UMASS LOWELL

FISCAL YEAR 2019 – 2013 CAPITAL PLAN SEPTEMBER 2018

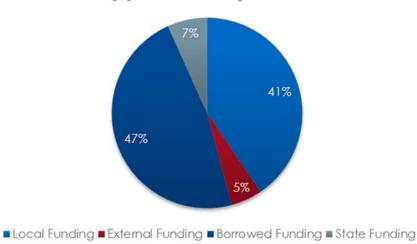




LOWELL CAMPUS

	Prelim Campus Estimate First Vote			Full Project Approval Second Vote				
	#		\$	#	\$			
	1	\$	18.500.000	5	\$ 151.400.000			

UML Approved Project Sources





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Campus Introduction and Overview of Campus Capital Plan

This document provides an update to the most recent Capital Plan for UMass Lowell for approval by the Board of Trustees for FY2019-FY2023. It reflects the priorities outlined in the UMass Lowell 2020 Strategic Plan within a constrained fiscal environment. UMass Lowell's success in executing its Capital Plan will reinforce its growing national and international recognition as a world-class institution.

The plan includes one new capital project that exceeds the \$10 million threshold for Board of Trustee approval and two additional new capital projects estimated to cost between \$2 million and \$10 million. These projects total \$23.6 million. In addition, the plan includes eight other capital projects which were approved under the FY2017-FY2021 Capital Plan, totaling \$144.2 million, whose implementation continues during this new capital planning cycle. All campus projects costing more than \$2 million have been entered into the system database and are regularly reviewed as part of the quarterly capital plan update.

The funded projects included in the FY2019-FY2023 capital plan are affordable within the FY2019-FY2023 multi-year financial plan. The new projects utilize state and campus contributions to the campus's critical repairs program to address deferred maintenance and do not require additional borrowing. Planned borrowing for previously-approved ongoing projects will not push the campus over the 8% debt ratio policy cap and the capital expenditures funded from campus operating funds and accumulated reserves also fit within the operating margin targets included in the multi-year plan which will be updated for Board of Trustee review in November.

Anticipated capital expenditures will directly address academic, research, student life, recreational and infrastructure needs. All of the new projects and the vast majority of the ongoing major projects included in this capital plan will help reduce the substantial deferred maintenance backlog on campus. UMass Lowell employs a thorough process to document and track deferred maintenance in all campus facilities, with every building studied in detail at least once every three years.

The Lowell campus consists of 3 major locations: North, South and East. The campus's master planning emphasizes concentrating academic functions on the North and South campuses, reinforcing the identity of East Campus as a hub for student life and residence halls, and decanting administrative functions that do not directly engage students to the edges of campus. Each of the campuses is densely developed and directly adjacent to well-established residential and commercial neighborhoods.

Rolling campus planning initiatives conducted in partnership with the University of Massachusetts Building Authority and DCAMM have guided a capital strategy to provide the facilities necessary to support the four major transformative trends that the campus has experienced over the past decade: dramatic enrollment growth, evolution from a predominantly commuter environment to a highly residential campus, significant expansion of its research portfolio, and the conversion of its athletics programs to NCAA division one. While these transformations have largely been achieved, campus planning has also identified the investments necessary to sustain and support continued positive changes in these and other areas, consistent with the campus's strategic vision.

Total enrollment grew by more than 57% between Fall 2007 and Fall 2017 and is projected to grow at a more modest 1.5% to 2.0% per year through Fall 2022. This growth *has not* come at the expense of

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selectivity, quality or diversity. Measures of student retention, graduation rates, Honors College enrollments, and diversity among students, faculty, and staff are among the many indicators continue to trend upward, in some cases dramatically.

University research & development funding increased by 75% during the same period. With the anticipated continuation of this trend, the campus is placing particular emphasis on addressing the infrastructure and programmatic needs of its laboratory buildings in both its deferred maintenance and capital programs.

Planning Needs & Priorities

Campus Planning and Capital Construction:

A rolling process of coordinated plans for facilities renewal and space reassignment has yielded a capital program that has supported the campus's transformation.

Over the past decade, North Campus academic growth has been reinforced by the opening of the Pulichino Tong Building as the new home to the Manning School of Business and the Saab Emerging Technology and Innovation Center, the September re-opening of Dandeneau Hall as the fully-renovated home for Computer Science and Mechanical Engineering, the comprehensive renovation of Perry Hall as a center for interdisciplinary Engineering research (to be completed in late Fall 2018), and the upcoming renovation of portions of Olsen Hall to support instruction, research, and academic offices. South Campus academic expansion has been aided by the opening of the Health and Social Sciences building, the ongoing renovation of Coburn Hall (re-opening in January 2020), and the transformation of O'Leary Library into a state-of-the-art learning commons. These major capital projects enable a sequence of carefully planned "domino" space renewal and reassignment projects on each campus that will be implemented over the next several years.

