's final report that provides its comprehensive roadmap that outlines the scope and sequencing of improvements to the MaineStreet systems in support of Unified Accreditation and the optimal future state for the UMS.

Completed

- Questionnaires for Human Resources, Finance, Admissions, Student Records, Academic Advisement, Student Financials, Financial Aid, Reporting, Technology
- Workshops for Human Resources, Finance, Admissions, Student Records, Academic Advisement, Student Financials, Financial Aid, Reporting, Technology

- Current state assessments for Human Resources, Finance, Student, Reporting, Technology
- Draft Roadmap recommendations
- Unified Accreditation vision as it pertains to the ERP Roadmap
- CIO review of draft Roadmap recommendations

Upcoming Milestones

- CIO's review of draft Roadmap recommendations with VC of Finance & Administration and VP of Budget & Financial Analysis
- Huron's presentation of draft Roadmap recommendations to President's Council for input
- Huron finalizes roadmap recommendations and delivers final report

Status Update February 2021

Northern Ring Optical Equipment Refresh

Overall status:		Change from previous report:	None
Budget status:		Change from previous report:	None
Schedule status:		Change from previous report:	None

Overview

This project will replace optical network equipment in northern and downeast Maine.

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete	Comments
12/2020	Jeffrey Letourneau	7/2021	7/2021	$1,350,000	$ 1,183,215	24%	

9.1

Status

Site surveys and preparations:
6 of 13 sites are completely ready for the upgrades. Five of the remaining sites are waiting for electrical upgrades and or UPS installations and two need final testing and sign-off on readiness.

Equipment Receipt and Installation:
All of the equipment has been ordered and shipments began in early February. The contractor will begin scheduling installation in early March.

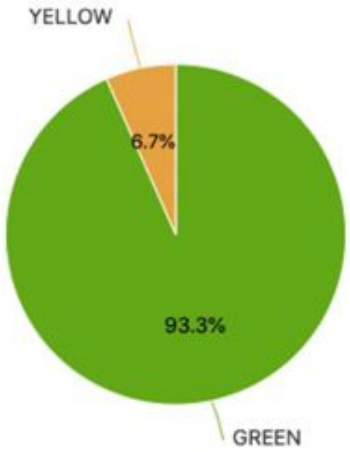
Migration of Services:
To begin when installations are completed. Current estimated timeline is April & May.

Decommissioning:
To begin when migration is complete. Current estimated timeline is late May through June.

Risks

- Limited access to sites and changes in health and safety regulations in response to the COVID-19 pandemic could impact project schedule. This work may require contractors from other states to visit sites.
- While working in Northern Maine in winter, weather may adversely impact project schedule.
- Availability of equipment may be a risk to this project.
- Availability of human resources is a risk to this project. Resources needed for this project also provide production support and support to other projects.

