



UNIVERSITY OF MASSACHUSETTS LOWELL

NECHE Comprehensive Self-Study

Submitted to the New England Commission of Higher Education

SEPTEMBER 2023



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Institutional Characteristics Form

This form is to be completed and placed at the beginning of the self-study report:

Date : September 12, 2023

1. Corporate name of institution: University of Massachusetts Lowell
2. Date institution was chartered or authorized: 1894
3. Date institution enrolled first students in degree programs: 1912
4. Date institution awarded first degrees: 1912 (Lowell Textile) 1935 (Lowell Normal School)
5. Type of control:

Public	Private
<input checked="" type="checkbox"/> State	Independent, not-for-profit
City	Religious Group (Name of Church)
Other: (Specify)	Proprietary
	Other: (Specify)
6. By what agency is the institution legally authorized to provide a program of education beyond high school, and what degrees is it authorized to grant?

Massachusetts Department of Higher Education; Associate, Bachelors, Masters, and Doctoral degrees
7. Level of postsecondary offering (check all that apply)

<input checked="" type="checkbox"/> Less than one year of work	<input checked="" type="checkbox"/> First professional degree
<input checked="" type="checkbox"/> At least one but less than two years	<input checked="" type="checkbox"/> Master's and/or work beyond the first professional degree
<input checked="" type="checkbox"/> Diploma or certificate programs of at least two but less than four years	<input checked="" type="checkbox"/> Work beyond the master's level but not at the doctoral level (e.g., Specialist in Education)
<input checked="" type="checkbox"/> Associate degree granting program of at least two years	<input checked="" type="checkbox"/> A doctor of philosophy or equivalent degree
<input checked="" type="checkbox"/> Four- or five-year baccalaureate degree granting program	<input checked="" type="checkbox"/> Other doctoral programs: DNP, DPT Ed.D. Other (Specify)
8. Type of undergraduate programs (check all that apply)

Occupational training at the crafts/clerical level (certificate or diploma)	<input checked="" type="checkbox"/> Liberal arts and general
<input checked="" type="checkbox"/> Occupational training at the technical or semi-professional level (degree)	<input checked="" type="checkbox"/> Teacher preparatory
Two-year programs designed for full transfer to a baccalaureate degree	<input checked="" type="checkbox"/> Professional Other _____

9. The calendar system at the institution is:
 Semester Quarter Trimester (Education degrees only) Other

10. What constitutes the credit hour load for a full-time equivalent (FTE) student each semester?

- a) Undergraduate 12 credit hours
- b) Graduate 9 credit hours
- c) Professional (N/A)

11. Student population: **FALL 2022**

a) Degree-seeking students:

	Undergraduate	Graduate	Total
Full-time student headcount	9,623	1,728	11,351
Part-time student headcount	2,364	3,040	5,404
FTE	10,379	3,304	13,683

b) Number of students (headcount) in non-credit, short-term courses: ____580 (non-degree)____

12. List all programs accredited by a nationally recognized, specialized accrediting agency.

Program	Agency	Accredited Since	Last Reviewed	Next Review
Art(BFA)	National Association of Schools of Art and Design (NASAD)	1989	2017	2025-2026
Education – Teacher Preparation Programs Elementary Education & Moderate Disabilities (BA) Curriculum & Instruction – Initial Licensure (MED) Reading & Language (MED, EDS) Education Administration, K-12 (MED)	Massachusetts Department of Elementary & Secondary Education (DESE)	2017	2017	2024-2025
Music Graduate and Undergraduate Programs in Performance Music Sound Recording Technology (BM) Music Business (BM) Composition for New Media (BM)	National Association of Schools of Music (NASM)	1972	2016	2023-2024
Chemical, Civil, Computer, Electrical, Mechanical and Plastics Engineering (BSE)	Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET)	Civil – 1969 Computer – 2005 Mechanical – 1962 Chemical -1971 Nuclear – 1999 Plastics – 1978 Electrical - 1962	2019	2024-2025
Electronic Engineering Tech (BET) Mechanical Engineering Tech (BET)	Engineering Technology Accreditation Commission (ETAC) of the Accreditation Board for Engineering and Technology (ABET)	1978	2021	2026-2027
Physics and Applied Physics, Radiological Sciences- Medical Physics (PhD) Medical Physics (MS)	Commission for Accreditation of Medical Physics Educational Programs (CAMPEP)	2012	2018	2023-2024
Radiological Sciences and Protection (MS) Physics and Applied Physics, Radiological Health Physics (BS)	Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET)	2009	2017	2023-2024
Manning School of Business - all programs	Association to Advance Collegiate Schools of Business, International (AACSB)	1987	2019	2023-2024
Applied Biomedical Sciences – Medical Laboratory Science (BS)	National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)	1978	2017	2026-2027
Nutritional Science – Dietetics (BS) Public Health – Dietetics (MPH) (Coordinated Program)	Accreditation Council for Education in Nutrition and Dietetics (ACEND)	2019	2019	2028-2029
Health Informatics & Management (MS)	Commission on Accreditation for Health Informatics and Information Management (CAHIIM)	2023	2023	2030-2031
Nursing (DNP)	Commission on Collegiate Nursing Education (CCNE)	2016	2021	2030-2031
Nursing (MS) Nursing (BS)	Commission on Collegiate Nursing Education (CCNE)	1974	2016	2025-2026
Physical Therapy (DPT)	Commission on Accreditation of Physical Therapy Education (CAPTE)	1981	2021	2030-2031
Public Health (MPH)	Council of Education for Public Health (CEPH)	Current candidate	2023	Spring 2023

13. Off-campus Locations. List all instructional locations other than the main campus. For each site, indicate whether the location offers full-degree programs or 50% or more of one or more degree programs. Record the full-time equivalent enrollment (FTE) for the most recent year. Add more rows as needed.

	Full degree	50%-99%	FTE
A. In-state Locations			
Harbor Place Campus, Haverhill		X	Fall 2022 = 6

B. Out-of-state Locations			
N/A			

14. International Locations: For each overseas instructional location, indicate the name of the program, the location, and the headcount of students enrolled for the most recent year. An overseas instructional location is defined as “any overseas location of an institution, other than the main campus, at which the institution matriculates students to whom it offers any portion of a degree program or offers on-site instruction or instructional support for students enrolled in a predominantly or totally on-line program.” **Do not include study abroad locations.**

Name of program(s)	Location	Headcount
N/A		

15. Degrees and certificates offered 50% or more electronically: For each degree or Title IV-eligible certificate, indicate the level (certificate, associate's, baccalaureate, master's, professional, doctoral), the percentage of credits that may be completed on-line, and the FTE of matriculated students for the most recent year. Enter more rows as needed.

Name	Degree Level	Delivery	FTE
Appld Behavior Analysis	GR Certificate	0	24.3
Accounting	Master	CMO	32.3
Accounting	UG Certificate	CMO	7.4
Business Administration	Associate	0	7.4
Business Administration	Bachelor	CMO	183.7
Business Analytics	Master	CMO	60.3
Business Analytics	GR Certificate	CMO	5
Curriculum & Instruction	Master	MO	54
Criminal Justice	Bachelor	CMO	107.7
Criminal Justice	Master	CO	144.3
Clinical Pathology	GR Certificate	CO	4.7
Contemp Communications	UG Certificate	CMO	0.8
Data/Telecom.	UG Certificate	0	0.2
Digital Engineering	GR Certificate	0	3.3
Digital Marketing	UG Certificate	0	1.2
Design & Manufacturing	GR Certificate	CO	0.3
Domestic Vio Prevent	GR Certificate	CO	0.3
Education Administration	Master	0	19.8
Educ Admin Plan & Pol	Ed. Specialist	MO	5
Engineering Innovation	GR Certificate	0	6
Engineering Management	Master	CO	67.4
English	Bachelor	0	62.3
Electronic Tech.	UG Certificate	MO	0.2
Evaluation & Assessment	GR Certificate	0	2
Finance	Master	CMO	38.4
Information Technology	UG Certificate	MO	1.2
Forensic Criminology	GR Certificate	CO	8.7
Graphic Des/Digital Im	UG Certificate	0	13.2
Health Informatics	GR Certificate	0	6.3
Health Information Mgmt	Master	0	28.7
Health Service Managmnt	GR Certificate	0	2
Innovation&Entreprenshp	GR Certificate	MO	0.8
Information Technology	Associate	CMO	16
Information Technology	Bachelor	CMO	232.3
Information Technology	Master	0	48.4
JAVA Development	UG Certificate	0	1.4
Liberal Arts	Bachelor	MO	79.1
Leadership in Schooling	Doctorate	MO	58.4
Leadership & Management	GR Certificate	0	0.7
Management	Associate	0	0.6

Business Administration	Master	CMO	852.4
Foundations of Business	GR Certificate	CMO	21.8
Multimedia	UG Certificate	O	0.2
Cyber Security	GR Certificate	O	2
Networking and Security	UG Certificate	O	0.4
Public Admin & Leadrshp	GR Certificate	O	1.7
Public Health	Master	CO	118.3
Paralegal Studies	UG Certificate	CMO	20.4
Plastics Eng Fund	GR Certificate	CO	3
Psychology	Bachelor	CMO	170.2
Renewable Energy Eng	GR Certificate	CO	1.3
Reading & Language	Ed. Specialist	MO	7.7
Reading & Language	Master	MO	17
Sec Mgmt/Homeland Sec	UG Certificate	CMO	0.4
Security Studies (MA)	Master	CO	36
Security Studies (MS)	Master	CO	30
Security Studies	GR Certificate	CO	3
Urban Education	GR Certificate	O	0.7
Unix/Linux Oper Sys	UG Certificate	O	1.6
Victim Studies	GR Certificate	CO	2
Web Design & Develop	UG Certificate	O	5.6

16. Instruction offered through contractual relationships: For each contractual relationship through which instruction is offered for a Title IV-eligible degree or certificate, indicate the name of the contractor, the location of instruction, the program name, and degree or certificate, and the number of credits that may be completed through the contractual relationship. Enter more rows as needed.

Name of contractor	Location	Name of program	Degree or certificate	# of credits
N/A				

17. List by name and title the chief administrative officers of the institution. (Use the table on the following page.)
18. Supply a table of organization for the institution. While the organization of any institution will depend on its purpose, size and scope of operation, institutional organization usually includes four areas. Although every institution may not have a major administrative division for these areas, the following outline may be helpful in charting and describing the overall administrative organization:
- Organization of academic affairs, showing a line of responsibility to president for each department, school division, library, admissions office, and other units assigned to this area;
 - Organization of student affairs, including health services, student government, intercollegiate activities, and other units assigned to this area;
 - Organization of finances and business management, including plant operations and maintenance, non-academic personnel administration, IT, auxiliary enterprises, and other units assigned to this area;
 - Organization of institutional advancement, including fund development, public relations, alumni office and other units assigned to this area.
19. Record briefly the central elements in the history of the institution:
- 1894 Lowell State College established
 - 1895 Lowell Technological Institute established
 - 1975 University of Lowell established by merger of two precedent institutions
 - 1991 University of Massachusetts Lowell enters the UMass five-campus system

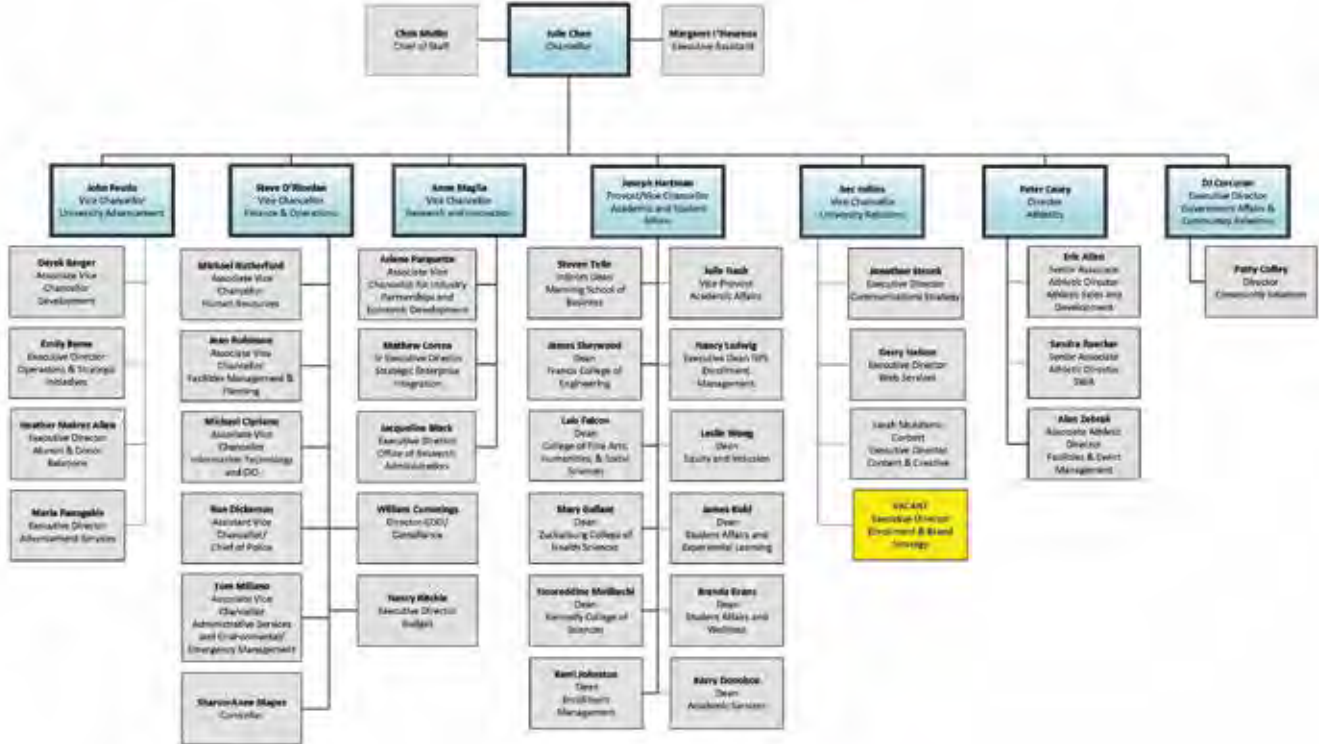
CHIEF INSTITUTIONAL OFFICERS

Function or Office	Name	Exact Title	Year of Appointment
Chair Board of Trustees	Stephen Karam	Chairman	2022
President/CEO (Chancellor)	Julie Chen	Chancellor	2022
Executive Vice President	N/A		
Chief Academic Officer	Joseph Hartman	Provost and Vice Chancellor for Academic and Student Affairs	2019
Deans of Schools and Colleges (insert rows as needed)	Luis Falcón	Dean, College of Fine Arts, Humanities, & Social Sciences	2012
	James Sherwood	Dean, Francis College of Engineering	2020
	Noureddine Melikechi	Dean, Kennedy College of Sciences	2016
	Steven Tello	Interim Dean, Manning School of Business	2023
	Bertie Greer	Incoming Dean, Manning School of Business	Starting Nov. 2023
	Mary Gallant	Dean, Zuckerberg College of Health Sciences	2023
	Jenifer Whitten-Woodring	Dean, Honors College	2022
Chief Financial Officer	Stephen O’Riordan	Vice Chancellor for Finance & Operations	2020
Chief Student Services Officer	Joseph Hartman	Provost and Vice Chancellor for Academic and Student Affairs	2019
Planning (Executive Cabinet Membership)	Julie Chen	Chancellor	2022
	Joseph Hartman	Provost and Vice Chancellor for Academic and Student Affairs	2019
	Stephen O’Riordan	Vice Chancellor for Finance & Operations	2020
	Anne Maglia	Vice Chancellor for Research & Innovation	2022
	John Feudo	Vice Chancellor for Advancement	2014
	bec rollins	Vice Chancellor for University Relations	2023
	Institutional Research	Christine Lewis-Horton	Director of Data Analytics & Institutional Research
Assessment	Julie Nash	Vice Provost for Academic Affairs	2016
	Paula Haines	Sr. Director of Assessment & Accreditation	2014
Development	John Feudo	Vice Chancellor for Advancement	2014
Library	Allison Estell	Dean of the University Library	2021
Chief Information Officer	Michael Cipriano	Associate Vice Chancellor and Chief Information Office	2013
Continuing Education	Nancy Ludwig	Dean of Graduate, Online, & Professional Studies	2018

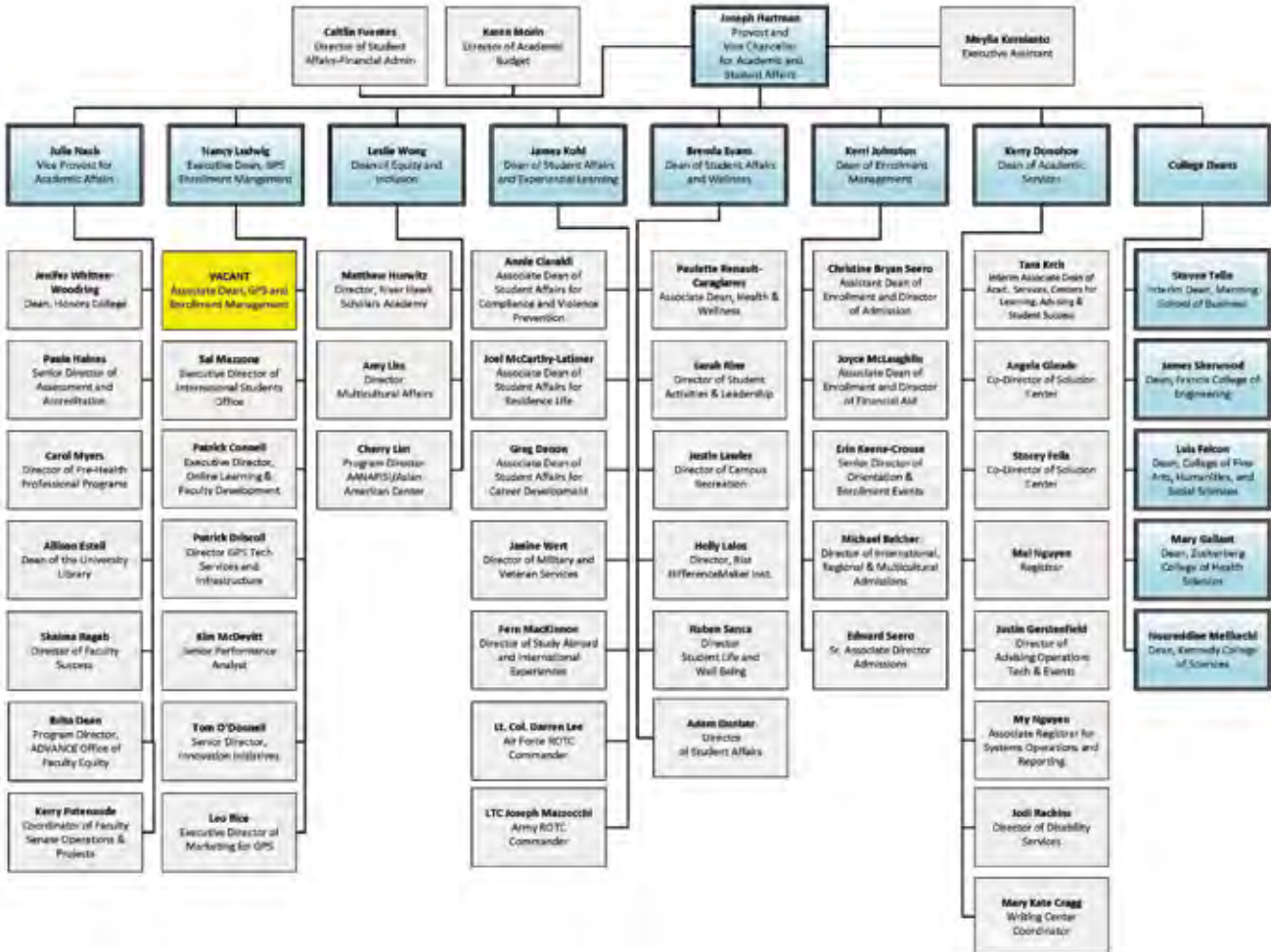
Grants/Research	Anne Maglia	Vice Chancellor for Research & Innovation	2022
Admissions	Kerri Johnston	Dean of Enrollment Management	2019
	Christine Bryan	Assistant Dean of Enrollment & Director of Undergraduate Admissions	2019
	Shahram Haydari	Assistant Dean of Graduate Recruitment & Admissions	2016
Registrar	Mai Nguyen	Registrar	2016
Financial Aid	Joyce McLaughlin	Associate Dean of Enrollment, Financial Aid	2022
Public Relations	bec rollins	Vice Chancellor for University Relations	2023
Alumni Association	Heather Makrez Allen	Executive Director of Alumni and Donor Relations	2017

Organization Charts

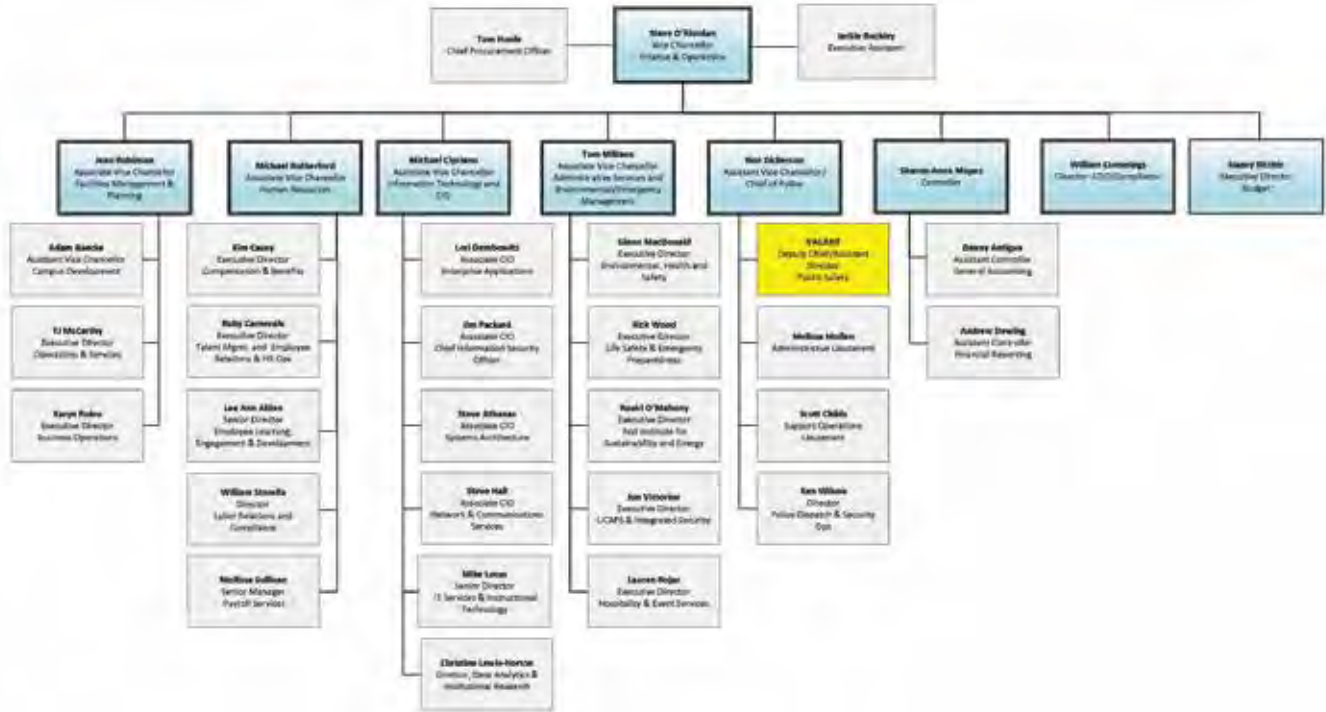
Office of the Chancellor



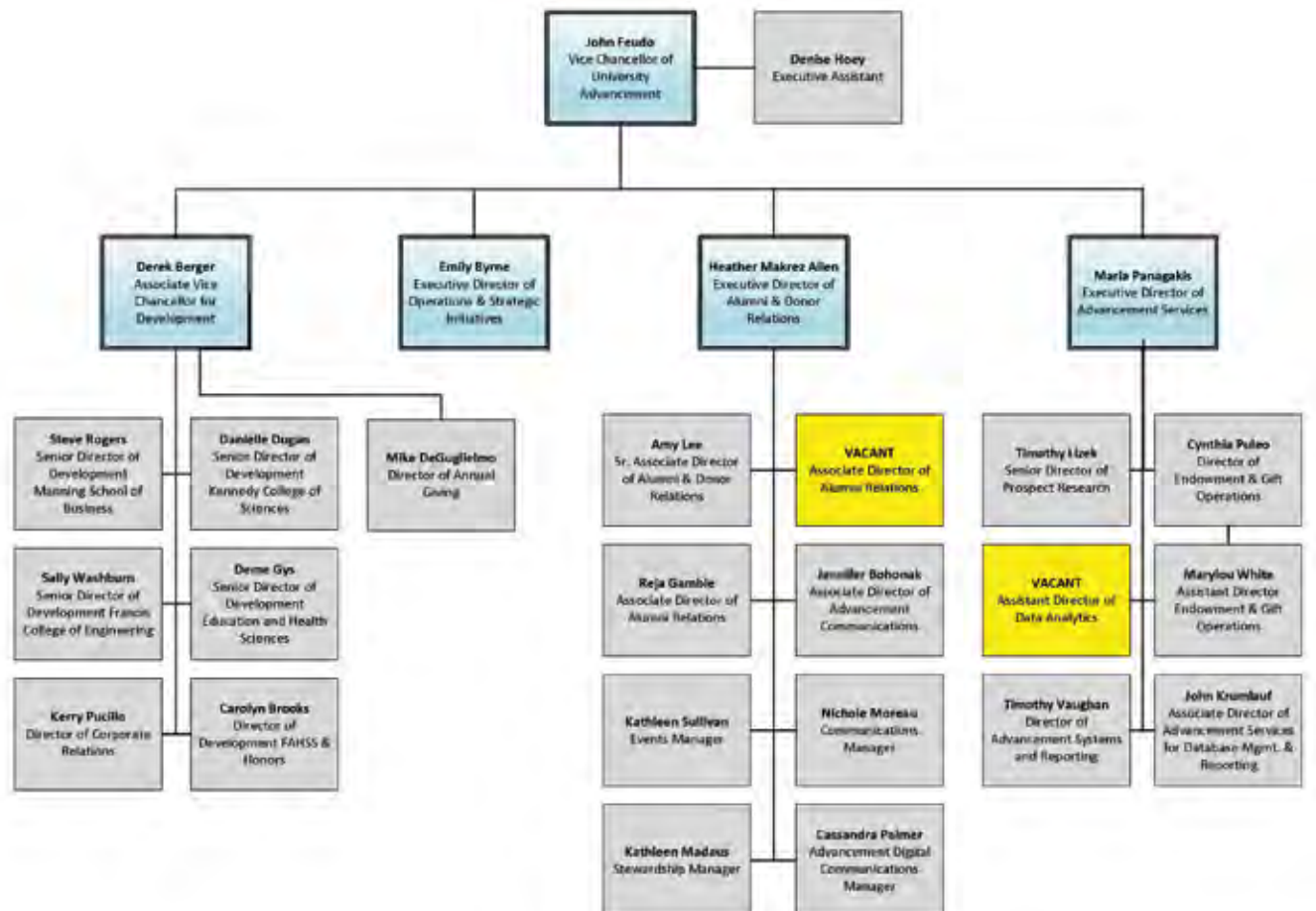
Office of the Provost



Finance Operations



University Advancement



University Relations

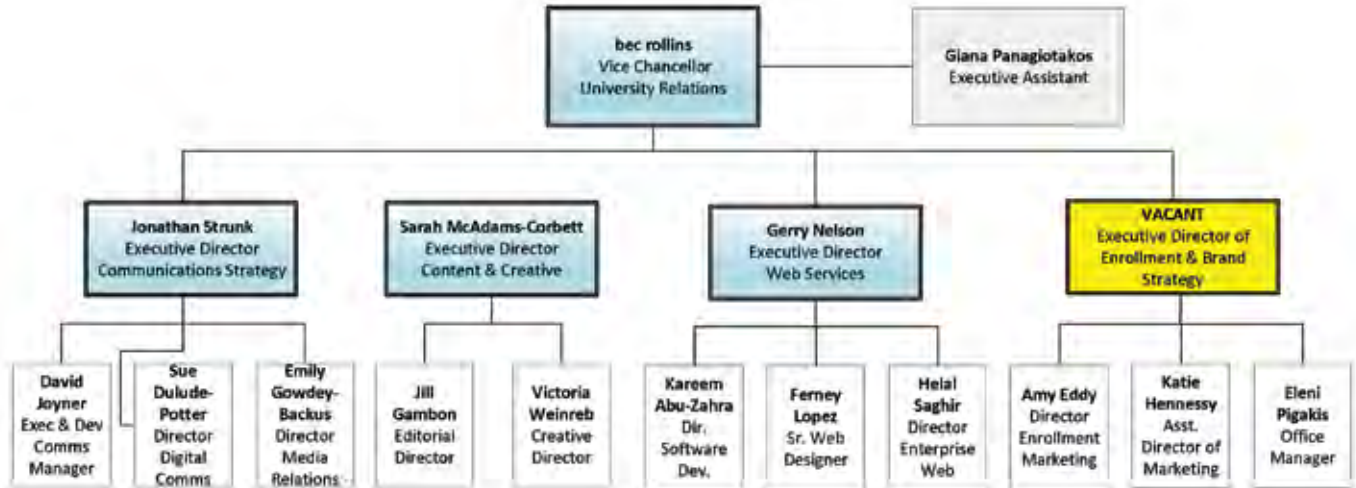


Table of NECHE Actions, Items of Special Attention, or Concerns

Date of Commission Letter	Detailed Actions, Items of Special Attention, or Concerns	NECHE Standards Cited in Letter	Self-Study Page Number
12/05/2018	UML continued in accreditation	n/a	n/a
12/05/2018	Harbor Place additional instructional location accepted and confirmed as included in UML's accreditation	n/a	n/a
12/05/2018	1. Continuing to develop a comprehensive approach to the assessment of student learning, including general education, and using the results to inform program improvement	none	36-40, 105-116
12/05/2018	2. Providing sufficient resources to support and enhance the university's core mathematics curriculum	none	111, 127-130
12/05/2018	3. Strengthening its English language program for international students	4.11	131-132
12/05/2018	4. Achieving the University's goals for gender diversity	4, Statement of the Standard	54-55, 56-58, 62
12/05/2018	5. Effectively managing the growth of its Harbor Place campus in Haverhill, Massachusetts	2.5, 8.1	100, 133-134

Introduction to the Self-Study Process

In January 2019, shortly after we received NECHE's response to our five-year interim report, our vice provost for academic affairs and our senior director of curriculum assessment and accreditation began planning for this comprehensive self-study. We set several goals for the ongoing improvement of our self-study process, including creating smaller working groups, facilitating more interaction among groups, and providing more concrete writing goals to each group. Our lead team, which eventually grew to four members, has been meeting regularly since 2019 to facilitate this campus-wide effort and attending NECHE's workshops and annual meetings to keep our work on target.

We began our outreach and invitation to engage in this process with an announcement to faculty, staff, and students in March 2019, and by July had secured our faculty lead. We had also recruited chairs for each of the five areas of emphasis the commission asked us to address after our interim report. We drew these administrators and faculty into our planning and convened an early fall 2019 kick-off. Our five "special team" chairs were introduced to our planning logic model and their charge of recording the results of cross-campus improvement efforts in their respective areas from 2019 to 2023.

By fall 2019, the special teams had a full membership of 35, including faculty, students and staff (each team included a member of the Office of Data Analytics and Institutional Research, or DAIR), and were underway, with a Microsoft Teams site serving as the hub for information sharing and communication among and between teams. As the special teams did their work, we used the logic models and a series of group meetings to track and guide their progress. Despite the disruption of the COVID-19 pandemic in 2020, over the next two years the lead team periodically hosted open office hours, check-in meetings with individual special teams chairs, a working retreat in spring 2022 as drafting began, and drop-in feedback and revision sessions.

In spring 2021, as special team drafts were beginning to coalesce, we advertised and hosted two major "Town Hall" events to help the campus community understand the importance of the accreditation process as a continuous improvement effort and to solicit comments and suggestions. In September 2021, our newly appointed director of faculty success joined the lead team, and a short time later we launched the next major phase of our self-study: choosing chairs and members for our nine "standards teams."

These 28 administrators, faculty and staff were invited, along with members of the special teams, to a November workshop that included a visit from NECHE Vice President Carol Anderson, who helped us reinforce the purpose and shape of the comprehensive review. Again, each team had a representative from DAIR to assist them with data needs and analysis. We set a schedule for their work, providing guidance about the expectations for data use and the description, appraisal and projection profiles of their standard reports, while reminding them that they were serving as conduits for input from the wider campus. The lead team also engaged some undergraduate students to assist with research for this report, including fact-checking, creating links for the electronic document room and searching through our news stories to connect them with our narrative about the NECHE standards.

In spring 2022, the lead team met with each of the special and standards teams to ensure progress toward their drafts. We increased the frequency of updates on our NECHE comprehensive self-study, which were shared with the campus at Chancellor's Open Forum events and at Faculty Senate meetings; each of these provided opportunities for our community to ask questions and for us to seek input and advice.

In January 2023, we engaged our University Relations colleagues to assist with revising and shaping the document to produce a cohesive voice, and we began preliminary planning for the visit. In spring 2023, we hosted the visiting team chair, University of Maine President Joan Ferrini-Mundy, with whom we discussed priorities and structure for the visit. We look forward to the full team's site visit and feedback from our reviewers.

Overall, we are pleased with the process changes that we implemented, although we will continue to raise our expectations for the caliber of draft materials—always a significant challenge—and are proud to have approached this work as a matter of collaborative, strategic and continuous improvement.

Self-Study Teams

Our self-study process involved faculty, students, staff, and administrators across colleges working together. We want to acknowledge and thank the individuals noted below. (Staff marked with an asterisk are no longer with the university).

NECHE Lead Team

Julie Nash, Vice Provost for Academic Affairs
Paula Haines, Senior Director of Curriculum Assessment & Accreditation
Shaima Ragab, Director of Faculty Success
Ingrid Hess, Associate Professor of Art & Design

Special Teams for Areas of Emphasis

Team 1: Comprehensive Assessment Efforts

Paula Haines, Senior Director of Curriculum Assessment & Accreditation
Alice Frye, Associate Teaching Professor, Psychology, and Assessment Faculty Fellow
Kevin Petersen, Associate Teaching Professor, English, and Core Curriculum Coordinator
Marshall Greenleaf, Director of Student & Family Support Services, Residence Life
Deborah Cantor, Enterprise Data Architect, DAIR

Team 2: Support and Enhance Math Curriculum

Tibor Beke, Associate Professor, Mathematical Sciences
Matthew Nugent, Associate Dean for Research, Innovation & Partnerships, Kennedy College of Sciences*
Ravi Montenegro, Professor and Chair, Mathematical Sciences, and GPS Math Coordinator
Jennifer Percival, Associate Dean, Manning School of Business*
Jennifer Gonzalez-Zugasti, Associate Teaching Professor, Mathematical Sciences
Ken Levasseur, Professor, Mathematical Sciences
Michelle Scribner, Clinical Professor, Curriculum & Instruction, Sciences, Education
Christine Lewis-Horton, Director of Data Analytics and Institutional Research

Team 3: English Language Supports for International Students

Ann Dean, Associate Professor and Director of First-Year Writing, English
Sandhya Balasubramanian, Assistant Dean, GPS*
Zhiyong Gu, Professor and Chair, Chemical Engineering
Sal Mazzone, Executive Director, International Students & Scholars Office
Johanna Tigert, Associate Professor, Curriculum & Instruction, Education
Steven Tello, Interim Dean and Associate Professor, Manning School of Business
Ashish Jain, Systems Analyst, DAIR

Team 4: Gender Diversity

Kavitha Chandra, Associate Dean of Undergraduate Affairs, Francis College of Engineering
Kerri Johnston, Dean of Enrollment Management

James Kohl, Dean of Student Affairs & Experiential Learning

Jill Lohmeier, Chair and Professor, School of Education

Fred Martin, Associate Dean for Student Success, Kennedy College of Sciences*

Jennifer Buckley, Principal Research Analyst, DAIR

Team 5: Harbor Place

Nancy Ludwig, Dean of Graduate, Online & Professional Studies

Mary Barrett, Associate Director for Student Services, Graduate, Online & Professional Studies

Tom O'Donnell, Senior Director of Innovation Initiatives

Richard Serna, Associate Dean for Research & Graduate Programs, College of Fine Arts, Humanities, & Social Sciences*

Wilson Palacios, Associate Professor, Criminal Justice

Leticia Porter, Assistant Dean, Manning School of Business*

Sheri Barich, Strategic Decision Support Analyst, DAIR

Standards Teams

Standard 1: Mission and Purpose

Julie Nash, Vice Provost for Academic Affairs

Christopher Mullin, Director of Operations

Jonathan Strunk, Executive Director of Communications Strategy

Standard 2: Planning and Evaluation

Kerri Johnston, Dean of Enrollment Management

James Kohl, Dean of Student Affairs & Experiential Learning

Thomas Miliano, Executive Director of Administrative Services

Standard 3: Organization and Governance

Julie Nash, Vice Provost for Academic Affairs

Christopher Mullin, Director of Operations

Jonathan Strunk, Executive Director of Communications Strategy

Standard 4: The Academic Program

Michael Graves, Associate Professor, Biological Sciences, and former Faculty Senate President

Arthur Mittler, Professor, Physics, and former Chair of Senate Undergraduate Policy Committee

Steven Tello, Interim Dean and Associate Professor, Manning School of Business

Standard 5: Students

Christine Bryan, Assistant Dean of Enrollment and Director of Undergraduate Admissions

Kerry Donohoe, Dean of Academic Services

Brenda Evans, Dean of Student Affairs & Wellness

Joel McCarthy, Associate Dean of Students, Residence Life and Student & Family Support Services

Deborah White, Director, Graduate and Student Services

Leslie Wong, Dean of Equity and Inclusion

Standard 6: Teaching, Learning, and Scholarship

Anne Maglia, Vice Chancellor for Research & Innovation

Julie Nash, Vice Provost for Academic Affairs

Shaima Ragab, Director of Faculty Success

Standard 7: Institutional Resources

Michael Cipriano, Chief Information Officer, Information Technology

Allison Estell, Dean of the University Library

Nancy Ritchie, Budget Director

Standard 8: Educational Effectiveness

Paula Haines, Senior Director of Curriculum Assessment & Accreditation

Alice Frye, Associate Teaching Professor, Psychology, and Assessment Faculty Fellow

Kevin Petersen, Associate Teaching Professor, English, and Core Curriculum Coordinator

Marshall Greenleaf, Director of Student & Family Support Services, Residence Life

Deborah Cantor, Enterprise Data Architect, DAIR

Standard 9: Integrity, Transparency, and Public Disclosure

Christine Lewis-Horton, Director of Data Analytics and Institutional Research

Mai Nguyen, Registrar

Clara Reynolds, Associate Vice Chancellor of Equal Opportunity and Outreach*

Elaine Keough, Executive Director of Digital Strategy*

Christine Bryan, Assistant Dean of Enrollment and Director of Undergraduate Admissions

Document Editing and Preparation

Sarah Corbett, Executive Director of Content

Hernan Florez, Senior Graphic Designer

David Joyner, Senior Director of Communications and Digital Media

Katharine Webster, Senior Writer

Victoria Weinreb, Creative Director

Adjoa Adjepong, Student

Dalton Greibel, Student

Zach Lunghi, Student

Dedivya Surampudi, Student

Institutional Overview

The University of Massachusetts Lowell (UMass Lowell or UML) is situated in a historic community straddling the Merrimack River. In the 17th century, portions of what would become the university campus were located within two Pennacook villages. Pawtucket was located near rocky falls, which were fished for salmon, alewife and shad. Wamesit, sited near the confluence of the Merrimack and Concord rivers, was a “praying town” created at the behest of Puritan missionary John Eliot. As more Europeans settled in the area, a farming community grew up nearby.

Incorporated in 1826, the newly industrialized city of Lowell grew around a textile manufacturing center powered by the falls and a canal system. Lowell quickly became a magnet for immigration to the United States, which it remains to this day. Lowell is now home to a Southeast Asian American population of 30,000 to 35,000 people, according to the Cambodian Mutual Assistance Association of Greater Lowell Inc., including the second-largest community of Cambodian Americans in the U.S. This community, which began settling in Lowell in the 1980s, is the main reason for [the university's 2020 federal designation](#) as an Asian American Native American Pacific Islander Serving Institution ([AANAPISI](#)).

At the time of their creation in 1894 and 1895, the stated purposes of Lowell Normal School and the Lowell Textile School were to “enrich and serve” the residents of Lowell, the first by training teachers who could develop an educated citizenry and the second by training engineers who could innovate in the textile industry. The colleges flourished as economic and educational centers for the city, and their programs became more comprehensive over time. They merged in 1975 to create the University of Lowell, and in 1991 the university joined four other state campuses to form the University of Massachusetts System.

The Lowell campus retains administrative autonomy, although it is necessarily guided by system policies and depends to a large extent on system financial resources. It is led by a chancellor who reports to the system president and trustees. (1.2)

The decade since our last self-study has brought many improvements and innovations as well as ongoing and new challenges. Our six-year graduation rate grew by 20 percentage points between 2010 and 2022, from 51% to 71%, and our graduates continue to be successful, with a mid-career average salary of \$116,1000, making UMass Lowell the top-ranked public research university in Massachusetts for lifetime return on investment (ROI). The university also has made notable progress in supporting historically excluded students. Between 2013 and 2022, the six-year graduation rate for Black students rose from 41% to 64%, for Asian American students from 52% to 72%, and for Latinx students from 51% to 58%. Students receiving Pell Grants improved their graduation rate from 52% to 65% over the same period.