Signs of transformation have been particularly visible with the expansion of the campus's residential and student life facilities. More than 2500 beds have been added since the Fall of 2013 with the opening of University Suites, two phases of Riverview Suites, and Riverhawk Village, as well as comprehensive renovations of the Inn and Conference Center, Bourgeois Hall, and Leitch Hall, the addition of Fox Hall elevators, and several smaller projects. Student life has been greatly enhanced by the University Crossing student center, new dining facilities on all three campuses, Aiken Street recreation fields, and the landscaped South Campus Mall. Plans for the progressive renewal of the remaining older residential and student life facilities will continue to be implemented in the coming years, financed largely by the additional revenue from the expanded on-campus housing program, with a particular emphasis on deferred maintenance, energy efficiency improvement, and compliance with ADA/MAAB and other code requirements.

The capital program continues to be informed by thoughtful planning to identify and prioritize the projects necessary to continue to achieve the academic and strategic objectives of the campus, within an increasingly constrained fiscal environment. Ongoing planning efforts range from regular periodic updates to plans for each of UMass Lowell's campuses, to constant space assignment modeling, to topical program planning for campus initiatives, to building and project-specific development planning.

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Projects Identified:

These efforts have identified project priorities detailed in this capital plan. The highest priority projects are the funded capital projects, most of which are already underway in construction or design. Second highest priorities are the proposed projects addressing academic needs on the campus, subject to the availability of funding. These are followed by residence life and student affairs initiatives and athletics projects. Nearly all of these projects carry significant deferred maintenance components.

Eight funded projects continue from prior approved capital plans. Three new funded projects are included. These are the largest investments contemplated as part of the campus's five-year Critical Repairs Plan that has been submitted in response to the Commonwealth's new approach to supporting deferred maintenance investment in higher education facilities. UMass Lowell's Critical Repairs plan includes \$46.8 million in projects over five years funded with a combination of state and campus resources. Only the three projects listed exceed the \$2 million approval threshold. The first is an \$18.5 million investment in the infrastructure serving Olsen Hall, UMass Lowell's 1974 Life Sciences teaching and research building, against a deferred maintenance backlog of over \$32 million. The second is the replacement of a key component of the electrical infrastructure serving South Campus and the third is the resurfacing of the severely deteriorated athletic running track.

Aspirational priorities subject to the availability of funding exist with significant need to modernize the campus's instructional and research labs as well as the building infrastructure serving those facilities.

Deferred Maintenance

In April 2018, Sightlines reported a \$917 million deferred maintenance backlog in UMass Lowell facilities, including infrastructure. This represents a net reduction of the total deferred maintenance need on the campus due to the completion and removal of projects which addressed \$83.4 million, while cost escalation and emergent projects only added \$76.3 million to the backlog. Unfortunately, two-thirds of the total backlog is critical now or will require remedy within the 1-3 year time horizon.

This "Asset Reinvestment Backlog" includes projects that represent the most critical deferred maintenance needs; life cycle projects for systems that will be coming due in the next decade across 6 major systems (Exteriors, Roof, Interior, HVAC, Plumbing, Electrical), additional building needs including modernization and safety/code, as well as needs outside of the buildings such as grounds and utility distribution infrastructure.

The campus has incorporated these needs into the capital plan, and is addressing them through a variety of means and funding sources. The larger projects proposed in this capital plan will all incorporate some deferred maintenance reductions, and several are primarily or exclusively investments in building systems and infrastructure. The projects in Perry, Dandeneau, Coburn, and Olsen Halls will all virtually eliminate or dramatically reduce the deferred maintenance backlogs in these buildings. Many of the contingent projects listed would also substantially address deferred maintenance should funding be identified to implement them.

Consistent with the new procedures promulgated by the Commonwealth, UMass Lowell has developed a five-year, \$46.8 million Critical Repairs Plan, which includes a local match of nearly \$30 million solely

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focused on reducing the deferred maintenance backlog. This plan incorporates investments in 18 different campus buildings as well as infrastructure serving both the North and South Campuses.

In addition to the program defined in the Critical Repairs Plan, UMass Lowell anticipates continuing to make targeted investments to reduce deferred maintenance in Residence Life buildings using campus resources. Energy efficiency projects funded through energy rebates programs as well as annual operational investments in Facilities services will also support the continued focus on both catching up and keeping up with maintenance needs.

Affordability

This capital plan depends on funding from the state, private donors, granting agencies and debt supported by user fees, student charges and campus operating funds. The overall five-year plan is aggressive even as a substantial amount of need remains contingent on future funding. The absence of significant state investment in major capital projects forces the campus to utilize all other available sources to the maximum amount feasible.

Nevertheless, as previously noted, the projects included in the FY2019-FY2023 capital plan are affordable within the FY2019-FY2023 multi-year financial plan. New borrowing will not push the campus over the 8% debt ratio policy cap and the capital expenditures funded from campus operating funds and accumulated reserves also fit within the operating margin and primary reserve ratio targets included in the multi-year plan.

State Funds

The state is a critical partner in the success of this capital plan and by extension the realization of the university's strategic goal to achieve national and international recognition as a world-class institution. Unfortunately, the state has not made any funding available to UMass Lowell for major capital projects. The campus has therefore adjusted its financial and capital plans, recognizing that previously committed state funds are no longer available.