Active Project Health

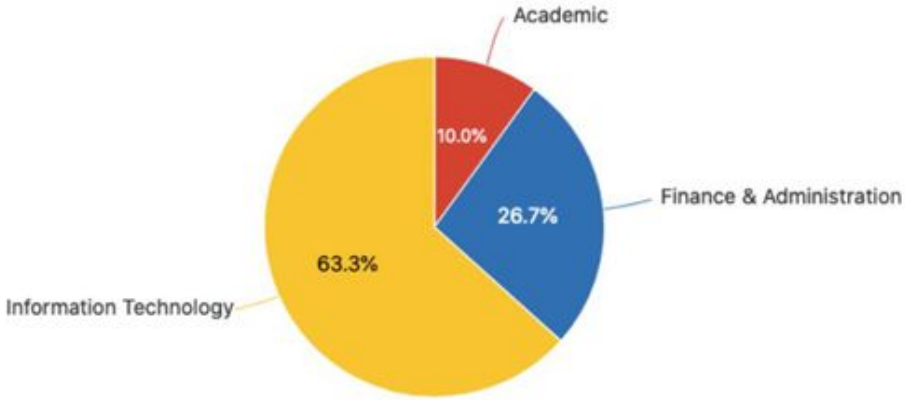


Project Health	Count
GREEN	28
YELLOW	2
Total	30

Total Budget of Active Projects

	Sum of Budget
Total	$28,871,075.00

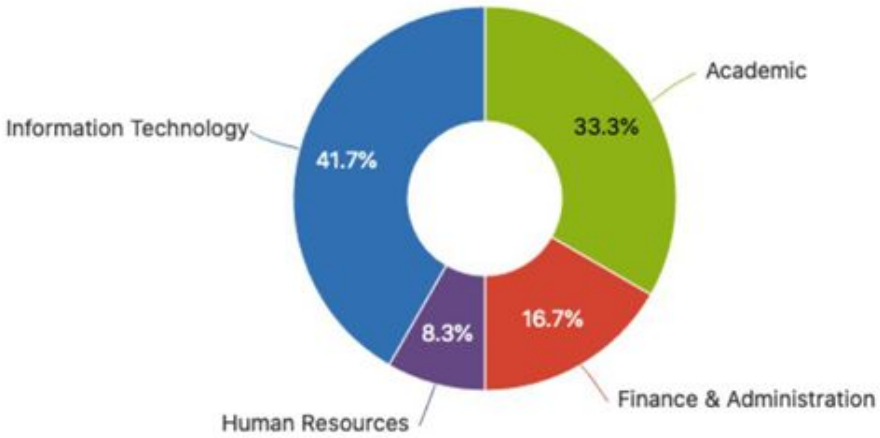
Active Projects by Category



Category	Count
Academic	3
Finance & Administration	8
Information Technology	19
Total	30

Initiating Projects & RFPs

Category	Count
Academic	4
Finance & Administration	2
Human Resources	1
Information Technology	5
Total	12



US:IT Project (>$250,000) Review

Finance – Facilities – Technology Committee

March 3, 2021

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM
University Services
Information Technology

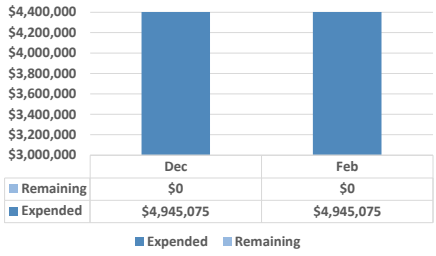
1

US:IT Project (>$250,000) Review

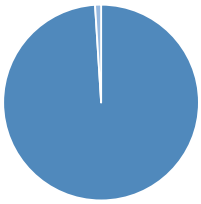
Classrooms for the Future

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

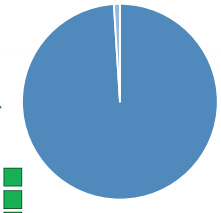
Project Budget - $4.945M**



99% Complete (Dec)



99% Complete (Feb)



Overall status:
Budget status:
Schedule status:

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget*	Budget Committed to date	Budget % Committed	Project % Complete
4/2016	David Demers	12/2019 (updated 11/18)	12/2020	$4,945,075	$4,945,075	100%	99%

**Revised Budget reflects additional $582,730 allocation provided from project contingency funds

2

US:IT Project (>$250,000) Review

Classrooms for the Future

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

- **2017-2021 Classroom Upgrades**

Campus	Feb '20
UMA	85%
UMF	100%
UMFK	99%
UMM	99%
UM	100%
USM	98%
UMPI	96%

3

US:IT Project (>$250,000) Review

Classrooms for the Future

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

- **Feb 2021 Update**
  - **UMA campus will combine remaining contingency funds and RUS grant funds to update several rooms into Summer 2021**
  - **Planning continues for remaining contingency funds available for UM and UMPI**
- **Risks**
  - **Potential COVID-19 impact of work on campus**
  - **Potential delays in shipping and equipment shortages due to higher equipment demand**

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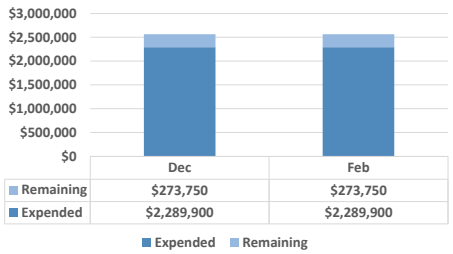
9.2

US:IT Project (>$250,000) Review

CFTF-Web Conferencing

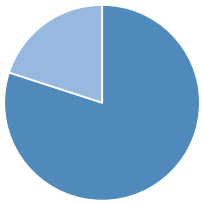
Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