As we embark on a five-year strategic plan under new leadership, we face several challenges, including declining enrollments, students’ pandemic-related academic and emotional concerns, and inflationary costs. This self-study will detail our plans to address these challenges by emphasizing the four key themes that drive our [2028 Strategic Plan](#):

- [Enrollment and Student Success](#)
- [A Diverse, Welcoming and Inclusive Campus](#)
- [Research Excellence](#)
- [Partnering with our Community for Mutual Benefit](#)

DATA FIRST FORMS GENERAL INFORMATION

Institution Name:

OPE ID:

Financial Results for Year Ending:		Annual Audit	
		Certified: Yes/No	Qualified Unqualified
Most Recent Year	<input type="text" value="06/30"/>	Yes	Unqualified
1 Year Prior	2021	Yes	Unqualified
2 Years Prior	2020	Yes	Unqualified

Fiscal Year Ends on: (month/day)

Budget / Plans

Current Year	2023
Next Year	2024

Contact Person:

Title:

Telephone No:

E-mail address:

STANDARD ONE: MISSION AND PURPOSES

Attach a copy of the current mission statement.

Document	Website location	Date Approved by the Governing Board
Institutional Mission Statement	https://www.uml.edu/about/mission.aspx	2007

Mission Statement published	Website location	Print Publication

Related statements	Website location	Print Publication
UMass Lowell Values Statement	https://www.uml.edu/diversity/values-statement.aspx#:~:text=We%2C%20at%20UMass%20Lowell%2C%20strive.can%20fully%20engage%20and%20thrive.	

Please enter any explanatory notes in the box below

Mission & Purposes

Mission & Purposes: Description

Since its origins in the late 19th century, the university has refined its mission statement to reflect changes in vision, structure and priorities, but it has retained its focus on the university's place within the city of Lowell and the unique opportunities the city offers our students, who gain real world experience through our community partnerships. We revisited our [mission statement](#) while undergoing our 2013 NEASC self-study, and it continues to reflect our values and purpose:

The University of Massachusetts Lowell is a nationally ranked public research university committed to excellence in teaching, research and community engagement. We strive to prepare students to succeed in college and to become lifelong learners and informed citizens in a global environment. UMass Lowell offers affordable, experience-based undergraduate and graduate academic programs taught by internationally recognized faculty who conduct research to expand the horizons of knowledge and sustainable practices. The programs span and interconnect the disciplines of business, education, engineering, fine arts, health, humanities, sciences, and social sciences. The university continues to build on its founding tradition of innovation, entrepreneurship and partnerships with industry and the community to address challenges facing the region and the world.

This mission statement is more expansive and ambitious than the one it replaced, notably in widening its lens from Lowell and the surrounding Merrimack Valley region to consider the university's role in serving the nation and the world. The university's mission remains harmonious and congruous with that of the [University of Massachusetts System](#):

[The mission of the University of Massachusetts](#) is to provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world.

[UMass Lowell's mission statement](#) can be found on our website and is included in prominent campus publications and the catalog. We explain and emphasize our mission at appropriate times with key constituencies, including new students entering the university and new faculty and staff. We periodically review the mission statement—and consider potential changes—as part of the strategic planning process, ensuring that it accurately reflects the university's vision, priorities and constituencies.

The mission statement has been augmented by statements of the university's vision and [values](#) that are similarly posted to the website, included in campus publications, and reviewed at appropriate times with students, faculty, and staff.

One program that clearly embodies our mission is the UMass Lowell String Project. For the past two decades, the university has offered accessible, high-quality music education to the children of Greater Lowell through the String Project. The project debuted in 2001 primarily to serve children in the Lowell public schools, which at the time did not have a strong K-8 instrumental education program, as well as to bring more string players into the university's music education programs. In the String Project, UML students serve as mentors and teachers to the schoolchildren, sharing their knowledge and serving the community while fostering a love of the arts. Our students earn credit or are paid while they gain experience in music education. And many of the String Project students, such as [Rachel Record '20](#) and [Josh Santana '20, '22](#), go on to study here and mentor the next generation. Weaving together the threads of education, the arts, and [community engagement and experiential learning for our students](#), the String Project exemplifies our unwavering commitment to our mission: serving both our students and the wider community.

Mission & Purposes: Appraisal

The mission statement is a guidepost for university leaders as they allocate resources and plan developments across the campus, and it is well-understood and embraced by the community. Since assuming her new role, Chancellor Julie Chen has repeatedly articulated and reinforced the university's mission and demonstrated it in concrete ways. For example, in September 2022, UML co-sponsored [September in the City](#) (with Middlesex Community College, the Lowell Public Schools and the Greater Lowell Cham-

ber of Commerce) to highlight the multicultural tapestry of events, artistry and food that give Lowell its unique character. “We are an integral part of this community, and we want our students, faculty and staff to benefit from all that this community has to offer,” Chen said. “And for those who are not part of the university, we want UMass Lowell to be part of your community. We have great sports, arts, music and lectures. We encourage all of you to participate, because those are meant to be things that we all share together.” The event was attended by hundreds of students, faculty, and staff, who reconnected with the city and each other after an extended, pandemic-related hiatus.

The mission statement steered the creation of the [2020 Strategic Plan](#), which was published in 2010 after an 18-month process engaging more than 200 faculty, staff and students. More recently, the mission statement has guided the creation and execution of the [2028 Strategic Plan](#), which builds upon campus-wide listening sessions and survey responses from more than 2,600 students, faculty, staff and community members, to consider the university’s growth in four fundamental categories: enrollment and student success; a diverse, welcoming and inclusive campus; research excellence; and partnering with our community for mutual benefit.

The mission statement has also guided more iterative planning, including the development of a [DEI Action Plan](#) that articulates strategies to improve diversity, equity, inclusion and belonging across the university. It is also guiding our work on a research excellence plan that outlines the steps and resources required to elevate UML to Carnegie-designated R1 status.

Mission & Purposes: Projections

We will revisit the university’s mission statement annually as we review and update our strategic plan. We will assess and address changing circumstances in light of our mission and the values at the heart of that plan as we seek to buttress enrollment and ensure student success; cultivate a diverse and inclusive campus where all students, faculty and staff feel welcome and empowered to do their best work; provide for growth and excellence in research by faculty and students; maintain and enhance our teaching excellence; and grow and enrich mutually beneficial partnerships within Lowell, the Merrimack Valley, and beyond.

Our mission will also continue to guide ongoing iterative plans and their implementation, including the DEI Action Plan and the research excellence plan, as well as the university’s longer-term plans to physically redevelop East Campus in conjunction with the UMass System, the UMass Building Authority and private partners.

STANDARD TWO: PLANNING AND EVALUATION

PLANNING			
	Year approved by governing board	Effective Dates	Website location
Strategic Plans			
Immediately prior Strategic Plan	2010	2010-2020	https://www.uml.edu/2020/
Current Strategic Plan		2023-2028	https://www.uml.edu/strategic-plan/
Next Strategic Plan			
	Year completed	Effective Dates	Website location
Other institution-wide plans*			
Master plan	2022	2022-2027	Document Room
Academic plan			
Financial plan			
Technology plan			
Enrollment plan			Document Room
Development plan			
Alt. Energy Master Plan	2021	2021-2050	https://www.uml.edu/office-sustainability/planning/energy-master-plan.aspx
Strategic Development Plan 2022-27	2022	2022-2027	https://www.uml.edu/facilities/planning-design-construction/planning/strategic-development-plan-2022-2027.aspx
Plans for major units (e.g., departments, library)*			
KCS "Roadmap to the Future Strategic Plan"	2014	2014-2020	https://www.uml.edu/sciences/dean/deans-message.aspx
Transportation Master Plan	2018	2018-2025	https://www.uml.edu/facilities/planning-design-construction/planning/transportation-master-plan.aspx
Athletics Strategic Plan	2017	2017-2022	Document Room
AASHE Sustainability Tracking Assessment	2022	2023	https://www.uml.edu/office-sustainability/planning/aashe-stars.aspx
Climate Action Plan	2012	2012-2050	https://www.uml.edu/docs/uml%20climate%20action%20plan_tcm18-74405.pdf
Emergency Operations Plan	2015	2015-2030	https://www.uml.edu/eem/emergency-management/
Business Continuity Planning	2015	2015-2030	https://www.uml.edu/financial-services/administrative-fiscal-policies/business-continuity-planning.aspx
EHS Policies & Procedures	2015	2015-2030	https://www.uml.edu/eem/policies-and-procedures/

EVALUATION			
			Website location
Academic program review			
Program review system (colleges and departments). System last updated:			https://www.uml.edu/academics/provost-office/accrreditation/aqad/
Program review schedule (e.g., every 5 years)			every 7 years

Revised October 2018

2.1

Sample program review reports (name of unit or program)*

Francis College of Engineering ABET Reports
Kennedy College of Science AQAD Reports
Kennedy College of Science Accreditation Reports

Document Room
Document Room
Document Room

System to review other functions and units

Program review schedule (every X years or website location of schedule)

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Sample program review reports (name of unit or program)*

Other significant institutional studies (Name and web location)*

<i>Example: Advising: www.notrealcollege.edu/advising</i>

Date
2014

*Insert additional rows, as appropriate.

Please enter any explanatory notes in the box below

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Planning and Evaluation

Inclusive, long-range planning and evaluation are embedded in the culture of the university. These efforts encompass a spectrum of activities, from university-wide strategic planning to unit-based processes. They share an approach grounded in the development of measurable goals, the use of data to evaluate progress, and a flexible, proactive approach that allows us to plan for the long term while responding decisively and expeditiously to unforeseen issues.

UMass Lowell has invested in both the people and the tools that allow us to use and understand the vast amount of data generated by our operations. In 2020, The Office of Institutional Research was restructured and renamed the [Office of Data Analytics and Institutional Research \(DAIR\)](#), reflecting the importance of not simply collecting and reporting data, but analyzing and interpreting it so that it can be used in decision-making. DAIR collaborates with units across campus to support data-informed planning and evaluation on topics from diversity efforts to academic program review and student outcomes. DAIR is the custodian of “Data UML,” our central repository of institutional information, and the office provides Tableau dashboards for most ongoing campus initiatives. Tools such as Slate, Salesforce, and Curriculum allow us to share data while ensuring security and accuracy.

Planning: Description

Our comprehensive strategic planning process, guided by our educational mission, is UML’s cornerstone, and the model for much of our planning and evaluation activity at all levels. This planning model, which focuses on the development of goals, the use of data, and an analysis of resources, is used for a wide array of decision-making, from strategic hiring to space allocation to human resources, as illustrated throughout this document. Below we highlight some of our major planning efforts.

Institutional Strategic Planning

Our campus learned a great deal as we built, realized, and evaluated our [2020 Strategic Plan](#). That plan was built upon five “Pillars of Excellence,” each of which had its own planning committee:

- Transformational Education
- Global Engagement and Inclusive Culture
- Innovative Research & Entrepreneurship
- Leverage Our Legacy and Place
- Entrepreneurial Stewardship in Higher Education

Each committee developed clear goals and measures that were tracked and evaluated, with results published in an annual [report card](#).

In fall 2022, under the leadership of our new chancellor, we set forth a vision for the university over the next five years. The [2028 Strategic Plan](#) identifies several key themes elicited through conversations with dozens of internal and external stakeholders and carries forward our work on several mission-critical initiatives, including the [Diversity Action Plan](#), the [Facilities Management Plan](#), the [Climate Action Plan](#), and the [Transportation Master Plan](#).

Our ambitious fall 2022 planning process (see timetable below) included many activities designed to define and validate our approach, including gathering significant input and feedback from students, faculty, staff, alumni, and Lowell community members. Surveys returned over [2,600 responses](#), representing over half the faculty and staff of the university and hundreds of students, alumni and community members. Aggregated survey results identified common themes, concerns, and questions, which were presented to the campus community, including:

- [Enrollment and Student Success](#)
- [A Diverse, Welcoming and Inclusive Campus](#)
- [Research Excellence](#)
- [Partnering with our Community for Mutual Benefit](#)

STRATEGIC PLANNING

PROCESS & TIMELINE	
Framing the Conversation	Early September 2022
Stakeholder Survey	September – Early October
Benchmarking & Background Information	August - November
Thought Sessions	November – December
Assemble & Present Draft Plan	December
Solicit Feedback on Draft Plan	December – January 2023
Revise & Publish	Early 2023
Present Final Plan	Spring 2023

Emergency Management Planning and COVID-19 Response

We need look no further than the recent COVID-19 pandemic to see the benefits of effective strategic planning at UMass Lowell. We established the [Office of Emergency Management & Life Safety](#) in 2013, recognizing the need for a framework and processes to respond to emergencies that might affect campus operations and the delivery of academic programs.

Because we had this infrastructure in place, [we were able to respond quickly](#) to the pandemic. As campus leaders monitored the spread of the virus, we executed a comprehensive response based upon a federally recognized emergency response standard known as the [Incident Management System \(ICS\)](#). An Emergency Operations Center team was activated to allow the campus to navigate the pandemic in an organized, unified, and deliberate manner, as [we moved the entire academic](#) and business enterprise to remote delivery mode in just seven days. The strength of this ICS process provided a pathway for what would be the largest business continuity event in campus history.

After moving nearly 3,000 courses and all associated student engagement and services offices to remote delivery in a matter of days in March 2020, we established five committees to plan for fall 2020 operations affected by the pandemic. The planning committees coordinated efforts and discussed and revised mitigations through the Emergency Operations Center (EOC).

Working with the UMass President's Office and the Board of Trustees, financial planning focused on mitigating the economic impact of COVID-19. Across all operating and academic departments, only essential spending was permitted. Staffing was reduced by offering retirement incentives and assistance programs for furloughed employees. Nearly all employees of the university were furloughed at least five days, with senior university leaders furloughed up to 12 days. We cut the number of adjunct faculty by making modest increases in class sizes. All financial and staffing resources were concentrated on COVID mitigations and support of remote learning; we basically eliminated all spending that did not support these priorities.

Financial and Budget Planning

The UMass Board of Trustees oversees long-term financial planning. Every year, each campus updates a five-year forecast of revenues and expenditures that includes prior-year actual results, a projection for the current fiscal year, and projections for the next five years. The five-year forecast incorporates estimates of salary increases and inflationary cost increases, as well as funding for strategic objectives and capital improvements and assumptions for revenues. It also discusses the strategic direction of the campus and our priorities and action plans.

State support and net tuition revenue are considered together, with the baseline assumption that in-state tuition and fee increases will not exceed the rate of inflation. When the state appropriation is not expected to keep pace with projected spending increases, we may have to consider higher tuition rates.

Development of the operating budget each year includes a comprehensive review of the effect of planned tuition and fee increases on enrollment projections, student costs, and potential increases in student debt. During this process, we calculate how much new revenue we will spend on increased need-based aid.

Accompanying the five-year forecast are key financial indicators such as:

- Operating margin—the surplus or deficit of revenues over expenses
- Operating cash flow margin—net income before non-cash expenses relative to operating revenue to support capital investments
- Debt burden ratio—how much of annual expenditures are dedicated to debt service.

These are indicators of UML's long-term financial health and our ability to cushion the university against downturns. The ratios are compared over a period of time (past actual performance and forecast) and against peer institutions. In the context of the annual financial forecasts, the Board of Trustees approves the campus operating budget each spring for the fiscal year beginning July 1. As part of that process, the board sets tuition rates for resident and non-resident students, both undergraduate and graduate.

Facilities Planning

The university's facilities development program is outlined in a comprehensive [Strategic Development Plan](#) that is prepared every five years and filed with the office that enforces [the Massachusetts Environmental Policy Act](#). The most recent document, for 2022 to 2027, reviews campus development since 2016, outlines proposed projects for the next five years, documents current environmental impacts, and projects future impacts.

Facilities planning begins each year with an "Annual Call," an invitation for members of senior leadership to identify and submit requests for facility-related projects not included in our Master Plan. These are ranked by priority by the individual requesters and reviewed by our Space Committee, which represents all campus divisions.

Our facilities planning team has recently been working on a [mixed-use development](#) for areas of East Campus that are now mostly surface parking lots. (We already have some residence halls, the rec center, a baseball field, and [the Tsongas Center](#), which hosts both UML sports and external events, on East Campus.) Potential uses of this under-utilized space include commercial offices, hospitality, student housing, residential and retail. A portion of the site is located within a federally designated Opportunity Zone, which provides investors with the ability to pursue attractive tax benefits. Master planning for this project will be in conjunction with the UMass Building Authority.

Planning: Appraisal

Since our last comprehensive review, UMass Lowell has adopted a logic-driven approach to planning for units and projects, both large and small, after it proved highly effective throughout the work on our 2020 strategic plan. It is now an expectation across campus that improvement efforts proceed from this logic model template, which includes a statement of need and establishes measurable goals. Planning takes into account participants and resources, with clearly linked activities leading to anticipated outcomes and a plan for data gathering, measurement and dissemination of results. The application of this disciplined approach to planning has become an important element of our ability to address challenges and drive continuous improvement, and it has yielded good results in a range of areas, including our response to COVID-19 and our planning for program review, finance and budgets, facilities and more.

The 2020 Strategic Plan transformed the university, guiding us through a period of dramatic change. It led to improvements in first-year retention rates, graduation rates, endowment funds, student diversity, research expenditures, physical accessibility and sustainability. The campus community was fully engaged in this inclusive effort, and our planning process helped us more effectively fulfill our mission.

The improvements gained through the execution of the 2020 Strategic Plan provide an appraisal of the process. Measures of planning effectiveness resulting from that work include:

- The six-year graduation rate increased from 51% to 60% in 2020 (it is now 71%).
- The total number of degrees awarded each year nearly doubled, from 2,149 to 4,254.
- Students of color on campus increased from 26% to 40% (undergraduate) and 19% to 29% (graduate).
- Annual research and development expenditures grew from \$59 million to \$92 million (they now top \$111 million).
- The university's footprint grew from 3.1 million square feet to 4.9 million square feet, including 19 new or substantially renovated buildings.
- All university sports were elevated to [Division 1 Athletics](#).
- The university created new programs to support students, such as the [River Hawk Scholars Academy](#) to foster the success of first-generation students, the [Launch!](#) summer programs to prepare incoming first-year students, and the [River Hawk Experience Distinction](#), a co-curricular program that integrates experiential learning with students' academic curriculum. The Honors Program was elevated to the [Honors College](#).
- The university created new programs to support faculty excellence, such as the development of a new faculty mentoring program, "[Launch@UML](#)," the [ADVANCE Office for Faculty Equity and Resilience](#), and the [Center for Excellence in Learning and Teaching](#).
- We increased philanthropic support through a successful [capital fundraising campaign](#), "Our Legacy, Our Place," which raised \$165.2 million and more than doubled our endowment from \$60,175,763 in 2013 to \$142,408,455 in April 2022.

This success notwithstanding, we found room to improve the strategic planning process. The 2020 Strategic Plan had five major committees aligned with our five [Pillars of Excellence](#), and each of these committees had several subcommittees. In any given year, we had 15 to 20 committees; feedback from participants helped us see that this was too many. While diverse perspectives are crucial to any successful and transparent planning process, the number of subcommittees was unwieldy, they were time-consuming, and the charges of some committees overlapped.

Understanding this, the chancellor chose to streamline the most recent strategic planning process while remaining committed to broad constituent input. Priorities were identified through surveys and divisional meetings, and a small Strategic Planning Committee was charged with gathering input and feedback through several open "thought sessions" at which interested community members could offer feedback. This process provided needed input in a timely manner and has given us a plan for moving forward.

Based on these lessons learned, UML adopted what was a "special projects" approach for some of our most fundamental and routine efforts. For example, we revisited our [Academic Quality Assessment and Development \(AQAD\)](#) process—a component of the UMass system-wide Performance Measurement System—to better reflect our campus mission and our strategic plan initiatives, and to turn what was once a reporting exercise into an integrated element of department- and college-level strategic planning. Our local AQAD guidelines have begun to elicit vastly improved self-studies from departments compared to the past. Supported by the Provost's Office and DAIR, each unit is provided with base data and guidance for developing analyses that can help inform long-term decision-making.

The COVID-19 pandemic both tested and validated the investment the campus had made in emergency preparedness and management frameworks. The Incident Command Systems, resource allocation and initial response, public information coordination, and expanding incident training all enabled the campus to respond quickly and deliberately. Our planning, training, exercise and continuity processes, coupled with the University System Enterprise Risk Management program, have proved invaluable and shown the university's fortitude and resiliency in confronting and recovering from major adverse events.

Financial and facilities planning is a continuing challenge, mostly due to the uncertainties surrounding finances, including inflation and varying enrollment projections. These factors introduce complexities that make it difficult to accurately forecast future revenue streams and effectively allocate resources. While we presented a fiscal year 2024 budget that meets the operating margin target set by the system president and Board of Trustees, our revenues have not rebounded to pre-pandemic levels. In the meantime, inflation and personnel costs have both accelerated and increased spending beyond what was anticipated. For example, our mandated fringe rate—the rate we are charged by the state to cover the cost of employee benefits—has increased 11%. And while the state covers a significant portion of collective bargaining wage increases, our campus funds nearly half of those additional costs. In fiscal

2024, these increases will amount to over 8%, significantly higher than the 2% to 4% increases we have seen in the past and that we had projected to continue. Financial planning and appraisal is discussed in more detail in Standard Seven.

Evaluation: Description

Evaluation is incorporated into UMass Lowell's planning efforts as an important final step and an opportunity to reflect upon the outcomes of our decisions. Closing the loop on important investments of time, resources, and energy improves future decision-making. A prime example of our evaluation process is the [UMass Lowell Report Card](#), a key tool for evaluating our [2020 Strategic Plan](#). Annual report cards identified 25 strategic indicators aligned to our five pillars. The Report Card helped us track this progress over time and allowed us to recalibrate our goals as we met and exceeded them.

As with planning, the evaluation principles of the 2020 Strategic plan have been applied to efforts at all scales, such as the evaluation of academic programs, offices, research centers and learning outcomes, many of which will be referenced throughout this document. Using a mix of quantitative and qualitative measures, we evaluate the achievement of our mission by applying this approach to a variety of indicators, for example:

- Review of retention and graduation rates: Studying these figures across units and demographics allows us to identify students in need of support and to adjust recruitment and financial aid strategies.
- Analysis of DFW Rates: After each semester, our DAIR office provides the academic leadership team with a detailed analysis of student performance in every class. These results are organized by course, section, and instructor to help us understand and address patterns of student performance and identify opportunities for intervention for students and faculty.
- Surveys of career placement and post-graduation success: These key studies provide information about the return on students' investment in their education.
- Evaluation of engagement, diversity, equity, and inclusion metrics: Tools including satisfaction surveys (NSSE); campus climate surveys of students, faculty, and staff; and focus groups are used to assess our progress in creating an inclusive culture at UML.
- Analysis of research and innovation output: As a research-intensive institution, we evaluate this aspect of our mission by tracking research output, grant funding, and the impact of research on society. Student involvement in research and innovation projects is also tracked to ensure that students are engaged in high-impact learning opportunities.
- Community engagement and outreach: We evaluate our success in community engagement through partnerships, service initiatives, and the impact of outreach programs on the local and global communities.
- Surveys of student satisfaction: The Student Government Association conducts student surveys annually to gather feedback on various aspects of campus life, including academic experiences, support services and extracurricular activities. These are disseminated at leadership meetings, through the Faculty Senate, and other avenues.

Evaluation: Appraisal

Over the past five years, particularly with the help of the DAIR office, we have improved the amount, quality and variety of data that guide our work as we fulfill our mission. The development of our evaluation methodology and use of results is evident, whether in evaluating wholesale strategic planning, evaluating a small mini-grant project in our Center for Excellence in Learning and Teaching, measuring the output of research centers or conducting departmental reviews. Similarly, we emphasize balancing facts and figures with qualitative information gained from focus groups and student reflections on courses and co-curricular activities. We have found success with mixed-method study both in terms of engaging faculty and students in evaluation and in effectively using evaluation to guide decisions.

Another strength in our approach to evaluation is that the work is dialogic and iterative. As we move into the 2028 Strategic Plan, we fully expect to improve upon the evaluation efforts of the prior plan—for example, embedding more qualitative measures to improve our understanding of lived results—and we begin our work anticipating that our approaches to evaluation will evolve as we progress.

Across evaluation efforts, a common theme is the time and effort required to design, track, and analyze the measures we establish. Producing meaningful and instructive evaluation results can quickly become overwhelming and unmanageable. As the expectations for robust evaluation increase, we need to provide support for members of the campus community who only occasionally work with complex or longitudinal data. For example, the seven-year cycle of AQAD review can span up to three department chairs. In that time, not only do strategic priorities shift, but the amount of experience faculty have in leading such evaluations can fluctuate radically. Steps such as tying AQAD more closely to an annual departmental strategic planning process are good adaptations, but the time, energy, and skills required of busy faculty and staff to conduct solid evaluation remain challenges in a period of tight budgets.

As noted throughout this self-study, the DAIR office is instrumental in informing and improving our evaluation processes. As thought partners and data analysts, members of the DAIR team are embedded in campus planning and leadership committees and respond to identified priorities. Whether building interactive Tableau dashboards that allow users to conduct routine evaluations more easily or providing bespoke data for smaller projects, DAIR has become vital to evaluation of all sorts. Given that evaluation has been successfully embedded in so many areas, their staff is hard pressed to meet ever-increasing demand while still developing new tools and establishing strong data governance. We need to reconsider the organizational position of DAIR in Information Technology, as their expertise and advice is such a valuable asset for meeting the evaluation needs of Academic and Student Affairs.

Planning and Evaluation: Projections

- As strategic planning is a continuous process, measurement is key to our momentum and transparency. For example, our plans to close the achievement gap across all groups will be measured by graduation rates, by career and by both traditional and non-traditional demographic data (i.e., veterans, LGBTQ+ students and students with registered disabilities). Similarly, our plan to expand external awareness of our research will be measured by media hits and social media engagement. We will continue to hold ourselves accountable by regularly reporting progress against established metrics to communicate outcomes, achievements and areas for improvement. This practice promotes openness, fosters trust and allows stakeholders to track the university's progress.
- Now that the 2028 Strategic Plan has been announced, individual colleges, departments and divisions have been asked to develop localized strategic plans that align with, contribute to and amplify the 2028 Strategic Plan.
- Under the leadership of the executive cabinet, the university will deploy a new Strategic Plan for Space and Facilities, which includes the development of [East Campus](#) to better engage the city and our corporate partners, with the goal of creating more career-connected opportunities for our students.
- Under the guidance of the DAIR Office and the Academic Technology Committee, we will streamline data collection methods by automating systems, where possible, to facilitate the evaluation of plans, departments and programs, and work to create a data governance plan over the 2023-2024 academic year. Repositioning and fortifying this team will help satisfy growing demand, ensure data quality and security, and relieve strain on academic units.

STANDARD THREE: ORGANIZATION AND GOVERNANCE

(Board and Internal Governance)

Please attach to this form:

- 1) A copy of the institution's organization chart(s).
- 2) A copy of the by-laws, enabling legislation, and/or other appropriate documentation to establish the legal authority of the institution to award degrees in accordance with applicable requirements.

If there is a "sponsoring entity," such as a church or religious congregation, a state system, or a corporation, describe and document the relationship with the accredited institution.

Name of the sponsoring entity	UMass President's Office
Website location of documentation of relationship	https://www.umassp.edu/

Governing Board

By-laws	https://www.umassp.edu/bot/policies
Board members' names and affiliations	https://www.umassp.edu/bot/members

Board committees *

	Website location or document name for meeting minutes
P Academic & Student Affairs	https://www.umassp.edu/bot/meetings/past-meetings
Audit & Risk	https://www.umassp.edu/bot/meetings/past-meetings
Administration & Finance	https://www.umassp.edu/bot/meetings/past-meetings
Athletics	https://www.umassp.edu/bot/meetings/past-meetings

Major institutional faculty committees or governance groups*

	Website location or document name for meeting minutes
Faculty Senate	https://www.uml.edu/faculty-senate/minutes/

Major institutional student committees or governance

	Website location or document name for meeting minutes
Student Government Association (SGA)	https://www.uml.edu/sga/

Other major institutional committees or governance groups*

	Website location or document name for meeting minutes

*Insert additional rows as appropriate.

Please enter any explanatory notes in the box below

(Locations and Modalities)

Campuses, Branches and Locations Currently in Operation (See definitions in comment boxes)

(Insert additional rows as appropriate.)

	Location (City, State/Country)	Date Initiated	Enrollment*		
			2 years prior	1 year prior	Current year
			(Fall 2020)	(Fall 2021)	(Fall 2022)
Main campus	Lowell, MA		13,441	12,484	12,091
Other principal campuses					
Branch campuses (US)					
Other instructional locations (US)	Haverhill, MA		0	8	10
Branch campuses (overseas)					
Other instructional locations (overseas)					

Educational modalities

	Number of programs	Date First Initiated	Enrollment*		
			2 years prior	1 year prior	Current year
			(Fall 2020)	(Fall 2021)	(Fall 2022)
Distance Learning Programs	49		4,928	5,371	5,234
Correspondence Education	0				
Low-Residency Programs	0				
Competency-based Programs	0				
Dual Enrollment Programs	1		43	39	224
Contractual Arrangements involving the award of credit	0				

*Enter the annual unduplicated headcount for each of the years specified below.

Please enter any explanatory notes in the box below

Other Locations = Count of all students taking at least one course at Haverhill for Fall 2022
 Distance learning = Count of all students not taking courses at Haverhill and taking more than 50% of their credits online for Fall 2022.
 Main Campus = Count of all students not taking courses at Haverhill and 50% or less credits online for Fall 2022
 Distance Learning Programs includes certificates as well as degree programs

Organization and Governance

In May 2022, [the university announced the appointment of Julie Chen as the new chancellor](#), and the written announcement itself underscored the many stakeholders in a system of shared governance, with comments from the UMass [System president](#), the chair of the [Board of Trustees](#), and the presidents of the [Student Government Association](#) and the [Faculty Senate](#). Each of these individuals leads a branch of the university's shared governance that reflects multiple perspectives and diverse stakeholders.

External Governance: Description

UMass Lowell is part of the five-campus University of Massachusetts system, subject to the authority of the UMass President's Office, the UMass Board of Trustees and the State Board of Higher Education. [The UMass Board of Trustees \(BOT\), which consists of 22 members, including student trustees from each of the five UMass campuses](#), governs according to a set of policies and standards that define proper procedures in areas affecting faculty, staff and students (3.4). The board is responsible for setting policies and providing operational oversight. It also hires and evaluates the university system president. Trustees are appointed by the governor of Massachusetts, and the authority of the board is outlined in its [bylaws](#).

Per the [General Laws of the Commonwealth of Massachusetts](#) (3.3), the board members represent all regions of the commonwealth, with alumni from each UMass campus and representatives from different Massachusetts labor unions, with no more than one-third employed by the commonwealth.

The Board of Trustees and the UMass System president have distinct but complementary roles. The board establishes broad policies, oversees the setting of tuition and fees, and appoints and evaluates campus chancellors in consultation with the system president. The president, as the chief executive officer of the UMass System, provides vision and strategic direction for the entire system, oversees academic programs, and manages the system's budgets and resources. President Martin Meehan assumed the role in 2015 after eight years as chancellor of UMass Lowell.

External Governance: Appraisal

Like many state university systems, the governance of UMass is complex, with five "sister campuses" usually working together cooperatively, while also competing for finite resources and an overlapping pool of students. Many of our business and program approval processes move more slowly than we would like, due to multiple stages of approvals through the system. At the same time, being part of the larger system facilitates [joint academic and financial initiatives](#) that drive maximum efficiency.

Internal Organizational Governance: Description

Cabinet Leadership

In July 2022, Julie Chen assumed the role of chancellor following a nationwide search, following Jacqueline Moloney's seven-year tenure. Chen is supported by her [executive cabinet](#), her senior advisory council, which is composed of the provost (who is also the vice chancellor for academic and student affairs), the vice chancellor for research and innovation, the vice chancellor for advancement, the vice chancellor for university relations and the vice chancellor for finance and operations. The executive cabinet meets weekly and shapes all major decisions, based on input from these areas of oversight. The executive cabinet also meets monthly with representatives from student government and holds at least two town hall-style open forums with the campus community each semester.

A larger leadership group supports and advises the executive team. This group, which meets monthly and is known as the senior cabinet, [consists of deans and university-wide leaders, most of whom report directly to members of the executive team](#). This senior cabinet steers and implements the operations of the university.

Academic Divisions and Leadership

UMass Lowell consists of five academic colleges: the [Kennedy College of Sciences](#), the [Zuckerberg College of Health Sciences](#), the [Manning School of Business](#), the [Francis College of Engineering](#), and the [College of Fine Arts, Humanities and Social Sciences \(FAHSS\)](#), as well as the [Honors College](#), which includes students from all five academic colleges. In late 2020, the university decided that the former College of Education would be better supported as a School of Education, administratively located in the College of FAHSS.

Organizational Changes in Academic & Student Affairs

In 2019, Engineering Dean Joseph Hartman was promoted to provost, following an internal search after his predecessor stepped down. In 2020, the vice chancellor for student affairs announced that he would retire, and then-Chancellor Moloney decided to merge the two divisions of Academic and Student Affairs into one ("ASA") under Provost Hartman's leadership. Hartman identified his top priorities as enhancing student success, empowering faculty success, and fostering partnerships and innovation to strengthen high-tech workforce development. Shortly after merging into one division, the ASA leadership team held a retreat and created a vision statement aligned with the university's overall mission.

"Believing that a transformative education should be accessible to all, Academic and Student Affairs leads an inclusive learning community that engages students in relevant, enriching experiences, with dedicated faculty and staff who inspire graduates to make a difference in the world."

Under the new ASA structure, the provost is assisted by the vice provost for academic affairs and the executive dean of graduate, online and professional studies, as well as by the deans of the academic colleges, and the academic and student affairs deans. (See attached [organizational chart](#) for specific members).

Another organizational change was the creation in 2019 of [a new Division of Graduate, Online and Professional Studies](#) (GPS) to align the former Division of Online and Continuing Education (OCE), Graduate Admissions and Recruiting, Graduate Student Services, and the International Student and Scholars Office to online undergraduates and online, hybrid and on-campus graduate students. The recently announced [School of Graduate Studies](#) will take over some responsibilities from GPS.

Faculty Governance

The university has a proud tradition of shared faculty governance, led by the [Faculty Senate](#). Under the authority of the UMass Board of Trustees, the faculty has primary responsibility for the quality of academic life and actively participates in university governance. Academic units are allotted one senator for every five full-time faculty members. Senate representatives sit on the university Budget Committee, all strategic planning committees, and on all senior-level searches for positions of dean or above.

In recognition of the importance of shared governance and a faculty voice at the decision-making table, the president of the Faculty Senate was invited to join the senior cabinet in fall 2022 and was a leading member of the Strategic Planning Core Committee.

The [senate's executive committee](#) is composed of the president, vice president, the representative and alternate representative to the Board of the Trustees, and the elected chairpersons of the [Faculty Senate subcommittees](#). Members of the academic leadership team and academic staff attend senate and subcommittee meetings in advisory (non-voting) roles.

Labor Unions and Collective Bargaining

The university engages in collective bargaining with eight labor units and one non-unit group that represents university employees across the campus:

- [MTA-- Massachusetts Society of Professors](#)--Faculty and Librarians
- [International Teamsters Union Local 25](#)--University Police
- [SEIU Local 888](#)--Professional Administrative Unit
- [MTA-- Classified / Technical](#)--Classified and Technical Staff
- [MTA-- Maintenance & Trades](#)--Maintenance and Trades Staff
- [MTA-- Grants & Contracts](#)--Grants & Contracts
- [Graduate Employee Organization Local 1596 UAW](#)--Teaching and Research Assistants
- [Union of Adjunct Faculty, Local 1596, UAW](#)-- Adjunct Faculty
- [Non-Unit Professionals](#)-- Executive Managerial and Confidential Employees

The university views its relationship with the unions as collegial, productive and positive, and both management and labor seek to resolve differences through regular and transparent communication. In each collective bargaining agreement (CBA), the parties have established a joint labor-management committee to promote constructive engagement and to address labor matters that arise periodically during the life of the CBA. The frequency with which joint labor-management meetings occur varies with each collective bargaining agreement, generally based on unit size and the complexity of administering the CBA. For example, the university meets weekly with its full-time faculty unit, which comprises about 600 members and shares governance of the academic direction of the university, whereas university representatives meet biannually, or as needed, with its approximately 40-member campus police union.

Student Government

[UML's Student Government Association](#) is actively involved in campus planning and has played a lead role in successful initiatives that have had a direct impact on student life and academic success. The SGA conducts a [student satisfaction survey every year](#) and shares its results with academic leadership and the executive cabinet, who use this information to improve the student experience. For example, prior to 2017, surveys had indicated that many of our first-year students were dissatisfied with advising. As a result, the university restructured its first-year [advising](#) program, hiring a director and creating a new office of College-Based Advising. In addition, the SGA has worked closely with the provost's office to champion [open educational resources](#), hosting [events that celebrate faculty](#) who have reduced the cost of textbooks for students and helping to create a course marker in the academic catalog so students can identify courses with low-cost textbooks (this program is currently being piloted).

Internal Governance: Appraisal

The unprecedented disruptions caused by the far-reaching impact of the COVID-19 pandemic have necessitated a constant evaluation of organizational structures at the university. The merging of Academic and Student Affairs has resulted in a stronger integration of student life and academic programming. For example, the university realigned the reporting lines of some offices that had previously reported to Academic Affairs ([Study Abroad](#), [Immersive Scholars](#), [River Hawk Experience Distinction](#)) with some that had reported to Student Affairs ([Career and Co-op Services](#), [Office of Residence Life](#)). The realignment of these offices, which now report to the dean of student affairs and engagement, has helped to foster a centralized system for coordinating [career-connected learning experiences](#), supporting one of Chancellor Chen's primary goals.

However, consolidation of the two offices presented its share of challenges. Such a significant reorganization inevitably leads to uncertainties and concerns among staff members, with new reporting lines and offices. The timing of this change further compounded the difficulties, as it occurred during a period of furloughs and layoffs amid the pandemic. The inability of staff to physically come together on campus hindered the opportunity for meaningful connections and further destabilized the already delicate work environment. Recognizing the importance of maintaining unity and encouraging collaboration, Provost Hartman organized a division-wide retreat in 2022, and he communicates regularly with his leadership team. These intentional efforts aim to bridge gaps

and strengthen bonds within the expanded unit. Despite the inherent difficulties of uniting such a large entity, the university is committed to sustaining these ongoing initiatives to foster a cohesive and supportive work environment.

The net result of the re-organization of GPS has been increased support for online and on-campus graduate programs, because the financial resources of the former online and continuing education unit can supplement the budget for graduate admissions and student services. The new division also has realized organizational efficiencies by merging the recruitment and admissions units for online and graduate students. It has expanded staffing in graduate student services and made significant investments in technology for recruiting, admitting and advising all our continuing education and graduate students. The graduate student population has increased 18% since fall 2019 to 4,944 graduate students in fall 2022.

Our model of shared governance allows the university to remain responsive to changing circumstances. For example, during the pandemic, shared governance enabled the university to quickly create policies and guidelines to support students and faculty, such as granting temporary approval for students to choose grades of pass/no credit in spring and fall 2020 amid the challenges of remote learning. The Faculty Senate quickly took up the proposal and suggested several changes to improve implementation. Working together, we were able to reduce student stress without overburdening the faculty with administrative headaches, such as the need for multiple forms and approvals. More recently, the administration and senate have created a joint task force to better understand the impacts of artificial intelligence on our work and the work of our students.

Organization & Governance: Projections

- The university has recently announced the establishment of a School of Graduate Studies. As UML continues our efforts to bolster our research endeavors, there is an increasing acknowledgment of the necessity to distinguish between the administration of professional master's degrees and research-intensive Ph.D. programs. The latter will now be housed within the graduate school and overseen by a school director, under the leadership of the vice chancellor for research and innovation. During the 2023-2024 academic year, the director and vice chancellor will work with the Provost's Office to determine the scope and structure of the new school.
- Collaborative efforts are underway to strengthen faculty governance by coordinating college curriculum committees and including them in Senate-level approval processes, as administered through the Curriculog curriculum management system. Faculty Senate leadership announced a first-ever convening of college curriculum committee chairs for September 2023 to help ensure that all units are active and effective participants in decision-making.
- The Provost's Office will continue to address lingering "silo" effects of the former split between Academic Affairs and Student Affairs and communicate with the campus to help clarify the shared priorities of these units.