This plan has been developed without including any new state funding other than for Critical Repairs discussed above. It does not include resources committed in previous state capital plans which included \$36 million for Perry Hall and \$40 million for Olsen Hall as part of the Science & Engineering renewal and renovation program, \$19 million for the Coburn Hall Renewal and Addition project, and \$30 million for the Tsongas Center Extension. The University, however, has moved forward to self-fund the critical Perry Hall, Olsen Hall and Coburn Hall projects. The Tsongas Center project is still a priority for the campus but as yet remains unfunded. The Lowell Campus is exploring a potential multi-partner P3 alternative as a solution to the athletics and recreation needs which a portion of state funding was intended to address.

Many of the projects listed as contingent on funding, including the urgent need to address the campus's instructional and research laboratory facilities, are dependent on a new infusion of state resources from future Higher Education Bond Bill(s).

This plan does reflect the commitment of \$17.2 million in state Critical Repairs funding to address deferred maintenance over five years as discussed above.



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Campus Debt

The capital plan includes \$80.6 million of projects funded with debt; \$26.9 million of which has already been borrowed (as of June 30, 2018) for the previously state funded Perry Hall, Olsen Hall, and Coburn Hall renovation projects. The campus previously had a relatively low debt to operations ratio of 6.3% in FY14. Despite this borrowing it is expected that UMass Lowell's debt ratio will remain just below the 8% policy threshold. However, the borrowing program does require a significant annual operating budget commitment to debt service, resulting in the reallocation of campus resources.

Campus Funds and Other Funding Sources

The campus is committing considerable annual operating funds and accumulated capital reserves towards the capital plan. More than \$45.8 million will be spent between FY2019 and FY2023 on the capital plan. The campus fully funds depreciation as part of its annual budgeting and multi-year financial planning processes. By doing so we generate sufficient cash flow and reserves to spend on this capital plan.

In addition, the campus will use \$15 million from a combination of private gifts, funding from our dining services vendor, savings from the campus utility budget and the system's equipment loan pool to fund other priority projects.



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Project Name	Project Cost		
Critical Repair - Olsen Strategic Renovations, Repairs and Replacements	\$18,500,000		
Science & Engineering Master Plan-Olsen Renovations 1	\$10,000,000		
Coburn Hall Renewal and Addition	\$47,000,000		
AEP	\$28,500,000		
Science & Engineering Master Plan-Perry Hall, Engineering, Renewal	\$50,000,000		
Pasteur Second, Third, and Fourth Floors – Comprehensive Renovation	\$15,900,000		

FY19-FY23 Capital Plan Project List

August 28, 2018

			Funding Sources					
		Estimated						
							0.1	Contingent
Project	Priority	TPC	CP/Bond	Gifts	UML	State	Other	on Funding
Current Capital Plan Projects								
Perry Hall Renovation	1	\$50.0	\$25.0	\$9.0	\$12.0		\$4.0	
Dandeneau (Pasteur) Floors 2-4	2	\$17.0			\$17.0			
Coburn Hall Renovation & Addition	3	\$47.0	\$45.7	\$1.0		\$0.4		
Olsen Hall Second & Third Floors	4	\$10.0	\$10.0					
Aiken Recreation Fields	5	\$5.5			\$5.5			
Cumnock Marketplace	6	\$5.0		\$5.0	·			
Wannalancit Projects (Floor 5 & Stair)	7	\$4.0		,	\$3.6	\$0.5		
Acquisitions	8	\$7.7			\$7.7	70.0		
Subtotal		\$146.2	\$80.7	\$15.0	\$45.8	\$0.8	\$4.0	\$0.0
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Critical Repairs Projects >\$2M								
Olsen Critical Repairs Investments	9	\$18.5			\$12.4	\$6.1		
South Campus Substation Switchgear Replacement	10	\$3.1			\$1.4	\$1.7		
North Campus Track Resurfacing	11	\$2.0			\$1.3	\$0.7		
Subtotal		\$23.6	\$0.0	\$0.0	\$15.1	\$8.5	\$0.0	\$0.0
Capital Projects Subject to Funding Availability								
Neuroimaging Initiative	12	\$27.0						\$27.0
Modernization & Improvement of North Campus Lab Facility Capacity	13	\$250.0						\$250.0
Tsongas Center Area Recreation and Athletics Complex (P3)	13 14	\$50.0						\$50.0
Weed Hall Renewal	15	\$70.0						\$70.0 \$70.0
Falmouth - Advanced Manufacturing Renovation/Makerspace Expansion	16	\$6.0						\$6.0
Residential Hall Comprehensive Renewal Program - Future Phases	10 17	\$53.0						\$53.0
Costello Gym D1 Facilities Improvements	18	\$11.0						\$11.0
O'Leary Renewal	19	\$22.0						\$22.0
South Campus Master Plan - Initial Space & Mall Improvements - Phase 1	20	\$20.0						\$20.0
Durgin Hall Renewal & Addition	21	\$65.0						\$65.0
Subtotal		\$574.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$574.0