Project Budget - $2.564M**

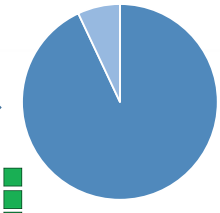


	Dec	Feb
Remaining	$273,750	$273,750
Expended	$2,289,900	$2,289,900

80% Complete (Dec)



93% Complete (Feb)



Overall status:
Budget status:
Schedule status:

Initiation Date	Sponsor	Estimated Completion Date*	Estimated Budget	Budget Committed to date	Budget % Committed	Project % Complete
5/2020	David Demers	2/1/2021	$2,563,650	$2,289,900	90%	93%

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US:IT Project (>$250,000) Review

CFTF-Web Conferencing

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

- **Feb 2021 Update**
  - Winter break work completed, except for holds on some rooms
  - Documentation added to completed rooms
  - Reassessments will take place in the near future
  - Additional equipment and classroom upgrades being considered with remaining funds
- **Risks**
  - Potential equipment delays due to increased demand

Campus	# Rooms	# Carts	Summer Rooms Completed	Winter Rooms Completed	Feb % Compl
UMA	27	10	16	10	
UMF	11	4	9		
UM	56	10	42	10	
UM-Law	5	1	2	2	
UMM	10	2	7	2	
UMFK	6	2	6		
UMPI	10	2	6	4	
USM	47	11	32	13	

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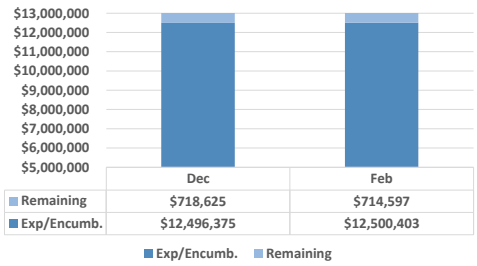
9.2

US:IT Project (>$250,000) Review

UMS Wireless Infrastructure

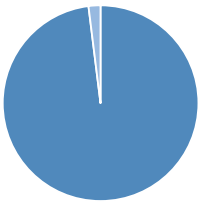
Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

Project Budget - $13.2M**

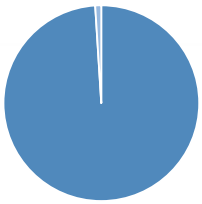


	Dec	Feb
Remaining	$718,625	$714,597
Exp/Encumb.	$12,496,375	$12,500,403

99% Complete (Dec)



99% Complete (Feb)



Overall status:
Budget status:
Schedule status:

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete
4/2016	Jeffrey Letourneau	12/2018	6/2021	$13,215,000	$12,500,403	99%

**Revised Budget reflects additional $415,000 allocation provided from project contingency funds

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US:IT Project (>$250,000) Review

UMS Wireless Infrastructure

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

Campus	Feb (% Budgeted)		Feb (% Complete)	
UMA	98%		98%	
UMF	100%		100%	
UMFK	103%		100%	
UMM	101%		100%	
UMaine	100%		99%	
USM	94%		82%	
UMPI	100%		99%	

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9.2

US:IT Project (>$250,000) Review

UMS Wireless Infrastructure

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

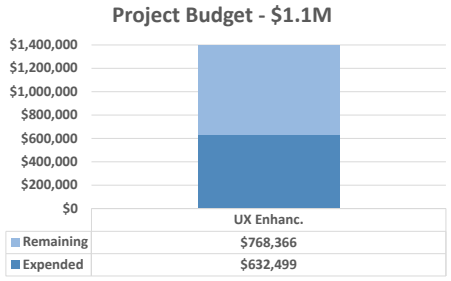
- **Project Status**
  - Project work is complete at UMA, UMF, UMFK, UMM and UMPI
  - Facilities Management is completing some work at UM
  - Cabling work in Sullivan Gymnasium at USM is complete and Networkmaine is working to finish the building. Work continues at LAC in coordination with phone upgrades. Evaluation of fiber infrastructure underway at USM as additional upgrades are considered.
- **Recently Completed:**
  - USM – Costello Complex
- **Current Work:**
  - Sullivan Gym is nearly complete
  - LAC Network Equipment Upgrade
- **Risks**
  - Phased funding will necessitate maintaining parallel wireless networks
  - Limited resources and competing projects