STANDARD FOUR: THE ACADEMIC PROGRAM

(Summary - Degree-Seeking Enrollment and Degrees)

Fall Enrollment* by location and modality, as of Census Date

Degree Level/ Location & Modality	Associate's	Bachelor's	Master's	Clinical doctorates (e.g., Pharm.D., DPT, DNP)	Professional doctorates (e.g., Ed.D., Psy.D., D.B.A.)	M.D., J.D., DDS	Ph.D.	Total Degree-Seeking
Main Campus FT		8,759	616	104	13		476	9,968
Main Campus PT	14	948	595	3	11		234	1,805
Other Principal Campus FT								0
Other Principal Campus PT								0
Branch campuses FT		5						5
Branch campuses PT		5						5
Other Locations FT								0
Other Locations PT								0
Overseas Locations FT								0
Overseas Locations PT								0
Distance education FT	8	845	496	2	1		3	1,355
Distance education PT	45	1,186	1,819	32	101		13	3,196
Correspondence FT								0
Correspondence PT								0
Low-Residency FT								0
Low-Residency PT								0
Unduplicated Headcount Total	67	11,748	3,526	141	126	0	726	16,334
Total FTE	28.47	10,294.20	2,381.78	173.33	74.67		555.78	13,508.23
Enter FTE definition:	# credit hours / 15	# credit hours / 15	# credit hours / 9	# credit hours / 9	# credit hours / 9	# credit hours / 9	# credit hours / 9	UG = # credit hours / 15 GR = # credit hours / 9
Degrees Awarded, Most Recent Year	32	2,838	1,361	51	25		95	4,402

Notes:

- 1) Enrollment numbers should include all students in the named categories, including students in continuing education and students enrolled through any contractual relationship.
- 2) Each student should be recorded in only one category, e.g., students enrolled in low-residency programs housed on the main campus should be recorded only in the category "low-residency programs."
- 3) Please refer to form 3.2, "Locations and Modalities," for definitions of locations and instructional modalities.

* For programs not taught in the fall, report an analogous term's enrollment as of its Census Date.

Please enter any explanatory notes in the box below

Other Locations = Count of all students taking at least one course at Haverhill for Fall 2022
 Distance Learning = Count of all students not taking courses at Haverhill and more than 50% credits online for Fall 2022
 Main Campus = Count of all students not taking courses at Haverhill and 50% or less credits online for Fall 2022
 Degrees Awarded Year = 2021-22

Standard 4: The Academic Program
(Summary - Non-degree seeking Enrollment and Awards)

Fall Enrollment* by location and modality, as of Census Date

Degree Level/ Location & Modality	Title IV-Eligible Certificates: Students Seeking Certificates	Non-Matriculated Students	Visiting Students	Total Non-degree-Seeking	Total degree-seeking (from previous page)	Grand total
Main Campus FT	6	9		15		15
Main Campus PT	57	246		303		303
Other Principal Campus FT				0		0
Other Principal Campus PT				0		0
Branch campuses FT				0		0
Branch campuses PT				0		0
Other Locations FT				0		0
Other Locations PT				0		0
Overseas Locations FT				0		0
Overseas Locations PT				0		0
Distance education FT	17	14		31		31
Distance education PT	341	311		652		652
Correspondence FT				0		0
Correspondence PT				0		0
Low-Residency FT				0		0
Low-Residency PT				0		0
Unduplicated Headcount Total	421	580	0	1,001		1,001
Total FTE	174.51	180.62		355		355.13
Enter FTE definition:	UG = # credit hours / 15 GR = # credit hours / 9	# credit hours / 9	n/a	UG = # credit hours / 15 GR = # credit hours / 9	UG = # credit hours/15 GR = # credit hours/ 9	UG = # credit hours/15 GR = # credit hours/ 9
Certificates Awarded, Most Recent Year	447					

- Notes:
- 1) Enrollment numbers should include all students in the named categories, including students in continuing education and students enrolled through any contractual relationship.
 - 2) Each student should be recorded in only one category, e.g., students enrolled in low-residency programs housed on the main campus should be recorded only in the category "low-residency programs."
 - 3) Please refer to form 3.2, "Locations and Modalities," for definitions of locations and instructional modalities.

Please enter any explanatory notes in the box below

Other Locations = Count of all students taking at least one course at Haverhill for Fall 2022
 Distance Learning = Count of all students not taking courses at Haverhill and more than 50% credits online for Fall 2022
 Main Campus = Count of all students not taking courses at Haverhill and 50% or less credits online for Fall 2022
 Degrees Awarded Year = 2021-22

**Standard 4: The Academic Program
(Headcount by UNDERGRADUATE Major)**



For Fall Term, as of Census Date

Number of credits*	3 Years Prior	2 Years Prior	1 Year Prior	Current Year
	(Fall 2019)	(Fall 2020)	(Fall 2021)	(Fall 2022)

Certificate (add more rows as needed)

?		85	104	114	99
Fine Arts, Humanities, and Social Sciences					
	Contemporary Communications	3	4	2	2
	Graphic Design/Digital Imaging	42	33	46	37
	Paralegal Studies	37	63	61	58
	Security Mgmt/Homeland Security	3	4	5	2
Francis College of Engineering		15	4	11	6
	C.A.M.	2	2	4	
	Electronic Tech.	3		1	1
	Into to Elec Eng Tech	8	1	1	
	Manufacturing Tech	2	1	5	5
Kennedy College of Sciences		51	46	45	32
	Data/Telecom.	1	2		1
	Information Technology	16	10	7	4
	JAVA Development	15	5	4	6
	Multimedia	1	3	3	1
	Networking and Security			2	2
	Unix/Linux Oper Sys	1	4	6	4
	Web Design & Develop	17	22	23	14
Manning School of Business		32	48	42	35
	Accounting	32	44	37	31
	Digital Marketing		4	5	4
Total		183	202	212	172

Associate (add more rows as needed)

?		36	23	19	14
Francis College of Engineering					
	Electronic Eng Tech	16	11	8	4
	Mech. Engineering Tech	20	12	11	10
Kennedy College of Sciences		47	48	31	32
	Information Technology	47	48	31	32
Manning School of Business		28	24	18	21
	Business Administration	6	11	16	20
	Management	22	13	2	1
Total		111	95	68	67

Baccalaureate (add more rows as needed)

P	Fine Arts, Humanities, and Social Sciences	3,526	3,453	3,300	3,260
	American Studies	7	5	5	6
	Art	200	79	85	89
	Composition for New Media	17	23	27	30
	Criminal Justice	798	819	753	679
	Digital Media			16	57
	Economics	101	92	94	86
	Education	83	134	131	136
	English	329	330	306	274
	Graphic Design		123	101	88
	History	118	106	109	95
	Liberal Arts	354	314	307	268
	Music Business	39	35	23	20
	Music Performance	21	28	31	28
	Music Studies	79	76	53	46
	Peace & Conflict Studies	19	15	12	8
	Philosophy	27	26	18	18
	Political Science	140	115	108	103
	Psychology	789	796	785	841
	Quantitative Economics				9
	Sociology	60	64	48	59
	Sound Recording Tech	92	82	84	101
	World Languages	23	21	27	20
	Undeclared Liberal Arts	230	170	177	199
	Francis College of Engineering	3,163	3,002	2,699	2,479
	Biomedical Engineering	244	264	247	232
	Chemical Engineering	383	345	269	232
	Civil Engineering	369	328	271	270
	Computer Engineering	330	299	276	240
	Electrical Engineering	478	449	425	378
	Electronic Eng Tech	40	39	33	32
	Environmental Engin.	43	43	56	50
	Industrial Engineering		4	14	25
	Mechanical Eng Tech	58	55	58	50
	Mechanical Engineering	900	911	837	822
	Plastics Engineering	189	164	121	92
	Undeclared Engineering	129	101	92	56
	Kennedy College of Sciences	2,652	2,657	2,485	2,398
	Applied Mathematics	4	3	2	2
	Biology	637	604	510	499
	Chemistry	130	133	151	138
	Computer Science	845	916	926	948
	Engineering Physics				7
	Environmental Science	111	125	111	95
	Information Technology	628	594	494	455
	Mathematics	200	177	171	148
	Meteorology Atmosphrc Sci		6	26	27
	Physics	97	98	84	64
	Undeclared Science		1	10	15

Manning School of Business		2,583	2,573	2,442	2,337
Business Administration		2,424	2,428	2,344	2,258
Undeclared Business		159	145	98	79
Zuckerberg College of Health Sciences		1,384	1,383	1,341	1,274
Applied Biomedical Science		28	106	155	158
Clinical Lab Sciences		114	55	8	
Exercise Physiology		141	61	1	
Exercise Science		227	296	340	325
Nursing		430	431	426	423
Nutritional Science		72	80	85	78
Pharmaceutical Sciences		31	38	39	41
Public Health		309	293	262	229
Health Pathways		32	23	25	20
	Total	13,308	13,068	12,267	11,748

Total Undergraduate

13,602 13,365 12,547 11,987

* Enter here the number of credits students must complete in order to earn the credential (e.g., 69 credits in an A.S. in Nursing)

Please enter any explanatory notes in the box below

Non-degree seeking: Fall 2019 = 570; Fall 2020 = 450; Fall 2021 = 338; Fall 2022 = 404

Standard 4: The Academic Program (Headcount by GRADUATE Major)

U For Fall Term, as of Census Date

Number of credits*	3 Years Prior	2 Years Prior	1 Year Prior	Current Year
	(Fall 2019)	(Fall 2020)	(Fall 2021)	(Fall 2022)

Master's (add more rows as needed)

?	Fine Arts, Humanities, and Social Sciences	673	740	765	691
	App Beh Anlys Autism Stds	30	36	35	45
	Community Social Psych	20	18	17	21
	Criminal Justice	179	223	259	238
	Curriculum & Instruction	104	109	118	95
	Educ Admin Plan & Pol	13	16	16	15
	Education Administration	56	52	48	40
	History	9	5	6	7
	Music Education	22	29	28	22
	Peace & Conflict Studies	23	18	12	7
	Public Administration	26	24	21	22
	Reading & Language	66	62	61	49
	Security Studies	125	148	144	130
	Francis College of Engineering	599	704	686	647
	Biomed Engr & Biotech	26	46	54	51
	Chemical Engineering	21	27	33	29
	Civil Engineering	67	83	90	88
	Computer Engineering	76	69	64	64
	Electrical Engineering	111	122	122	103
	Energy Engineering	33	32	35	34
	Engineering Management	93	120	129	111
	Environmental Studies Eng	7	7	5	5
	Industrial Engineering		2	4	4
	Mechanical Engineering	104	125	91	99
	Plastics Engineering	61	71	59	59
	Kennedy College of Sciences	337	341	371	452
	Biological Sciences	57	54	53	59
	Chemistry	15	17	21	25
	Computer Science	56	64	115	192
	Environmental Studies Sci	22	27	21	17
	Information Technology	140	134	123	110
	Mathematics	30	28	21	31
	Physics	10	9	7	5
	Rad Science & Protect	7	8	10	13
	Manning School of Business	851	1,091	1,412	1,437
	Accounting	42	41	47	41
	Business Administration	724	943	1,233	1,252
	Business Analytics	41	53	71	84
	Entrepreneurship	6	4	1	6
	Finance	38	50	60	54

Zuckerberg College of Health Sciences	278	257	298	299
Applied Biomedical Science				2
Clinical Lab Sciences	19	12	13	12
Health Information Mgmt	53	67	77	54
Nursing	93	82	78	59
Pharmaceutical Sci	17	19	22	33
Public Health	94	77	108	139
Work Environment	2			
Total	2,738	3,133	3,532	3,526

Doctorate (add more rows as needed)

? Fine Arts, Humanities, and Social Sciences	232	232	261	273
App Psych & Prevent Sci	24	25	26	22
Crim Just & Criminology	39	40	42	38
Education	58	59	65	77
Global Studies	27	29	31	30
Language Arts & Literacy	1	1		
Leadership in Schooling	78	76	95	105
Math & Science Education	5	2	2	1
Francis College of Engineering	207	207	211	229
Biomedical Engineering			1	5
Chemical Engineering	25	25	22	27
Civil Engineering	21	23	18	18
Computer Engineering	25	20	25	28
Electrical Engineering	40	42	39	43
Energy Engineering	11	15	16	16
Industrial Engineering				3
Mechanical Engineering	52	49	54	50
Plastics Engineering	33	33	36	39
Kennedy College of Sciences	171	176	176	205
Applied Biology	4	8	9	14
Chemistry	49	45	38	46
Earth System Science				66
Computer Science	53	59	61	5
Physics	55	53	57	60
Polymer Science	10	11	11	14
Manning School of Business	33	31	45	41
Business Administration	33	31	45	41
Zuckerberg College of Health Sciences	171	187	208	205
Nursing	37	50	60	68
Pharmaceutical Sci	8	12	15	15
Physical Therapy	113	114	114	103
Public Health		6	17	19
Work Environment	13	5	2	
Graduate Studies	56	52	54	40
Biomed Engr & Biotech	53	49	51	37
Marine Science & Tech	3	3	3	3
Total	870	885	955	993

First Professional (add more rows as needed)

Total		0	0	0	0

Other; specify (add more rows as needed)

Fine Arts, Humanities, and Social Sciences	118	108	120	88
Appld Behavr Analys 21cr	67	67	82	49
Beh Mgm Autsm BCaBA 12cr	10	2	1	
CJ Ldrshp & Policy Dev	3			1
Div in the Workplace	1	1	1	1
Domestic Vio Prevent	3	4	2	1
Evaluation & Assessment			3	5
Forensic Criminology	16	19	16	15
Peace & Conflict Res	1	1	2	1
Public Admin & Leadrshp		2	4	4
Security Studies	12	8	5	7
Urban Education				2
Victim Studies	5	4	4	2
Francis College of Engineering	55	50	51	37
Additive Mftg RF & MW				
Biomedical Engineering	6	5	1	5
Communications Engin		1		
Composites & Matls			1	
Design & Manufacturing				1
Digital Engineering				10
Energy Conversion	1			
Field Program Gate Arry	5	5	4	3
Fld Prgm Gate Arry-Enh			10	
Integrated Eng Systems	1			
Manufacture Engineer	4	10	5	
Materials Sci/Engineer		1		
Mdl,Siml & Ctrl Sys Pro	1		1	
Medical Plastics Des/Mn	3	1	3	
Microwave/Wireless Eng	11	1	2	2
Plastics Design	2	1		1
Plastics Eng Fund	16	22	19	9
Plastics Materials	1	3	2	2
Plastics Processing	1			
Renewable Energy Eng	1		1	2
VLSI & Microelectronics	2		2	1
Wind Energy				1
Kennedy College of Sciences	15	11	9	8
Applied Statistics	1			
Biotech & Bioprocess	2	1	2	1
Chemistry		2	1	1
Cyber Security	8	7	6	4
Environmentl Geoscience	1	1		1
Mole & Cell Biotech	3			1

Manning School of Business		94	87	98	80
Business Analytics		10	15	9	8
Engineering Innovation					10
Financial Management		5	5	5	3
Foundations of Business		73	64	81	55
Innovation&Entreprenshp				1	2
Leadership & Management					1
New Venture Creation		3	1		
Supply Chain & Opr Mgmt		3	2	2	1
Zuckerberg College of Health Sciences		45	55	46	36
Clinical Pathology		4	12	17	9
Health Informatics		18	20	12	12
Health Service Managmnt		15	8	5	3
Pharmaceutical Sciences		1			
Public Health Studies		7	15	12	12
Total		327	311	324	249
Total Graduate		3,935	4,329	4,811	4,768

* Enter here the number of credits students must complete in order to earn the credential (e.g., 36 credits in an M.B.A.)

Please enter any explanatory notes in the box below

Other = Graduate Certificates
 Non-degree seeking: Fall 2019 = 248; Fall 2020 = 225; Fall 2021 = 167; Fall 2022 = 176

**Standard 4: The Academic Program
(Credit Hours Generated and Information Literacy)**

Credit Hours Generated By Department or Comparable Academic Unit

	3 Years Prior (FY 2020) Su'19 - Sp'20	2 Years Prior (FY2021) Su'18 - Sp'19	1 Year Prior (FY 2022) Su'21 - Sp'2	Current Year (FY 2023) Su'22 - Sp'23
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Undergraduate (add more rows as needed)

	3 Years Prior (FY 2020) Su'19 - Sp'20	2 Years Prior (FY2021) Su'18 - Sp'19	1 Year Prior (FY 2022) Su'21 - Sp'2	Current Year (FY 2023) Su'22 - Sp'23
Fine Arts, Humanities, and Social Sciences	139,174	137,719	129,605	127,165
Art	9,653	9,444	11,254	11,236
Architectural Studies				429
Education	1,801	2,235	2,464	2,647
Economics	13,023	11,283	10,377	9,299
English	23,668	22,444	20,197	20,112
History	8,223	9,694	8,014	7,846
Interdisciplinary Studies	7,917	8,122	7,994	8,680
Music	6,880	6,130	6,097	5,823
Philosophy	7,820	6,913	7,114	7,419
Political Science	6,644	6,534	5,712	5,050
Psychology	20,866	21,409	19,894	18,885
School of Criminology	17,530	18,187	16,617	16,305
Sociology	7,302	6,820	6,453	7,070
World Languages and Cultures	7,847	8,504	7,418	6,364
Francis College of Engineering	46,123	47,432	42,724	38,156
Biomedical & BioTech. Engineering	1,965	2,853	2,870	2,607
Chemical Engineering	4,690	4,450	3,464	2,730
Civil & Environ Engineering	5,345	5,122	4,759	4,089
Electrical & Comp. Engineering	13,697	15,413	14,191	12,140
Industrial Engineering				24
Intercollegiate Engineering	4,045	3,838	3,129	3,120
Mechanical Engineering	13,606	13,344	12,378	11,756
Nuclear & Energy Engineering	159	207	159	168
Plastics Engineering	2,616	2,205	1,774	1,522
Kennedy College of Sciences	104,191	104,271	90,359	85,776
Biological Sciences	14,771	14,919	13,200	13,036
Chemistry	15,859	15,527	13,084	12,551
Computer Science & Information Techno	22,058	22,820	20,262	19,879
Environmental & Atmospheric Science	3,450	4,829	4,178	4,189
Intercollegiate Sciences	199	79	134	437
Mathematics	35,744	35,088	30,238	28,539
Physics	12,110	11,009	9,263	7,145
Manning School of Business	53,938	54,574	49,895	46,596
Accounting	7,554	8,300	7,149	6,545
Entrepreneurship	2,647	3,009	3,590	3,721
Finance	7,911	8,522	7,896	7,140
Management	14,142	13,529	11,829	11,106
Marketing	11,595	11,125	10,476	9,462
Oper & Info Systems	10,089	10,089	8,955	8,622

Zuckerberg College of Health Sciences	29,941	30,067	28,936	27,396
Biomedical and Nutritional Science	14,743	15,662	15,421	14,025
Physical Therapy & Kinesiology	3,994	3,382	3,687	3,181
Public Health	5,547	5,430	4,625	4,860
School of Nursing	5,657	5,593	5,203	5,330
Honors College	3,498	3,540	3,564	3,595
UMass Lowell	434	301	326	663

Total 377,299 377,904 345,409 329,347

Graduate (add more rows as needed)

Fine Arts, Humanities, and Social Sciences	14,143	14,774	15,269	14,167
Economics	135	33	150	21
Education	4,658	4,747	5,060	5,078
History	102	13	29	82
Interdisciplinary Studies	916	836	794	681
Music	297	345	302	299
Psychology	2,463	2,444	2,388	2,118
School of Criminology	5,494	6,311	6,546	5,888
Sociology	78	45	0	0
Francis College of Engineering	14,402	15,645	14,797	14,565
Biomedical & BioTech. Engin.	824	807	714	627
Chemical Engineering	1,248	1,349	1,304	1,139
Civil & Environ Engineering	1,645	1,833	1,653	1,687
Electrical & Comp. Engineering	3,764	4,192	4,419	4,157
Environmental Studies	120	78	72	141
Industrial Engineering		30	66	173
Intercollegiate Engineering	56	105	149	126
Mechanical Engineering	3,682	4,033	3,474	3,583
Nuclear & Energy Engineering	231	218	225	219
Plastics Engineering	2,832	3,000	2,721	2,713
Kennedy College of Sciences	8,209	8,372	8,804	10,384
Biological Sciences	963	592	799	852
Chemistry	947	1,098	1,012	1,340
Computer Science & Information Techno	3,951	4,390	4,742	5,799
Environmental & Atmospheric Science	458	337	512	475
Intercollegiate Sciences	4	2	0	0
Marine Science & Technology	27	38	20	1
Mathematics	822	723	561	689
Physics	1,037	1,192	1,158	1,228
Manning School of Business	15,524	21,957	25,219	24,279
Accounting	2,172	3,302	3,600	3,288
Entrepreneurship	411	484	789	832
Finance	2,790	3,874	4,038	3,734
Management	3,989	5,279	6,486	6,522
Marketing	1,967	3,060	3,197	3,180
Oper & Info Systems	4,195	5,958	7,109	6,723
Zuckerberg College of Health Sciences	9,443	9,709	10,567	10,556
Biomedical and Nutritional Sciences	996	996	1,342	1,343
Physical Therapy & Kinesiology	3,642	3,655	3,493	3,249
Public Health	3,410	3,699	4,272	4,728
School of Nursing	1,395	1,359	1,460	1,236
UMass Lowell	21	39	12	37

Total 61,742 70,496 74,668 73,988

Information Literacy Sessions

Main campus

Sessions embedded in a class

1	7	29	35
0	0	0	0

Free-standing sessions

Branch/other locations

Sessions embedded in a class

n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a

Free-standing sessions

Online sessions

7	11	23	6
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URL of Information Literacy Reports:

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Please enter any explanatory notes in the box below

The Academic Program

UMass Lowell currently offers [120 baccalaureate](#), [47 master's](#) and [30 doctoral degrees](#). Since [the interim report to NECHE in 2018](#), several new degrees have been added in response to student and workforce demands, including the: B.F.A. in Digital Media; B.F.A. in Graphic Design; Bachelor of Music in Composition for New Media; B.S. and M.S. in Industrial Engineering; Ph.D. in Earth System Science; D.Sc. in Public Health; Ph.D. in Applied Biology; M.S. in Health Information Management; and Ph.D. in Biomedical Engineering. New undergraduate options and concentrations have also been added. (See Standard Four work room documents for a complete list of new UMass Lowell programs, options, concentrations and certificates).

The university also offers 15 undergraduate and 26 graduate certificate programs through the [Division of Graduate, Online & Professional Studies \(GPS\)](#), some of which will soon be administered by the [newly announced UML School of Graduate Studies](#). Over half of the GPS division's offerings are delivered online or in a low-residency hybrid format (for example, the Ed.D. requires a one-week summer residency during each of its three years). The rest take place on campus, including undergraduate classes scheduled during the summer and winter sessions or in the evenings and on weekends. All programs offered through GPS, like our undergraduate on-campus programs, are coordinated through their respective academic departments, which approve faculty, courses and program design.

All undergraduate baccalaureate degrees require a minimum of 120 credits, with at least 36 credits addressing the breadth-of-learning outcomes in general education courses and at least 30 credits taken within the major. Associate degrees (offered through GPS only) require a minimum of 60 credits. All master's programs require a minimum of 30 credits in both non-thesis and thesis options, and all doctoral programs require 60 credits with a dissertation or thesis and/or a practicum or clinical component. All degree programs have a coherent design and progress sequentially from less to more advanced courses. Advanced courses require students to have developed sophisticated skills and depth of knowledge.

Requirements for all academic programs are published in the online academic catalogs and on the department pages of the university website. Learning outcomes specific to each undergraduate degree program are published on the Student Learning Outcomes website. In addition, degree pathways outline the requirements for each undergraduate program. Exceptions to the degree pathways for individual students are indicated on their personalized advisement reports, which are accessible through the Student Information System (SiS).

Because of our history and our role as a public university, we have always been dedicated to equipping students with the skills and knowledge needed to make a meaningful impact in the real world, especially in Massachusetts, New England and the Northeast. Thus, we continually evolve our programs to meet the changing demands of both our students and the regional economy. One recent example is the introduction of a [new concentration in sociology](#) focused on racial equity and inclusion. Recognizing the significance of recent movements advocating for racial justice, the evolving demographics of our student body, and growing student interest, we responded by developing this concentration as well as an interdisciplinary minor in [Race and Ethnic Studies](#). Classes in both allow students in all disciplines to deepen their understanding of the complex issues surrounding race and equity. The sociology concentration also offers paid and for-credit undergraduate research opportunities, in keeping with the university's new strategic plan and the chancellor's announced intention to provide a paid, career-connected work experience for every undergraduate student who wants one.

Assuring Academic Quality: Description

Both in evaluating existing programs and considering the introduction of new programs, we look carefully at faculty expertise, student interest and market demands. Detailed data analysis and assessment shape the decision-making process, ensuring that new programs align with the institution's resources and objectives. Likewise, decisions to discontinue programs are guided by rigorous evaluation of program quality, costs, and student enrollments.

Both the establishment of new programs and modifications to existing programs at the graduate and undergraduate levels undergo a comprehensive review and approval process. This begins with the engagement of department and college-level curriculum committees, which are tasked with ensuring academic excellence and alignment with the university's overarching goals. Following approval at the college level, either the [Undergraduate Program Committee](#) (UPC) or the [Graduate Policy and Affairs Committee](#) (GPAC) of the [Faculty Senate](#) reviews each proposal for a new program or substantive changes to an existing one.

Programs approved at that level are submitted to the full Faculty Senate and reviewed by the Office of Academic and Student Affairs. Then, newly approved proposals are reviewed at the UMass President's Office by the senior vice president for academic, student, and international affairs, and those approved are submitted to the UMass Board of Trustees. If the trustees approve a proposal, it is then submitted to the state [Board of Higher Education](#) for a final review. While time-consuming, this sequential approval process provides full oversight of the coherence, quality and value of proposed academic programs.

Department chairs, faculty, and undergraduate and graduate program directors and coordinators are responsible for the development and direction of approved programs, including management of advising and retention, instructional methods, and student learning and achievement. Oversight is provided by the college deans and Academic and Student Affairs.

The university leverages several different internal and external mechanisms to ensure the quality of our academic programs. In addition to NECHE accreditation, professional academic programs undergo regular review by the appropriate accrediting agencies. A list of [accreditation agencies](#) is available on the [UMass Lowell Accreditation website](#).

As noted in Standard Two, programs that do not participate in professional accreditation are reviewed on a seven-year cycle through the AQAD (Academic Quality, Assessment and Development) process. The guidelines for AQAD reviews, [published on the university website](#), outline a rigorous, evidenced-based self-assessment followed by an external team review, a departmental response to the reviewers' report, and a departmental action plan, which is reviewed by the college's dean and the provost's office and submitted to the president's office as part of its UMass System Performance Measurement System. (See Standard Four work room documents for a sample of AQAD reviews).

Over the past decade, the university has increased academic administrative support in each of the colleges by adding [associate and assistant deans for undergraduate education and associate deans for research and graduate programs](#). These deans are typically university faculty who have advanced through the ranks and are well-versed in the policies guiding the development and oversight of academic programs. The associate deans within each college work as a team. Those who oversee undergraduate education meet monthly with the vice provost for academic affairs, while those who oversee research and graduate programs meet monthly with the vice chancellor for research and innovation. This coordination allows colleges to identify opportunities for collaboration and efficiencies, such as shared foundational courses, interdisciplinary programs and cross-disciplinary research.

The university also appoints undergraduate and graduate program coordinators for most academic programs. These program coordinators are responsible for advising and admissions, as well as for reviewing program quality and making recommendations for updates and improvements. Some larger departments and schools have also created assistant and associate chairs who work with deans, program coordinators and faculty on academic program oversight.

Policies and procedures for the creation of new programs or the revision of existing ones are published on the [Faculty Senate website](#). Those proposing new or modified programs are required to demonstrate sustainable student demand and to identify the resources required to initiate and sustain the programs.

Where program enrollments are consistently low, the provost's office has worked with the relevant college dean, chair, faculty and the Office of Admissions to enhance recruitment. For example, in 2019, after a comprehensive review of the then-College of Education's programs and enrollments, we decided to develop a common core curriculum for the eight pathways in the [M.Ed. in Curriculum & Instruction](#) (now further streamlined into three pathways). This helped to reduce the number of low-enrollment courses. GPS leadership also worked with faculty in the M.Ed. in Higher Education Administration program to develop a live, online version of the degree that GPS could then support and promote, expanding the program's recruitment market.

At times, lower program enrollments and budget challenges necessitate organizational realignment. The consistently lower number of students enrolled in the College of Education, compared to other academic departments and named schools, resulted in converting the college to a [School of Education](#) within the College of Fine Arts, Humanities and Social Sciences in 2021. This resulted in significant administrative savings and allowed education students and faculty to benefit from the academic and administrative resources of the much larger College of FAHSS.

In cases where low student demand persists, the provost may suspend admission to a program or recommend discontinuation of a program to the UMass System president, who authorizes the discontinuation. In such cases, an announcement is posted on the website and in the catalog stating that no new students are being admitted to the program. For example, due to very low enrollments and extensive competition, a decision was made to close the R.N.-to-B.S. program offered by the Zuckerberg College of Health Sciences. Students were notified, a teach-out plan was developed, and the remaining students were supported through graduation. Similarly, low enrollments in the Professional Science Masters programs led the university to close admission, halt recruitment and develop a teach-out plan. The benefit of the Professional Science Masters closures was the redirection of these students into other master's programs. The process for program closures is outlined on the [UMass System website](#).

Assuring Academic Quality: Appraisal

UMass Lowell has a well-structured and comprehensive review process for both introducing new programs and evaluating existing ones. This multi-tiered approach involving department committees, the Faculty Senate and external oversight ensures thorough evaluation and adherence to academic standards. Our emphasis on data analysis and assessment in decision-making ensures that academic programs are continuously monitored and adjusted to align with student demand and institutional resources. This data-driven approach promotes efficiency and effectiveness.

The approval and modification processes for interdisciplinary programs should ideally adhere to the same standards as those applied to programs within individual disciplines. However, the policies and procedures governing interdisciplinary programs lack uniformity and consistency in their enforcement. This disparity can be attributed, in part, to the institution's historically department-focused organizational structure. While our cultural mindset has gradually shifted toward fostering a more collaborative and less siloed interdisciplinary environment, our policies have not always kept pace with this transformation. To address this challenge, the university has appointed a new coordinator of Faculty Senate operations and projects and introduced [Curriculog](#), a platform for curriculum management, to help us develop and institutionalize comprehensive policies for the assessment and oversight of all programs.

Undergraduate Degree Programs: Description

Every undergraduate program is designed to prepare students to achieve in-depth learning in their chosen majors, while also preparing them to meet general education requirements and achieve critical learning outcomes. Early courses provide a foundation for the advanced work that students will be required to perform.

All undergraduates must earn at least 120 credits and complete requirements in their major as well as in our [Core Curriculum](#) to earn a bachelor's degree. (4.33) The Core Curriculum is distributed to ensure all students fulfill both [Breadth of Knowledge \(BOK\)](#) requirements and the seven [Essential Learning Outcomes \(ELOs\)](#) by taking at least 36 credits outside their major. (4.15) (See more on the BOK and ELO requirements below, under General Education.) Many of the Essential Learning Outcomes are addressed in upper-level courses within each student's major, as well, bringing the total to more than the 40 credits required by Standard Four.

At least half the courses within the academic major must be upper-level courses, and many academic programs require students to complete a capstone project. (The Honors College also requires a final thesis or project.) The remaining credits outside the academic major and the Core Curriculum allow students to choose a minor, a second major or unrestricted electives. Program requirements are clearly outlined in the [online academic catalog](#), on the departmental web pages and in the personalized advising reports that are accessible through SiS. In addition, semester-by-semester curriculum checklists serve as roadmaps that lead students through each undergraduate degree program.

Undergraduate Degree Programs: Appraisal

As described in the previous section on assuring academic quality, we frequently evaluate and adjust our undergraduate programs according to various metrics, including student demand, faculty expertise, industry and community needs, and the requirements of external accreditation agencies. For example, our B.S. in Plastics Engineering is accredited by the Engineering Accreditation Commission of ABET).

One key example of building on our existing programs to address growing and emerging needs is the creation of a new, interdisciplinary minor in [population health informatics and technology](#), designed to help address a regional and national need to better understand health care delivery and outcomes for different demographic groups. At the same time, this curricular development was enabled by a [federal grant for minority-serving institutions](#) aimed at educating students from underrepresented groups for well-paying and meaningful careers. (The AANAPISI grant also supports a certificate program and two new master's degree specialties.) Another example is the reintroduction of our undergraduate education major six years ago. The major leads to dual certification in elementary education and teaching students with mild to moderate disabilities in grades K-8. This dual certification, the first offered by an undergraduate degree program in Massachusetts, is highly prized by public school systems. This new degree program, coupled with a hiring cluster in education focused on faculty with multilingual teaching skills, prepares our students to lead inclusive classrooms effectively. In this time of resource constraints, we are fortunate to have a collaborative campus culture that enables us to build on our existing foundations instead of allocating new resources to create additional programs.

General Education: Description

The [Core Curriculum](#) is designed to ensure that students learn deeply and broadly and that they develop the essential intellectual abilities to thrive in and contribute to their communities. The "Breadth of Knowledge" requirement is designed to familiarize students with different perspectives on learning and understanding. Students satisfy this requirement with a minimum of 36 credits distributed across social sciences, arts and humanities, sciences, college writing and math. Students must fulfill the Breadth of Knowledge requirements from courses outside of their major, with no more than two courses from a single discipline applied to the same criterion. Students may use up to two courses from their minor to satisfy Breadth of Knowledge requirements.

Students are also expected to meet seven Essential Learning Outcomes (ELOs): applied and integrative learning; critical thinking and problem-solving; diversity and cultural awareness; information literacy; quantitative literacy; social responsibility and ethics; and written and oral communication, emphasizing writing in the discipline. Essential Learning Outcomes may be met within the major or through other courses, including BOK requirements. Each department has identified courses within and external to their majors that allow students to demonstrate each ELO, and the online academic catalog tags courses so students can easily identify those that will fulfill both the ELO and BOK requirements.

Faculty or departments interested in having a course approved for one or more ELOs must apply for approval to their department and college and to the Core Coordinating Committee of the Faculty Senate, which reviews the course to determine whether it addresses the criteria for that Essential Learning Outcome(s), based on the approved rubric.

General Education: Appraisal

Our Core Curriculum was designed to be responsive to student needs and to evolve based on regular assessment. [An example of this kind of evolution](#) is the development of our [First-Year Writing Program](#) for undergraduates, which helps students strengthen skills in expository writing, research writing, critical thinking, and presentation skills in English. Entering first-year students complete the Writing Course Finder, a survey that asks them to reflect on their writing experiences and goals and then choose among the program's course options (College Writing I, College Writing I Studio, or College Writing II). Students who earn an AP English score of 3 may receive credit for College Writing I, while those who score a 4 or 5 receive credit for College Writing I and II. (4.11).

Major changes in the past five years include:

- The First-Year Seminar in Honors (FYSH), which for years has served as the introductory seminar for Honors College students, became part of the First-Year Writing Program in 2017-18. By addressing the learning goals for College Writing I, it allows students to meet two requirements with one course and ensures consistency across sections. (For honors students who place out of College Writing I, it counts as a humanities elective.)
- Instead of offering special sections of College Writing I and II for multilingual students, we now offer College Writing I Studio, a 4-credit class that includes extra instruction time for all students who are concerned about their ability to write college essays. We also offer the 3-credit College Writing Workshop, which is geared toward multilingual students and prepares them for College Writing I.

- We offer sections of College Writing I and II designed for first-generation college students in the River Hawk Scholars Academy (RHSA), who may have less confidence and/or experience in writing college-level research papers. These sections address those needs and reinforce a sense of community among that cohort. In 2022-23, the university offered 20 RHSA-targeted writing courses. The success rates in these courses are comparable to the success rates in our College Writing sequence across the university.

Another significant change we have implemented is a shift from a test-based placement model for the College Writing sequence to guided self-placement in College Writing I, College Writing II, or College Writing I Studio. Rather than being assigned to a level based on a single essay, students choose the level at which they think they belong. If the essay they submit does not, in the opinion of the faculty, align with the level a student has chosen, faculty contact them for a follow-up conversation.

An analysis reveals that this shift has been successful. Each fall semester, around 10% of incoming first-year students self-place into College Writing II. They succeed in the course at rates comparable to students who take the course after College Writing I or who place into it through AP or transfer credit. We have also found that guided self-placement helps students who need extra support choose a course through a dialogue-based process that removes stigma. A 2023 survey of 97 upper-level students from across the university found that 87% believed that the College Writing courses prepared them “well” or “very well” for work in their majors. The recently created [Writing Goals](#) web page also helps students explore writing specific to their majors.

Despite these successes, College Writing faculty report that students in the 2022-23 cohort were less prepared and less engaged than in previous years, a trend we’ve seen in academic disciplines across campus.

An appraisal of the learning outcomes of the Core Curriculum are discussed further in Standard Eight.

The Major or Concentration: Description

Published descriptions of majors and concentrations for undergraduate programs are available through the online academic catalog and on department websites. Several tools help students track their progress toward the completion of the degree. [Degree pathways](#) map optimal semester-by-semester sequencing through the major, along with suggested classes to meet BOK and ELO requirements within four years; personalized advising reports are available through SiS. The [university calendar](#) includes a specific advising period of three weeks in mid-semester during which faculty hold extra office hours to meet with advisees before they register for their next semester’s classes.

Each academic department is responsible for the structure, content, and instructional methods of its academic programs and for assessing student learning. Departments develop programs of study with courses tiered at 1000, 2000, 3000 and 4000 levels to provide continuity and indicate sequential progression and depth of knowledge. Courses numbered 1000 and 2000 are typically survey or introductory courses that require no prerequisites. Courses numbered 3000 or 4000 have prerequisites, typically within the requirements for the major or concentration. Synthesis of cumulative knowledge within the major is enhanced through capstone projects in courses numbered at the 4000 level.

Currently, majors leading to professional degrees often include practicums in off-campus settings as part of their degree pathways. For example, in the Zuckerberg College of Health Sciences, students in the clinical option for exercise science have a full semester of clinical experience in settings such as a cardiac rehabilitation center, while students in the Manning School of Business, the Kennedy College of Sciences or the Francis College of Engineering may have paid co-op experiences in workplaces. In some programs, such as psychology and English, internships for service-learning credit, research positions, and other practical experiences are available but not required.

The Major or Concentration: Appraisal

Aligned with our new strategic plan's focus on enrollment and student success, the university is dedicated to an ambitious goal: [offering paid, career-related experiences to all students, irrespective of their major or field of study](#). Chancellor Chen announced this goal at the fall 2023 Convocation. Recognizing that many of our students already hold at least one job while pursuing their degrees, we understand the importance of providing paid opportunities so that undergraduates can gain career-related experience without unsupportable financial sacrifices. By emphasizing the availability of paid career-connected work and experiential learning, we aim to create an enticing environment for both current and prospective UMass Lowell students.

This commitment to paid career-connected work also aligns with our equity goals. Access to quality internships and co-op positions can disproportionately benefit students from privileged backgrounds. By ensuring paid opportunities for all students, regardless of their major or background, we hope to promote a more inclusive and equitable educational experience. This approach supports our broader mission of providing equal opportunities for success to all members of our diverse student body.

Graduate Degree Programs: Description

The university offers 41 master's and 28 doctoral degrees across its five colleges. Detailed descriptions and degree requirements for all programs are published in the [graduate catalog](#). Online options are available for 22 master's and three doctoral programs. In addition, 22 of the 56 graduate certificates offered by GPS are also offered online.

Master's programs require a minimum of 30 credits beyond the baccalaureate degree, professional doctoral programs (the Ed.D. and D.P.T., for example) require a minimum of 46 credits, and Ph.D. programs require a minimum of 60 credits. Graduate certificate programs require at least 12 credits. The certificate programs offer students the opportunity to strengthen their credentials beyond the baccalaureate degree through a set of well-connected courses that have a coherent theme, and to explore the option of continuing for a related graduate degree.

Graduate degree-specific requirements are consistent with common standards across institutions of higher education. The doctoral degree and many master's degrees require a blend of discipline-specific courses with an increasing level of complexity plus a research project, which may lead to a dissertation or thesis under the supervision of at least one faculty member. The coursework and research projects require the student to make use of an existing body of knowledge and to build on and synthesize it through research. The thesis or dissertation and related papers must facilitate the dissemination of knowledge in the discipline. (4.20)

Requirements for admission, degree requirements and any program-specific variants are described in the [academic catalog](#) and on the admissions page of each program. Prospective students may apply to a specific graduate degree program, including master's, doctoral or certificate programs. The graduate coordinator for each program reviews applications, in some cases with the assistance of a faculty committee or GPS admissions staff. Students may enroll as non-degree students, for example in a certificate program, but may only transfer up to 12 credits into a degree program. All students seeking admission to graduate-level study must show evidence of having earned a baccalaureate degree or its equivalent from an accredited college or university.

As a way to encourage undergraduates to pursue master's degrees, the university has instituted [a Bachelor's-to-Master's](#) program in a number of disciplines. Our undergraduate students in eligible majors are encouraged to apply for master's level work during their junior year. Bachelor's-to-Master's students may take two graduate-level courses during their senior year, and in some cases may take up to four graduate courses as undergraduates; these courses may be counted toward both their undergraduate and graduate degrees with permission of the graduate coordinator. To be eligible for the Bachelor's-to-Master's program, students must have a minimum GPA of 3.0 both when they apply and when they complete the baccalaureate degree. We waive application fees and tests (such as the GRE) for these qualified applicants, with the exception of the MTEs for those pursuing a master's degree in education.

We are also creating and supporting a growing number of [interdisciplinary graduate programs](#) to take advantage of strengths and synergies among academic colleges and departments, in tandem with our increasing emphasis on interdisciplinary research. These graduate programs use a graduate group model of administration in which faculty collaborate across disciplines, departments, programs or colleges, and in some cases form partnerships with other UMass campuses. Examples of interdisciplinary offerings include master's programs in [peace and conflict studies](#), [security studies](#), [pharmaceutical sciences](#) and [public administration](#), as well as Ph.D. programs in [biomedical engineering](#), [criminology](#), [global studies](#) and pharmaceutical sciences.

This has led to new and exciting opportunities for graduate students to do research in emerging and critical areas. For example, professors in sociology and education have teamed up with faculty in engineering [to improve engineering education](#), and faculty in criminology and justice studies have teamed up with professors in philosophy to explore the [ethics of medical enhancements to warfighters](#), including using AI to improve military decision-making. Built into the grants that fund this research is money to pay graduate and undergraduate research assistants.

We are also continuously seeking ways to offer our on-campus master's degree programs online as well. Recent examples are the [Master of Public Health](#) and the [M.Ed. in Curriculum and Instruction](#). All online courses and programs are developed by university faculty with the support and approval of their respective academic departments and colleges through the identical faculty governance process utilized for our in-person classes. To ensure quality and consistency, all online faculty must participate in a [six-week online training program](#) led by staff and instructional designers in GPS. Faculty have 24-hour access to technical support and may participate in regular technology workshops throughout the year.

To ensure compliance with federal guidelines for awarding credit, GPS and the registrar have developed a contact hours equivalency document to assist faculty and students in understanding the amount of course work and faculty engagement they should expect in a 3-credit course of varying course lengths. Direct instruction in online courses is either 15, 30 or 45 hours spread over three, six, eight, 10 or 15 weeks. Students can expect to spend twice as much time on out-of-class assignments as they spend on direct instruction, or 30, 60 or 90 hours total.

Each academic department is responsible for the structure, content and instructional methods of its graduate programs and for assessing student learning. Departments develop programs of study with courses tiered at 5000, 6000 and 7000 levels to provide continuity, sequential progression and increasing depth of knowledge. Courses numbered 5000 are typically master's level classes, require no prerequisites other than an approved baccalaureate degree in the same or a closely related major, and may be taken by senior year baccalaureate students with permission from the instructor. Courses numbered 6000 or 7000 indicate more advanced study and may have 5000-level prerequisites. Synthesis of learning is accomplished through master's theses, projects, comprehensive examinations and/or doctoral dissertations. The department chair or graduate coordinator ensures that degree requirements are satisfied.

Students who successfully complete a graduate program demonstrate that they have acquired the knowledge and developed the skills that are identified as the program's objectives through one or more pathways. Ph.D. students must successfully complete a degree-specific qualifying examination before being officially considered a doctoral candidate. For course-only graduate degrees, students must demonstrate mastery of the knowledge by maintaining a consistent record of success in the classroom that includes appropriate completion of core requirements and a minimum GPA. For research-based degrees, demonstration is through the writing of a thesis for master's students and of a dissertation for doctoral students and the subsequent defending of this research before a committee of faculty and, in some cases, outside experts.

Faculty who mentor and advise graduate students have an appropriate terminal degree. All research-oriented master's and doctoral graduate programs are led by research-active faculty. For more on research at the university, see Standard Six.

Graduate Degree Programs: Appraisal

Our efforts to increase the number of Bachelor's-to-Master's students have paid off. While these programs have existed for some time, we have put significant effort into promoting the advantages of a master's degree to our undergraduates, and as a result we have seen an increase in students going on for graduate degrees, especially during the first years of the pandemic. In the past three

years, we have seen an increase in applications to the Bachelor's-to-Master's program. In the 2022-23 academic year, we enrolled 371 new Bachelor's-to-Master's students, a 21% increase over 2017-18.

Our graduate degree programs closely align with our mission and our strategic plan to increase research at the university while embedding our programs in the community. In public health, for example, these strong partnerships helped our students and new graduates [step into vital roles during the pandemic](#).

Other initiatives align our graduate programs with regional professional and workforce needs, while providing our graduate students with valuable professional experience as they pursue their degrees. As we have grown our industry and nonprofit partnerships, our graduate students have benefited from increased paid or credit-earning opportunities, including through the:

- Graduate Engineering Master's Co-op
- National Science Foundation I-Corps
- GPS [Corporate Academic Partnership](#)
- Semester-long preceptor/internship programs in health sciences and education.

We are encouraged by our success in increasing online options for master's students, as it affords them the flexibility that many of them want, but we are also moving carefully. We know that interaction with faculty and between students can be a challenge with online learning, and we want these students to receive the same faculty- and peer-connected opportunities that our in-person students have access to. We have the tools to ensure this: the primary technologies we use to support online courses are the [Blackboard Learn management system](#) (which includes interactive email, discussion forums, and synchronous audio, text and video chat) and the Zoom synchronous audio/video platform. Our GPS faculty development staff also offer technical and pedagogical workshops, often in collaboration with the Center for Excellence in Learning and Teaching, in using these tools to maximize student engagement.

This flexibility is key to attracting today's graduate student. We continue to experiment with the length of certain courses to better accommodate the needs of our graduate students and the preferences of academic departments. GPS now offers accelerated course sessions in three-week (winter intersession), six-week (either of two summer sessions), eight-week (fall, spring and summer semesters), 10-week (fall, spring and summer) and 15-week (fall, spring and summer) options.

When eight-week sessions were piloted for the MBA and select undergraduate courses in 2020-21 (after review and approval by the Faculty Senate), GPS hired an external consultant to survey students and faculty about the experience. The consultant found that overall, students and faculty were highly satisfied with the eight-week course experience, although both groups indicated that the eight-week timeline involved more work than anticipated. Based on this and other feedback, GPS worked with the registrar to limit students to taking no more than 6 credits (two eight-week courses) per academic session. GPS is also working with academic departments to identify courses with significant workloads that could be offered with both eight-week and 15-week options, allowing students and faculty to select the course length most appropriate for their learning and teaching styles.

Integrity in the Award of Academic Credit: Description

As noted above, degree requirements are listed in the undergraduate and graduate catalogs, and the university ensures that required courses are offered regularly so that students are able to graduate within the specified program length. Students are informed of specific course requirements through their course syllabi, which all faculty are required to provide at the start of each semester. The university provides faculty with a syllabus template (see additional Standard Four work room documents for a sample syllabus) that they may adapt for their own purposes. Course syllabi must clearly state the criteria by which the course learning objectives will be assessed, as well as information on how the course meets federal credit hour equivalencies.

The university neither offers competency-based programs nor assigns credit for prior learning beyond examination options: College Level Examination Placement (CLEP) exams, College Board Advanced Placement (AP) exams, and departmental equivalency exams. Test credits are typically granted upon admission. Subject to the additional limitations of the college and program in which the student is enrolled, the maximum number of credits that a matriculating student may earn through course equivalency tests is 30 semester credits. Requirements and restrictions regarding our course equivalency policies can be found in the [catalog](#).

Transfer student success is not only important for the university; it is an equity priority that we take seriously. We are also constantly working with the [Mass Transfer Program](#) and our biggest partner institutions, especially Middlesex and Northern Essex Community Colleges in the Merrimack Valley, to align curricula and offer advising and other supports to ensure the smoothest possible transfer experience for their students who wish to complete a bachelor's degree at UMass Lowell. Examples of this include hosting meetings between faculty and program representatives from our campus and Middlesex and Northern Essex community colleges, new joint application programs with Northern Essex and Bunker Hill Community Colleges, and a pilot program to provisionally admit students to UMass Lowell after a semester or up to four semesters at Middlesex.

Transfer equivalencies are evaluated by academic departments and are published in an interactive, online [transfer dictionary](#). Each major has a degree pathway outlining how transfer students can complete their degrees. Up to 90 credits of undergraduate coursework in which a student earned a C- or better may be transferred to UMass Lowell from an accredited four-year institution. Up to 60 credits of undergraduate coursework completed with a C- or better may be transferred to UMass Lowell from an accredited two-year institution (although we may accept up to 68 credits by petition).

Up to 12 credits of graduate coursework that earned a grade of B or better may be transferred into a master's degree program at UMass Lowell from an accredited program at another institution. Up to six credits of graduate coursework taken as an undergraduate at UMass Lowell through the Bachelor's-to-Master's program may be transferred to a graduate program. In the case of a doctoral program, up to 24 course credits taken to complete a qualifying master's degree may be transferred from an accredited institution. Policies regarding [transfer of graduate credits](#) are published in the catalog.

UMass Lowell also has dual enrollment offerings for high school students, including free courses for students from Lowell High school, and is piloting an online early college program, the [Commonwealth Collegiate Academy \(CCA\)](#). Courses taken through these programs count for both high school and college credit and are taught by a team of one university faculty member and one high school teacher. Students who participate in the Commonwealth Collegiate Academy may earn more than 30 college credits during the regular school year and in summer sessions. Those credits can add up to one full year of college classes and can cut the time and cost of finishing a college degree by 25%. Participants in this program are required to be recommended by a high school teacher or guidance counselor.

Academic standing and eligibility for a degree are determined by the quality of the student's course work. Following each semester, the university calculates students' standing based on a 4-point scale (GPA). A student whose GPA falls below 2.0 is considered to be in unsatisfactory academic standing and will either be placed on warning (after one semester), suspension (after two semesters), or dismissal (after three semesters). Individual programs may have their own, higher, standards for continuation in the program, as indicated in the catalog. The processes for determining and appealing academic standing are articulated in the [catalog](#). Students in unsatisfactory academic standing also receive notification from the provost's office and information about how to appeal to their college dean's office. First-year students on academic warning are required to attend a Strategies for Success workshop prior to returning to campus the following semester.

Academic departments and their faculty retain responsibility for oversight of the award of academic credit. Faculty must work within the established academic and administrative processes to implement changes in course, program and degree requirements. The recent introduction of the [Curriculog](#) tool is meant to assist in the curriculum approval process, as the tool both distributes information regarding proposed changes and maintains a record of these changes.

All members of the university community are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Academic dishonesty is prohibited in all programs of the university. We have clearly formulated procedures for reporting and tracking incidents of academic dishonesty at the [undergraduate](#) and [graduate](#) levels, as described in the catalog. Course instructors determine sanctions for academic dishonesty as specified in their course syllabi. The provost's office maintains a record of all reported incidents of academic dishonesty and may apply more severe sanctions, including suspension or dismissal, when deemed necessary (for example, for multiple infractions). Faculty are encouraged to place clear statements on plagiarism and other acts of academic dishonesty on their syllabi, and sample language is provided in the syllabus template.

Integrity in the Award of Academic Credit: Appraisal

The COVID-19 pandemic tested the strength of our academic programs as well as our ability to deliver those programs under changing and challenging conditions. It also allowed the university some flexibility in enforcing policies, which led to a review and revision of some of those policies, such as student absence guidelines, which were revised to encourage faculty to be flexible when students are ill. (See Standard Four additional work room documents for UML's student absence guidelines).

While every degree program has a well-defined academic path, some students may encounter difficulties meeting their degree requirements within the designated time frame. This is especially relevant for programs with limited elective options. When a student is unable to complete a required course within the specified sequence, they may fall behind, resulting in lost credits and a prolonged time to graduation. Although we have a team in the registrar's office monitoring degree progress and supporting students, our financial constraints pose challenges for those who need to catch up through online or summer courses, which come with extra costs. Students want flexible course schedules, but expanding these options will hurt revenues under our current financial model. It is imperative that we find a solution to this problem, but so far we have been unable to do so, apart from providing scholarships on a case-by-case basis.

Incidents of academic dishonesty peaked during the period of remote learning, increasing by one-third, but have since returned to pre-pandemic levels. The [Center for Excellence in Learning and Teaching](#) (CELT) provides workshops on the use of Turnitin® and best practices in preventing academic dishonesty, including in response to the use of ChatGPT and other forms of artificial intelligence. The increased use of AI in academic dishonesty has proven a challenge for many of our faculty. As a result, CELT regularly hosts workshops for faculty to share their experiences about integrating ChatGPT into their classes and ensuring academic integrity. We will continue to monitor the impact of AI on student learning.

Academic Program: Projections

- In keeping with our desire to become an R1-classified institution, we need to increase the number of Ph.D.s awarded, particularly in the humanities and social sciences, to develop the balanced profile of a comprehensive research university. Under the leadership of the new School of Graduate Studies and the College of FAHSS dean's office, we will convene an exploratory group in fall 2023 to develop a humanities track within our Global Studies Ph.D. program that will take advantage of the resources housed in UML's Center for Lowell History. An increase of 10 Ph.D.s in FAHSS fields will move us toward R1 status.
- To strengthen our academic programs and our faculty's knowledge of best practices in curriculum development, the Faculty Senate will formalize a more direct collaboration with college curriculum committees, beginning in fall 2023.
- To ensure that our burgeoning interdisciplinary offerings uphold UMass Lowell's standards for academic quality, we will explore a faculty-driven process for interdisciplinary program review during the 2023-2024 academic year. This process will be led by the Faculty Senate, working with the Provost's and Registrar's Offices.
- Once we have the new School of Graduate Studies in place and have determined the scope of its work, we will be able to implement planned changes to our graduate catalog, adding features now included in the undergraduate catalog, such as clearly stated learning outcomes, cohort tracking, etc. These changes will promote consistency and clarity for internal and external audiences.
- The university will strengthen industry partnerships that provide curriculum-based professional opportunities for our students, led by Career and Co-op Services.
- The Faculty Senate will convene a task force in fall 2023, led by an associate dean and a faculty member, to explore the implications of artificial intelligence for our academic programs and academic integrity.

STANDARD FIVE: STUDENTS

(Admissions, Fall Term)

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

Credit Seeking Students Only - Including Continuing Education

	3 Years Prior	2 Years Prior	1 Year Prior	Current Year
	Fall 2019	Fall 2020	Fall 2021	Fall 2022
Freshmen - Undergraduate				
Completed Applications	12,660	12,970	12,493	12,253
Applications Accepted	9,286	9,753	10,565	10,532
Applicants Enrolled	2,391	2,082	1,907	1,937
% Accepted of Applied	73.3%	75.2%	84.6%	86.0%
% Enrolled of Accepted	25.7%	21.3%	18.1%	18.4%
Percent Change Year over Year				
Completed Applications	na	2.4%	-3.7%	-1.9%
Applications Accepted	na	5.0%	8.3%	-0.3%
Applicants Enrolled	na	-12.9%	-8.4%	1.6%
Average of statistical indicator of aptitude of enrollees: (define below)				
SAT Total	1232	1234	1256	1263
High School GPA	3.59	3.63	3.69	3.67
Transfers - Undergraduate				
Completed Applications	2,338	2,155	1,932	2,093
Applications Accepted	2,163	1,981	1,708	1,882
Applications Enrolled	1,341	1,251	1,022	1,024
% Accepted of Applied	92.5%	91.9%	88.4%	89.9%
% Enrolled of Accepted	62.0%	63.1%	59.8%	54.4%
Master's Degree				
Completed Applications	2,051	2,703	2,542	2,414
Applications Accepted	1,794	2,337	2,229	2,083
Applications Enrolled	962	1,323	1,157	1,156
% Accepted of Applied	87.5%	86.5%	87.7%	86.3%
% Enrolled of Accepted	53.6%	56.6%	51.9%	55.5%
First Professional Degree				
Completed Applications				
Applications Accepted				
Applications Enrolled				
% Accepted of Applied	-	-	-	-
% Enrolled of Accepted	-	-	-	-
Doctoral Degree				
Completed Applications	637	728	793	625
Applications Accepted	287	302	329	339
Applications Enrolled	205	193	221	230
% Accepted of Applied	45.1%	41.5%	41.5%	54.2%
% Enrolled of Accepted	71.4%	63.9%	67.2%	67.8%

Please enter any explanatory notes in the box below

Education Specialists are counted in our Master's Degree Admission data.

**Standard 5: Students
(Enrollment, Fall Term)**

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

Credit-Seeking Students Only - Including Continuing Education

		3 Years Prior	2 Years Prior	1 Year Prior	Current Year
		Fall 2019	Fall 2020	Fall 2021	Fall 2022
UNDERGRADUATE					
First Year	Full-Time Headcount	3,075	2,738	2,609	2,721
	Part-Time Headcount	202	232	188	180
Total Headcount		3,277	2,970	2,797	2,901
Total FTE		3,158	2,849	2,656	2,734
Second Year	Full-Time Headcount	2,537	2,543	2,228	2,124
	Part-Time Headcount	453	441	373	329
Total Headcount		2,990	2,984	2,601	2,453
Total FTE		2,723	2,344	2,344	2,236
Third Year	Full-Time Headcount	2,650	2,648	2,631	2,302
	Part-Time Headcount	754	685	598	554
Total Headcount		3,404	3,333	3,229	2,856
Total FTE		2,965	2,932	2,850	2,499
Fourth Year	Full-Time Headcount	2,528	2,677	2,499	2,470
	Part-Time Headcount	1,220	1,199	1,209	1,135
Total Headcount		3,748	3,876	3,708	3,605
Total FTE		2,966	3,138	2,895	2,854
Unclassified	Full-Time Headcount	4	6	6	6
	Part-Time Headcount	179	196	206	166
Total Headcount		183	202	212	172
Total FTE		59	67	71	56
Total Undergraduate Students					
Full-Time Headcount		10,794	10,612	9,973	9,623
Part-Time Headcount		2,808	2,753	2,574	2,364
Total Headcount		13,602	13,365	12,547	11,987
Total FTE		11,871	11,330	10,816	10,379
% Change FTE Undergraduate		na	-4.6%	-4.5%	-4.0%
GRADUATE					
Full-Time Headcount		1,240	1,299	1,609	1,728
Part-Time Headcount		2,695	3,030	3,202	3,040
Total Headcount		3,935	4,329	4,811	4,768
Total FTE		2,548	2,835	3,239	3,304
% Change FTE Graduate		na	11.2%	14.3%	2.0%
GRAND TOTAL					
Grand Total Headcount		17,537	17,694	17,358	16,755
Grand Total FTE		14,419	14,164	14,054	13,683
% Change Grand Total FTE		na	-1.8%	-0.8%	-2.6%

Please enter any explanatory notes in the box below

Unclassified = Undergraduate certificates

Standard 5: Students
(Financial Aid, Debt, Developmental Courses)

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

Where does the institution describe the students it seeks to serve?
[Fast Facts about UML | Undergraduate Admissions | UMass Lowell](#); [Common Data Set | UMass Lowell \(uml.edu\)](#)

	(FY2018 Actual)	(FY2019 Actual)	(FY2020 Draft)
Three-year Cohort Default Rate (from College Scorecard)	3.5	0.8	0

	3 Years Prior	2 Years Prior	Most Recently Completed Year	Current Year
	(FY 2019)	(FY 2020)	(FY 2021)	(FY 2022)

Student Financial Aid				
Total Federal Aid	\$94,311,705	\$96,690,795	\$89,707,874	\$85,492,396
Grants	\$18,200,808	\$20,083,847	\$19,966,991	\$18,190,495
Loans	\$75,585,124	\$75,937,537	\$69,307,586	\$66,804,025
Work Study	\$525,773	\$669,411	\$433,297	\$497,876
Total State Aid	\$7,240,304	\$7,900,130	\$8,486,764	\$9,357,252
Total Institutional Aid	\$65,596,452	\$65,555,469	\$57,861,181	\$66,519,623
Grants	\$62,934,917	\$63,355,828	\$57,188,899	\$64,802,661
Loans	\$0	\$0	\$0	\$0
Student Employment	\$2,661,535	\$2,199,641	\$672,282	\$1,716,962
Total Private Aid	\$30,341,835	\$32,675,807	\$19,672,920	\$24,479,934
Grants	\$3,168,239	\$3,589,094	\$4,753,526	\$4,942,745
Loans	\$27,173,596	\$29,086,713	\$14,919,394	\$19,537,189

Student Debt

Percent of students graduating with debt (include all students who graduated in this calculation)				
Undergraduates	68%	68%	69%	66%
Graduates	29%	30%	30%	28%
First professional students				

For students with debt:				
Average amount of debt for students leaving the institution with a degree				
Undergraduates	\$29,638	\$30,071	\$29,976	\$28,907
Graduates	\$29,151	\$26,635	\$27,253	\$26,531
First professional students				

Average amount of debt for students leaving the institution without a degree				
Undergraduates	\$12,801	\$12,591	\$13,466	\$14,198
Graduate Students	\$19,426	\$16,070	\$17,338	\$19,459
First professional students				

Percent of First-year students in Developmental Courses (courses for which no credit toward a degree is granted)

English as a Second/Other Language				
English (reading, writing, communication skills)				
Math				
Other				

Please enter any explanatory notes in the box below

**Standard 5: Students
(Student Diversity)**

Complete this form for each distinct student body identified by the institution (see Standard 5.1)

For each type of diversity important to your institution (e.g., gender, race/ethnicity, first generation status, Pell eligibility), provide information on student admissions and enrollment below. Use current year data.

Undergraduate Admissions information		Completed Applications	Applicants Accepted	Applicants Enrolled	
Category of Students (e.g., male/female); add more rows as needed					
Female (First Year Freshman) - Fall 2022		5,787	4,995	750	
Male (First Year Freshman) - Fall 2022		6,467	5,538	1,187	
Minority URM (First Year Freshman) - Fall 2022		4,051	3,157	551	
Ethnicity SOC (First Year Freshman)- Fall 2022		5,694	4,690	887	
PELL-Grant Eligible (First Year Freshman) - Fall 2022		12,255	10,534	1,937	
Upper Level Transfer- Fall 2022		810	810	810	
First Generation (First Year Freshman)- Fall 2022				1,283	
Veterans Status				501	
Graduate Admissions information		Completed Applications	Applicants Accepted	Applicants Enrolled	
Category of Students (e.g., male/female); add more rows as needed					
Female - Fall 2022		1,325	1,070	626	
Male - Fall 2022		1,714	1,352	760	
Minority URM - Fall 2022		384	316	199	
Ethnicity SOC - Fall 2022		601	510	321	
Undergraduate Enrollment information		Full-time Students	Part-time Students	Total Headcount	FTE
Category of Students (e.g., male/female); add more rows as needed					
Female - Fall 2022		3,956	18	3,974	4,283
Male - Fall 2022		5,667	1,323	6,990	6,095
Minority URM - Fall 2022		2,517	598	3,115	2,696
Ethnicity SOC - Fall 2022		3,918	862	4,780	4,184
Upper Level Transfer- Fall 2022		2,328	1,423	3,751	2,812
First Generation - Fall 2022		1,357	108	1,465	1,388
Veterans Status		232	128	360	269
Graduate Enrollment information		Full-time Students	Part-time Students	Total Headcount	FTE
Category of Students (e.g., male/female); add more rows as needed					
Female - Fall 2022		770	1,429	2,199	1,536
Male - Fall 2022		958	1,610	2,568	1,768
Minority URM - Fall 2022		194	466	660	444
Ethnicity SOC - Fall 2022		295	778	1,073	702
Please enter any explanatory notes in the box below					
Credit-seeking only students for this standard, follows standard 5.1.					

Students

As of fall 2022, UMass Lowell had a total of 16,755 students:

Total undergraduate students: 11,987

- Full-time undergraduate: 9,623
- Part-time undergraduate: 2,364

Total graduate students: 4,768

- Full-time graduate: 1,728
- Part-time graduate: 3,040

Admissions: Description

As a comprehensive public research institution, UMass Lowell serves a wide variety of students, and therefore there are two admissions offices: one overseeing traditional on-campus students that come in as first-year or transfer students, and the other overseeing our graduate and online students.

Undergraduate Admissions

[The Office of Undergraduate Admissions](#) is housed within the [Division of Enrollment Management](#), alongside [Financial Aid](#) and the [Office of Orientation and Enrollment Events](#), and it is overseen by the dean of enrollment. The primary responsibility of this office is to attract, recruit, admit and enroll new first-year and transfer students for the fall and spring semesters.

The division is driven by its mission statement, which is closely aligned with our new strategic plan: “The Division of Enrollment Management strives to recruit and enroll a talented, diverse and global student body who are empowered to persist, become engaged members of our inclusive university community and become successful alumni. We achieve these goals using experience-based and data-informed strategies with an emphasis on collaboration with the campus community, while providing optimal student experiences.”

UMass Lowell's [mission](#) is central to the strategies that the office uses to enroll students who will “become lifelong learners and informed citizens in a global environment.” We follow high standards of integrity in all admissions and recruitment practices, and we follow the guidelines set forth by the National Association of College Admissions Counselors (NACAC) as well as those of the [Massachusetts Department of Higher Education](#).

Prior to the pandemic, applications and enrollment had experienced continued growth. In fall 2012, 8,048 applications were submitted for first-year admission and 1,883 applications for transfer admission. In fall 2019, 13,280 applications were submitted for first-year admission – a 65% increase over 2012 – and 2,294 applications came in for transfer students, a 22% increase. For fall 2020, first-year applications ticked up a bit to 13,472, while transfer applications dropped slightly to 2,017. The pandemic's impact continued into fall 2021, when there was a decrease in both first-year applications, at 13,017, and transfer applications, at 1,881.

The Office of Undergraduate Admissions uses a holistic review process to consider each applicant within their own context. [Admissions standards](#) are developed for each college by the dean of enrollment management in conjunction with the assistant dean of enrollment/director of undergraduate admissions, based on the priorities of each major as outlined by the academic deans. The Office of Admissions collaborates with the deans' offices prior to every application cycle to review the admissions standards for the coming year. They do this by reviewing the goals of the institution and analyzing prior incoming classes, including admit rate, yield rate and first-year retention. The goal is to admit students who will join our community and be successful.

We receive applications through the [Common Application, the Coalition Application and the university's own application](#). The application deadlines are Nov. 5 (Early Action 1), Jan. 5 (Early Action 2) and Feb. 5 (Regular Decision).

Applications for first-year students are assigned to admissions counselors based on the admissions counselor's connection with the feeder high school. As part of the holistic review process, a committee-and-director review process is used for applicants who do not meet set admissions standards but who show potential to be successful.

In 2016, we became the first public institution in New England to offer test-optional review of applications for the fall 2016 incoming class, establishing a [pilot program](#) within the Massachusetts Department of Higher Education. First-year applicants could choose whether or not to submit their standardized test scores with their application. Admissions leadership and the director of assessment developed an evaluation process for applicants who opted not to submit test scores, using a rubric to assess a student's non-cognitive variables as well as other information within their application.

Upon admission to the university, qualified students receive an offer to join the [Honors College](#) and/or the [River Hawk Scholars Academy](#), our nationally recognized support program for first-generation students. Beginning this fall (2023), new transfer students are being invited to join the [Transfer Alliance Program](#), which aims to better integrate transfer students into the university. Connecting students with these programs early in their college journeys can foster a sense of belonging while providing them with structured guidance, connections to resources, enhanced access to designated scholarships and other opportunities that increase persistence and academic success.

In addition, any undergraduate student who identifies as having a learning difference is linked to the [Office of Disability Services](#) within their Student Information System portal. The office begins its intake process during the months before a student's first semester.

In 2016, the university established the [Reserved Placement Program \(RPP\)](#). This is an option for first-year students who are not eligible for regular admission but are conditionally admitted for the spring semester, pending a successful fall semester at one of our partner community colleges. Established partnerships with specific community colleges allow for a nearly seamless transition for these students. Students in our RPP program are given a UMass Lowell ID so they can use our library and rec center and attend sporting and other events.

Transfer students comprise 41% of our undergraduate student body, and the university actively seeks to increase transfer student support, particularly for students from state community colleges, who are more likely to be low-income students from underrepresented groups.

The university strategically builds partnerships and programs with individual community colleges. Our closest partners are [Middlesex Community College](#) (38% of our transfer students), which has campuses in Lowell and Bedford, and Northern Essex Community College (20%), with campuses in Haverhill and Lawrence. During the 2018-19 academic year, we hosted separate retreats with faculty and staff from these colleges to better align our programs and ensure a high-quality transition from the two-year schools to UML. These retreats resulted in aligned student tutoring programming, honors opportunities, coordinated advising and curricular revisions.

The university also participates in the [Mass Transfer program](#), which guarantees admission to UML for all state community college students who complete a transfer-designated associate degree with a minimum GPA of 2.5. It also includes particular "A2B" (associate to bachelor's) degree pathways, such as the agreement between Bunker Hill Community College (11% of our transfer students) that [students who complete an associate degree in physics with an engineering concentration may transfer directly to UML's Francis College of Engineering](#).

Admissions requirements for [transfers](#) are reviewed annually by the dean of enrollment management and the assistant dean of enrollment/director of undergraduate admissions, with feedback from college deans and associate deans. The evaluation of transfer students is primarily based on the courses they have completed at the college level and, if needed, their high school record may also be consulted. Students are recruited using the state's Mass Transfer program and, to a lesser extent, the [Commonwealth Commitment Compact](#).

Undergraduate recruitment is an ongoing process, and we offer major recruitment events throughout the year. These events are organized by the [Office of Orientation and Enrollment Events](#) in partnership with the colleges and a variety of student-serving offices. The events include [Open House](#), [Junior Preview Day](#), Welcome Day and daily [campus tours](#) and information sessions. Virtual campus tours are available in English, Spanish, Khmer and Mandarin to ensure that families of prospective students can access them. The undergraduate admissions office also hosts a wide variety of school groups and school counselors throughout the year, offering specialized tours and information sessions based on student interest.

Prior to the pandemic, recruitment consisted primarily of high school or college visits, panels and college fairs. With the elimination of in-person travel in 2020 and 2021, the office began to offer a variety of options for virtual recruitment, including virtual college fairs, online presentations, live-narrated virtual tours and information sessions, remote application help sessions and virtual one-on-one appointments. Beginning in spring 2021, the university returned to in-person events while also continuing to offer some virtual options to meet the needs of all applicants.

For international recruitment, the university had previously worked with Navitas, but we ended the partnership in 2019. Staff members have recruited in China and India over the past several years. In fall 2018, undergraduate admissions partnered with the Graduate Admissions Office to work with recruiters based in India. This regional recruitment strategy allows prospective students to connect with a UML representative closer to their home.

All our recruitment practices are heavily supported by University Relations. The university web pages as well as the [admissions pages](#) outline admissions standards and criteria; there are also pages for specific populations, including veterans, international students and transfer students. Using first Salesforce/TargetX and now Slate, we have developed a communication plan that can target students' interests. In 2020, during the pandemic, University Relations helped to create a [virtual viewbook](#) that can be customized to the interests of its user.

Graduate, Online and Professional Studies Admissions

GPS enrollment consists of a mix of student populations: continuing education undergraduate students, traditional undergraduates taking online courses, graduate students, non-degree students, and students coming through our Corporate Education unit. The division offers courses in several different delivery modes, including online, face-to-face (FTF), hybrid (part remote, part FTF), hyflex, low-residency, and synchronous remote (also referred to as live online).

Between fall 2018 and fall 2020, GPS experienced enrollment growth of 7.5%. This was driven largely by graduate online enrollments. During this period, undergraduate FTF enrollments had dipped slightly, while undergraduate online enrollments had leveled off. Traditional, on-campus graduate enrollments were stable.

[Graduate Admissions](#) regularly holds informational webinars to supplement our on-campus events for prospective and admitted students and to enhance the preparedness of those entering graduate school. College- and program-specific sessions, delivered in tandem with relevant faculty, are designed to provide program and career information as well as to outline our admissions requirements and process. Multiple joint sessions with the [International Students and Scholars Office \(ISSO\)](#) assist international students in the application process while also providing information relevant to the I-20 eligibility and visa processes.

UMass Lowell follows a well-structured yearly process to determine enrollment goals for our graduate programs. After the dean and provost finalize revenue goals for the division, the admissions and marketing teams engage in a comprehensive review of both internal and external factors. This analysis allows us to establish realistic and achievable enrollment goals for each program. Using historical trends as a reference, the team then projects targets for admits, applications, and inquiries. The Admissions and Recruitment team employs a diverse range of recruitment strategies and tactics, tailored to specific target audiences.

The team holds campus-wide open houses that offer one-stop shopping for prospective students to find the best fit among our graduate and undergraduate programs, based on each prospective student's career and academic goals. The recruitment team participates in college fairs, recruitment tours and career fairs, as well.

As with our Undergraduate Admissions office, the GPS Admissions team takes a holistic approach to reviewing applications. The application process, including required tests and other steps, is outlined on GPS's website. While the GPS Undergraduate Admissions team makes admissions decisions for online undergraduates based on feedback from the academic deans and departments, the academic departments determine admission to master's and doctoral programs. Online undergraduate admissions standards are developed by the dean of GPS and the assistant dean of admissions and recruitment, in conjunction with the assistant director for online undergraduate admissions, with input from the academic departments. Academic advisers are available to discuss academic requirements with prospective students and to assist transfer students with the transfer credit process. During the admissions process, both admissions staff and academic advisers are available to assist applicants and new students.

Graduate and GPS undergraduate applicants are required to submit official transcripts from all institutions attended. Graduate students must have earned a bachelor's degree from an accredited U.S. college or university or an equivalent international degree. Some graduate programs require standardized test scores (GRE, MAT, GMAT, TOEFL and MTEL). [Information about and applications for waivers are posted to the website.](#) (Note that during the initial COVID-19 emergency, some test requirements were waived to ensure that otherwise qualified international and domestic students were able to apply.)

The application process is fully automated for all students and is accessible via the GPS admissions website. Students can check the status of their applications, pay deposits, and obtain information regarding financial aid. Information regarding admissions policies and procedures is readily available on the admissions website and in the online catalog. Admissions processes and decision-making are fully compliant with all applicable equal-opportunity laws and regulations.

[Orientation for graduate students](#) is managed by the [Graduate Student Success team](#) and takes place both online and on campus to accommodate the needs of our multiple constituents—online and on-campus students, working people, adult learners, caregivers and more. Orientations provide information to help students navigate UML's academic and other supports, registration, tutoring, university policies, and other university resources and services.

The Graduate Student Success team also manages a [mandatory, university-wide orientation that prepares new teaching assistants \(TAs\)](#) for their duties, which may include: grading; consulting with students during office hours; leading discussions or tutoring sessions; giving lectures; and teaching labs. This two-day orientation, which we implemented in 2019, augments the training TAs will receive from their program and their faculty supervisor. While TA duties vary across colleges and departments, all TA positions demand considerable skill and knowledge. The orientation helps TAs learn about their various duties and our expectations; introduces them to resources to improve their teaching and to support students who are struggling academically or emotionally; and instructs them in antibias laws and university policies. Participants also meet a variety of UML administrators, faculty, TA/RA union officers and more experienced TAs.

Graduate student advising is multifaceted. Each graduate program has a faculty member or professional adviser who serves as graduate coordinator. The graduate coordinator provides course advising and other support to all students within that program. Students completing a thesis or dissertation also receive support from their principal investigator, which may include course, career and research advising. The Graduate Student Success (GSS) team hosts programs for new graduate students and provides enrollment and re-enrollment coaching, policy advising and academic support to all graduate students (and the graduate faculty who teach and mentor them) from admission through graduation. Each semester, the GSS team conducts re-enrollment outreach campaigns via phone and email, and it advises and assists students regarding academic standing and early alerts. The GSS team regularly works with faculty, academic departments, deans and administrative units (Registrar, Financial Aid, Solution Center, etc.) to advocate for students and help resolve issues. Advising meetings are conducted both in-person and online.

Admissions: Appraisal

While our enrollments are stabilizing, we continue to see challenges in admissions. In May 2022, the number of deposits had indicated that the enrollment goal of 1,900 new students for the 2022-23 academic year would be achieved. However, we experienced higher-than-normal summer melt rates, and enrollment goals fell slightly short. The freshmen class included 1,888 new students, and the total number of new transfer students was 693 (versus a goal of 700).

In an effort to better predict melt for the current admissions cycle, the Enrollment Management division has worked with DAIR and campus partners on an anti-melt pilot that measures a student's progress towards enrollment. This pilot includes reviewing the following data points and assisting where we can: registration for housing (as applicable), international visa (if needed), Orientation registration and attendance, getting a campus ID, engagement with the admissions portal, and submission of a final transcript. We hope to identify the students who are likely to melt earlier. We will be able to assess the effectiveness of this pilot following the add/drop period in fall 2023.

As of Sept. 8, 2023, the outlook for UMass Lowell's undergraduate enrollment for fall 2023 is notably positive. The university set an ambitious goal to increase new student enrollments (including freshmen and undergraduate transfer students) by 2% over the previous year. For context, new student enrollment for fall 2022 stood at 2,581 students.

However, the university has exceeded our enrollment target, with 2,739 new students enrolled as of Sept. 8, 2023. This represents a substantial 6% increase over the previous year. Several strategies detailed throughout this report have contributed to this achievement, such as traditional recruitment practices (participating in school fairs, conducting high school and community college visits, hosting large-scale recruitment events, etc.), and utilizing Slate (CRM) for a smoother and more personalized application process. We also expanded our efforts to enhance recruitment and yield, such as implementing a second multicultural overnight program, offering additional college-specific events in collaboration with the academic colleges, introducing a direct admit option to the MBA program, increasing participation in College Board Search, providing early college opportunities through the Commonwealth Collegiate Academy, sending more physical mailers to prospective students, strengthening the university's social media presence, and hosting a higher volume of group visits.

While it may be challenging to pinpoint specific actions responsible for this enrollment increase, it is clear that a collaborative approach to enrollment goals under Chancellor Chen's leadership has been instrumental. The entire university community has been engaged in recruitment and yield activities, emphasizing our collective responsibility to achieve enrollment targets.

The pandemic severely hindered our progress towards an increase in out-of-state enrollments, although for fall 2023, non-Massachusetts deposits for freshmen and transfer students were up 12% as of July 2023. We attribute this improvement to marketing changes (more personalized messages to students, purchasing additional College Board names, etc.), Mid-Atlantic regional scholarships, America East admissions events and an annual review of our merit scholarships.

We have developed a number of programs to improve our admissions processes while working toward greater racial equity and gender balance and increasing student retention and academic success. In the past six years, the university has developed new programs and expanded existing ones to admit, onboard and support specific groups, including: the [RHSA](#) for first-generation college students; the new [Transfer Alliance Program](#) for new transfer students; [joint admissions programs with partner community colleges](#); our [Launch](#) summer programs for all incoming first-year students; our summer [RAMP](#) and [SoarCS](#) programs for incoming students who are underrepresented in engineering and computer science, respectively; [River Hawk Rising 360](#) for students from underrepresented groups; expanded [Family Orientations](#) and programs; and the late-August [Student Success Summit](#) for incoming students, which is hosted by the Office of Multicultural Affairs. These programs have been successful in attracting new first-year and transfer students to the university while increasing our racial and ethnic diversity.

The introduction of our "[No Test](#)" process, as well as its continued analysis, is another example of our culture of care and commitment to our students. Standardized test scores are often lower for women, first-generation students and students of color. A considerable body of national education research shows that test scores are a poor predictor of college success, while grades and other evidence that a student has taken advantage of educational opportunities at their high school are much better predictors of college persistence and success. Our pilot project and research on our own admissions data, collected from prior to the introduction of the no-test option until today, bear this out. A five-year examination of application trends from 2015 supports the theory that it lowers barriers for students:

Admissions Trends for Students of Color : First-time, first-year

Year	Completed Applications	Admitted Applicants	Enrolled Students
2015	3,511	1,547	418
2016	3,987	1,961	480
2018	4,820	3,053	767
2022	5,668	4,666	872

Admissions Trends by Gender : First-time, first-year

Year	Completed Applications	Admitted Applicants	Enrolled Students
2015	W: 4,563 (47%) M: 6,073 (53%)	W: 2,443 (47%) M: 3,575 (53%)	W: 554 (47%) M: 1,044 (53%)
2016	W: 5,070 (45%) M: 6,156 (55%)	W: 2,960 (45%) M: 3,806 (55%)	W: 668 (47%) M: 1,012 (53%)
2018	W: 5,506 (45%) M: 6,611 (55%)	W: 3,945 (45%) M: 4,743 (53%)	W: 794 (47%) M: 1,289 (53%)
2022	W: 5,746 (47%) M: 6,424 (53%)	W: 4,957 (47%) M: 5,497 (53%)	W: 725 (47%) M: 1,164 (53%)

After two years of the pilot program, our [office of Data Analytics and Institutional Research](#) analyzed the data we had collected to determine if there were significant differences in the population that submitted test scores and the population that chose not to. This analysis revealed some compelling results (see Standard Five additional work room documents for more information on UMass Lowell No-Test data). The most significant impact on a first-year student's fall GPA was the student's high school GPA. This analysis led the undergraduate admissions office to improve our application reading processes and make optional the pilot project requirement of an additional essay question for no-test students. The pilot and its adaptation having proved successful, the no-test option has become permanent.

The pandemic interrupted standardized testing dates and processes across the country, and as a result we received a far greater number of no-test applicants for fall 2021. We plan to conduct additional analyses to examine whether students' no-test status affects graduation rates. More recently, for the 2022 admissions cycle, we approved the ability of students to [self-report](#) their standardized test scores. This change allowed students to complete applications earlier and offset some of the costs of applying to college, furthering our goal of lowering barriers.

To improve transfer pathways and college success for Black and Hispanic students in the Merrimack Valley, in September 2022 we embarked on the Equity Transfer Initiative with Middlesex Community College, with hopes that we could expand it to other community colleges. This program encouraged students to think of themselves as "citizens" of both institutions. It offered robust advising, scholarships, bookstore vouchers and more to make sure that students interested in certain high-demand fields of study – criminal justice, engineering, computer science, medical laboratory science and business – could complete their four-year degrees expeditiously. While this program failed to expand due to a lack of continued funding, it and previous "bridge" programs formed the basis for our new [Transfer Alliance Program](#).

As previously noted, our transfer students differ demographically from those students who start and finish at UML. Our data show that the average age of our transfer students is 26, and more than 60% of them are working while studying, in large part because they are more likely to be responsible for supporting themselves and/or family members. The new Transfer Alliance Program, or TAP, uses a "peer ally" model, similar to the peer mentors in the RHSA; and like the RHSA, TAP will also offer academic and career skills workshops and opportunities to network with staff and faculty. The peer allies are successful transfer students, who are paid to mentor new transfer students during their first semester.