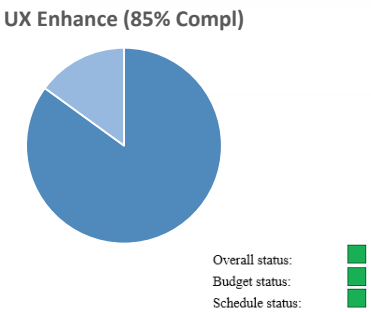
9

US:IT Project (>$250,000) Review

MaineStreet Improvements

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM





Project	Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Initial Budget	Current Budget Balance	Project % Complete
UX Enhancements	September 2018	David Demers	January 2019	*May 2021	$1,148,237	$632,499	85%

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9.2

US:IT Project (>$250,000) Review

MaineStreet Improvements

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

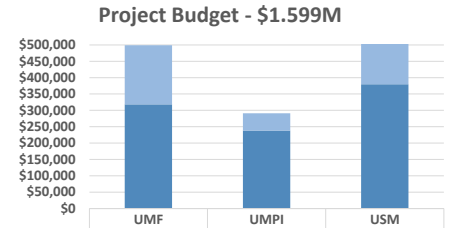
- **Recently Completed:**
  - Update of HCX in production environment
  - Demonstrations/information sessions with staff and faculty in preparation for UMM pilot
  - Completion of student and staff support documentation and video
  - Jan 4 – "New MaineStreet Experience" pilot launched for UMM (Student Self-Service)
- **In Progress:**
  - Outreach to students regarding user experience, feedback
  - Prep for point release updates of HCX in production
- **Risks**
  - Managing change in navigation and interface for the MaineStreet environment

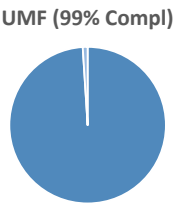
11

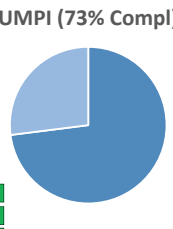
US:IT Project (>$250,000) Review

VoIP Implementation

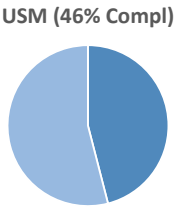
Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM







Overall status:
Budget status:
Schedule status:



	Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete
UMF	4/2019	Jeffrey Letourneau	9/2021	09/2021	$499,000	$318,240	99%
UMPI	6/2019	Jeffrey Letourneau	9/2021	6/2021	$291,000	$238,322	73%
USM	6/2019	Jeffrey Letourneau	9/2022	9/2022	$809,000	$379,879	46%

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9.2

US:IT Project (>$250,000) Review

VoIP Implementation

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

UMF:

- Cleaning up of the old system is pending availability of resources
- Cost-benefit analysis underway to determine use of remaining funds
- Project end date extended

UMPI:

- South Hall and Campus Center cabling complete and phones deployed
- Focus on completing phone deployments, clean up and decommissioning the old system during the spring semester

USM:

- Process slowed due to lack of available resources; aim to accelerate over the next several months

COVID-19 Impact has delayed project timeline

Risks

- Ongoing probability of future failures of legacy phone systems at UMF/USM
- Poor network infrastructure on both campuses will pose challenges to the project timeline

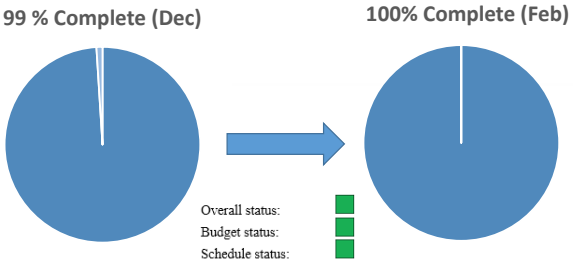
13

US:IT Project (>$250,000) Review

Brightspace LMS Implementation

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

- **Final Project Report**
  - **Report is being finalized**
  - **To be presented at May FFT meeting**



brightspace

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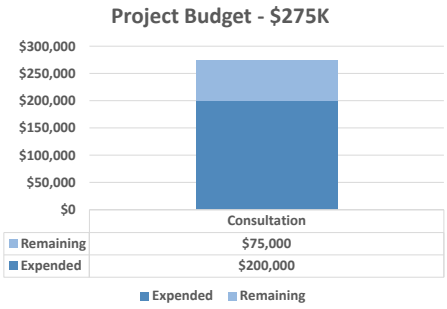
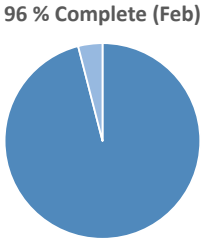
9.2