We have also recently begun joint admissions programs with [Northern Essex](#) and [Bunker Hill Community College](#) that allow students to apply to the two-year institution and UML at the same time, with a single application. Since launching the joint admissions agreement with Northern Essex in February 2023, over 400 NECC students have opted into joint admissions to UML, allowing us to work with these students proactively as they pursue their associate degrees to ensure a smooth transfer experience. This includes assigning a UMass Lowell adviser to work specifically with these students.

Since 2018, Graduate Admissions has experienced steady growth in applications and enrollments, especially among international students and students from underrepresented groups. For fall 2018, 2,700 applications were received, 2,055 applicants were admitted and 1,266 students enrolled, including 271 students of color and 228 international students. In fall 2019, 3,108 applications were received, 2,432 were accepted and 1,209 enrolled, including 368 students of color and 282 international students. In fall 2020, 3,876 applications were received, 2,897 were accepted and 1,573 were enrolled, including 426 students of color and 342 international students. In fall 2021, 3,040 completed applications were received, 2,593 were admitted and 1,457 enrolled; of those, 388 were students of color and 406 were international. In fall 2022, 3,043 completed applications were received, 2,434 were admitted and 1,420 enrolled; of those, 327 were students of color and 433 were international.

Two years post-pandemic, GPS is seeing a strengthening and resurgence of its continuing education undergraduate population, while graduate online enrollments remain flat or have declined slightly. GPS is also seeing increased interest in low-residency graduate programs, as well as synchronous remote courses, from both continuing education and graduate student populations.

Special Area of Emphasis: Gender Diversity

In its response to our 2018 Interim Report, the commission acknowledged the university's challenges in achieving gender balance among our students, particularly in the STEM fields, and NECHE invited us to reflect on our efforts to address goals in that area in this 2023 report. In 2019, we embarked on a concerted effort to better understand our challenges in achieving gender balance, and we commissioned [Simpson Scarborough](#), a higher education marketing consulting firm, to conduct a comprehensive study of prospective undergraduate students.

The survey of 539 participants revealed that a campus visit is the single most important factor in recruitment and yield of students, but only 16% of surveyed female high school seniors had taken a campus tour, compared to 25% of male prospects. This reinforced the importance of bringing prospective students to campus, a challenge during the pandemic but one we have been addressing since. During the 2022-23 admission cycle, undergraduate admissions focused on bringing a variety of students from Massachusetts schools to campus for field trips, and it coordinated some of these trips with the academic colleges.

Summer programs such as [RAMP](#) in engineering and [SoarCS](#) in computer science, both of which are aimed at women and other incoming students who are underrepresented in STEM, have been well-attended. Other efforts to recruit women students include hand-written notes from the Women in Business student club to admitted female business students. In addition, some colleges and departments have hosted events geared to students who identify as female.

Since 2018, 107 students have participated in RAMP. Of this number, 74% are women and 27% are students of color. Among those who took part in our inaugural 2018 program, 75% had graduated with bachelor's degrees in engineering by May 2022, and more than half of those students have since embarked on graduate studies. The RAMP cohort participates in undergraduate research programs and internships as well as a variety of community activities, volunteering their time to encourage other young women to pursue and persist in engineering degree programs. By any measure, this program is a success.

Despite these and other efforts, we have not succeeded in substantially moving the needle in our proportion of male to female students in the STEM fields. A comparison of enrollment of males and females shows that, within each college, the gender distribution has been fairly consistent across the last five years. In the College of Fine Arts, Humanities and Social Sciences, the percentage of females ranged from 50% to 57% from 2017 to 2021. As of May 15, 2023, 56% of students who'd made deposits for enrollment in fall 2023 identified as female. The Francis College of Engineering (FCE) saw a slight increase in the representation of female students, from 16% in 2018 to 21% in 2022, with 20% of incoming fall 2023 students identifying as female. The Kennedy College of Sciences (KCS) shows a slight decline, from 37% in 2018 and 2019 to 34% in 2020 and 2021 and 35% in 2022; 31% of incom-

ing students for fall 2023 identify as female. The Manning School of Business has remained consistent, averaging 32% female; 30% of incoming students for the fall 2023 class identify as female. The Zuckerberg College of Health Sciences (ZCHS) enrolls the highest percentage of female students, increasing slightly from 73% in 2018, 2019 and 2020 to 75% in the last two years.

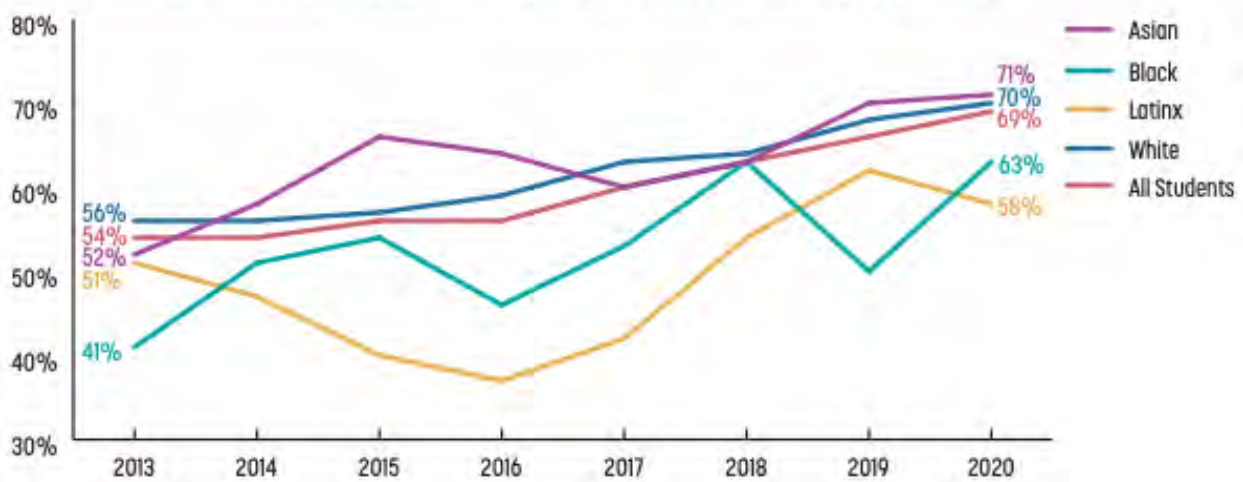
A promising development appears to be the university's capacity to organize on-campus recruiting events, as indicated by an examination of the incoming cohort. UMass Lowell received a total of 12,424 completed applications for the fall 2023 semester. Among these applicants, 5,867 were female-identifying students, making up 47% of the applicant pool. Out of all the applicants, 4,989 students were admitted and 822 of them submitted a deposit for the fall, resulting in an overall yield rate of 16.50%.

Female students accounted for 39% of the 2,112 total deposits we received for this fall. A closer examination of the data shows that on-campus recruiting events had a significant recruiting impact, especially for female students. Specifically, out of the 1,451 female students who attended on-campus yield events, 1,351 were admitted, and 597 of them submitted a deposit for the fall, reflecting an impressive yield rate of 44.18% for this group (compared to an overall yield rate of 19.85%). This data highlights the importance of on-campus recruiting events in attracting and securing female-identifying students and suggests the value of continuing and expanding such efforts to increase female enrollment.

Improvements in Racial and Ethnic Diversity

One of our greatest points of pride is our success in recruiting and graduating students of color. In fact, our success rate among historically underrepresented students caught the attention of [Complete College America](#) in 2022, which asked the university to be part of a study of seven four-year institutions that have made significant gains in this area, so that our and their efforts can serve as a model for other institutions. Between 2013 and 2020, six-year graduation rates increased 22 percentage points for Black students (from 41% to 63%), 19 percentage points for Asian and Asian-American students (52% to 71%), and 7 percentage points for Latinx students (51% to 58%). From 2016 to 2020, six-year graduation rates for students receiving Pell Grants increased 14 percentage points. At the same time, non-white student enrollment increased by 7 percentage points.

UMass-Lowell: Graduation Rates Within Six Years Based on Race and Ethnicity



The university remains committed to increasing the proportion of underrepresented students on campus while ensuring their inclusion and success. Since the last NECHE review, Admissions has added three new positions largely dedicated to this goal: a director, senior assistant director and assistant director of international, regional and multicultural recruitment. While every university community member plays a role in recruiting underrepresented students, these three staff members serve as leaders of this effort.

We have implemented successful recruitment strategies by forging strong partnerships between the [Office of Multicultural Affairs](#) and community-based organizations (CBOs), including Memoranda of Understanding with four of these organizations. This collaboration ensures that high school students connected with our partner CBOs receive comprehensive guidance throughout the admissions process and continue to receive ongoing support upon their enrollment at UMass Lowell.

We have also developed a vibrant collaboration with the [District of Columbia College Access Program \(DC-CAP\)](#). Each year, we welcome up to 20 accomplished scholars from the Washington, D.C.-Baltimore area as first-year students. This partnership enables us to extend educational opportunities to deserving students from diverse backgrounds.

Since 2010, our senior assistant director of multicultural recruitment has been organizing an overnight program for underrepresented students. This program offers prospective students, including [DC-CAP participants](#) and other out-of-state students, the chance to connect with current UML students, experience a night in our residence halls, and determine if UMass Lowell is the right fit for them. While the program transitioned to a virtual format during the pandemic, it resumed in person during spring 2022, allowing for a more immersive and impactful experience.

Student Services and Co-Curricular Experiences: Description

As a public institution, it is our mission to provide comprehensive support and resources that cater to the diverse needs of all our students. Beyond traditional classroom instruction, we use proactive measures to create an inclusive educational environment where students can flourish. We strive to empower our students, foster resilience, and build strong foundations for their future achievements. This commitment is reflected in our robust offerings.

The university participates in federal, state, institutional and private financial aid programs and adheres to all federal, state and institutional financial aid policies and regulations. The Financial Aid Office is audited regularly by an independent auditor.

Financial aid information is disseminated to students and families in print and on the financial aid website, and it is also presented at university events such as admissions Open Houses, Welcome Days, and Orientation. [The Free Application for Federal Student Aid \(FAFSA\)](#) is the only form required by the university for a student or applicant to be considered for financial aid, including grants, loans and student employment. Students may access their individual financial aid and billing information in real time through the university's Student Information System (SiS) self-service portal.

New students are provided with the university's financial aid guide in paper form before taking out student loans, and returning students are provided a link to the guide on our website. All student borrowers must complete the [Federal Direct Master Promissory Note prior to taking federal student loans](#). Student borrowers receive notification of each disbursement.

Executive leadership established the [Financial Wellness and Financial Planning Committee](#) under the 2020 Strategic Plan's first pillar, "Transformational Education," in early 2017, to find effective ways to promote student success and long-term financial health. The committee's initiatives have resulted in a fully integrated [Financial Wellness Program](#) that includes classes on financial aid literacy, budget management and investing.

Our [academic student services](#) are overseen by our dean of academic services, while our student life services are overseen by the dean of student affairs and wellness and the dean of student affairs and experiential learning.

Academic Advising: Professional and faculty advisers provide guidance on course selection, degree requirements and academic planning, ensuring that students make informed decisions and progress toward their academic goals. During the 2022-23 academic year, advisers held 12,206 appointments for course selection, success coaching, follow-ups on academic alerts, degree requirements, and other issues related to academic success. See Standard Six for more information on advising.

Career Services: The Office of Career and Coop Services provides comprehensive support for students' career development. The office organizes [career fairs](#), employer information sessions and other events to connect students with potential employers, as well as offering individual appointments and group programs on résumé-writing, career testing, and more. Following some internal reorganizations, all the experiential learning programs on campus are now overseen by this office, and as of summer 2023, the Office of Student Employment (OSE) is part of Career Services, too. The goal is to allow students to access all of the available opportunities for career-connected work experience in a single place.

Counseling and Mental Health Services: Driven by the philosophy that well-being is the responsibility of the entire community, our [Office of Prevention and Education](#) has created programs that empower faculty, staff and students to promote mental health. We provide short-term confidential counselling (both in-person and virtually), workshops, [educational programs](#) and [peer-to-peer](#) resources to promote emotional well-being and personal growth. During the 2022-23 academic year, 4,200 faculty, staff, students and family members received education about mental health issues, warning signs and how to help students, as well as information and resources on mental health. In addition, the [Office of Student Life and Well-Being](#) was created in 2021 to promote the health of students in eight recognized dimensions of wellness. Initiatives have included training [student “well-being leaders”](#) who organize events and share tips and resources with their peers in their respective colleges. In September 2022, UMass Lowell became the [first campus in New England](#) to formally adopt the [Okanagan Charter](#).

Tutoring and Academic Support: The university provides free [tutoring services](#) and academic support programs to enhance students' learning experiences. These services include drop-in tutoring, certified [peer tutoring](#), writing assistance, study skills workshops and academic success coaching. To make tutoring as convenient and accessible as possible, we offer tutoring and advising in the residence halls after hours, as well as online.

Health Services: The health care services offered to students include preventive care, immunizations, routine medical exams and treatment for minor illnesses and injuries. A positive outcome associated with the COVID-19 crisis was the addition of a nurse case manager, freeing up the nurse practitioner staff to practice to the full extent of their licensure and scope.

Student Involvement and Engagement: UMass Lowell [encourages student involvement](#) and offers various opportunities for engagement, including over [250 clubs and student organizations](#). The breadth of these clubs reflects an increased student interest in academic-related organizations as well as student interest in developing hands-on skills, networking, and leadership abilities. Most of these organizations are supported by the [Office of Student Activities and Leadership](#) to ensure compliance with university policies for budgeting and event planning.

Undergraduate and graduate clubs are overseen by two separate organizations: [The Student Government Association \(SGA\)](#) and the [Graduate Student Association \(GSA\)](#). The SGA provides club recognition and funding for undergraduates, as well as support for the growth of each club and organization. The GSA works to support the social, academic and professional development of graduate students. The association oversees 30 clubs and organizations, and it awards \$45,000 in professional development funds and graduate research grants to graduate students each year.

Housing and Residence Life: Over 200 professional and graduate staff, faculty-in-residence and resident advisers make up the Office of Residence Life. We are committed to providing an environment that is inclusive and promotes personal and academic success for all individuals, including our Living Learning [residential communities](#), [gender-inclusive housing](#), and [residential education](#).

Athletics: UMass Lowell competes in the Division 1 America East athletic conference (with the exception of Men's Hockey, which competes in Hockey East), with eight men's and nine women's sports teams. Campus recreation also sponsors 30 club sports teams.

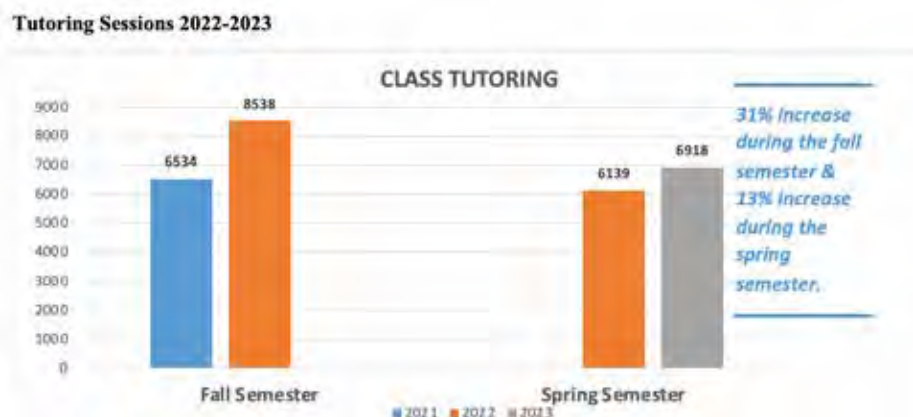
Student Services and Co-Curricular Experiences: Appraisal

Student engagement with academics, co-curricular and extra-curricular activities is the key to supporting our student success goals: retention, persistence, graduation and lifelong connections to our campus community. Our data on increased graduation rates for all groups, noted earlier in this standard, provide evidence that we are succeeding. However, the increasing levels of student needs often place a heavy burden on our faculty and staff.

As a result of higher demand since early in the pandemic, the university has increased the counseling and mental health services we offer. In the 2022 UML Healthy Minds Study, 41% of students screened positive for any depression, 34% for any anxiety, and 48% for depression or anxiety symptoms. In addition, 14% of students reported suicidal ideation and 24% reported that they en-

gaged in non-suicidal self-injury. These numbers reflect an increase since the survey was last administered in 2019; however, they are lower than national averages, with the exception of suicidal ideation, which is equal.

Student demand for tutoring has increased significantly in recent years (see graph, below), a trend we anticipate will continue. While we have always hired tutors for many of the largest first- and second-year classes that fulfill prerequisites for multiple majors, such as Human Anatomy and Physiology, Organic Chemistry and Computing I and II, students are increasingly requesting tutoring for upper-level classes.



As a result, we have trained more peer tutors and increased tutoring hours and locations; added part-time professional staff to The Writing Centers; opened the Health Sciences Hub to offer group study spaces, peer tutoring, health sciences club meeting spaces and advising for health sciences majors in a single place; beefed up our counseling staff; created a program to better onboard transfer students; expanded the River Hawk Scholars Academy from a first-year program to one that serves first-generation students throughout their college years; added the Summer Launch program; added the Office of National Scholarships; increased our Honors College advising staff and honors study abroad options; introduced the River Hawk Experience Distinction program to connect coursework with real-world experiences; started a scholarship fund to offer paid, career-connected experiences to all students; and more. As these are new initiatives, we do not yet have evidence of the impact of these changes, but plan to assess them by reviewing student success measures such as grades, retention and graduation rates, as well as by collecting and analyzing qualitative feedback.

The integration of academic and co-curricular experiences is embedded in our mission. One area of success is the popularity of our Honors College, which provides intellectually engaging seminars and other educational and co-curricular opportunities for our top students. Part of the state-wide [Commonwealth Honors Program](#), the Honors College reflects the diversity of the university, supporting many students who are first generation and/or from underserved communities. Peer mentoring, small course sizes, experiential learning opportunities such as honors-only study abroad programs, and a dedicated gathering space in the campus's historic Allen House all provide students a range of ways to enrich their learning experiences. Unfortunately, our financial limitations have led to constraints in our ability to offer fully comprehensive support and opportunities to the substantial number of honors students that we welcome each year—850 new first-year and transfer students this fall. While one option to address this challenge would be to downsize the college, we have chosen to maintain its larger size to ensure inclusivity, and we use endowment funds and other sources to supplement our support of honors.

Our ongoing investments in the achievement of underrepresented students continue to yield positive outcomes. Notably, our Office of Multicultural Affairs (OMA) and its Rising 360 program have played pivotal roles in raising awareness of the needs of underrepresented students, leading to significant achievements. One such accomplishment was the lead role OMA played in a successful campaign to incorporate pronoun options in SiS, enhancing the sense of belonging for many of our students. Our student community has also shown great enthusiasm for other OMA initiatives, with a total of 2,040 attendees participating in our 58 initiatives focused on student success, well-being, and retention.

Another signature program that merges academics with co-curricular experiences is the River Hawk Scholars Academy. Created in 2017 to improve the academic success and retention of UMass Lowell's first-generation college students during their first year, the RHSA has evolved into a nationally recognized program that has resulted in increased student retention and academic success. In the past five years, RHSA has grown significantly, from an initial cohort of under 100 first-time, first-year students in 2017-18 to an incoming cohort for fall 2023 of nearly 400 students. In addition, RHSA has expanded to offer support to these students from matriculation to graduation, with an increasing focus on planning for careers and graduate school. This fall, the RHSA is welcoming its first continuing cohort of 125 sophomore students, who will have newly-created second year opportunities. The Academy has raised enough outside funding between federal and foundation grants to plan on annually distributing over \$200,000 in scholarships for the next three years. Our new challenge involves solidifying the position of the RHSA within the university by finding the right equilibrium between external funding and ongoing institutional investment.

Our NCAA Division 1 student athletes are consistently academically successful, earning an average 3.24 GPA during the 2022-23 academic year. Their [graduation success rate \(GSR\)](#), at 93%, is higher than the 90% national average for D1 schools and compares favorably with the graduation rates of our student population as a whole, as shown in the table below. See additional materials in our document room regarding the academic success of our athletes.

FRESHMAN-COHORT GRADUATION RATES	All Students	Student-Athletes #
2015-16 Graduation Rate	69%	76%
Four-Class Average	67%	69%
Student-Athlete Graduation Success Rate		93%

UMass Lowell's commitment to student support and success has garnered recognition both within and beyond the university community. In addition to being acknowledged by Complete College America, we received acclaim in 2019 as a "First Gen Forward" institution by the Center for First-Generation Student Success. This recognition was further elevated in 2020 when UML was granted the status of an advisory institution, an honor extended to only 32 higher education institutions nationwide.

More recently, UMass Lowell achieved high rankings from the *Wall Street Journal*, [placing among the top 10 colleges and universities in Massachusetts](#) overall and the No. 1 public institution. These rankings were based on a methodology that places a strong emphasis on student outcomes, including factors like return on investment and graduation rates. This recognition underscores the university's dedication to providing effective support for its students and delivering tangible, positive outcomes in their education and future careers.

Students: Projections

- To help us better understand and support student engagement, we are embarking on the **Mosaic Student Experience Project**, a data-based project that aims to leverage our campus CRM strategy to track and monitor nearly all student engagement, from the time students arrive on campus until graduation and beyond. To build the mosaic, we have identified four areas that capture student experiences, recognizing that not all aspects of engagement can be drilled down to data that is amenable to capture. These areas are: 1) academic opportunities; 2) university supports; 3) career-connected and experiential learning; and 4) engagement and involvement (clubs and organizations). The data we capture will help map the 360-degree student experience, enabling faculty and staff to support students more holistically by drawing on points of connection, while at the same time identifying students in need of additional support and connection. It will also help in the longer term to build a repository of student affiliation data that supports alumni networking and life-long connections to UML. This project will be led by a steering committee consisting of staff in Academic and Student Affairs and co-chaired by the dean of academic and student services and the dean of student affairs and event services.
- Even in the face of demographic challenges, we must maintain strong enrollments of qualified students. We have exceeded our goal of a 2% increase in new freshmen and transfer students in fall 2023, and we must continue to innovate in the way we recruit students. We will achieve this by doing the following (initiatives overseen by our Enrollment Management team unless otherwise specified):

- Marketing a Mid-Atlantic Regional scholarship
- Making additional investments in College Board name buying
- Increasing investment in admissions recruitment platforms (Hobsons/Intersect/PowerSchool, College Board)
- Working with University Relations to further develop our social media strategy for recruitment and yield
- Adding additional personalized yield events for spring admits through departments and colleges
- Implementing joint admission agreements with community colleges, beginning in spring 2023 (Northern Essex) and fall 2023 (Bunker Hill), working with the Office of Admissions, the colleges, and the Provost's Office
- Leveraging the new Transfer Alliance Program to recruit and support new transfer students, under the Office of the Provost
- Offering campus tours in Spanish, beginning in fall 2023
- Engaging superintendents, school counselors and principals and inviting them to campus events
- UMass Lowell will continue to work to improve the gender balance at the university, particularly in STEM fields. These efforts will include the following:
 - Hiring and retaining more women and non-binary faculty and staff. Our ADVANCE Office of Faculty Equity and Resilience will work with HR and the deans to improve our hiring and onboarding practices.
 - Increasing our outreach to regional high schools to expose students of all genders to the university, with the goal of bringing as many as possible to campus
 - Developing strong mentoring programs for female and non-binary students in STEM fields, including the expansion of our very successful RAMP program
- We will continue to improve the graduate orientation process and TA/RA training and support, coordinating with GPS and the new School of Graduate Studies
- Enrollment growth in GPS is projected to be relatively even between undergraduate and graduate programs. Using a multi-year model that considers term, academic level, and delivery mode, GPS projects an overall growth in enrollments of 11.5% from fiscal 2023 to fiscal 2029. This is driven largely by growth in online and remote (synchronous live-online and virtual) enrollments (12.3%), with a more modest increase in FTF (face to face) enrollments (3.8%).
- UMass Lowell is committed to expanding experiential learning and paid career-connected work opportunities for any undergraduate student who wants one, beginning with this year's incoming class. This work will be overseen by the dean of student affairs and experiential learning, in collaboration with the offices of the academic deans. We will assess the impact of these programs in terms of learning outcomes and career readiness so as to guide program development.
- We will provide additional Mental Health First Aid training opportunities. In fall 2023, we are scheduled to implement Welltrack Connect, an online referral service to help students locate and connect with a therapist in the community who best fits their mental health needs. We have also invested in a men's wellness platform, [Manual Care](#), designed to better meet the mental and physical health needs of male students, who may be reluctant initially to seek advice or counseling in person.

STANDARD SIX: TEACHING, LEARNING, and SCHOLARSHIP

(Faculty by Category and Rank; Academic Staff by Category, Fall Term)

3 Years Prior	2 Years Prior	1 Year Prior	Current Year
Fall 2019	Fall 2020	Fall 2021	Fall 2022

? Number of Faculty by category

Full-time	445	443	438	440
Adjunct	493	372	417	417
Clinical	19	18	18	14
Research	15	14	16	12
Visiting	57	30	35	36
Other; specify below:				
Instructors	3	6	6	7
Teaching Professors	119	130	127	129
Total	1,151	1,013	1,057	1,055

Percentage of Courses taught by full-time faculty

7%	73%	71%	71%
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? Number of Faculty by rank, if applicable

Professor	149	144	143	146
Associate	149	153	165	179
Assistant	147	146	130	115
Instructor	3	6	6	7
Other; specify below:				
Clinical	19	18	18	14
Visiting	57	30	35	36
Research	15	14	16	12
Teaching Professors	119	130	127	129
Adjuncts	493	372	417	417
Total	1,151	1,013	1,057	1,055

? Number of Academic Staff by category

Librarians	16	11	11	13
Advisors	21	23	25	21
Instructional Designers				
Other; specify below:				
Nursing Lab and Simulation S	3	3	3	1
Total	40	37	39	35

Please enter any explanatory notes in the box below

- Librarians include library support staff.
- Advisers include non-faculty employees: college based advisers, international student advisers, career advisers, directors and coordinators.
- The Nursing Lab and simulation specialist participates in the development, implementation, and evaluation of educational programming in the School of Nursing laboratories.

**Standard 6: Teaching, Learning, and Scholarship
(Highest Degrees, Fall Term)**

		3 Years Prior Fall 2019	2 Years Prior Fall 2020	1 Year Prior Fall 2021	Current Year Fall 2022
Highest Degree Earned: Doctorate					
Faculty	Professor	145	131	139	143
	Associate	141	135	153	170
	Assistant	140	138	127	115
	Instructor	0	0	0	1
	Clinical	10	11	11	10
	Research	15	14	16	12
	Visiting	31	12	16	16
	Teaching Professors	95	98	104	109
	Adjuncts	193	139	159	174
	Total	770	678	725	750
Academic Staff					
	Librarians				1
	Advisors		1	1	
	Inst. Designers				
	Other; specify*				
Highest Degree Earned: Master's					
Faculty	Professor	4	3	4	3
	Associate	8	10	12	9
	Assistant	7	4	3	0
	Instructor	3	6	6	6
	Clinical	9	7	7	4
	Research	0	0	0	0
	Visiting	24	15	18	19
	Teaching Professors	24	24	23	20
	Adjuncts	271	174	229	217
	Total	350	243	302	278
Academic Staff					
	Librarians		6		5
	Advisors		7		8
	Inst. Designers				
	Other; specify*				
Highest Degree Earned: Bachelor's					
Faculty	Professor	0	0	0	0
	Associate	0	0	0	0
	Assistant	0	0	0	0
	Instructor	0	0	0	0
	Clinical	0	0	0	0
	Research	0	0	0	0
	Visiting	2	1	1	1
	Teaching Professors	1	2	1	0
	Adjuncts	28	18	17	20
	Total	31	21	19	21
Academic Staff					
	Librarians	1	1	1	1
	Advisors	3	3	3	4
	Inst. Designers				
	Other; specify*				
Highest Degree Earned: Professional License					
Faculty	Professor				

	Associate				
	Assistant				
	Instructor				
	No rank				
	Other				
	Total	0	0	0	0
Academic Staff	Librarians				
	Advisors				
	Inst. Designers				
Other; specify*					

* Please insert additional rows as needed

**Standard 6: Teaching, Learning, and Scholarship
(Appointments, Tenure, Departures, Retirements, Teaching Load Full Academic Year)**

		3 Years Prior (FY 2020)		2 Years Prior (FY 2021)		1 Year Prior (FY 2022)		Current Year (FY 2023)	
		FT	PT	FT	PT	FT	PT	FT	PT
?	Number of Faculty Appointed								
	Professor	1		2		1		0	
	Associate	2		4		2		4	
	Assistant	20		22		6		14	
	Instructor			1					
	Clinical	1		1					
	Visiting	12				8		10	
	Teaching Professors	3		4		2		2	
	Adjuncts		88		32		58		71
	Total	39	88	34	32	19	58	30	71
?	Number of Faculty in Tenured Positions								
	Professor	148		140		138		145	
	Associate	140		141		152		172	
	Assistant								
	Instructor								
	No rank								
	Other								
	Total	288	0	281	0	290	0	317	0
?	Number of Faculty Departing								
	Professor	2		2		1		3	
	Associate	5		2		3		5	
	Assistant	6		14		3		9	
	Instructor								
	Clinical					2		2	
	Visiting	8		8		6		3	
	Teaching Professors	4				4		1	
	Adjuncts		88		58		101		75
	Total	25	88	26	58	19	101	23	75
?	Number of Faculty Retiring								
	Professor	19		8		4		3	
	Associate	1		4				1	
	Assistant								
	Instructor								
	Clinical	1		1					
	Visiting								
	Teaching Professors			1		3		3	
	Adjuncts						1		
	Total	21	0	14	0	7	1	7	0
Fall Teaching Load, in credit hours									
Professor	Maximum	915		927		855		840	
	Median	27		27		33		27	
Associate	Maximum	444		573		459		441	
	Median	33		42		33		33	
Assistant	Maximum	432		356		372		304	
	Median	33		36		20		18	
Instructor	Maximum	333		300		246		264	
	Median	57		99		57		57	
Clinical	Maximum	279		273		264		245	

Visiting	Median	24	27	32	24
	Maximum	450	249	216	264
Teaching Professors	Median	59	66	57	54
	Maximum	546	438	297	459
Adjuncts	Median	45	48	48	45
	Maximum	267	294	228	228
	Median	54	63	57	57

Explanation of teaching load if not measured in credit hours

Fall teaching load is based on total student credit hours instructed in the fall semester only.

Standard 6: Teaching, Learning, and Scholarship
(Number of Faculty by Department or Comparable Unit, Fall Term)

3 Years Prior (FY 2020)		2 Years Prior (FY 2021)		1 Year Prior (FY 2022)		Current Year (FY 2023)	
FT	PT	FT	PT	FT	PT	FT	PT

Number of Faculty by Department (or comparable academic unit); insert additional rows as needed

Francis College of Engineering								
Biomedical Engineering	7		9	2	10	1	10	3
Chemical Engineering	18	6	17	2	14	3	14	2
Civil & Environmental Eng	20	3	17	3	16	5	15	8
College Engineering		2		2		3		3
Electrical & Computer Eng	34	11	33	6	33	8	33	6
Engineering Technlgy		9		5		8		6
Mechanical Engineering	29	12	29	9	34	12	34	13
Plastics Engineering	15	9	14	3	15	5	15	3
Fine Arts, Humanities, and Social Sciences (FAHSS)								
Art and Design	17	18	17	16	16	26	17	28
Criminal Justice	26	41	28	30	28	31	28	31
Curriculum and Instruction	22	1	20	3	21	1	21	10
Economics	11	12	11	3	11	8	10	9
English	36	26	33	26	33	25	31	23
English Writing Program		29		9		16		18
Fine Arts Humanities & Soc Sci		10		1		1		1
History	14	12	13	9	12	10	13	12
Music Department	18	20	17	14	18	21	18	20
Philosophy	11	3	9	1	10		10	2
Political Science	14	6	12	5	12	7	12	2
Psychology	24	32	24	29	23	28	23	25
School of Education				5		3		
Sociology	12	4	12	5	10	8	9	9
World Languages and Cultures	15	11	14	9	13	10	13	10
Zuckerberg College of Health Sciences								
Biomed & Nutritional Sciences	21	12	23	2	22	7	21	9
Department of Public Health	13	12	13	7	13	11	13	14
Physical Therapy & Kinesiology	14	12	13	9	13	7	13	7
School of Nursing	22	21	18	21	18	24	20	23
Manning School of Business								
Accounting	13	8	13	8	13	7	13	5
Finance	12	10	11	8	13	4	13	2
Management	21	6	20	7	19	5	18	7
Mktg Entr & Innovation	18	14	18	15	18	17	16	19
Operations & Info Systems	13	16	13	16	14	12	13	11
Kennedy College of Sciences								
Biological Sciences	25	7	27	5	26	6	26	6
Chemistry	25	14	26	8	26	9	27	6
Computer Science	27	38	29	33	31	36	32	31
Envir,Earth&Atmos.Sciences	10	2	10	3	10	2	12	4
Mathematical Sciences	34	27	33	23	31	22	34	18
Physics and Applied Physics	30	3	29	2	26	2	28	2
UML								
Honors College	2	8	2	6	2	5	1	9
CE-Credit Courses		4		2		1		
CE-Fall Credit Program		2		-		-		-
Total	643	493	627	372	624	417	626	417

Please enter any explanatory notes in the box below

- PT includes Adjuncts (semester and academic year)

Standard 6: Teaching, Learning, and Scholarship (Faculty and Academic Staff Diversity)

For each type of diversity important to your institution (e.g., gender, race/ethnicity, other), provide information on faculty and academic staff below. Use current year data.

Faculty	Full-time	Part-time	Total Headcount
Category of Faculty (e.g., male/female, ethnicity categories); add more rows as needed			
Men	343	231	574
Women	295	186	481
Asian	142	30	172
Black/African American	13	5	18
Hispanic/Latinx	20	6	26
Two or more races	5	2	7
White	422	299	721
US Nonresident	32	9	41
Not Specified	4	66	70
Academic Staff			
	Full-time	Part-time	Total Headcount
Category of Academic Staff (e.g., male/female, ethnicity categories); add more rows as needed			
Men	29	1	30
Women	5	0	5
Asian	3	0	3
Black/African American	3	0	3
Hispanic/Latinx	2	0	2
White	26	1	27
			0
Please enter any explanatory notes in the box below			
Fall 2022 data reported			

Teaching, Learning and Scholarship

Faculty and Academic Staff: Description

Faculty

Faculty consist of tenure-track, tenured, and teaching full-time faculty at the ranks of assistant (114 assistant professors, 108 assistant teaching professors, two clinical assistant professors), associate (171 associate professors, 12 associate teaching professors, five clinical associate professors) and full (149 full professors, five full clinical professors and seven full teaching professors formerly known as “lecturers” or “non-tenure-track faculty”); 33 full-time visiting lecturers, instructors and professors; 419 adjunct and senior adjunct faculty; and 13 research faculty. (These numbers are accurate as of fall 2023).

Tenure-stream, teaching and research faculty are represented by the [Massachusetts Society of Professors \(MSP\) union](#) and are under the same contract, while adjunct and senior adjunct faculty are in the [Union of Adjunct Faculty \(UAW\)](#) and visiting faculty are non-unit. Unionized part- and full-time faculty have opportunities for promotion with increasing levels of job security and salary. Tenure-stream faculty are evaluated on the basis of their teaching, service, research and scholarship, while teaching faculty undergo a parallel evaluation and promotion process based on excellence in teaching and service only.

All of our faculty have the appropriate degrees and qualifications for their fields, while our clinical and research faculty have strong experience as well as degrees in their areas.

The university is committed to recruiting and retaining a high-quality, diverse faculty. We use a clear, multi-step recruitment plan for all searches. Search committees, which consist of faculty members from the home department and may also include faculty from other disciplines, receive [HR training and resources](#) prior to serving, and they work with a search adviser and diversity adviser from Human Resources to ensure a diverse candidate pool before proceeding to application evaluations. If a candidate pool is insufficiently diverse, efforts are made to reach out to disciplinary academic networks and to seek alternative sites for posting open positions. [The salaries of UMass Lowell faculty and staff are competitive with others in the greater Boston area.](#)

The university's collective bargaining agreements with the MSP and UAW provide structure regarding hiring and promotion, teaching load, service load, grievance procedures, and scholarship expectations and opportunities. The university does not provide a faculty handbook. However, our [faculty success website](#) provides resources and policies, as does the [ADVANCE Office for Faculty Equity and Resilience](#).

We invest in our faculty by financially supporting professional development. Per their contracts, all full-time and adjunct faculty are eligible for annual professional development funds that can be spent on materials, travel for conferences or research, or focused trainings (such as leadership or DEI training). We also regularly offer [mini-grants](#) to support pedagogy, networking and [research](#), thus creating communities of practice for faculty to experiment with new teaching techniques, explore research collaborations and connect with others across campus in a low-stakes capacity.

We also understand that mentoring should be part of the faculty career lifecycle. To promote retention, the university offers various programs for faculty with specific interests, affinities and career goals, beginning their first semester on campus. For example, the ADVANCE Office provides seed grants for interdisciplinary mentoring groups and projects; there are mentoring programs within the colleges for faculty from underrepresented groups; and in keeping with our recent designation as an [Age-Friendly University](#), we are in the process of recruiting emeritus faculty to mentor current faculty.

The promotion and tenure (P&T) process for full-time faculty takes place in accordance with the MSP contract and is overseen by the Provost's Office. Each year, the provost issues updated [Guidelines for Promotion and Tenure](#) and holds workshops open to faculty at all levels to explain the promotion process and offer advice and technical support.

Annual evaluations of full-time faculty are also governed by the MSP contract. All junior tenure-stream and teaching faculty are reviewed annually by their department chair, who submits the reviews to the dean and provost. In addition to a review of scholarship (for tenure-stream faculty) and service, faculty teaching is evaluated by the chair (or designee) through observations and student evaluations.

The process for student evaluation of faculty is in transition. We have historically taken a decentralized approach, with each college using its own student feedback instrument and delivering the surveys in different formats (on paper, through Blackboard or Qualtrics, etc.). In addition, adjunct and full-time faculty are evaluated with different surveys, even when they are teaching the same course (except when teaching through GPS, which uses a single, standardized survey). This decentralized approach is clearly laid out in the MSP and Union of Adjunct Faculty (UAW) contracts. However, we are working on better aligning evaluations across departments, colleges and administrative units, which will also enable us to collect more robust data across the institution (see appraisal below).

Our collective bargaining agreements with both full-time and adjunct faculty protect academic freedom. Both are modeled on the 1940 AAUP Statement of Principles. In response to current events relating to political interference in higher education curricula, the Faculty Senate reaffirmed its commitment to academic freedom in a resolution in February 2022.

Academic Staff

Our on-campus undergraduate students are supported by several teams of academic staff, most of whom are housed in one of four units, each reporting to the [dean of academic services](#):

- [The Solution Center](#) (one stop for registration, billing, and financial aid help)
- [The Centers for Learning, Advising and Student Success](#), or CLASS, which oversees tutoring, professional advising, the testing centers, the writing centers, success coaching and workshops on time management and study skills
- [The Office of Disability Services](#)
- [The Registrar's Office](#)

In addition, all colleges have academic staff who support college-based initiatives. Other student support offices include [Athletics](#), [International Experiences and Study Abroad](#), [Career and Co-op Services](#), and the [Office of National Scholarships](#).

[The Division of Graduate, Online and Professional Studies \(GPS\)](#) has its own organizational structure to provide personalized support for online students. Before their first semester, students who enroll in an online undergraduate program are invited to a virtual orientation managed by GPS Undergraduate Admissions, along with new student webinars presented by the GPS undergraduate advisers. The Undergraduate GPS Academic Advising and Student Success department includes four full-time professional advisers and two part-time advisers, who support these students from admission to graduation. Academic advisers are available during business hours to deliver prompt support for a variety of academic and general issues, with extended service until 8 p.m. to better serve non-traditional students and distance learners. Advisers conduct phone and email outreach campaigns for enrollment and relationship-building purposes each term. All interactions are documented in our Salesforce CRM. Resources for students on the [Student Success Central webpage](#) include technical support, academic and career advising, wellness support, library services and free online tutoring through CLASS and [ThinkingStorm™](#).

All academic staff, whether serving full-time on-campus students or GPS students, are hired following a mandatory search in which the necessary qualifications and experience for the position are transparent and appropriate. Both internal and external candidates may be considered. Staff are evaluated annually on a broad range of measures, and supervisors and staff receive training in how to use these performance evaluations constructively. We also encourage our academic staff to undertake continuing education or join professional associations that will keep their skills up to date.

Faculty and Academic Staff: Appraisal

We have developed several faculty mentoring programs to improve retention of faculty. Since 2018, we have onboarded full-time faculty through [Launch@UML](#). The program connects new faculty members, especially junior faculty, with mentors both within and outside their departments, and it offers a series of workshops and events to introduce them to campus policies and culture. In the past two years, new faculty participation in Launch events has been minimal, so the Provost's Office is working with a team of faculty and the ADVANCE Office of Faculty Equity and Resilience to re-evaluate our onboarding process. For faculty entering this fall, we offered a two-day workshop, which is being followed with a new mentoring program.

Because our student feedback on faculty teaching has historically been decentralized, the process has proved confusing for both faculty and students. In fall 2021, the university piloted an online student feedback instrument with adjunct faculty, with the goal of expanding its use to all faculty by fall 2024. This shift to online "[Student Feedback on Instruction](#)" (SFI) forms was implemented with several objectives:

- to be responsive to students' and faculty members' concerns about the environmental impact of thousands of paper evaluations
- to reduce the administrative burden of manually tallying student responses
- to provide faculty with the ability to track student feedback over time and by theme, and to offer comparative context.

Our evaluation of adjunct faculty is heavily reliant on student feedback on instruction, an incomplete method of assessment. This is in part because adjunct faculty are not generally subject to teaching observation, unless their department chair makes a specific request based on concerns. Under the adjunct faculty contract, the university is not obligated to rehire adjunct faculty who score below a 3.5 out of 5 on student feedback. Senior adjunct faculty who score between 3.0 and 3.5 are offered a performance plan for the following semester. We are currently entering into contract negotiations with adjunct faculty, and we will review the assessment of adjunct faculty members as part of those discussions.

The pandemic strained our entire campus, and faculty were no exception. The stress on faculty of teaching virtually to more students—course caps were temporarily raised in 2020-2021—while managing their other responsibilities and their personal lives took its toll. A [faculty climate survey](#), conducted in summer 2021 and sponsored by the ADVANCE Office for Faculty Equity and Resilience, revealed areas of concern as well as indications that faculty are overall satisfied with many aspects of the university.

In general, the majority of faculty were satisfied with their jobs, with 73.3% of faculty reporting some level of satisfaction. While 5.5% were extremely dissatisfied, 18.4% of respondents were extremely satisfied. Associate professors were the least satisfied group, a surprising finding that the university is attempting to address with mentoring and other opportunities. Among these are the annual [Faculty Research and Community Engagement Symposium](#), which aims to foster interdisciplinary research collaborations, and virtual events sponsored by our new [Center for Excellence in Learning and Teaching](#). Both have seen high participation rates, but participation at in-person events, including Convocation and [Commencement](#), remains somewhat lower than before the pandemic, whether from low morale or pandemic-related safety concerns.

One concern raised in the climate survey by a significant number of faculty was service equity, now a major area of emphasis for the ADVANCE Office. Historically, individual colleges and departments have determined their service needs and assigned particular faculty members to fulfill them, but some faculty have felt the distribution of service assignments and opportunities was inequitable and/or that the way assignments were determined was opaque. The ADVANCE Office is starting to hold workshops on service equity, looking at which service assignments are low vs. high prestige and which are more or less time-consuming. The idea is to better understand what kinds of service different faculty are asked to perform and achieve a more equitable distribution of both more burdensome service and opportunities that faculty value.

Teaching and Learning: Description

Consistent with our mission, the university prioritizes and celebrates excellence in teaching. The sudden pivot to all-remote teaching in March 2020 was disorienting for many faculty, although the university's long-time involvement in online instruction meant that we had a strong bench of teachers experienced in remote teaching and learning who were willing to share best practices with their colleagues. As we transitioned back to on-campus classes and activities, faculty and the administration ramped up this practice of faculty-led pedagogical development, creating the [Center for Excellence in Learning and Teaching \(CELT\)](#). Administered by the Provost's Office in collaboration with faculty and deans, CELT is the pedagogical hub of the university. The mission of CELT is to "foster innovative, engaging and inclusive learning environments by providing resources and tools to support a community of educators," and it does this by holding workshops, sponsoring teaching collaboratives and offering mini-grants to faculty to experiment with new teaching methods.

The COVID-19 pandemic spurred our instructional community to step up exploration of new and innovative pedagogical methods, building on previous efforts such as faculty-led workshops on reverse course design. High-demand courses like Human Anatomy and Physiology, as well as the Calculus and College Writing sequences, benefit significantly from ongoing collaboration among

instructors, both within and across departments and even colleges. This collaborative approach provides faculty with a common structure while giving them flexibility to achieve the learning objectives of each course.

Many of our faculty taught both in person and online before the pandemic, but the near-total closure of campus spurred many more faculty members to seek out CELT's pedagogical trainings, which we increased first of necessity and later to meet demand, especially in how to reengage students who were slow to interact after more than a year of remote learning. Our pedagogical trainings promote a range of engaging teaching strategies, as appropriate to their subjects, including hybrid and remote instruction and "flipped" learning, in which instructors may record their lectures and assign reading and then use class time for hands-on problem solving, discussion and other forms of active learning.

Since 2020, we have offered 50 professional development workshops to faculty, with 90 faculty members serving as workshop leaders. These workshops have had a total of 1,068 unique participants and 1,135 views of their recordings. [The workshops](#) and a "Teaching Excellence" listserv also offer faculty a chance to foster relationships with colleagues, network across the university and learn more about resources to support their work.

We have made the continued enhancement of teaching and learning a priority. Over half of CELT's budget has been earmarked for pedagogical grants aimed at making teaching materials and practices more inclusive, supporting discussion groups and faculty mentoring, encouraging the use of contemplative pedagogy, and seeding the development of Open Educational Resources (OERs). The annual Excellence in Teaching Awards, celebrated at the Faculty Symposium, recognize faculty who have demonstrated sustained excellence in teaching and dedication to innovative instruction. In addition, [CELT publishes a quarterly newsletter](#) to highlight accomplishments and opportunities.

We have also developed an [Open Educational Resources](#) initiative to support student learning. In collaboration with IT, the student chapter of [MASSPIRG](#) and the Student Government Association, faculty members are honored at an awards ceremony for developing no-cost and low-cost textbooks and other open educational resources. Faculty members are also encouraged to include the use and development of OER materials in their promotion and tenure applications as evidence of their teaching excellence. In 2022, we provided \$55,000 in [faculty grants to support OER](#), and an additional \$25,000 in mini-grants in summer 2023.

The university's commitment to student advising is embedded in our culture and reflected in the faculty contract, which requires full-time faculty to hold additional office hours to meet with students during the advising period each semester. This faculty-led advising model offers several benefits, including the cultivation of student-faculty relationships and the integration of students within their respective academic programs. We have also increased our professional advising staff over the past five years.

Teaching and Learning: Appraisal

CELT is a rare example of a positive outcome from the pandemic. The university had not offered a teaching center for 14 years; over the previous decade, faculty and administrators had expressed a desire for a new center that would be responsive to pedagogical and technological developments as well as changes in our student body, but other projects took precedence. The shift to remote learning created an immediate need for "right now" teaching support. In the months that followed, CELT increasingly became a holistic resource for faculty, addressing topics including use of technology, engaging students, hybrid learning and inclusive course design.

Faculty response has been especially strong for workshops on how to better engage students and individualize instruction, as a lack of student engagement during the early months of the pandemic has proven to be an ongoing challenge. Faculty who have taken the workshops or received mini-grants have been enthusiastic in endorsing this peer-led approach to researching innovative teaching methods and sharing what works. The university's commitment to the importance of teaching is evident through the substantial investments made in CELT, recently highlighted by the allocation of dedicated space within our new [Faculty Success Center](#). This demonstrates our unwavering dedication to cultivating an environment where teaching excellence takes precedence and is recognized as a top priority.

We have adopted a new approach to advising since 2017, largely in response to student concerns expressed through the 2016 Student Government Association survey. While academic advising continues to be very important, especially as students advance

in their studies, our previous heavy reliance on faculty to do most of our advising led to inconsistencies among departments and disciplines. We took proactive steps to develop a more comprehensive and consistent advising system overall. While we had long supplemented faculty advising with professional advising by staff from [the Centers for Learning, Advising and Student Success \(CLASS\)](#), their resources were not sufficient to meet our biggest challenge: the advising needs of incoming students,

Under the leadership of the dean of academic services and in close collaboration with the Provost's Office, we established the Office of College-Based Advising to focus on first-year advising, to make sure students are on track to meet their academic goals from the start. A thorough national search was conducted to hire a team of professional advising staff, who are known as [College-Based Advisers \(CBAs\)](#). Now, every first-year student is assigned both a faculty adviser and a professional CBA, ensuring comprehensive support. The CBAs are embedded within their respective colleges, allowing them to develop expertise in specific academic programs and college requirements. Like the professional advisers in CLASS, they are also trained to work with students who want to change their majors, whether within the same college or in a different college. We set up a similar model for incoming transfer students as well; they are now assigned both a faculty adviser and a professional adviser in CLASS.

The soundness of our decision to add professional advisors for all first-year students appears to be well-supported by the data, which reflect the growing reliance of students on these advisory services. In the 2022-23 academic year alone, there were a total of 12,206 professional advising appointments. These appointments covered a wide spectrum of services, including course selection, success coaching, addressing academic alerts, providing degree-related guidance and assisting with other matters crucial for student success at UMass Lowell.

Research: Description

We have long provided support for research, scholarship and creative activities, and we are increasing that support as part of our plan to be recognized as a Carnegie Classification Highest Research Activity (R1) university. In the decade covered by the 2020 Strategic Plan, research growth (as measured by total research and development expenditures) exceeded our target of \$80 million in research expenditures by more than 15%, at \$92.2 million. In fiscal 2022, this grew to \$111 million. To strategically support the continued growth and sustainability of the research enterprise, the university has embarked on campus-wide, bottom-up planning to earn R1 status.

In 2016, as part of the ongoing effort to increase research, innovation and economic development activities, the position of vice provost for research was elevated to an executive cabinet position: vice chancellor for research and innovation. That position was first held by Julie Chen, and shortly after she was selected as chancellor, the associate vice chancellor for research administration and integrity was promoted to fill the post.

The vice chancellor for research and innovation oversees campus-wide strategic planning efforts and administrative services involving research, including: the Research Growth Planning Commission; external partnerships; economic growth and development; the [Core Research Facilities](#); all UML research institutes and centers; and technology transfer and compliance activities.

Also in 2016, working closely with faculty and administrators, [the offices of Research Administration and Research Integrity \(formerly Institutional Compliance\)](#) conducted full business enterprise analyses to improve processes and workflows and reduce administrative burdens on faculty and staff. Many policies, practices, and guidelines associated with research activities, sponsored research, core facilities and space allocation were updated, and we upgraded [several administrative tools](#) used to submit and monitor proposals and compliance documents. The [processes](#) for creating and reviewing interdisciplinary centers were improved to include rubric-driven peer reviews, bi-monthly roundtables, and administrative support for marketing, social media and website development.

We have long emphasized interdisciplinary research through university-recognized [centers and institutes focusing on diverse topics](#) and societal needs. Still, this full-scale analysis of our research enterprise has allowed us to more deliberately develop focused activities around several broad interdisciplinary strength areas, including flexible electronics/smart textiles, sustainability and clean energy, cybersecurity, health informatics, and social justice and immigration. Each of these areas has at least one corresponding academic program at the undergraduate and graduate levels to ensure that these strong areas of faculty research have a commensurate impact on students.

We have also established several new research and engagement centers, including the [Center for Pathogen Research and Training](#), the [Lowell Center for Space Science and Technology](#), the [UML Cyber Range](#), the [Center for Program Evaluation](#), and the [Center for Energy Innovation](#), which does research on sustainable energy. Additional collaborative entities such as [HEROES](#), a partnership between UML and the U.S. Army DEVCOM Soldier Center, bring together researchers from different areas to collaborate on critical solutions, sometimes in collaboration with private industry. These academic-government-industry collaborations contribute to national and regional economic development.

We also promote economic development directly through the start-up friendly UMass Lowell Innovation Hub and the [Massachusetts Medical Device Development Center \(M2D2\) and biotech incubator](#), and indirectly through direct research collaborations with industry. Strategic outreach and the hiring of several technical program managers to support these research partnerships has resulted in steady growth. In 2017, 22% of UML's external funding for research came from industry; in 2021, 35% of external research funding came from industry sources.

In response to the results of a campus-wide survey and several listening sessions conducted by the Research Infrastructure and Support Services Committee of the UMass Lowell 2020 Strategic Planning Commission, we have continued or increased our services to support faculty research success. These include providing [internal seed grants](#) of up to \$15,000 to foster interdisciplinary research in its earliest stages, with the goal of producing preliminary results that help the group seek external funding. We also sponsor workshops that help newer faculty and post-docs write strong proposals and connect with funding opportunities and potential or existing sponsors; we also offer workshops and "E-Bites" on specific topics of interest. (See additional Standard Six work room documents for examples of activities that support faculty success in research and scholarship).

Faculty awards recognizing accomplishments in research, scholarship and commercialization are presented at the annual [Faculty Symposium](#), and since 2016, an annual [Distinguished University Professor](#) award recognizes a faculty member who has consistently demonstrated exemplary teaching, research and service to the university. The [Manning Prize for Excellence in Teaching](#) is also awarded to one faculty member at each UMass campus annually.

Research: Appraisal

Efforts to increase the university's research profile have been successful. Our annual external research awards have nearly doubled since fiscal 2018, from \$43.7 million to \$83.1 million in fiscal 2022. Similarly, total annual research expenditures, which also includes internal investments, have increased by more than one-third since 2018, from \$73.2 million to \$111.1 million in 2022. See table below.

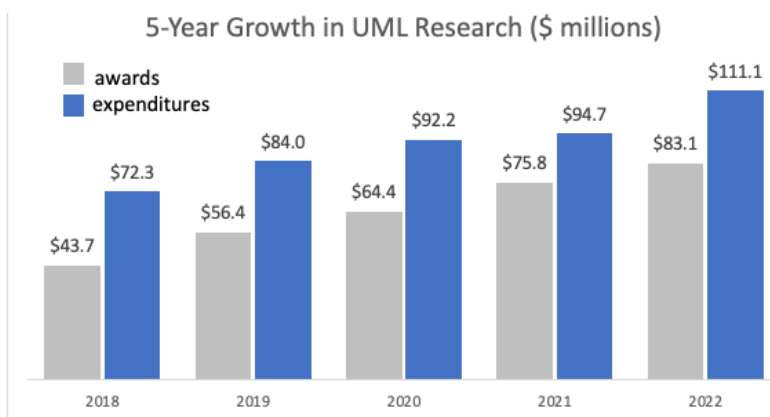


Fig. 6.1: Five-year growth in UMass Lowell research expenditures.

Internal investments in research also include reductions in teaching loads for research-productive faculty, reduced teaching for tenure-track assistant professors, purchases of new equipment for and hiring of professional staff to operate our research facilities, increased faculty start-up packages, and more hiring of professionals who support faculty research. While research expenditures were slightly reduced in fiscal 2021, mainly owing to COVID-19 travel limitations, proposal sizes and the number of awards continued to

grow throughout the pandemic. In the 2022 fiscal year that just concluded, with the most critical phase of the pandemic behind us, our total annual research expenditures jumped to \$111 million.

Several new buildings and major building renovations have helped grow and improve the research and scholarship spaces on campus (e.g. the [Pulichino Tong Business Center](#), Shah Hall, Perry Hall, Olney Hall, [Coburn Hall](#), Southwick Hall and Olsen Hall). Additional investments have been made to secure and renovate research and scholarship spaces off campus (the 110 Canal Street Innovation Hub in Lowell, Andover Imaging and Research Labs in Andover, and the UMass Lowell Research Center in Lincoln), in order to provide modern facilities that support interdisciplinary research partnerships. And investments in new equipment in the Core Research Facilities (see <https://www.uml.edu/research/crf/> for complete list) have improved access to cutting-edge equipment, including a nanofabrication lab and [the first pilot-scale lyophilization lab](#) on the East Coast, for faculty, students and external partners.

In conjunction with our efforts to grow our research enterprise, and in alignment with the university's five [Pillars of Inclusive Excellence](#), the vice chancellor for research and innovation's team has become more intentional about diversity, equity, inclusion and belonging in all aspects of its operations. In observance of #ShutDownSTEM, the vice chancellor hosted a series of campus-wide facilitated conversations about race and racism in academia and research. We actively invite women and people of color to participate in our events and have supported [internal seed grants](#) on topics including cultural preservation of historic immigrant neighborhoods and [historic land markers](#), inclusive instruction, restorative justice, enabling technologies, implicit bias, financial literacy for neurodiverse students and cultural competence in patient care.

Our interdisciplinary research centers and our partnerships with government and private industry offer a wealth of research experiences to students at all levels. Undergraduates have opportunities to do research with faculty for academic credit, as paid research assistants in labs with external funding, and—at no cost to faculty—through internal scholarship and fellowship programs that serve both research and teaching purposes. These include [Emerging Scholars](#), [Immersive Scholars](#) and [Honors College Fellowships](#).

Our partnerships with government and industry also provide real-world training, internships and job opportunities for our students and graduates, and they lead to research products that can be quickly translated into usable technologies. Some of our strongest research partnerships include those with Raytheon, Honeywell, Major League Baseball, SI2, Intel and Triton Systems. We hope that our plans for public-private development on East Campus will bring in more research partners, providing further opportunities for our faculty and students and providing good jobs in Lowell.

Projections: Teaching, Learning and Scholarship

- We need to establish a centralized electronic system for student feedback on faculty instruction that promotes consistency, efficiency, data-driven decision-making, accountability and compliance. Following the MSP contract, the provost will convene a university-wide committee to create a new process that will enable faculty to better use student feedback to modify and improve their pedagogy. Our hope is to pilot this system with full-time faculty by spring 2024.
- In collaboration with the MSP union, the deans and the Provost's Office, we will undergo a review of our guidelines for promotion and tenure to ensure that they reflect the values and mission of the institution. For example, in 2023-24 we want to make more explicit the value that we place on faculty work in diversity, equity, inclusion and belonging.
- During the 2023-24 academic year, the ADVANCE Office for Faculty Equity and Resilience will work with department chairs to assess service equity issues with faculty on campus and provide recommendations to document faculty service, in order to ensure that both service opportunities and service workloads are fairly distributed.
- Now that the new Faculty Success Center has been successfully launched, the three offices occupying that space—CELT, Academic and Instructional Technology and the ADVANCE Office—must work to ensure that it is a vibrant destination for faculty success and professional growth. This is a priority for 2023-24 under the vice provost for academic affairs.
- In summer 2023, we asked faculty to complete a new climate survey through the ADVANCE Office, and we will use the results to further evaluate and refine our approaches to faculty satisfaction and engagement.
- Our Research Growth Planning Commission will create a strategic plan to identify challenges and propose opportunities and solutions for strategically growing and investing in our research enterprise, without lessening our focus on teaching and student success.

STANDARD SEVEN: INSTITUTIONAL RESOURCES

(Headcount of Employees by Occupational Category)

For each of the occupational categories below, enter the data reported on the IPEDS Human Resources Survey (Parts B and D1) for each of the years listed.

If your institution does not submit IPEDS, visit this link for information about how to complete this form:

https://surveys.nces.ed.gov/IPEDS/Downloads/Forms/package_1_43.pdf

	3 Years Prior			2 Years Prior			1 Year Prior			Current Year		
	Fall 2019			Fall 2020			Fall 2021			Fall 2022		
	FT	PT	Total	FT	PT	Total	FT	PT	Total	FT	PT	Total
Instructional Staff	1,786	521	2,307	630	372	1,002	627	417	1,044	628	417	1,045
Research Staff	40	5	45	36	6	42	45	4	49	49	2	51
Public Service Staff	0	0	0	0	0	0	0	0	0	0	0	0
Librarians	4	0	4	4	0	4	3	0	3	5	0	5
Library Technicians	0	0	0	0	0	0	0	0	0	0	0	0
Archivists, Curators, Museum staff	1	0	1	0	1	1	0	0	0	0	0	0
Student and Academic Affairs	11	1	12	9	0	9	10	1	11	61	2	63
Management Occupations	389	7	396	339	10	349	361	7	368	174	2	176
Business and Financial Operations	92	2	94	67	4	71	88	1	89	159	2	161
Computer, Engineering and Science	138	4	142	129	2	131	136	4	140	187	2	189
Community, Social Service, Legal, Arts, Design, Entertainment, Sports, and Media	115	1	116	91	1	92	106	1	107	111	1	112
Healthcare Practitioners and Technical	15	0	15	9	1	10	15	1	16	23	1	24
Service Occupations	148	0	148	113	0	113	122	0	122	135	0	135
Sales and Related Occupations	0	0	0	0	0	0	0	0	0	1	0	1
Office and Administrative Support	152	8	160	118	7	125	139	6	145	144	3	147
Natural Resources, Construction, Maintenance	31	0	31	24	0	24	26	0	26	47	0	47
Production, Transportation, Material Moving	3	0	3	3	0	3	3	0	3	13	0	13
Total	2,925	549	3,474	1,572	404	1,976	1,681	442	2,123	1,737	432	2,169

Please enter any explanatory notes in the box below

Standard 7: Institutional Resources
(Statement of Financial Position/Statement of Net Assets)

Fiscal Year ends - month & day: (6 / 30)	2 Years Prior (FY 2020)	1 Year Prior (FY 2021)	Most Recent Year (FY 2022)	Percent Change		
				2 yrs-1 yr prior	1 yr-most recent	
ASSETS (in 000s)						
?	Cash and Short Term Investments	\$64,566	\$82,838	\$90,227	28.3%	8.9%
?	Cash held by State Treasurer	\$14,590	\$11,712	\$9,730	-19.7%	-16.9%
?	Deposits held by State Treasurer	\$0	\$0	\$0	-	-
?	Accounts Receivable, Net	\$30,138	\$39,963	\$39,316	32.6%	-1.6%
?	Contributions Receivable, Net	\$4,763	\$2,845	\$2,814	-40.3%	-1.1%
?	Inventory and Prepaid Expenses	\$0	\$0	\$0	-	-
?	Long-Term Investments	\$52,577	\$90,486	\$85,462	72.1%	-5.6%
?	Loans to Students	\$0	\$0	\$0	-	-
?	Funds held under bond agreement	\$5,881	\$2,415	\$2,444	-58.9%	1.2%
?	Property, plants, and equipment, net	\$888,899	\$994,727	\$973,105	11.9%	-2.2%
?	Other Assets	\$19,254	\$21,665	\$21,692	12.5%	0.1%
	Total Assets	\$1,080,668	\$1,246,651	\$1,224,790	15.4%	-1.8%
LIABILITIES (in 000s)						
?	Accounts payable and accrued liabilities	\$50,800	\$56,113	\$51,661	10.5%	-7.9%
?	Deferred revenue & refundable advances	\$19,996	\$18,625	\$21,748	-6.9%	16.8%
?	Due to state	\$0	\$0	\$0	-	-
?	Due to affiliates	\$99	\$0	\$0	-100.0%	-
?	Annuity and life income obligations	\$0	\$0	\$0	-	-
?	Amounts held on behalf of others	\$0	\$0	\$0	-	-
?	Long-term investments	\$552,657	\$696,496	\$677,340	26.0%	-2.8%
?	Refundable government advances	\$0	\$0	\$0	-	-
?	Other long-term liabilities	\$12,947	\$14,986	\$12,542	15.7%	-16.3%
	Total Liabilities	\$636,499	\$786,220	\$763,291	23.5%	-2.9%
NET ASSETS (in 000s)						
	Unrestricted net assets					
	Institutional	\$234,986	\$241,361	\$256,600	2.7%	6.3%
?	Foundation	\$178,236	\$192,749	\$178,032	8.1%	-7.6%
	Total	\$413,222	\$434,110	\$434,632	5.1%	0.1%
	Temporarily restricted net assets					
	Institutional	\$23,246	\$17,458	\$19,490	-24.9%	11.6%
?	Foundation	\$2,095	\$3,177	\$1,580	51.6%	-50.3%
	Total	\$25,341	\$20,635	\$21,070	-18.6%	2.1%
	Permanently restricted net assets					
	Institutional	\$0	\$0	\$0	-	-
?	Foundation	\$5,606	\$5,686	\$5,797	1.4%	2.0%
	Total	\$5,606	\$5,686	\$5,797	1.4%	2.0%
	Total Net Assets	\$444,169	\$460,431	\$461,499	3.7%	0.2%
	TOTAL LIABILITIES and NET ASSETS	\$1,080,668	\$1,246,651	\$1,224,790	15.4%	-1.8%

Please enter any explanatory notes in the box below

**Standard 7: Institutional Resources
(Statement of Revenues and Expenses)**

Fiscal Year ends - month& day: (6/30)	3 Years Prior (FY2019)	2 Years Prior (FY2020)	Most Recently Completed Year (FY 2021)	Current Year (FY 2022)	Next Year Forward (FY 2023) Q3 Forecast
OPERATING REVENUES (in 000s)					
⌵ Tuition and fees	\$259,130	\$263,115	\$267,559	\$254,039	\$254,170
⌵ Room and board	\$0	\$0	\$0	\$0	
⌵ Less: Financial aid	-\$65,369	-\$67,631	-\$61,850	-\$66,040	-\$72,250
Net student fees	\$193,761	\$195,484	\$205,709	\$187,999	\$181,920
⌵ Government grants and contracts	\$42,802	\$46,137	\$52,233	\$58,970	
⌵ Private gifts, grants and contracts	\$18,402	\$16,164	\$18,384	\$29,296	
⌵ Other auxiliary enterprises	\$68,923	\$55,461	\$14,473	\$57,875	
Endowment income used in operations	\$3,202	\$3,368	\$3,687	\$3,871	
⌵ Other revenue (specify):	\$1,436	\$1,481	\$2,224	\$2,474	
Other revenue (specify):	\$8,129	\$6,629	\$5,023	\$6,322	
Net assets released from restrictions	\$0	\$0	\$0	\$0	
Total Operating Revenues	\$336,655	\$324,724	\$301,733	\$346,807	\$181,920
OPERATING EXPENSES (in 000s)					
⌵ Instruction	\$140,229	\$146,629	\$142,688	\$145,746	
⌵ Research	\$55,460	\$60,095	\$62,628	\$72,796	
⌵ Public Service	\$1,215	\$1,158	\$599	\$825	
⌵ Academic Support	\$40,872	\$41,262	\$41,474	\$50,408	
⌵ Student Services	\$38,023	\$37,376	\$31,176	\$38,728	
⌵ Institutional Support	\$46,497	\$45,461	\$39,679	\$42,531	
Fundraising and alumni relations	\$0	\$0	\$0	\$0	
⌵ Operation, maintenance of plant (if not allocated)	\$41,494	\$41,811	\$40,323	\$42,897	
⌵ Scholarships and fellowships (cash refunded by public institution)	\$9,641	\$11,439	\$14,024	\$24,612	
⌵ Auxiliary enterprises	\$39,843	\$34,652	\$16,725	\$34,305	
⌵ Depreciation (if not allocated)	\$42,147	\$44,482	\$56,766	\$59,075	
⌵ Other expenses (specify):					
Other expenses (specify):					
Total operating expenditures	\$455,421	\$464,365	\$446,082	\$511,923	\$0
Change in net assets from operations	-\$118,766	-\$139,641	-\$144,349	-\$165,116	\$181,920
NON OPERATING REVENUES (in 000s)					
⌵ State appropriations (net)	\$122,802	\$127,688	\$133,768	\$140,053	
⌵ Investment return	\$6,493	\$2,388	\$3,269	-\$2,414	
⌵ Interest expense (public institutions)	-\$21,231	-\$18,879	-\$21,379	-\$21,536	
operations	\$0	\$0	\$0	\$0	
⌵ Other (specify):	\$18,082	\$25,149	\$36,090	\$48,768	
Other (specify):	\$738	\$171	\$65	\$476	
Other (specify):					
Net non-operating revenues	\$126,884	\$136,517	\$151,813	\$165,347	\$0
Income before other revenues, expenses, gains, or losses	\$8,118	-\$3,124	\$7,464	\$231	\$181,920
⌵ Capital appropriations (public institutions)	-\$6,626	\$8,274	\$2,301	\$10,769	

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P	Other (specify):	\$9,59	\$1,852	\$6,481	-\$9,932	
	ASSETS	\$11,09	\$7,002	\$16,246	\$1,068	\$181,920

**Standard 7: Institutional Resources
(Statement of Debt)**

FISCAL YEAR ENDS month & day (/)		3 Years Prior (FY2019)	2 Years Prior (FY2020)	Most Recently Completed Year (FY2021)	Current Year (FY2022)
	Long-term Debt				
	Beginning balance	\$522,656	\$553,028	\$552,657	\$557,367
	Additions	\$99,468	\$172,930	\$120,152	\$0
	Reductions	(\$69,096)	(\$173,301)	(\$115,442)	(\$18,397)
	Ending balance	\$553,028	\$552,657	\$557,367	\$538,970
	Interest paid during fiscal year	\$21,231	\$18,879	\$21,379	\$21,536
	Current Portion	\$94,341	\$19,251	\$14,578	\$14,790
	Bond Rating	Aa2 Moody's, AA Fitch, AA- Standard and Poor's	Aa2 Moody's, AA Fitch, AA- Standard and Poor's	Aa2 Moody's, AA Fitch, AA- Standard and Poor's	Aa2 Moody's, AA Fitch, AA- Standard and Poor's
	Debt Service Coverage Operating Income / (Annual Interest + Current Portion of Debt)	1.90	1.90	3.40	2.50
	Debt to Net Assets Ratio Long-term Debt / Total Net Assets	1.30	1.20	1.20	1.20
	Debt to Assets Ratio Long-term Debt / Total Assets	0.50	0.50	0.40	0.40
<p>Debt Covenants: (1) Describe interest rate, schedule, and structure of payments; and (2) indicate whether the debt covenants are being met. If not being met, describe the specific covenant violation (i.e., requirement of the lender vs. actual achieved by the institution). Also, indicate whether a waiver has been secured from the lender and/or if</p> <p>Please refer to Note 11 on page 51 of FY2022 UMass Annual Financial Report: https://www.umassp.edu/controller/financial-and-compliance-reports . Debt covenants are being met.</p>					
<p>Line(s) of Credit: List the institutions line(s) of credit and their uses.</p> <p>None as of June 30, 2022</p>					
<p>Future borrowing plans (please describe) .</p> <p>Borrowed \$6 million in commercial paper during FY2023 for work on athletics, office and parking facilities. Plans to borrow an additional \$72 million over the next 5 years for work on two academic buildings.</p>					

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**Standard 7: Institutional Resources
(Supplemental Data)**

FISCAL YEAR ENDS month & day (/)		3 Years Prior (FY2019)	2 Years Prior (FY2020)	Most Recently Completed Year (FY2021)	Current Year (FY2022)
NET ASSETS					
	Net assets beginning of year	\$426,077	\$437,167	\$444,169	\$460,431
	Total increase/decrease in net assets	\$11,090	\$7,002	\$16,262	\$1,068
	Net assets end of year	\$437,167	\$444,169	\$460,431	\$461,499
FINANCIAL AID					
	Source of funds				
	Unrestricted institutional	\$37,060	\$34,977	\$28,168	\$33,822
	Federal, state and private grants	\$19,991	\$23,792	\$25,458	\$29,292
	Restricted funds	\$8,318	\$8,862	\$8,224	\$2,926
	Total	\$65,369	\$67,631	\$61,850	\$66,040
	% Discount of tuition and fees	25.2%	25.7%	23.1%	26.0%
?	% Unrestricted discount	14.3%	13.3%	10.5%	13.3%
	Net Tuition Revenue per FTE	\$7	\$6	\$7	\$6
?	FEDERAL FINANCIAL RESPONSIBILITY COMPOSITE SCORE	n/a	n/a	n/a	n/a
Please indicate your institution's endowment spending policy:					
UMass Foundation maintains and administers the University's endowment assets. UMass Foundation utilizes the pooled investment concept whereby all invested funds are included in one investment pool, unless otherwise required by the donor. Pooled investment funds will receive an annual distribution, based on the endowment fund's average market value for the preceding twelve quarters on a one-year lag. Only quarters with funds on deposit are included in the average. In addition, a prudence rule is utilized, limiting spending from a particular endowment fund to be no lower than 93% of its carrying value.					
Please enter any explanatory notes in the box below.					

**Standard 7: Institutional Resources
(Liquidity)**

FISCAL YEAR ENDS month & day (6 / 30)	3 Years Prior (FY2019)	2 Years Prior (FY2020)	Most Recently Completed Year (FY 2021)	Current Year (FY 2022)
CASH FLOW				
Cash and Cash Equivalents beginning of year	\$430,389	\$317,892	\$462,596	\$353,934
Cash Flow from Operating Activities	(\$509,371)	(\$626,986)	(\$580,160)	(\$677,368)
Cash Flow from Investing Activities	(\$7,224)	\$45,290	(\$222,830)	(\$108,096)
Cash Flow from Financing Activities	\$404,098	\$726,400	\$694,328	\$1,127,580
Cash and Cash Equivalents end of year	\$317,892	\$462,596	\$353,934	\$696,050

LIQUIDITY RATIOS				
Current Assets	\$86,054	\$103,142	\$129,916	\$136,370
Current Liabilities	\$163,425	\$81,713	\$95,105	\$89,139
Current Ratio	0.53	1.26	1.37	1.53
Days Cash on Hand (Cash and Cash Equivalents) / [Operating Expenses - Depreciation and other noncash expenses]/365)	103	108	169	132

Please enter any explanatory notes in the box below that may impact the institution's cash flow.
 Cash flow information is only available at the consolidated UMass system level. Liquidity ratios are presented for the UMass Lowell campus.

Has the institution needed to access its restricted net assets or liquidate other financial assets to fund operations? If so, please describe and indicate when approvals (if required) were obtained from the stat's authority.
 No

Please enter any explanatory notes in the box below.

Standard 7: Institutional Resources (Information Resources)

3 Years Prior	2 Years Prior	Most Recently Completed Year	Current Year	Next Year Forward (goal)
(FY 2019)	(FY2020)	(FY 2021)	(FY 2022)	(FY 2023)

Total Expenditures

Materials	\$2,664,941	\$2,848,353	\$2,848,353	\$2,929,711	\$3,020,079
Salaries & wages (permanent staff)	\$1,614,349	\$1,650,683	\$1,092,547	\$1,173,735	\$1,339,228
Salaries & wages (student employees)	\$131,354	\$129,545	\$46,469	\$148,373	\$236,242
Other operating expenses	\$64,554	\$41,948	\$58,020	\$58,466	\$59,123

Expenditures/FTE student

	14824	15113	15501	14592	14027
Materials	\$180	\$188	\$184	\$201	\$215
Salaries & wages (permanent staff)	\$109	\$109	\$70	\$80	\$95
Salaries & wages (student employees)	\$9	\$9	\$3	\$10	\$17
Other operating expenses	\$4	\$3	\$4	\$4	\$4

Collections

Percent available physically	48%	43%	39%	37%	28%
Percent available electronically	52%	57%	61%	69%	72%
Number of digital repositories	6	6	6	6	6

Personnel (FTE)

Librarians - main campus	10	8	5	7	8
Librarians - branch /other locations	0	0	1	2	2
Other library personnel - main campus	11	10	6	8	9
Other library personnel - branch/other locations	1	1	0	0	0

Availability/attendance

Hours of operation/week main campus	214	214/0*	0	199	199
Hours of operation/week branch/other locations	40	40/0*	0	32	32

Consortia/Partnerships

Boston Library Consortium (BLC)
MCCLPHEI
Fenway Libraries Organization (FLO)
Northeast Research Libraries (NERL) and LYRISIS
Eastern Academic Scholars Trust (EAST)

URL of most recent library annual report:

Please enter any explanatory notes in the box below

Pandemic started in March of FY2020 and the library shut down.

See Form 4.5 for data about Information Literacy

**Standard 7: Institutional Resources
(Technological Resources)**

				?
3 Years Prior	2 Years Prior	Most Recently Completed Year	Current Year	Next Year Forward (goal)
(FY 2021)	(FY 2022)	(FY 2023)	(FY 2024)	(FY 2025)

Course management system

Blackboard Learn (Blackboardltra upgrade in FY2024)

Number of classes using the system

4,063	3,930	3,785	3,595	3,595
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Bandwidth

On-campus network

10000	10000	10000	10000	10000
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Off-campus access

commodity internet (Mbps)

7000	8500	9000	14000	16000
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high-performance networks (Mbps)

10000	10000	10000	10000	20000
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Wireless protocol(s)

WiFi 5	WiFi 5	WiFi 5, 6	WiFi 5, 6	WiFi 5, 6, 6E
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Typical classroom technology

Main campus

Classroom Podium Computer (PC)
Integrated Audio System
HDMI Connection
Wireless Connection (Airtame) 35% of classrooms
Extron media switch
Extron Controller
Touch Screen monitor
Laser Projector (Sony)
Document Camera
Echo360 Recording device
Recording microphone
IP or USB Camera
HYFLEX CLASSROOMS (8)
IP Tracking Camera - Beamforming Microphone - Far End monitors

Branch/other locations

Haverhill Campus (Same as standard classroom configuration)

Software systems and versions

Students

Peoplesoft CampusSolutions

Finances

Peoplesoft CampusSolutions

Human Resources

Peoplesoft CampusSolutions

Advancement

Ellucian Advance

Library

OCLC WMS and Springshare LibApps

Website Management

Tridion

Portfolio Management

Treasure's Office at the System level (UMass) and UMass Foundation manage this

Interactive Video Conferencing

Zoom and Teams

Digital Object Management

Website locations of technology policies/plans

Integrity and security of data

<https://www.uml.edu/service/Apps/HR/PolicyPortal/Policies/Download?id=12>

Privacy of individuals

Appropriate use

<https://www.uml.edu/service/Apps/HR/PolicyPortal/Policies/Download?id=12>

Revised October 2018 plan

7.1

Technology replacement

5-year replenishment for laptops/MacBooks
Network & servers/storage before end-of-service-life

Please enter any explanatory notes in the box below

UMass Lowell's PeopleSoft CampusSolutions is running on a shared instance with UMass Boston & UMass Dartmouth. It is supported centrally by the UMass President's Office UITs team. All three campuses run Slate for Recruiting & Admissions. UMass Lowell operates and supports an independent Salesforce Education Cloud instance for an assortment of Student Success initiatives. Campus network is Extreme/Aruba. Internal workflow management moving to ServiceNow. Campus Faculty & Administration users store their productivity files on Microsoft OneDrive. All local "production" servers backed up by Rubrik and located at the Markley Data Center facility in Lowell.

**Standard 7: Institutional Resources
(Physical Resources)**

Campus location	Serviceable Buildings	Assignable Square Feet (000)
	Main campus	62
Other U.S. locations	0	0
International locations	0	0

	3 Years Prior	2 Years Prior	1 Year Prior	Current Year
	(FY 2019)	(FY 2020)	(FY 2021)	(FY 2022)
Revenue (\$000)				
Capital appropriations (public institutions)	-\$6,626	\$8,274	\$2,301	\$10,769
Operating budget	\$33,562	\$18,744	-\$1,464	\$36,155
Gifts and grants	\$8,975	\$5,088	\$1,015	\$1,307
Debt	\$0	\$63,735	\$0	\$0
Total	\$35,911	\$95,841	\$1,852	\$48,231
Expenditures (\$000)				
New Construction	\$0	\$0	\$0	\$0
Renovations, maintenance and equipment	\$30,050	\$30,926	\$19,946	\$25,732
Technology	\$3,500	\$3,596	\$411	\$138
Total	\$33,550	\$34,522	\$20,356	\$25,870

Assignable square feet (000)	Main campus	Off-campus	Total
	Classroom	129,271	0
Laboratory	438,389	0	438,389
Office	407,245	0	407,245
Study	74,167	0	74,167
Special	147,219	0	147,219
General	300,334	0	300,334
Support	744,906	0	744,906
Residential	635,153	0	635,153
Other	40,201	0	40,201

Major new buildings, past 10 years (add rows as needed)

Building name	Purpose(s)	Assignable Square Feet (000)	Cost (000)	Year
North Parking Garage	Service	170,759.00	\$20,300,000	2012
Saab Emerging Technologies & Innovation Center	Research	31,925.00	\$83,500,000	2012
Donna Manning Health & Social Sciences Building	Academic	40,988.00	\$41,800,000	2013
South Parking Garage	Service	207,767.00	\$20,200,000	2013
University Crossing Building A	Administrative	74,932.00	\$97,300,000	2013
University Suites Residence Hall	Residential	96,954.00	\$54,000,000	2013
Pulichino Tong Business Center	Academic	35,327.00	\$47,000,000	2017
Recreation Complex	Service	1,806.00	\$5,400,138	2017
Rist Urban Agriculture Farm	Administrative	2,051.00	\$63,085	2017
Richard L. Schueller Observatory	Academic	184.00	\$440,000	2019

New buildings, planned for next 5 years (add rows as needed)

Building name	Purpose(s)	Assignable Square Feet	Cost (000)	Year

Major Renovations, past 10 years (add rows as needed)

The list below includes renovations costing \$XXX or more

Building name	Purpose(s)	Assignable Square Feet	Cost (000)	Year
Fox Dining	Residential/Service	16,021.00	\$22,475,964	2012
Bourgeois & Leitch Halls	Residential	70,150.00	\$33,351,653	2014
ETIC 3rd & 4th Floor Build outs	Research	11,508.00	\$8,247,000	2014
McGauvran Hall	Academic	28,714.00	\$34,983,386	2016
Fox Hall Elevators	Residential	0.00	\$17,870,000	2017
Perry Hall	Academic	34,547.00	\$49,956,050	2017
Dandeneau Hall	Academic	23,452.00	\$16,800,000	2018
Olsen Hall	Academic	20,775.00	\$19,100,000	2019
Coburn Hall	Academic	35,514.00	\$47,324,280	2020

Revised October 2018

7.1

Renovations planned for next 5 years (add rows as needed)

The list below includes renovations costing \$XXX or more

Building name	Purpose(s)	Assignable Square Feet	Cost (000)	Year
Olsen Hall	Academic	2,400.00	\$13,000,000	2024
Olney Hall	Academic	60,000.00	\$98,000,000	2026
Ball Hall	Academic	35,000.00	\$55,000,000	2026

Please enter any explanatory notes in the box below

Row 4 is owned buildings only, see leased buildings below; Row 5 UML has no owned buildings off campus, see leased buildings below; Row 6 UML has no international locations; The above Campus Location, Use Categories, New Buildings and Major Renovation sections include owned properties only. To add the leased properties, please use the below numbers.