US:IT Project (>$250,000) Review

ERP Assessment

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM





Overall status:
Budget status:
Schedule status:

Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Initial Budget	Current Budget Balance	Project % Complete
July 2020	David Demers	Nov 2020	March 2021	$275,000	$200,000	96%

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US:IT Project (>$250,000) Review

ERP Assessment

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

- **Project Overview**
  - Evaluation of UMS MaineStreet (Peoplesoft) ERP to identify functional gaps and opportunities to support Unified Accreditation; develop roadmap/plan
  - "Repaving MaineStreet"
- **Recently Completed:**
  - Questionnaires and Workshops for HR, Finance, Admissions, Student Records, Academic Advisement, Student Financials, Financial Aid, Reporting, Technology
  - Current state assessments for HR, Finance, Student, Reporting, Technology
  - Draft Roadmap recommendations, CIO review
  - Unified Accreditation vision as pertains to ERP Roadmap
- **Upcoming:**
  - CIO Review of draft Roadmap recommendation with VC of Finance & Administration and VP of Budget & Financial Analysis
  - Huron's presentation of draft Roadmap recommendations to President's Council for input
  - Huron finalizes roadmap recommendations and delivers final report
- **Risks**
  - **Funding to support necessary upgrades, modifications**

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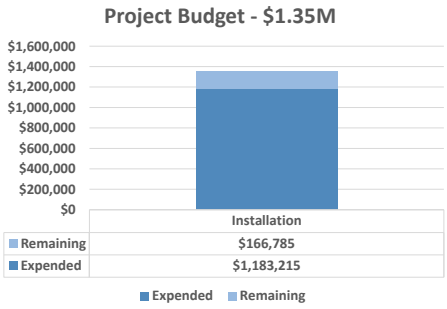
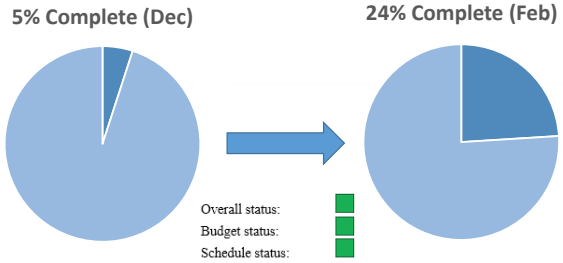
9.2

US:IT Project (>$250,000) Review

Northern Ring Optical Equipment Refresh

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM





Initiation Date	Sponsor	Original Estimated Completion Date	Current Estimated Completion Date	Estimated Budget	Budget Committed to date	Project % Complete
12/2020	Jeffrey Letourneau	7/2021	7/2021	$1,350,000	$ 1,183,215	24%

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US:IT Project (>$250,000) Review

Northern Ring Optical Equipment Refresh

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

- **Recently Completed:**
  - Site surveys are complete with 6 sites ready for upgrades, 5 waiting for electrical upgrades/UPS installations and 2 waiting for final testing and sign off
  - All equipment has been ordered and shipments began in early February
- **Upcoming:**
  - Contractor will begin scheduling installation in early March
  - Migration of services will begin when installations are complete
- **Risks**
  - Winter weather in Northern Maine may impact schedule
  - Availability of equipment and human resources

18

University of Maine System
Board of Trustees

AGENDA ITEM SUMMARY

NAME OF ITEM: Proposed Changes to Board of Trustee Policy 803 *Naming of Physical Facilities*

INITIATED BY: James O. Donnelly, Chair

BOARD INFORMATION: **BOARD ACTION: X**

BOARD POLICY:
803 *Naming of Physical Facilities*

UNIFIED ACCREDITATION CONNECTION:
This revised Board policy will provide clarity for naming, renaming and remove of names of physical facilities for consistency among all campuses.

10

BACKGROUND:
At the September 28, 2020 Board of Trustees meeting, the Board was charged to establish a working group to consider the factors relied upon by the C.C. Little Hall Name Task Force in its June 23, 2020 report and recommendation for this name change and determine whether these factors or others should be expressly incorporated into Board Policy 803 *Naming of Physical Facilities* to guide the Board's consideration of future naming recommendations of this nature. Board Policy 803 is currently silent about the removal or renaming of facilities.

Proposed revisions to Board Policy 803 were discussed with the Finance, Facilities and Technology Committee at their meeting on January 6, 2021 as well as the Board of Trustees at the January 25, 2021 meeting.

TEXT OF PROPOSED RESOLUTION:
That the Finance, Facilities and Technology Committee approves the following resolution to be forwarded to the Board of Trustee approval at the March 22, 2021 Board meeting:

> That the Board of Trustees accepts the recommendation of the Finance, Facilities and Technology Committee and approves the proposed changes to Board of Trustees Policy 803 *Naming of Physical Facilities*, as presented.

2/23/2021

UNIVERSITY OF MAINE SYSTEM

Policy Manual

DRAFT REVISED POLICY

FACILITIES
Section 803 Naming and Renaming of Physical Facilities
Effective: 04/10/70
Last Revised: 03/18/02; 05/17/99; this draft 12/7/20
Responsible Office: Facilities

Policy Statement:

1. **Definition.** The term "physical facility" is defined as a building or assembly of buildings enclosing or defining an occupiable space or activity area. For the purposes of this Policy, this definition includes major additions and renovated structures, but does not include interior spaces within buildings, such as lobbies, auditoria, dining and function rooms, classrooms, and offices, exterior campus spaces such as fields, terraces, greens, courtyards, gardens, or athletic fields, or physical objects such as fixtures and equipment. Naming opportunities may include new facilities that are to be constructed or acquired, existing facilities that are undergoing major or minor renovations, or existing facilities that are not undergoing renovations.

2. **Authority.** The authority for naming any physical facility in the University of Maine System shall be reserved to the Board of Trustees, acting after receiving the proposal from the Chancellor at the recommendation of a University President or Dean of the Law School. Donors, honorees, or benefactors should be informed through any naming discussions that final naming approval for all University facilities rests with the Board of Trustees. Naming of any other campus area or object rests with the President of that University.

3. **Commemorative Naming Criteria.** A building name is a symbolic and public statement, reflecting the highest values and ideals of the University and its community. Generally, facilities are named for distinguished individuals who have made extraordinary contributions of a scholarly, professional, or public service nature related to the university's mission. In some cases, buildings may be named for benefactors or donors who advance the university's mission through significant philanthropy. While facilities may be informally assigned a working or administrative name at the campus level, the Board of Trustees shall formally assign commemorative names, which fall into two categories: honorific or memorial naming and benefactor naming.
    a. Honorific or memorial naming: Facilities may be named to honor someone, living or dead, who embodies the university's ideals and reputation through distinguished accomplishments that advance the university and/or the public good. Serving Trustees, current elected officials, and current UMS employees are not eligible for a naming opportunity except in extraordinary circumstances.

b. Benefactor naming: A donor may be recognized when a person, organization or corporation has provided substantial funding for a facility or other entity as defined below. Each University may offer such opportunities to acknowledge donors' roles in advancing its mission and so that as an institution the university can express its deep appreciation in a concrete manner. Naming opportunities are not transactional in nature; they are not offered "for sale." The university president will advise what is considered "substantial funding" based on the project and the naming opportunities. Consideration shall be given to the visibility and use of the space, current market, donor interest, and campus and peer institution comparables. Criteria shall include:
    i. New Construction (which may include maintenance endowments): Gift amounts shall provide a substantial portion of the project's total cost.
    ii. Existing Facilities: The gift(s) shall provide a substantial amount of funding for maintenance, repairs, and/or enhancement or renovation of a facility or space.

4. **Morals Clause**. The University of Maine System depends on public goodwill to accomplish its educational mission and to attract governmental and philanthropic support. As naming a facility is a public honor that implicitly associates the values, character and reputation of the honoree with the University of Maine System, it must be undertaken with well-considered judgment. Therefore, all gift agreements for naming physical facilities shall, without exception, include a morals clause. Should the UMS Board of Trustees find that a designed name brings discredit upon the university (as explained in items 7 and 8 below), the moral clause should state that the unusual circumstances leading to renaming shall not impose financial responsibilities on the UMS or the individual campus.