Campus Leased Locations

	Serviceable Buildings	Assignable Square Feet (000)
Main Campus Leased Assignable Sqft	8	302,743
Other U.S. Location Leased Assignable Sqft	3	43,501

Use Categories

	Main campus	Off-campus	Total
Classroom	5,761	2,578	8,339
Laboratory	75,398	24,716	100,114
Office	22,740	10,862	33,602
Study	8,528	0	8,528
Special	5,961	668	6,629
General	6,705	2,351	9,056
Support	18,619	207	18,826
Residential	153,631	0	153,631
Other	5,400	5,103	10,503

Major New Leased Buildings

Building name	Purpose(s)	Assignable Square Feet	Cost (000)	Year
Riverview Suites Phase 1	Residential	125,412.00		2013
Riverview Suites Phase 2	Residential	59,832.00		2014

Major Renovations in the past 10 years to Leased Buildings

Building name	Purpose(s)	Assignable Square Feet	Cost (000)	Year
110 Canal M2D2	Research	9,581.00		2015
110 Canal 1st & 2nd Floor	Research	17,146.00		2017
Graduate and Professional Studies Center	Administrative	30,301.00		2019

Institutional Resources

[UMass Lowell's mission](#) as a public non-profit institution requires us to manage all our resources responsibly, with a special emphasis on our teaching and research goals, while minimizing cost increases for our students. Over the past five years, this mission has become more challenging for several reasons.

In the past, we enhanced our revenues through creative, outward-facing initiatives and partnerships that have earned UMass Lowell a reputation as entrepreneurial. However, this entrepreneurial approach made us more vulnerable than our public university peers during the COVID-19 pandemic, which deprived us not only of revenues from housing and dining services, but significant income from internal and external events, such as bookings at the [UMass Lowell Inn & Conference Center](#) and the [Tsongas Center](#) arena.

While our events services have largely recovered from the worst of the pandemic, and an infusion of federal emergency funds and extra financial help from the state Legislature helped us balance the budget at the end of fiscal 2020 and during fiscal 2021 and 2022, most of our revenues come from state budget appropriations and student tuition and fees. These last will not recover so easily.

Like other colleges and universities, we began to see a slight downturn in first-time, first-year student enrollments four years ago, most likely due to a general demographic decline in the population of college-age students in New England. The pandemic accelerated that decline and also contributed to a steep drop in the numbers of students attending community colleges in Massachusetts, which is now resulting in a decrease in the number of transfer students coming to UMass Lowell. Added to this, low unemployment and high hourly wages are leading more potential students, especially the 18-to-25-year-olds from low- to middle-income families in the state who make up most of our prospective student pool, to postpone or forego a traditional college education.

The universities that will thrive in the decades ahead are those that distinguish themselves from their peers and clearly demonstrate to students the return on their college investment. Our recent ranking by the [Wall Street Journal](#) as No. 10 overall among schools in Massachusetts and No. 1 among public institutions, based on learning environments, diversity and student outcomes, including lifetime earnings and ROI, provides evidence that our mission and priorities are helping us distinguish ourselves. Payscale.com also ranks us as the No. 1 public university in New England for ROI and mid-career salary. However, controlling costs for students will continue to remain a challenge.

Human Resources: Description

As of fall 2023, UMass Lowell employed 606 full-time faculty, 419 adjunct faculty, and 1,101 full-time staff and administrators. We also have 222 part-time staff, 398 graduate RAs/TAs, and 789 student employees. [The Office of Human Resources](#) reviews staffing to address the representation of underrepresented groups in each division and assists hiring managers to assess the needs of vacant positions, as well as to identify appropriate, diverse advertising platforms. We follow all state and federal laws, regulations and university policies on [equal opportunity and affirmative action in recruitment and employment](#).

Professional and faculty positions require advanced degrees. Employees who are hired are compensated appropriately and in accordance with federal and state collective bargaining and employment guidelines. HR has prepared hiring materials for each union group for adherence to policy and collective bargaining requirements.

HR is committed [to increasing diversity](#) within the faculty and staff ranks and trains all search committee members on the search process, including on the importance of diversity and inclusion and ways to address implicit bias. Our training, which is valid for two years, covers how to conduct interviews and the benefits of diversity. We also recommend that search committee members complete additional training on implicit bias offered through [LinkedIn Learning](#).

The search adviser, search chair, department administrators, search committee members, deans and department heads share responsibility for ensuring that search and hiring procedures are followed; that information about all job openings reaches the broadest possible range of appropriately qualified people; and that special care is taken to assure that recruitment information reaches members of traditionally underrepresented groups. HR facilitates the equitable review of applications by working directly with search committee chairs; this also helps to ensure legal compliance and protect the university's eligibility for federal and state

funds. A search committee is given access to the applicant pool only after we have determined that the pool reflects the diversity of the workforce. If special circumstances require that the committee begin reviewing applications before the pool is sufficiently diverse, we conduct more recruitment and outreach, and the posting remains open.

Approximately 90% of the university's workforce is unionized. Wages, hours and working conditions, as well as procedures for alternative dispute resolution and grievance and arbitration, for unionized employees are set through collective bargaining with each of our eight bargaining units and affiliated representatives: [Massachusetts Society of Professors \(Massachusetts Teachers Association, or MTA\)](#); [University Police \(Teamsters\)](#); [Professional Administrative Unit \(SEIU\)](#); [Classified/Technical \(MTA\)](#); [Maintenance & Trades \(MTA\)](#); [Grants & Contracts \(MTA\)](#); [Graduate Employee Organization \(GEO\)](#); and [Union of Adjunct Faculty \(UAW\)](#). The collective bargaining agreements are administered by the Office of Human Resources and are published on the [Human Resources/Labor Relations](#) website.

Any unionized employee may file a grievance under the relevant collective bargaining agreement. Employees also may appeal their compensation level and classification/job title to HR.

About 10% of our workforce consists of [non-bargaining unit employees](#) who are executive management, confidential or part time. Their wages, hours and terms of employment are governed by Board of Trustees and campus policies.

We have set professional salary ranges for staff in the SEIU and MTA Grants union, as well as for non-unit personnel. These ranges are reviewed and updated every 2.5 years. Staff members may request through their managers or their union that HR review their compensation for reasons of equity, job reclassification or other factors.

Faculty salaries have an established minimum. The classified unions have grades and steps, which usually change annually. Members of the classified unions may request a formal review of their classification by HR by submitting a form, and they may appeal an adverse finding to HR under Chapter 30, Section 49 of the Massachusetts General Laws.

The annual [Performance Planning & Evaluation process](#) provides a valuable opportunity for staff and managers to set goals and clarify expectations, as well as to discuss mentoring and professional development. Most collective bargaining agreements require employees to achieve a rating of "successful" or the equivalent to be eligible for collectively bargained salary increases. The performance evaluation cycle begins each year in April. Employees may complete a self-evaluation, and they are provided with comprehensive feedback on their performance. We offer training for staff and managers on preparing for and conducting this process. HR actively engages with managers and employees to address identified performance issues; we may use performance management plans and/or training and development opportunities to improve performance.

UMass Lowell recognizes that its success hinges on its most valuable asset: the 1,800+ members of its dedicated faculty and staff. To support and empower these individuals, the university places a strong emphasis on [Employee Learning, Engagement, and Development](#). This commitment is reflected in the offering of a dynamic range of classes, workshops, and certificate programs that are accessible to all staff and faculty members. In addition, faculty can take advantage of [CELT](#). By investing in the professional growth and development of our employees, we not only strengthen our workforce but also foster a culture of continuous learning and improvement, ultimately contributing to the university's overall success. We also work with individuals and teams. Our certificate programs include diversity, equity, inclusion and belonging (DEIB); university budget; inclusive communication; and supervisory leadership development. We also provide organizational development to improve academic and administrative departmental operations.

Our subscription to [LinkedIn Learning](#) allows students, faculty and staff to take any of 15,000 courses at no cost. This provides a convenient and accessible avenue for on-demand learning that complements campus offerings. In addition, full-time employees may take university classes and pursue university degrees at no cost, a benefit that many staff members have taken advantage of, including many of our senior leaders who received advanced degrees while employed at the university.

Human Resources: Appraisal

The landscape of higher education is evolving rapidly in response to global, technological and demographic changes. Our Human Resources department is tasked with guiding the university's response to many of those changes. For example, as we fully reopened campus in fall 2022, many staff sought greater flexibility in their working hours, noting that they had demonstrated they could perform successfully from a remote location. Similarly, we saw a marked decrease in the faculty's on-campus presence at a time when students were seeking in-person connections. We need to strike a balance between ensuring that we have a vibrant campus, while also acknowledging and addressing the needs of staff. In response to these concerns, the university has undertaken a comprehensive review of its policies, led by the Associate Vice Chancellor of Human Resources in collaboration with the senior cabinet. The goal of this initiative, known as "The Future of Work," is to establish a set of guidelines that promote fairness and inclusivity across the university, ensuring that all staff members are provided with consistent and equitable working conditions.

In response to budgetary concerns, the university implemented a Voluntary Separation Incentive Program to take effect September 1, 2023, to encourage retirements. This agreement resulted in 22 retirements, the majority by staff members. While this is a positive financial development, the result is an understaffed fall semester. Administrators have developed short-term plans to cover the necessary work through reduction of services, consolidation of roles and responsibilities, and the use of part-time staff, but we will need an expedited plan to hire key staff members as needed.

Financial Resources: Description

The state appropriation for the University of Massachusetts System arrives as a lump sum. The [system president](#), by delegation of the [UMass Board of Trustees](#), allocates these funds among the five individual campuses. For many years, the Lowell campus's portion of these funds has remained stable at between 15.5% and 16%, and no changes are expected in the near future.

All operating and non-operating revenues received by UMass Lowell support the university's teaching and research mission. [Executive leadership](#) is actively engaged in long-range financial planning, budgeting and decisions about annual resource allocations, including the review and approval of all faculty and staff positions through the Essential Hiring Committee.

We adjust our annual spending and update our rolling five-year financial plan annually, based on changing revenue and expenditure estimates and forecasts. Consistent with the trustees' expectations, we maintain positive annual operating margins by budgeting conservatively, while funding a modest operating reserve to ensure flexibility and the capacity to address changing circumstances in any given fiscal year. As we work to reach the trustees' expected operating margin, we review the key areas, general operations, auxiliary and grants. When we look at expense opportunities, our largest expense is payroll. We evaluate proposed changes to faculty and staff lines by reviewing the impact to key ratios: student/faculty ratio and faculty/staff ratio. For facilities personnel, we compare our budgeted numbers to APPA (Association of Physical Plant Administrators) standards. For non-personnel expenses, reductions are set at the vice chancellor level, and each executive area determines how to disburse the reduction with the least impact to student success, research, critical campus operations and other campus priorities.

We rely primarily on state appropriations and student tuition and fees to support our educational and general operations budget, which funds instruction, academic and student support services, facilities operations and maintenance, interest on university debt, financial aid and research support. General operations budget spending in fiscal 2022 was \$383.9 million, or approximately 72% of the campus's total operating budget spending of \$533.5 million. In fiscal years 2023 and 2024, that percentage is forecast at 66% and budgeted at 63%. The annual state appropriation represented 39% of general operations revenue and 27% of all operating and non-operating revenue in fiscal 2022 (39%/30% forecast for fiscal 2023 and 42%/31% budgeted for fiscal 2024); net student tuition and fees revenue represented 56% of general operations revenue and 37% of all operating and non-operating revenues. Other revenues in support of general operations include unrestricted revenues from gifts, interest earnings and overhead charges and assessments.

In May of 2023, the UMass Board of Trustees approved UMass Lowell's operating budget with a required 1% operating margin for the upcoming fiscal year. The revenues and expenditures we are looking to balance include:

- the end of one-time pandemic-related federal dollars
- growing grant and research external funding
- enrollment changes and corresponding tuition and residence hall revenues
- significant increases for salaries and benefits
- inflationary pressures on contracts, goods, services and capital activities.

Even with a 6% increase in tuition rates from fall 2019 to fall 2023, net tuition is down 5% at \$9.3 million. This May we graduated the last of our large classes recruited pre-pandemic; these have been replaced with smaller, COVID-era cohorts. Our incoming classes continue to grow, but it will still be several years before the pandemic's financial impact is behind us.

By far the largest cost drivers are collectively bargained salary increases, financial aid, debt service and depreciation. Cost growth in these areas is either partly outside the campus's control (bargained salary increases), essential to maintaining student net revenues (financial aid) or locked in (debt service). This year, those factors are coming together in a "perfect storm" of financial challenges. At 58% of all university costs, salaries and benefits are UMass Lowell's largest expenditure, and these costs are increasing by 8% and 11% respectively, due to parameters set by the state. Just over half of that increase is funded by state dollars (54%), leaving the campus to fund the remainder.

As of May 2023, the university was anticipating a budget gap of some \$37 million that we need to close while still prioritizing the goals of the strategic plan. We have already begun to address this gap. Our recent cost-cutting measures include the following:

- Reducing campus operating budgets by 15% across all areas (with strategic investments continuing in essential areas)
- Using "soft" funding from research grants to invest \$2 million in library needs
- Improving academic efficiencies: for example, raising the minimum number of students required for enrollment in all courses
- Implementing a Voluntary Separation Incentive Program (VSIP) to encourage retirements
- Placing a hold on all non-essential hiring (hold on 51 vacant positions): \$6.3 million in savings
- Executive team members, deans, and other senior leaders will forego or postpone salary increases
- Engaging the entire campus in addressing the budget gap by advertising an anonymous form to suggest cost-cutting measures
- Thorough evaluation of and reduction in capital spending:
- Redirect philanthropic funds to support more financial aid:
- Reducing student financial need through external paid internships:
- Office consolidation: savings TBD
- University reorganizations: savings TBD

In addition to these new initiatives, we are reducing the cost of business operations, energy use, and inefficiencies in other activities within our control, often in coordination with the UMass President's Office and the other UMass campuses. A significant example is the formation of the [Unified Procurement Services Team \(UPST\)](#), which consolidated and centralized campus strategic procurement, contracts management and accounts payable operations within the President's Office.

We take a proactive approach to resource management, financial sustainability and operational excellence on campus, as well. For example, we implemented a comprehensive hiring review process in 2016. The Essential Hiring Committee (EHC) now includes the entire executive cabinet, the associate vice chancellor for human resources, the executive director of budget and financial planning and budget staff. The committee meets weekly to review every staff position that becomes vacant, maximize vacancy savings during the fiscal year, and control growth in the base budget. This allows us to realize one-time savings from vacancies while considering strategic organizational changes. For example, we integrated the Academic and Student Affairs divisions under the provost upon the retirement of the vice chancellor for student affairs, which has led to better coordination in the delivery of support services as well as salary savings.

Integrity and Oversight

Financial and administrative policies necessary to ensure sound business practices, integrity, and accountability for the UMass System and our campus are broadly shared, publicly posted and regularly updated:

- [Board of Trustees Policies](#)
- [UMass President's Office Polices & Guidelines](#)

We also issue [state ethics and conflict of interest laws and policies](#) to the campus community annually, as well as the [university's fraud policy](#), reporting guidelines and resources. All employees are required to complete training on the state Conflict of Interest Law shortly after they are hired and every two years afterward.

We are audited by several agencies and entities:

- Our independent auditing firm, currently KPMG LLP, performs the annual general purpose financial audit using generally accepted auditing standards and federal government auditing standards. KPMG also audits federal grants and awards annually under Uniform Grant Guidance (UGG). The Board of Trustees Audit & Risk Committee reviews all audits.
- An internal auditing department, part of the university system office and reporting to the Audit & Risk Committee of the Board of Trustees, coordinates and monitors all audit activity (internal and external) and reviews internal campus processes to ensure proper controls are in place. The internal audit group presents the annual financial statements and results of the audit to the Trustees Audit & Risk Committee for acceptance by vote. Management letter comments and other recommendations are presented to the board, with corrective action plans as necessary.
- As a state agency, the university is subject to periodic audits by the state auditor.
- As a recipient of federal grants and contracts, the university is subject to audit by relevant government agencies.
- Other program audits may be required by sponsoring entities, and these are performed by various auditing firms under oversight from the internal audit director.

Staff from the [Budget Office](#) and [Controller's Office](#) as well as the system's Unified Procurement Services Team hold regular training sessions for the campus community to explain policies and procedures, demonstrate systems available, and identify people to contact for questions. These courses cover such topics as the campus budget process and timeline, accounting best practices, the procurement process, travel expense processing and grant accounting.

Our finance organization is staffed with qualified professionals. All employees meet common educational and professional qualifications for finance and budget positions and, where appropriate, for higher education financial management in particular. A vigorous search process, including appropriate reference checks, ensures that job candidates possess the background and skills required to be successful.

The Finance and Operations organization is led by a vice chancellor who reports directly to the chancellor. The university controller, who leads the accounting organization, and the executive director of budget and financial planning, who leads the operating units responsible for financial management and oversight, report directly to the vice chancellor for finance and operations. [The Finance and Operations organization](#) also includes the [facilities management](#), [master planning and capital project management](#), [information technology](#), [auxiliary and administrative services](#), [public safety](#), and [human resources management](#) departments. The broad scope of the vice chancellor and our strong leadership team allow for comprehensive planning, coordinated and efficient services and informed decision-making about how to allocate university resources.

The UMass Board of Trustees, the President's Office and campus administration and finance leaders have adopted a framework to strengthen the university's long-term fiscal outlook, accountability and risk management posture. The trustees are presented with quarterly updates on financial and budget matters, capital plans and projects, and risk management and mitigation.

Using this framework and internal campus practices, we continue to work toward strategic goals that ensure financial sustainability, mitigate risk, deliver efficient operations and ensure access and affordability to students. For more on financial planning, see Standard Two.

Fundraising and Advancement

A bright spot in our financial picture is our continued success in fundraising. In fiscal 2022, we raised more than \$41 million in gifts and pledges, the highest amount ever in a single year. This banner year came after the conclusion of our first multi-year campaign, Our Legacy, Our Place, timed to culminate with our celebration of the university's 125th anniversary. We raised \$165.2 million, well beyond our original goal of \$125 million. A particular point of pride is the high rate of faculty and staff giving: 33%, down from a high of 51% pre-pandemic, but still nearly double the national average of 17%. We followed our banner year by raising nearly \$37.5 million in fiscal 2023.

[The Office of University Advancement](#) engages in annual fundraising, including annual giving, major gifts, planned giving and corporate and foundation support. Alumni, parents, friends, corporations, foundations and university faculty and staff are the focus of our efforts. Gifts are solicited through personal engagement, direct mail, events, alumni e-newsletters and other electronic communications.

Advancement maintains the strictest levels of confidentiality regarding donor information. The university closely adheres to IRS regulations and guidance as well as the standards created by the [Council for the Advancement and Support of Education](#). We also follow the reporting standards of the [National Association of College and University Business Officers \(NACUBO\)](#). The office staff works closely with the Controller's Office to follow all necessary accounting procedures in accepting and acknowledging each charitable contribution and using it as the donor intended.

Equally important is how we acknowledge and steward our valued donors, including inviting them to community events and "thank you" receptions—and by encouraging them to participate in the life of the university (for example, by serving as judges for our [DifferenceMaker](#) entrepreneurial competitions and our [Student Symposium](#)). All donors who have made gifts and commitments through their endowed funds receive an annual report detailing the use of their funds during the previous year.

Financial Resources: Appraisal

Given the long-term trend in state support, our financial strategy remains increasingly reliant on student revenue, which we expect to continue to improve as we increase the size of our incoming classes, as we did this fall. Compared with five years ago, however, growth potential in undergraduate tuition and fees is limited, which will put unprecedented pressure on our finances, while the expectations of the Board of Trustees for increased financial performance and additional spending on deferred maintenance will put greater pressure on campus operating budgets.

These competing pressures are already being felt in the form of an operating budget gap of \$37 million. To close this gap the campus has targeted approximately \$14 million in non-personnel and \$23 million in personnel budget cuts and cost reallocations in fiscal 2024. The distribution of cuts reflects the overall split in spending between personnel and non-personnel costs, minus depreciation and interest. Non-personnel actions include a 15% cut in departmental general operating budgets (\$7.5 million), reallocating indirect cost funds for research to support library materials (\$2 million), reducing capital expenditures (\$500,000), and increasing scholarship and intern funding from non-general operations funds (\$1 million).

Personnel budget reductions include the following, to date: eliminating/freezing 51 vacant positions in fiscal 2024 (\$6 million), and the Voluntary Separation Incentive Program (\$2 million). A reduction in non-unit pay increases for senior leadership has been implemented, and additional personnel actions are under review, including: a second voluntary separation incentive program, eliminating/freezing additional vacant positions, and other actions, including layoffs. However, these actions will only be taken in furtherance of the priorities outlined in the strategic plan and as part of a campus-wide reorganization effort to identify and achieve operational efficiencies and resulting cost savings.

The executive cabinet has identified the following areas for potential consolidation and/or reorganization: event and meeting services, marketing and communications, corporate relations and development, information technology, and reporting and data functions. Additional areas will be reviewed for consideration as well.

While we don't expect these measures to impact our core mission, service impacts will be felt across the campus, including administrative support activities, response times from Facilities, the Library and Information Technology, support for events and conferences, and reductions to transportation services.

Campus morale has taken a hit due to recent budget cuts, and the administration has endeavored to communicate plans and impacts in a transparent way with regular public updates and announcements, including opportunities for members of the campus community to suggest cost-cutting measures. The community has asked many questions about our capital priorities and facilities use practices which highlighted the need to communicate through an [FAQ](#) some of the current constraints (such as the benefits, terms and long-term plans of certain leased properties) as well as our ongoing efforts to leverage hybrid work to consolidate office space and reduce operations and maintenance costs. We are pursuing external partnerships with corporations and industry who may be willing to lease our vacated space, so as to enjoy the benefits of co-locating with our researchers and having greater access to our students, who are potential future employees.

These budget strategies, while difficult, provide the financial bridge necessary to get back on track. We believe we will require two to three years of steady growth in our incoming classes to regain our financial footing.

Information, Physical and Technological Resources: Description

[Information Technology \(IT\)](#) consists of six teams that meet the growing technology and automation needs of the university. These six functional teams manage the university's technology delivery and platforms.

- [Academic Technology](#) -- Academic tech support is provided 24/7 through a combination of telephone, virtual and walk-in help. In January 2023, the new Faculty Success Center opened, co-locating the Office of Instructional Technology with the [Center for Excellence in Learning and Teaching \(CELT\)](#), reinforcing the integration of technology and pedagogy.

We use [Blackboard](#) as the learning management software for in-person and online classes. Students, faculty and staff can also download software for free, including Microsoft Office, Adobe Creative Suite, Zoom and Google Classroom.

All classrooms are equipped with a PC, document camera, laptop connectivity, an integrated sound system, a laser projector, Echo 360 lecture-capture and an Extron controller. In addition, 15% of our classrooms are configured with multiple laser projectors, and 12 classrooms are equipped with beamforming microphones, which allow the instructor and students to record without any hardwired, podium or wireless microphones.

- [Data Analytics and Institutional Research](#) -- This team is responsible for all regulatory, system-required and internal reporting, using quantitative and qualitative research to support campus goals and decision-making. A recent example was a multiyear initiative to disaggregate data about our Asian American students' national origins which, combined with data on their financial status, supported UML's recognition as an [Asian American and Native American Pacific Islander Serving Institution](#), and the subsequent award of federal grants that allowed us to create both the [Asian American Center for Excellence and Engagement](#) and a [new program in health care informatics](#). (See additional Standard Seven work room documents for a copy of the UMass Lowell AANAPISI Eligibility Letter).

In recent years, the DAIR team has been building a self-service, Tableau-based reporting hub, DataUML, in partnership with Helio-Campus. This academic-focused group of more than 50 dashboards, with more in the works, is being used by senior academic leaders to better understand our enrollment and student success trends and to pursue data-driven goals. DataUML enables Tableau-trained administrators to quickly run reports to access information about a population of students or a pattern of student performance, without having to place individual requests. We discuss the role of DAIR in greater detail in Standards Two and Eight.

- **Systems Architecture & Technical Services** – IT supports most of the university's computing infrastructure following a cloud-first strategy. End-user support is provided by a team of technicians who staff a central service desk and also visit campus labs and offices. The Systems Engineering team also designs and manages an extensive virtual desktop capable of handling the software needs of the most complex engineering applications.

- **Data Networks & Communications Services** – The network team supports a secure, resilient and high-performing network that transfers more than 25TB of data daily, providing seamless connectivity to the UMassNet wide-area network, cloud providers and the UMass System shared data center. Network uptime averages 99.9%.

Over the past few years, this group has deployed Microsoft Teams (in addition to OneDrive and Outlook) across campus as UML's primary communication and collaboration tool. The transition proved particularly beneficial when COVID-19 shut down most of the campus, and it has continued allowing for more flexible, collaborative work.

- **Enterprise Applications** – The Enterprise Applications team uses the Salesforce Higher Ed platform to support local initiatives. This single-instance suite of tools and applications has dramatically improved our digital automation capabilities for program management, business analysis, client outreach and operational support. Recent projects include providing an award-winning, integrated CRM platform that fosters student recruitment, engagement, retention and success. Student interactions are tracked and viewable by several student-focused service teams. Another major project was the delivery of a robust platform for student advising and tutoring, including early academic alerts and re-enrollment campaigns.
- **Information Security** – The team is comprised of highly skilled and certified security engineers experienced in the latest security technologies and cybersecurity best practices.

The University Library

UML students and faculty enjoy the use of three library facilities located within a mile and a half of each other in Lowell. The libraries offer 233 service hours per week during the fall and spring semesters and 127 hours per week in the summer.

The university library system, which has been under new leadership since 2021, is realigning and rebuilding its resources to support the goals of the university's 2028 Strategic Plan. In the past year, the library's focus has been on growing and strengthening the staff and starting to evaluate spaces, collections and services, with the goals of providing consistent and equitable support to faculty, students and staff across all disciplines and programs and beefing up resources for research as we move toward R1 status.

- **O'Leary Library (South Campus)** – O'Leary Library is a six-story building on South Campus. Library services share space with several student-facing offices, including a Learning Commons and Writing Center, and several academic departments. Although most of the academic programs that use print resources heavily are housed on South Campus, less than 17% of the library's print collection is shelved at O'Leary, an issue we hope to address through our space study.
- **Lydon Library (North Campus)** – Lydon Library is a five-story building on North Campus. It houses nearly 80% of the university library's book collections, although books may be requested online for delivery by courier to O'Leary Library. Lydon also holds more than 5,000 print journals in four underground storage levels, and it includes many individual and group study spaces. The two upper floors include several offices and consultation areas for the First-Year Writing Program.
- **Center for Lowell History** – The Center for Lowell History is dedicated to the preservation of university and local history. It is located in the Patrick J. Mogan Cultural Center, part of Lowell National Historical Park. In keeping with one of our key 2028 strategic goals, these primary historical records serve the university community as well as the public. The center attracts researchers from across the country and around the globe: in fiscal 2022, about 700 students, scholars and other patrons consulted the collections.

Special collections at the center comprise 4,837 books that are discoverable in the university catalog and 7,932 books in our archival collections, most of which are not in the catalog and require staff assistance to discover and access. The center houses 528 archival collections documenting city history as well as the university's archives, including the [Jack Kerouac and Beat Literature collections](#). Nearly all the special collections are represented online via a finding aid. We have also created [89 research guides on Lowell history](#) topics. The center is also home to the [Southeast Asian Digital Archive](#) (SEADA), the [Portuguese American Digital Archive](#) (PADA), and the Hellenic Heritage Collection.

We work with the UMass President's Office and a [consortium of Massachusetts public higher education libraries](#), as well as the [Boston Library Consortium](#) and the [Fenway Libraries Organization](#), to leverage collective buying power. We have started negotiating agreements that support Open Access publishing for our researchers by shifting collections dollars away from subscription costs and toward article processing charges. We also support Open Educational Resource initiatives by and with faculty.

Physical Facilities: Description

Because the university is a state agency, capital projects must meet statutory and regulatory requirements, including accessibility and sustainability mandates. We employ a team of project managers who are certified as Massachusetts public procurement officials and are familiar with state design standards and requirements. They guide designers and contractors to ensure work is consistent with these standards.

These design standards include a comprehensive set of technical and operational guidelines to promote safety and security such as: ID card access; emergency notification systems; security cameras; and other tools that control access to the physical campus and discourage unsafe or criminal activity. During renovation projects and other capital improvements, campus buildings and spaces are upgraded to the current standards.

One of our proudest accomplishments in the past decade is the dramatic improvement in physical accessibility for our campus. With the exception of a few older, limited-use, special purpose buildings, all campus facilities meet ADA and Massachusetts Architectural Access Board standards for accessible parking, pathways, entrances, toilets and travel between building floors. In 2010, fewer than 25% of campus buildings met these standards. By fiscal 2020, 95% of buildings were accessible.

UMass Lowell has been recognized as a national leader in environmental sustainability. We [enjoy the highest rating of any college or university in Massachusetts](#) under the Association for the Advancement of Sustainability in Higher Education's [Sustainability Tracking, Assessment, & Rating System](#). The university has already met its 2030 carbon reduction goals and has developed a comprehensive [strategy to attain carbon neutrality](#) by 2050, consistent with Massachusetts Executive Order 594. Eight campus buildings have been LEED certified by the U.S. Green Building Council.

Physical and Electronic Environments

With three mostly adjacent campuses in Lowell totaling 140 acres, and leased satellite space in three nearby towns and cities, the university owns or leases more than 4.8 million gross square feet in 73 buildings. Our instructional facilities include 124 classrooms, 49 science-intensive teaching labs and 36 "dry" teaching labs and studios, along with more than 265,000 net square feet of research space. Our facilities also include residence halls with beds for 4,569 students, academic and administrative offices, libraries, athletics and recreational buildings and fields, student life and activities, food service and support facilities. The university also owns or leases 6,716 parking spaces, including some equipped with electric car chargers.

Our capital programs are grounded in the strategic plans of the campus and individual colleges. We have developed rolling master plans to assess these needs and identify priority investments, which inform five-year capital plans that are updated every two years. This process is managed by the university's Space Committee, which is led by three executive cabinet members and includes representatives from the colleges, Student Affairs, the Registrar's Office and Facilities Management. Shorter-term capital projects are prioritized each year using an annual call process, in which all campus departments are invited to submit requests. Investments in building and campus infrastructure are based on a five-year critical repairs planning process and funded through state and campus matching funds.

The university has a robust data network, with both wired and WiFi coverage supported by a fiber optic backbone. Overall, this network provides ample capacity, but certain older buildings face localized challenges because of network constraints and expanding demand. We have prioritized these upgrades and are addressing them individually and during larger renovations.

Information, Physical and Technological Resources: Appraisal

IT's ability to halt and investigate an attempted ransomware attack in June 2021 is a testament to the security team's planning and vigilance. Although we switched to a static website for several days, we were able to shut down the attack before our systems were compromised. Since then, working in tandem with the data services team, we have increased our information security through stricter network access control and device registration requirements. We have also beefed up cybersecurity education for end-users.

The library's biggest challenge has been staffing. From 2010 to 2020, the library lost many staff members, primarily through retirements, and these openings were not filled due to the lack of a library strategic plan. We have since reorganized our staff and added new positions, with an additional five new full-time positions approved for 2023-24.

The biggest challenge to achieving full carbon neutrality will be the availability of funding to upgrade building envelopes and electrical and mechanical systems. Our strategy anticipates a combination of energy conservation and electrification, coupled with the ongoing greening of the electrical grid serving Massachusetts, as well as a modest amount of local renewable energy production. This strategy will be executed over time through multiple renovation projects. However, limits on our debt capacity and very limited available state funding pose obstacles to timely achievement of our goals. Operating and maintaining the more sophisticated heating, ventilation and cooling systems and equipment associated with decarbonization are also complicated by our limited financial and staff resources.

While we have enough classroom space overall, we have too many large, lecture-format rooms and seminar rooms and too few for courses enrolling 50 to 75 students. The renovations to Olney Science Center will help rebalance this.

The most recent [master planning effort](#) began in late 2021, as the university returned to full in-person instruction and activities after the pandemic shutdowns. Preliminary findings from our assessment suggest that the amount of teaching and research space on campus is reasonably aligned with projected demand, based on a conservative enrollment growth forecast and a more aggressive expectation of research program expansion as we pursue R1 status. However, informal student study and collaboration spaces and student recreation spaces are significantly below benchmarked standards for our current and projected enrollments. The study also found significant potential for repurposing office space in tandem with the formal expansion of hybrid and remote work.

Although the amount of academic and research space is adequate, some of our instructional laboratories and research spaces need updating. We also have nearly \$1 billion in deferred maintenance to campus buildings and grounds, some of which affects our ability to support an increasingly sophisticated research program. The current capital plan focuses on these challenges, prioritizing investment in renovations to four of the primary laboratory buildings: Olsen Hall, Olney Science Center, Ball Hall and Weed Hall. Limited finances and the need to maintain operations in all four buildings during construction mean these renovations are being implemented in phases over multiple years, resulting in short-term inconveniences and longer-term difficulty ensuring that we can keep pace with expanding laboratory needs.

Institutional Resources: Projections

Priorities articulated by the 2028 Strategic Plan have given the university its focus. As we align plans for our financial, human, advancement and institutional resources to those objectives, we are cognizant of challenges we will face over the next five years. Our key priorities include:

- All campus leaders will review current practices and eliminate duplicative efforts.
- The executive cabinet will review current campus services and make appropriate reductions to reflect our smaller student population.
- The Office of Advancement will oversee a comprehensive fundraising and engagement campaign, focused not just on major gifts, but on donor acquisition and retention.
- Our Human Resources team has been verifying hybrid and remote work policies and plans with all campus administrative departments. This information will be reviewed by our Planning Department to identify opportunities to consolidate office

space and free up entire floors, wings and buildings, to reduce the pressure on our facilities services and operations staff. We are exploring whether we can then reduce or terminate some of our leased space, and/or lease out freed-up spaces that we own to our corporate, industry and other partners, consistent with our M2D2 and iHub space model. Please see the Special Area of Emphasis below that discusses our Harbor Place campus in Haverhill.

- The campus will continue to partner with the university system office to identify campus administrative services and activities that can be provided more efficiently by central service organizations, such as the Unified Procurement Services team, treasury and payroll services. For example, interstate and international tax administration would be better serviced centrally for all campuses, including ours.
- In addition, the UMass System, per past practice, performs a transition audit and operational review when a new chancellor is hired. The President's Office contracted with Accenture in fall 2022 to identify administrative and financial operations, processes and practices that could benefit from an external review for efficiencies and improvements. The scope of work and areas of review were developed in concert with campus executive leadership, and key operational improvement recommendations were provided and prioritized. The campus will implement recommended process improvements in the areas of:
 - Teaching and research assistant hiring and contract processing
 - Institutional research and data governance and reporting practices
 - Time and effort reporting
 - Travel and expense processing
 - Auxiliary services agreements and contract management
 - Review and assessment of private/public partnership proposals and agreements.
- The Provost's Office will address library staffing issues through a series of new hires during 2023-24 in research assistance, instruction, collection development and archives.
- Our library research and learning team will lead several collection assessment projects to ensure that our print and electronic materials meet current and future needs and that these resources are allocated equitably.
- We plan to consolidate library spaces in line with the recommendations of the O'Leary Library study and master plan.

STANDARD EIGHT: EDUCATIONAL EFFECTIVENESS

(Undergraduate Retention and Graduation Rates)

Student Success Measures/ Prior Performance and Goals	3 Years Prior (Fall 2019)	2 Years Prior (Fall 2020)	1 Year Prior (Fall 2021)	Current Year (Fall 2022)
IPEDS Retention Data				
Associate degree students	*	*	*	*
Bachelors degree students	83%	84%	82%	84%
IPEDS Graduation Data (150% of time)				
Associate degree students	0%	0%	25%	33%
Bachelors degree students	66%	69%	69%	71%
IPEDS Outcomes Measures Data				
First-time, full time students				
Awarded a degree within six years	59%	62%	66%	68%
Awarded a degree within eight years	62%	65%	68%	70%
Not awarded within eight years but still enrolled	2%	1%	1%	1%
First-time, part-time students				
Awarded a degree within six years	13%	16%	24%	25%
Awarded a degree within eight years	14%	18%	36%	35%
Not awarded within eight years but still enrolled	3%	2%	2%	1%
Non-first-time, full-time students				
Awarded a degree within six years	63%	64%	67%	67%
Awarded a degree within eight years	64%	66%	68%	68%
Not awarded within eight years but still enrolled	1%	1%	1%	1%
Non-first-time, part-time students				
Awarded a degree within six years	41%	41%	43%	41%
Awarded a degree within eight years	43%	45%	46%	44%
Not awarded within eight years but still enrolled	3%	2%	2%	3%
Other Undergraduate Retention/Persistence Rates (Add definitions/methodology in #1 below)				
1 FTFT Bachelors - Female	88%	89%	83%	85%
2 FTFT Bachelors - Male	79%	80%	81%	83%
3 FTFT Bachelors - Students of Color	80%	85%	81%	83%
4 FTFT Bachelors - Pell Grant recipients	80%	84%	81%	82%
5 FTFT Bachelors - First Generation	80%	83%	77%	82%
Other Undergraduate Graduation Rates (Add definitions/methodology in # 2 below)				
1 FTFT Bachelors - Female	73%	77%	74%	76%
2 FTFT Bachelors - Male	62%	65%	67%	68%
3 FTFT Bachelors - Students of Color	63%	65%	62%	65%
4 FTFT Bachelors - Pell Grant recipients	59%	67%	64%	65%
5				
Definition and Methodology Explanations				
1	Used federal IPEDS definition for calculating retention and graduation rates.			
2	* Associate degree cohorts had fewer than five students each year.			

Note: complete this form for each distinct student body identified by the institution (See Standard 8.1)

**Standard 8: Educational Effectiveness
(Student Success and Progress Rates and Other Measures of Student Success)**

P	Category of Student/Outcome Measure	Bachelor Cohort Entering		Associate Cohort Entering	
		6 years ago	4 years ago	6 years ago	4 years ago
		IPEDS 2016	IPEDS 2018		
P	First-time, Full-time Students				
	Degree from original institution	58%	59%	*	*
	Not graduated, still enrolled at original institution	2%	2%	*	*
	Degree from a different institution	42%	41%	*	*
	Transferred to a different institution	300%	28%	*	*
	Not graduated, never transferred, no longer enrolled	37%	12%	*	*
P	First-time, Part-time Students				
	Degree from original institution	21%	20%	*	*
	Not graduated, still enrolled at original institution	0%	4%	*	*
	Degree from a different institution	79%	80%	*	*
	Transferred to a different institution	21%	26%	*	*
	Not graduated, never transferred, no longer enrolled	57%	50%	*	*
P	Non-first-time, Full-time Students				
	Degree from original institution	63%	62%	*	*
	Not graduated, still enrolled at original institution	1%	1%	*	*
	Degree from a different institution	37%	38%	*	*
	Transferred to a different institution	3%	25%	*	*
	Not graduated, never transferred, no longer enrolled	33%	12%	*	*
P	Non-first-time, Part-time Students				
	Degree from original institution	41%	44%	*	*
	Not graduated, still enrolled at original institution	0%	2%	*	*
	Degree from a different institution	59%	56%	*	*
	Transferred to a different institution	4%	28%	*	*
	Not graduated, never transferred, no longer enrolled	54%	26%	*	*

Measures of Student Achievement and Success/Institutional Performance and Goals

	3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Next Year Forward (goal)
	(FY 2)	(FY2)	(FY 2)	(FY 2)	(FY 2)

Success of students pursuing higher degrees (add more rows as needed; add definitions/methodology in #1 below)

1					
2					
3					
4					

Other measures of student success and achievement, including success of graduates in pursuing mission-related paths (e.g., Peace Corps, public service, global citizenship, leadership, spiritual formation) and success of graduates in fields for which they were not explicitly prepared (add more rows as needed; add definitions/methodology in #2 below)

1					
2					
3					
4					

Definition and Methodology Explanations

1	* Associate degree cohorts had too few students to report.
2	

**Standard 8: Educational Effectiveness
(Licensure Passage and Job Placement Rates and
Completion and Placement Rates for Short-Term Vocational Training Programs)**

	3-Years Prior	2 Years Prior	1 Year Prior	Most Recent Year
	2019	2020	2021	2022

State Licensure Examination Passage Rates									
	Name of exam	# who took exam	#/% who passed	# who took exam	#/% who passed	# who took exam	#/% who passed	# who took exam	#/% who passed
1	MTEL (all program completers*)	17	100%	18	94%	150	91%	TBD	TBD
2									
3									
4									
5									

National Licensure Passage Rates									
	Name of exam	# who took exam	# who passed	# who took exam	# who passed	# who took exam	# who passed	# who took exam	# who passed
1	NCLEX - RN (first-time test takers)	79	79	97	94	91	83	86	78
2									
3									
4									
5									

Job Placement Rates									
	Major/time period	* # of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs
1									
2									
3									
4									
5									

* Check this box if the program reported is subject to "gainful employment" requirements.