5. **Naming Process.** Recommendations to the Trustees for names of physical facilities shall be made by the Chancellor, after receiving a recommendation from the President of a University or Dean of the Law School, after consultation with such campus committees as may be established for this purpose. Before forwarding a name to the Board for consideration, the university shall undertake a thorough degree of due diligence to avoid potential areas of concern or conflicts of interest.

   A commitment to name a facility associated with a gift shall not be executed – e.g., building signage not installed – until and unless the University has received an executed gift agreement and 50% of pledge payments towards the total gift commitment have been received.

   The Chancellor may recommend exceptions to any of these guidelines under unusual circumstances for authorization by the Board of Trustees.

6. **Duration of Naming.** Naming for an honoree or a donor is generally granted for the useful life of the entity. The University may deem the naming period concluded in certain circumstances, including but not limited to:
    a. If the purpose for which the named entity is or needs to be significantly altered, is no longer needed/ceases to exist.
    b. If a physical entity is replaced, significantly renovated or no longer habitable.
    c. The period of time of the naming specified in the gift agreement has expired.

The appropriate University representative will make all reasonable efforts to inform in advance the original donors or honorees when the naming period is deemed concluded. The University may provide alternate recognition as may be appropriate in honor of the original gift.

7. **Removal of Naming.** The Board of Trustees reserves the right to remove a name from a facility under extraordinary circumstances when the continued use of the honoree's name would compromise the public trust and reflect adversely upon the university and/or University of Maine System and its reputation.

   Additionally, in the case of a naming associated with a gift, the Board of Trustees reserves the right to remove a name from a facility if the donor fails to fulfill the terms of the gift that is recognized by a naming. The appropriate University representative will make all reasonable efforts to inform in advance the original donors or honorees when the naming period is deemed concluded. The University may provide alternate recognition as appropriate in honor of the original gift.

8. **Name Removal Process.** The removal of a name from a facility must not be undertaken lightly, and it must be approached with respect for the considered judgments of the past, especially when exercised by the contemporaries of an honoree, and with an awareness of the fallibility of our own judgments. Consideration of renaming must include, at a minimum, the following:
   a. Proposals for removal of names from physical facilities shall be brought to the Board of Trustees by the Chancellor at the discretion of a campus President or Law School Dean after a campus-level review process, including soliciting perspectives from diverse stakeholders and public comment, has completed and identified the grounds for removal. The review team or task force shall present their findings and recommendation in a formal, written report to the respective President or Law School Dean.
   b. Before the Board of Trustees considers the issue, the name change or removal of the name shall be reviewed by the Chancellor and President's Council. After review by the Chancellor and President's Council, the Chancellor may forward the request to the appropriate Board Committee.
   c. If approved by the Board Committee, the recommendation will be presented to the full Board of Trustees for consideration.
   d. Upon the removal of a name, the name of the facility may revert to the name immediately previous. If there is no previous permanent name, an administrative name shall be adopted. The process for an initial naming shall be utilized if the facility is subsequently renamed.

UNIVERSITY OF MAINE SYSTEM

Policy Manual

FACILITIES
Section 803 Naming of Physical Facilities

Effective: 04/10/70
Last Revised: 03/18/02; 05/17/99
Responsible Office: Facilities

Policy Statement:

1. A physical facility is a structure or assembly of structures enclosing or defining an occupiable space or activity area. For the purposes of this Policy, this definition includes major additions and renovated structures, but does not include individual rooms within buildings, outside areas such as gardens or athletic fields, or physical objects such as fixtures and equipment.

2. The naming of any physical facility in the University of Maine System is reserved to the Board of Trustees. Naming of any other campus area or object is reserved to the President of that University.

3. Facilities may be named for any individual, living or dead, except for current employees or current members of the Board of Trustees. Other acceptable names include, but are not limited to, geographical designations, functions, or University groups.

4. Facilities may be named for, or on the recommendation of, a major contributor to the cost of the facility. A contribution equivalent to at least 25% of the project cost is suggested for a naming gift for a physical facility.

5. Naming gifts may also be made when a donor establishes an endowment whose income is adequate to provide at least 75% of expected annual operating costs (utilities, custodial and maintenance).

6. Recommendations to the Chancellor and Trustees for names of physical facilities shall be made by the President of a University after consultation with such committees as may be established for this purpose. The Chancellor may recommend exceptions to any of these guidelines under unusual circumstances.