Web location of gainful employment report (if applicable)

Completion and Placement Rates for Short-Term Vocational Training Programs for which students are eligible for Federal Financial Aid

	3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Next Year Forward (goal)
	(FY 2)	(FY2)	(FY 2)	(FY 2)	(FY 2)
1					
2					
3					
4					
5					

Placement Rates					
1					
2					
3					
4					
5					

Please enter any explanatory notes in the box below

MTEL (all program completers*) as published on the DOE MA website
<https://profiles.doe.mass.edu/epp/student.aspx?leftNavId=12484&orgcode=30000055>

**Standard 8: Educational Effectiveness
(Graduate Programs, Distance Education, Off-Campus Locations)**

Student Success Measures/ Prior Performance and Goals	3 Years Prior	2 Years Prior	1 Year Prior	Current Year
	(Fall 2019)	(Fall 2020)	(Fall 2021)	(Fall 2022)
Master's Programs (Add definitions/methodology in #1 below)				
Retention rates first-to-second year	89%	88%	89%	87%
Graduation rates @ 150% time (3 years)	77%	74%	75%	74%
Average time to degree (years)	2.4	2.4	2.5	2.5
Other measures, specify:				
Doctoral Programs (Add definitions/methodology in #2 below)				
Retention rates first-to-second year	92%	91%	93%	93%
Graduation rates @ 150% time (8 years)	57%	62%	64%	69%
Average time to degree (years)	4.8	4.9	4.9	4.8
Other measures, specify:				
First Professional Programs (Add definitions/methodology in #3 below)				
Retention rates first-to-second year				
Graduation rates @ 150% time				
Average time to degree				
Other measures, specify:				
Distance Education (Add definitions/methodology in #4 below)				
Course completion rates				
Retention rates				
Graduation rates				
Other measures, specify:				
Branch Campus and Instructional Locations (Add definitions/methodology in #5 below)				
Course completion rates				
Retention rates				
Graduation rates				
Other measures, specify:				
Definition and Methodology Explanations				
1	Retention rates are reported for students entering in fall 2018 to fall 2021 and include students who graduate in one year.			
2	Graduation rates for Masters students are reported for 3 years and is reported for fall entrants 2016 to 2019.			
3	Graduation rates for Doctoral students are reported for 8 years and is reported for fall entrants 2011 to 2014.			
4				
5				

Educational Effectiveness

Special Area of Emphasis: Comprehensive Assessment of Student Learning

UMass Lowell's focus on continuous improvement has driven tremendous progress in the work we do to ensure our educational effectiveness, and foundational changes to our structure and new or improved tools are accelerating our efforts. This progress was partly spurred by the fall 2018 interim report from NECHE, which called on us to "develop a comprehensive approach to the assessment of student learning, including general education, and use the results to inform program improvement." The factors contributing to our educational effectiveness are many and varied, and this section outlines the array of means, supports, and measures that we have established to allow departments and other units needed flexibility while maintaining coherence. Our shared, data-informed understanding of student learning allows us to identify needs and priorities, and it provides direction to our educational work.

We describe our assessment and related practices, consider and appraise our successes and opportunities to improve, and project the path that we will take moving forward through our 2028 Strategic Plan. We have gone into greater depth in this standard to show that this special area of emphasis has been and continues to be actively addressed. For that reason, this chapter is organized to present the description and appraisal of each individual numbered paragraph of Standard Eight.

Several themes emerge as key tools in our efforts to evaluate our effectiveness. These include:

- UMLData: This is the collection of collaboratively designed dashboards that make our student data visible and actionable.
- Experiential and co-curricular learning: The organizational union of Academic and Student Affairs are fostering a restructuring of mission-critical, high-impact programs, with a focus on evidence-based outcomes from career-related experiences.
- Our new Center for Excellence in Learning and Teaching: This is a driver of faculty engagement and development, promoting the use of logic models and robust learning outcomes assessment.
- The growing alignment between our "traditional" school and GPS.

We also want to point out that while the upheaval and uncertainty caused by the COVID-19 pandemic slowed some of our activity, it also provided an opportunity to step back and reevaluate our priorities and capacity with fresh eyes and try fresh approaches. UMass Lowell was quick to respond and adapt to changing conditions, including in our educational effectiveness, which shifted from a priority to an emergency as students and faculty adapted to teaching and learning remotely. We were required to reprioritize the most urgent issues, which put a spotlight on learning outcomes and our ability to understand those outcomes. Our prior work on outcomes-based instruction served us well in this crisis and, out of necessity, our continuous improvement accelerated.

Improving Data for Decision-Making: Description

Over the past five years, we have greatly increased our routine use of data for evidence-based decision-making. The Office of Data Analytics and Institutional Research (DAIR) has led an effort to gather and refine disparate campus data sources into a "data lake," commonly referred to as DataUML. To make this enormous amount of information useful for a variety of users and purposes, DAIR has developed a suite of dashboards and interactive visualizations to guide the work we do on behalf of all students in all modalities. DAIR works in continuous partnership with campus users and provides ongoing training, including walk-throughs and best practices for interpretation. Representatives of the DAIR team attend many meetings to facilitate analysis; after listening to the discussions and questions, they provide refinements and additional functionality to the dashboards. (8.1)

Our data today is much more detailed and refined than ever before, and through campus collaborations with DAIR it has become far more visible and actionable. We are able to quickly and confidently connect outcomes and student characteristics, including bio-demographic information, from a number of formerly disconnected sources. This allows us to explore the factors impacting the success of particular groups of students. Localized outcomes by department and college provide nuanced data to be used at the point of action. (See additional Standard Eight work room documents for sample visualizations provided by DAIR).

Executive cabinet members, vice provosts, deans, associate deans and key staff have access to DataUML, and they use it for both short- and long-term decision-making. Users can see historical data and trends to guide system-level changes, while live data are

available at key points for immediate use, for example, during enrollment. This confluence is helping us to align two separate administrative units: our “traditional” course and degree offerings and those administered by the [Division of Graduate, Professional, and Online Studies \(GPS\)](#), which has separate admissions, advising and scheduling processes.

Beyond the improvements driven by DAIR and DataUML, other changes directly contributing to our capacity for managing data include:

- The fall 2022 merger of what had been two separate instances (“traditional” school and GPS) of our learning management software, Blackboard, which is critical for gathering information about student performance at a granular level, especially by faculty teaching across modalities.
- Our continued use of the Student Information System (SiS) to examine outcomes for students in mission-critical categories, such as Honors College students.

Improving Data for Decision-making: Appraisal

The demand from administrators, staff, and faculty across campus for timely, quality information demonstrates that UML has embraced an analytical, data-based approach to planning, action and investment. As our data has become both more complex and easier to find and use, DAIR staff also ensure that we are getting the information we most need and helping us to interpret it accurately and in context.

This very positive change has revealed some challenges, as well. We need to stabilize the operational definitions we use to describe the sub-groups within our student body. This issue is not unique to UML: State and federal reporting requirements have long dictated the categories we use to explore our data. We need to be more flexible in labeling the complex and intersecting variables we want to explore and that we allow our students to use to identify themselves. The external definitions available in categories such as gender, ethnicity and other characteristics are limited, which makes it difficult to achieve the greater nuance we desire. Without better disaggregation in the sources from which our data are taken, such as the Common App, we will continue to struggle to close this data gap. Also, clear administrative distinctions such as “online” or “international”—while carefully footnoted in our Data First Forms—are less reliably consistent when used in some contexts.

Because of this, we need to strengthen our data governance. To ensure the privacy, security and accuracy of our data, a robust, authorized body with clear policies and processes is required. Fragmentation of data about students and their learning is unavoidable when coming from such a range of sources, and idiosyncratic data formats need to be resolved. While initial steps have been taken to establish a data governance team under DAIR, our decision-making and our students will benefit from increased efforts in this area.

Given the important work to be done and campus demand, the DAIR office requires increased staffing. There are currently only five full-time staff, compared to the eight or more found in some peer and aspirant peer institutions. While this may be sustainable for ongoing reporting tasks and the development of DataUML, DAIR staff are pressed to respond to data requests from academic departments and other units, as well as to develop public-facing dashboards that will make UML’s outcomes more transparent. To achieve our goals, the office must grow.

Aligning and Improving Learning Outcomes: Description

The success of our faculty across campus in adapting their curricula and teaching during the COVID-19 pandemic reflected the high priority we have long placed on establishing and using clear, relevant learning outcomes for teaching and assessment. During the massive shift to remote instruction, our learning outcomes were the stabilizing force that allowed faculty to reorganize their courses to meet the educational needs of students. The intensive professional development offerings during that period—which propelled the creation of our new Center for Excellence in Teaching and Learning ([CELT](#))—drew heavily on this strength to support faculty and cemented the centrality of these outcomes.

Our mission is carried out in the two elements of our undergraduate [Core Curriculum](#). The [Breadth of Knowledge \(BOK\)](#) requirements provide structure to our traditional distribution of general education courses, which underpin our commitment to a broad, liberal education, while the core’s seven [Essential Learning Outcomes \(ELOs\)](#) shape the requirements in every discipline, ensuring that students graduate with a suite of intellectual skills and dispositions that will prepare them as lifelong learners and leaders. As

previously stated, one of Chancellor Chen's top priorities is to ensure that every UMass Lowell student has the chance to engage in formal experiential learning; our [Applied and Integrative Learning](#) outcome will help us refine the structure of those opportunities and assess their effectiveness.

Both the BOK and ELO requirements are explained on the Core Curriculum website and discussed in Standard Four. Approved courses are tagged in the university catalog, and scheduled courses satisfying each outcome are searchable using our [Course Finder](#) tool. Both sets of core outcomes are marked on undergraduate degree pathways in the [catalog](#), with the ELOs placed on courses in which students are expected to demonstrate mastery. Courses satisfying BOK and ELO requirements are noted on each student's advisement report within SiS so advisers can ensure that these graduation requirements are satisfied. The Provost's Office and the [Core Curriculum Committee](#) of the Faculty Senate are jointly responsible for overseeing these outcomes.

[Program learning outcomes](#) for all undergraduate degrees are posted centrally in searchable form on the Provost's Office website and are readily accessible from department home pages. These apply to programs delivered on campus and online. Each year, departments are explicitly invited to examine and update these outcomes through the [Annual Program Curriculum and Learning Summary](#) survey, and all new programs are asked to provide learning outcomes as part of their proposals. The director of assessment and accreditation assists any department or program seeking to improve their learning outcomes so as to allow for effective assessment.

Many but not all graduate programs have explicitly published program outcomes. We have been working to add learning outcomes—as well as advisement reports—for all programs in our [graduate catalog](#) to improve advising and time-to-degree for those students and to allow us to evaluate curricular changes and student outcomes.

Aligning and Improving Learning Outcomes: Appraisal

UMass Lowell has sound, systematic processes to ensure that learning outcomes are kept up to date and readily available to faculty, students and the public. Undergraduate programs are the origin and main beneficiary of these processes, and over time a gap has emerged between the undergraduate and graduate catalogs, which are issued by two separate administrative units.

We are working on improving the graduate catalog so it is similar to the undergraduate catalog, but that work has proven challenging and slow. One complicating factor is the greater decentralization of leadership for individual graduate programs, which are largely administrated by faculty program coordinators and associated committees, while undergraduate programs tend to be managed at the department level, where there are more established channels of communication and more structural supports.

Faculty have identified some discrepancies between the way the Core Curriculum was administered for our online undergraduate programs, overseen by GPS, and our on-campus programs. This is mainly due to the presentation of requirements for online students, who are mostly part-time and therefore do not follow the on-campus, semester-by-semester degree pathways. UML's institutional educational outcomes and Core Curriculum requirements need to be more clearly labeled on the GPS website for transparency, advising and assessment. We have improved communication on this point, and the Registrar's Office is now building advisement reports for undergraduate online programs to promote clarity about our expected outcomes, which will lead to public-facing website updates.

Assessing Student Learning Across the Curriculum: Description

Our efforts and expectations described above have led to substantial improvements in both teaching and learning since our last review. When we compare our 2013 and even 2018 E-Series forms, we can see the significance of this change toward an assessment culture. Authentic, outcomes-based assessment has been normalized as a part of instructional activity, and departments and programs have increasingly identified sound means of assessment suited to their subject matter and students. We have accomplished this shift by continuously reinforcing the work of assessment across campus practices and processes. Our approach has been to highlight the inquiry-centered nature of all we do and to provide assistance and encouragement to improve the quality of the inquiry into student learning. (8.3)

Some key processes, programs and tools that have helped to propel student learning assessment include:

- Strategic planning at the campus and college levels
- The [Annual Program Curriculum and Learning Summary](#)
- Professional development and special projects led by the Center for Excellence in Learning and Teaching (CELT), including faculty orientation and “toolkit” events
- Curriculum-connected experiential learning and support programs such as the River Hawk Scholars Academy, the River Hawk Experience Distinction, Immersive Scholars, Emerging Scholars, Honors College Fellowships and the new Transfer Alliance Program
- Promotion and tenure guidelines
- Revised and refocused program review through the UMass System’s [Academic Quality Assessment and Development \(AQAD\) process](#)
- [Faculty Senate](#) practices documenting curriculum changes
- Faculty Senate subcommittees, especially the Core Curriculum Committee
- New program reports required by the UMass President’s Office
- The UML Inquiry Scholars Program, a program in which students are trained to conduct focus groups of other students to learn more about their experiences
- Departmental committees, curriculum mapping, and catalog and website review
- Leadership in the Massachusetts Department of Higher Education’s [AMCOA](#) (Advancing a Massachusetts Culture of Assessment) team
- Responding to the increased demand by professional accreditors for valid, authentic assessment.

These processes and programs have been explicitly interrelated. The logic model used for planning and change management at both the campus and faculty levels is consistent and demands clear assessment. The Annual Program Curriculum and Learning Summary survey is designed and promoted as the building block for the student learning section of the periodic AQAD review. The promotion and tenure guidelines prompt similar types of evidence-based reflection. This is accomplished with support from campus leadership and faculty and staff partnerships.

The Provost’s Office is the structural home of student learning assessment. The director of assessment and accreditation and a faculty fellow for assessment (who receives a stipend) have direct responsibility for supporting assessment. The director and faculty fellow both have many other responsibilities, which has informed the strategies we have pursued. Our successes to date have relied on our ability to forge partnerships and encourage faculty to take on the work of assessment, with guidance and assistance from the provost’s office.

Assessing Student Learning Across the Curriculum: Appraisal

By design, activities that reinforce student learning assessment as an essential, embedded practice are now nearly inescapable. The insertion of assessment into familiar processes, as well as the introduction of new processes, has been a long-term strategy for us and one that has created a campus culture of assessment.

That being said, we still rely heavily on teaching faculty for this work. While that is appropriate, we need to acknowledge that the continued development of student learning outcomes assessment will fall to these faculty who already have high teaching and service demands. Also, to the extent that tenure-track faculty enjoy more authority and power on campus, attaching assessment work only to teaching faculty and staff could stigmatize it.

Our focus on learning outcomes assessment, rooted in the “transformational education” pillar of the 2020 Strategic Plan, will continue under the [2028 Strategic Plan](#), which is strongly characterized by clear goals and measures—evidence that assessment has permeated the way that faculty and staff understand the value and impact of their work toward our mission. It will also be the way that we express value to our students and the community we serve.

Student learning assessment actions and data appear in this report’s E-Series forms, but by way of appraisal, we offer a few brief illustrations of our faculty-enacted assessment culture.

- The Department of Electrical and Computer Engineering has made a major shift in their approach to assessment of student learning. Prior to 2021, the department relied primarily on student self-reporting of perceived learning outcomes, achieved by surveys attached to course evaluations. In the past year, they have begun using external assessment tools provided by ABET to examine the development of core skills in the context of authentic course work. This has led to recent changes in curriculum in both of the department's undergraduate degree programs.
- The Honors College has developed a regular practice of assessing student learning across different elements of their curriculum. At the degree completion stage, the program follows Massachusetts Department of Higher Education Commonwealth Honors Program guidelines for capstone projects and theses. Of the 163 students that undertook Honors Projects during the 2021-22 academic year, 159 successfully completed and presented projects that met commonwealth standards. The college wanted to learn about students earlier in the program, so in 2021-22, they revised and updated the learning outcomes for two required first-year courses—the First-Year Seminar in Honors and Honors College Writing II—and collected artifacts to assess the outcomes, resulting in community norming and priorities for strengthening the first-year seminar. Next, the program will work on integrating Honors Learning Outcomes into the 2000- and 3000-level courses offered by various departments.
- In spring 2023, the Core Curriculum Committee of the Faculty Senate launched a faculty survey to learn how the Applied and Integrative Learning (AIL) Essential Learning Outcome (ELO) is being integrated and measured across disciplines. Of 103 faculty teaching AIL courses that semester, 42 responded and 23 completed the survey. While some responses provided insights into that outcome and classroom practices we can use to improve it, only two respondents indicated that they would be willing to share the results of their classroom-based assessment efforts.

Across all assessment work, one of our main challenges is the ability to capture and share results. While we have some vehicles for this, such as [CELT workshops](#) in which faculty share what they have learned as well as mini-grants that require faculty to report on their assessment work at our Faculty Symposium, we have not made as much progress as we could in sharing assessment outcomes in an accessible way.

We have established a strong mission- and campus-appropriate foundation for student learning assessment. To continue to extend and refine our process, some necessary actions include:

- Improving our strategies and tools for reporting and sharing information about the achievement of student learning outcomes, both on campus and on our website;
- Addressing gaps where assessment culture has been slow to develop by reaching out to offer support and encouragement, and by ensuring that top leadership demonstrates commitment to assessment in all programs;
- Ensuring the chancellor's call for department-level strategic planning promotes student learning outcome assessment as a meaningful and useful activity; and
- Planning for sufficient staffing to sustain continuous improvement in the long run.

Assessing Co-Curricular and Extra-Curricular Programs: Description

The gains the university has made in cultivating a culture of assessment extend into the work of our co-curricular and extra-curricular student opportunities. These programs are deliberately focused on the university's mission, and we use the same, serious approaches to assessment for them as we use in academics. (8.4)

The merger of our former divisions of Academic Services and Student Affairs under the provost in 2020 helped cement what was an already-established link between these two arenas of student learning. Our dean of student affairs and enrichment now works out of the same office as our director of assessment and accreditation, an outward sign of our progress toward embedding assessment in everything we do while removing administrative and cultural silos.

With its adoption in 2014, the Core Curriculum established [Applied and Integrative Learning \(AIL\)](#) as its crowning Essential Learning Outcome, with the aim of ensuring that students are able to synthesize their learning experiences across the curriculum and co-curriculum. The current administration has put a clear priority on [experiential and career-connected learning](#) as key to our mission in this area. Practices developed collaboratively in the new, unified division of Academic and Student Affairs form the basis of educational assessment for experiences both outside and alongside the classroom.

The [Career and Co-op Center](#) was the subject of one of the first assessment partnerships between the Provost's Office and Student Affairs. The director of assessment teamed up with the professional co-op staff to design a program-wide, authentic assessment of student learning. Together, they identified best practices for helping students articulate the value of disparate co-op experiences, which both helped and aligned the staff members who were teaching the post-experience Co-op Assessment course.

Likewise, a partnership with the [Office of Residence Life](#) identified staff who were committed to student learning outcomes assessment and then integrated assessment into the program's continuous improvement. The establishment of learning outcomes across the co-curriculum has been normalized and is evident in documents such as the Office of Residence Life's assessment plan (see additional Standard Eight work room documents for UMass Lowell residential satisfaction survey data).

Today, for programs like the [River Hawk Experience Distinction \(RHED\)](#) and the [River Hawk Scholars Academy \(RHSA\)](#), assessment is done in ongoing consultation with the director of assessment and staff from DAIR and the Registrar's Office. Aspects of those collaborations include goal setting, outcomes development, long-range assessment planning, identification of data resources, opportunities and methods of assessment, rubric building, collection of data and artifacts, and analysis and sharing of results—all aimed at continuous improvement.

Assessing Co-Curricular and Extra-Curricular Programs: Appraisal

The university's approach to student learning outcomes assessment is now well-embedded in the co-curriculum and student activities. We use the same, serious approaches to assessment with those programs as we do our academic disciplines.

The River Hawk Experience Distinction (RHED) and RHSA (program to support first-generation students) are two examples of successful assessment for student learning outcomes, and our Transfer Alliance Program is likewise structured as a three-year pilot project that will be assessed each semester for continuous improvement. The director of assessment meets frequently with faculty members who work directly with students in these programs and assists the faculty and staff program leaders to establish assessment from the very conception of an RHED-qualified or RHSA-specific course. The partnership for the RHED is highly complex: the assessment director runs workshops with the faculty of each team (Leadership, Entrepreneurship, Community Engagement, Global Engagement and the new Sustainability RHED) to tease out the specific outcomes that will distinguish students who complete the program and that guide the development of rubrics for evaluating student artifacts and reflections. (See additional Standard Eight work room documents for RHED rubrics and sample reflection guide). With the RHSA, the collaboration is similarly supportive of faculty, including help with outcome and assignment design as well as consultation on means of investigating and quantifying the impact of their program on first-generation students.

In these two cases and others, assessment of the co-curriculum is customized and flexible. The goals of the programs themselves and, within those, the goals for student learning, are explored in partnership, and care is taken to authorize participating faculty and staff as the experts in the needs of the programs and students. Program leaders are gently encouraged to push past their comfort zone of student surveys and counts of participation into more probing explorations of student experiences that have the potential to yield improvements. Relationships of respect and trust between program leaders and assessment staff are key to ensuring that time spent on assessment is rewarding and yields results that help to fulfill the university's mission.

While we have enjoyed great success within co-curricular programs, there are still some co-curricular assessment gaps, such as establishing outcomes for the Study Abroad program, and authentic assessment in the Honors Program, that are opportunities to strengthen our efforts. Also, despite our efforts, the results of co-curricular assessment still remain hidden to some faculty and academic leaders. The reorganization that brought Student Affairs under the Provost's Office may set the stage for improvement, but what we have learned from our efforts is not as widely shared as it could be.

Gathering and Aligning Data on Student Learning: Description

We employ a variety of methods, direct and indirect, to gain insight into student outcomes and experiences, including nationally benchmarked and locally designed surveys, institutional data collection and reporting, comparisons to statewide and national data (e.g. NSSE), external assessments (co-op and clinical evaluations, invited ratings of student work), student feedback on instruction, observations of teaching, LMS data, individual and departmental assessment projects, student-led focus groups and more. Our use of multiple methods and levels of inquiry provides us with qualitative and quantitative and small- and large-scale evaluations of educational outcomes. (8.5)

We continuously seek to strengthen and extend our methods of local data collection. The work we have done since our interim report includes upgrades to the Annual Program Curriculum and Learning Assessment Survey, the primary tool with which we regularly gather department- and program-level learning outcomes assessment activity and results. We have added the practice of providing departments with direct, written feedback from the director of assessment and accreditation and the faculty fellow for assessment on the responses to these annual surveys. Feedback includes suggestions for improved assessment activity and urges departments to design assessments that will feed into their AQAD or professional accreditation reports. In 2020, we began to send the annual survey data to DataUML so that it can be analyzed in combination with other information.

Similarly, data that has traditionally been centrally reported and shared through email (e.g. DFW rates) has been transitioned into dashboards in DataUML; this makes the data more accessible and provides the ability to consider it alongside other qualitative and quantitative data. (See additional Standard Eight work room documents for DFW rate summary of day courses).

Another improvement in our capacity to use automatically-collected data is the merger of formerly separate instances of [Blackboard](#), currently being upgraded to Blackboard Base Navigation, as noted above. With our traditional on-campus and GPS iterations of Blackboard now united, we are able to mine and compare student performance data to understand how it relates to other outcomes. In response to COVID-19, our [Academic and Instructional Technology](#) team began to automatically generate Blackboard course shells for every course (before that, roughly half of on-campus faculty had used Blackboard, while all GPS faculty were required to use it). This faculty use of Blackboard has been sustained since the campus fully reopened. The ability to correlate Blackboard's individual behavioral data with other sources yields new insights about students in all modalities, both overall and in specific populations.

Our use of large-scale assessment measures has also grown. Importantly, we have transitioned from using a home-grown to a benchmarked [first destination survey](#) to provide us with external context for the evaluation of our students' post-graduation outcomes. While employment outcomes remain notoriously difficult to trace, this improved survey is supplementing the web-scraping and direct reporting efforts of our Career and Co-op Center.

Gathering and Aligning Data on Student Learning: Appraisal

Overall, the university has made major strides in using a robust and varied array of measures of student success. We are taking good advantage of the recent improvements noted above, especially in terms of our ability to identify achievement gaps and pay direct attention to closing them. A prime example of this is the work of our [Mathematical Sciences Department](#) on their curriculum, as described in that area of emphasis report.

While our sources of insight for examining student learning outcomes are plentiful, our next phase of effort must include a change to the ways we make data available and the ways we ask our departments and units to analyze it. Our large-scale data (e.g., NSSE and first destination data) and passively collected data (e.g. Blackboard data) are mainly used in administrative reporting and planning, while smaller-scale data, which is much more idiosyncratic and labor-intensive to produce, tends to be held at the course, department and program levels. We could better understand the learning experiences of our students by examining these sources in tandem; better integration could also improve decision-making at the campus and classroom levels.

The Provost's Office and Information Technology have been engaged in a long-term effort to create a central process for "[Student Feedback on Instruction](#)," as previously discussed in Standard Six. We have licensed Anthology's [Course Evaluations](#) tool for this

purpose and have designed reports to facilitate the faculty's use of de-identified and summarized student feedback, as well as department chairs' ability to identify and act upon strengths and weaknesses in the delivery of program instruction. Although this tool has been in use since fall 2019, primarily for courses taught by our adjunct faculty, concerted efforts to secure the agreement of the full-time faculty union to use it have failed, despite many concessions and protections afforded in their collective bargaining agreement. For that reason, we are limited in our ability to gather this important quantitative and qualitative data representing the student experience of instruction.

Improving Collection of and Public Access to Key Data: Description

Key student outcomes of public interest—such as data on graduation, retention, time to degree, loan default and repayment rates, and more—are regularly reported to NECHE (in our annual reports and Data First Forms), the UMass President's Office, the Massachusetts Department of Higher Education and the U.S. Department of Education. They are also shared extensively within the university to facilitate continuous improvement across units. (8.6)

Our previous strategic planning process prompted us to articulate the connections between these points of information and our mission. The [2020 Strategic Plan's report cards](#) were a crucial step forward for defining and reporting our mission-derived definitions of student success. The report cards presented point-in-time and trend data across the "Pillars of Excellence" established in that plan, and particularly in the section on Transformational Education. These [annually-produced report cards](#) are available on our website in a reader-friendly format.

The most public-facing sections of our website provide much of this data in a highly accessible form. Selected information is prominently presented on the high-level "[About UMass Lowell](#)" page. Other data are published by the units that collect it: DAIR publishes copious outcome information in the Common Data Set, the Career and Co-op Center publishes employment and graduate school attendance data, and so on. This data is typically static and must be manually compared to reveal patterns and trends. Additionally, some data is not sufficiently available: For example, nursing and ABA licensure passage rates are not shared beyond a limited audience.

Improving Collection of and Public Access to Key Data: Appraisal

UMass Lowell must present its rich data about student outcomes to the public in an easier-to-access, more transparent manner. While we have provided contextualized and accurate data for public consumption, we need to continue our work to make disparate points of information coherent and easier to find for a broad audience. We also need to centralize the collection of important data that should be more readily available.

Measuring Outcomes for Our Graduates: Description

The first destination survey and career outcomes measurements taken from publicly available data (discussed above) are the main sources of information that we use to learn about the success of our graduates. These sources are supplemented by National Student Clearinghouse data and UML Alumni Relations surveys. In addition, some academic departments and programs conduct their own alumni outreach, including surveys and invitations to return to campus, as a way of gaining insight into post-graduation outcomes. (8.7)

Measuring Outcomes for Our Graduates: Appraisal

We use an array of approaches to collecting information from our alumni, but each of these methods is limited and they are not easily combined for a clear picture of what UMass Lowell students achieve after graduation.

The first destination survey is critically important, but it lacks the kind of qualitative and anecdotal data that would help us link the outcomes to their sources within the university. We can roughly triangulate between this data and other sources, including [NSSE](#) and the National Clearinghouse, to build a picture of our students' post-college or post-graduate school experiences and to analyze their connections to our campus efforts, but conclusions drawn from combining such disparate measures lack validity.

Department- and program-level inquiries provide a better chance to achieve a significant return rate from alumni who respond to the faculty and peers they remember, but surveys and other outreach from departments is not consistent, even within departments. The instruments may not be refined for maximum validity, they may not be administered regularly and they may reflect biases. Further, results of such surveys are typically shared only occasionally, as in AQAD program reviews and professional accreditation reporting. To gather these for any type of broad analysis would be nearly impossible due to their extreme variability.

Assessment as a Factor in Decision-Making: Description

UMass Lowell's efforts to improve the curriculum and learning opportunities can be seen both in our continuous improvement processes and in the progress we have demonstrated in the E-Series and other Data First forms. Our new emphasis on multi-level strategic planning can serve as a primary vehicle for sensible prioritization and alignment of continuous improvement activities, based on our mission and goals. (8.8)

The recent progress we have made in this area is largely due to a careful balance of approaches that provide both extrinsic and intrinsic motivations. Extrinsic motivations for using assessment results are built into standing processes such as the Annual Program Curriculum Learning Assessment Survey, AQAD program review, promotion and tenure guidelines, mini-grant programs and the Provost's Office project planning guide. (See the document room.) All of these emphasize that analysis of assessment results is integral to a complete process.

Without intentional measures, of course, there is a danger that faculty and staff will see these processes as discrete, repetitive, or a call to compliance rather than as an integral part of the work that faculty, staff and administrators do together. To this end, the Provost's Office administers these processes with close guidance, providing expertise, data, encouragement and support. Each administrative process becomes an opportunity to provide feedback and engage in dialogue about the value and use of assessment results. Our feedback is focused on helping identify concrete improvements and faculty and staff's own intrinsic motivation for using assessment results and data-informed decision making.

Flexibility is key to this approach. Not every program or office is equally prepared to partner in this way or to engage in assessment and analysis—one size certainly does not fit all, and that is a major challenge for any institution as large and complex as UMass Lowell. We ensure that everyone is met "where they are," with respect and an understanding of their context. Faculty and staff are the critical actors. Their self-defined goals and outcomes and their intimate knowledge of their students means that they are best suited to frame inquiries into student outcomes. As we come closer to operating out of intrinsic motivation, faculty assume leadership and develop their ability and will to execute, interpret and evaluate their efforts. As this occurs, administrative processes appropriately become reminders, prompts, and calls to pay attention to what is a shared mission, rather than a collection of tasks with noisy, competing priorities.

Assessment as a Factor in Decision-Making: Appraisal

A strong array of processes and tools is in place to support and ensure evidence-based continuous improvement in our curricular and co-curricular offerings. The approach we have taken has allowed us to raise expectations across campus while embedding assessment and the use of its results into our culture.

While this collaborative and gradual approach has been effective for us, it has been, and continues to be, a long journey. Time, staff and money are limited, and this can provoke both defensiveness and resentment when overtaxed people are asked to do more—and conducting valid, authentic assessment is certainly time consuming and labor intensive. It is not necessarily seen as high profile or prestigious service, even where it is being done very well. Inequity between the perceived roles of tenure-track versus teaching and clinical faculty put continuous improvement at risk, as those with more authority are likely to leave assessment to those with less. This attaches more strain and potential resentment to assessment work, and that is deeply counterproductive.

Ensuring Valid and Useful Data for Improvement: Description

UMass Lowell has limited personnel to manage the continuous expansion and improvement of assessment activity. Our slow expansion has been both a fiscal and a cultural choice, as should be clear from all sections of this standard, but our decision to pursue

this work locally and embrace flexibility does produce variability in the quality and results of our assessment efforts. That being said, were we to be prescriptive and standardized, we would still have highly variable quality, but perhaps with less likelihood of producing the intrinsic motivations we want to encourage. (8.9)

Departments vary in their approaches to assessing student learning outcomes and their use of those assessments to update pedagogy and curricula. For programs that respond to professional accreditors (such as ABET for [plastics engineering](#)) or evaluating agencies (such as the state Department of Elementary and Secondary Education for the School of Education), or those highly engaged with professional associations such as NASPA (Student Affairs Administrators in Higher Education) and the American College Personnel Association, valid approaches to assessment are externally enforced or endorsed. These are more compelling to their members for being, to various degrees, voluntary and based on a common identity in a discipline or area. They are more readily identifiable as peer-to-peer engagements rather than management requirements.

Supporting the use of valid methods is most important, therefore, when we work with departments and programs that are less experienced with assessment and less clear about their precise goals. Where the skills needed for valid assessment are not yet fully developed, we see that the purpose of assessment is not fully articulated and fewer direct measures are used, resulting in a less logical model for change management. This is unsurprising, and it is why we have attempted to integrate the setting of measurable goals across key processes; it is also why feedback and support are integral to how we deliver assistance.

Ensuring Valid and Useful Data for Improvement: Appraisal

UMass Lowell has a system of assessment with multiple opportunities for feedback and support to ensure that we act from valid conclusions. Although there is room for improvement, we have tools and systems designed to build capacity and genuine engagement in assessment.

We need to share our ongoing work more fully and to partner more thoroughly with programs and departments that are overly reliant on individual assessments of courses and programs, anecdotal or limited data, indirect measurements, or highly subjective and implicit ideas about student learning. We also need to find ways to engage those who persist in a view of assessment as irrelevant, top-down performance management activity.

Deep Integration of Assessment: Description

The foregoing sections of this area of emphasis report have described our approach to ensuring educational effectiveness and to continuous improvement in this area, using valid and meaningful measures. We have shown that the culture of UMass Lowell has continued to evolve by constant evaluation of our approaches and a focus on our campus mission, as well as in response to NECHE guidelines. We have appraised strengths and weaknesses in the results of our work and identified next steps that will move us forward in the coming years. (8.10)

Deep Integration of Assessment: Appraisal

We embed valid assessment practice and the use of the findings from that work into our institutional and program evaluation activities wherever possible. We have created and enabled practices that support a focus on our mission and our aims for students. This is the foundational characteristic of our approach to assessment, which we strive to make systematic, shared and transparent.

In tandem with these practices, our increasingly sophisticated data tools have enabled more pointed inquiries and investigations and more detailed results. Our faculty, staff and students are asking important questions and finding the answers they need to serve our students and community, whether that means changing approaches, investing in different efforts or moving on from past practices.

We promote agency and engagement among our exceptional faculty, staff and students, and we provide support and encouragement for continuous learning and development. UMass Lowell will continue to pursue this inclusive and engaging approach as we refine and enact our new strategic plan going forward.

Projections

Improving Data for Decision-Making

We have seen great progress with the expansion of DataUML since our last accreditation report. As a result, the demand for our ability to assess outcomes for all students in all modes of learning has increased. However, we have also identified some areas that require continued effort. Our priorities in this area include:

- Maintain our gains in providing and using data for decision-making about academic programs and student outcomes
- Continue to clarify bio-demographic definitions and pursue valid data sources for that information
- Establish more explicit, active data governance, with clear policies and standards encompassing an array of data types across units
- Create public-facing dashboards to provide better transparency about student outcomes and other key data (see also 8.6)
- Ensure proper staffing levels to support our continued pursuit of valid evidence about student learning.

Aligning and Improving Learning Outcomes

Our priorities in this area include the following improvements:

- Help our graduate programs systematically present and maintain measurable learning outcomes for their students, and provide updated catalog and degree progression tools to support those outcomes
- Complete the development of advisement reports for online programs
- Update the degree requirements pages for online undergraduate programs to indicate expected outcomes
- Pursue curriculum mapping activities with departments to promote outcomes alignment and the scaffolding of curricula.

Assessing Student Learning Across the Curriculum

We have established a strong, mission- and campus-appropriate foundation for student learning assessment. To continue to extend and refine it, some necessary actions include:

- Improve our strategies tools for reporting and sharing information about the achievement of student learning outcomes, both on campus and on our website
- Address pockets of campus where assessment culture has been slow to develop through additional outreach, support and encouragement, and ensure that top leadership demonstrates commitment to this work for all programs
- Ensure that the chancellor's call for department-level strategic planning promotes student learning outcome assessment as meaningful and useful activity
- Plan for sufficient staffing to sustain continuous improvement in the long run.

Assessing Co-Curricular and Extra-Curricular Programs

To ensure that student co-curricular learning outcomes assessment is valued as much as its curricular counterpart, we must:

- Raise awareness among faculty and academic staff of co-curricular learning goals and outcomes
- Make the results of co-curricular assessments accessible so that they can inform and be informed by curricular outcomes assessment
- Examine the learning taking place in additional high impact co- and extra-curricular programs, such as study abroad and student employment.

Gathering and Aligning Data on Student Learning

To capitalize on the available data and develop new avenues of investigation, efforts going forward should:

- Continue to introduce faculty to valid assessment techniques and support their use of mixed methods to answer pressing questions about student learning
- Secure agreement from the MSP union to make use of our Student Feedback on Instruction system

- Supplement first destination surveys with reliable and longer-range alumni surveys to better understand the impact of the university's educational effectiveness
- Improve vertical integration of assessment results to enrich our understanding of student outcomes.

Improving Collection of and Public Access to Key Data

Priorities regarding the presentation of our educational effectiveness data are to:

- Ensure that data governance practices and policies, as described above, are clear and adhered to
- Bring additional measures into DataUML to facilitate reporting
- Create a suite of easily accessible dashboards to report important achievement indicators in one place
- Include disaggregated data to clarify outcomes for subpopulations within our student body
- Continue to introduce faculty to valid assessment techniques and support their use of mixed methods to answer pressing questions about student learning
- Secure agreement from the MSP union to make use of our Student Feedback on Instruction system
- Supplement first-destination surveys with reliable and longer-range alumni surveys, to better understand the impact of the university's educational effectiveness.

Measuring Outcomes for Our Graduates

To improve the quantity and quality of the outcomes data we have for graduates, we plan to:

- Promote the first destination survey more aggressively among students and create a culture of participation
- Make alumni data a part of regular improvement processes, including departmental strategic planning
- In collaboration with academic departments, develop a campus-wide instrument to periodically collect longitudinal data on our students' career and life paths, and partner with academic departments to secure this information.

Assessment as a Factor in Decision-Making

To ensure that we continue to make good use of learning outcomes assessment and other measures of effectiveness, we must:

- Maintain mission-centered alignment between campus processes that call for assessment
- Continue to provide support to all departments and programs in the design and use of manageable, authentic assessment
- Present a unified message that authentic, data-informed continuous improvement is a basic expectation of all units
- Share and celebrate the results of this work and acknowledge those results in existing and new systems of reward.

Ensuring Valid and Useful Data for Improvement

To ensure that all university units are acting from conclusions based on valid assessments, we can:

- Continue to focus on inquiry, based in faculty and staff curiosity about real data
- Give additional attention and help to programs that struggle to conduct effective assessment
- Track gains in assessment activity and make assessment work and results more visible on campus, including through our website
- Invite faculty to include an explanation of methodology when sharing results at campus events like the Faculty Symposium, and publicly value that approach
- Offer more professional development on valid forms of assessment through CELT.

Deep Integration of Assessment

Each of the many recommendations noted above, small or large, will contribute to our achievement of this culminating outcome. This represents a long-term agenda of collaborative work for Academic and Student Affairs, faculty from across campus, leadership, staff and students. Our commitment to continuous improvement should be clear in every part of this report, and we look forward to our next opportunity to report on our progress.

STANDARD NINE: INTEGRITY, TRANSPARENCY, and PUBLIC DISCLOSURE

(Integrity)

Policies	Last Updated	Website location where policy is posted	Responsible Office or Committee
Academic honesty	10/9/20 , 10/13/20	https://www.uml.edu/catalog/undergraduate/policies/academic-policies/academic-integrity.aspx	Registrar
Intellectual property rights	8/5/19	https://www.uml.edu/Research/OITC/student-resources.aspx	OTC
Conflict of interest	1/27/22	https://www.uml.edu/Research/Integrity/Conflict-of-Interest/	ORI
Privacy rights	10/6/21	https://www.uml.edu/theolutioncenter/information/FERPA.aspx	Registrar
Fairness for students	6/24/16 , 9/30/14	https://www.uml.edu/Catalog/Undergraduate/Policies/Admissions-Policies/Equal-Opportunity.aspx https://www.uml.edu/Catalog/Graduate/Policies/Equal-and-Fair-Treatment.aspx	Provost Office
Fairness for faculty	7/30/21	https://www.uml.edu/diversity/faculty-staff/#~:text=UMass%20Lowell%20is%20committed%20to%20providing%20an%20education%20and%20working,%2C%20including%20sex%2Dbased%20discrimination.	EOO
Fairness for staff	7/30/21	https://www.uml.edu/diversity/faculty-staff/#~:text=UMass%20Lowell%20is%20committed%20to%20providing%20an%20education%20and%20working,%2C%20including%20sex%2Dbased%20discrimination.	EOO
Academic freedom	2017	https://www.uml.edu/docs/MSP-CBA-7.1.17-6.30.20_tcm18-323079.pdf	Faculty Union
Research	12/3/2021	www.uml.edu/research	Research
Title IX	1/18/22	https://www.uml.edu/Prevent/	Student Affairs
Other; specify			
Non-discrimination policies			
Recruitment and admissions	6/20/16	https://www.uml.edu/Catalog/Undergraduate/Policies/Admissions-Policies/Equal-Opportunity.aspx	Admissions
Employment	8/2/21	https://www.uml.edu/HR/Equal/Guidelines-Procedures/ https://www.uml.edu/hr/equal/guidelines-procedures/umass-admin-stand-for-nondiscrimination-harassment.aspx#~:text=The%20University%20prohibits%20unlawful%20discrimination%2C%20harassment%2C%20and%20retaliation,Act%20of%201973%2C%20and%20the%20Massachusetts%20anti-discrimination%20law.	HR/EOO
Evaluation - staff			HR/EOO
Evaluation - faculty	2017	https://www.uml.edu/docs/MSP-CBA-7.1.17-6.30.20_tcm18-323079.pdf	Faculty Union
Disciplinary action	8/20/21	https://www.uml.edu/student-services/Student-Conduct/conduct-code/	Student Affairs
Advancement		alumni.uml.edu	Advancement
Other; specify			
Resolution of grievances			
Students		https://www.uml.edu/Catalog/Undergraduate/Policies/Academic-Policies/Student-Complaints.aspx	Provost Office
Faculty		https://www.uml.edu/hr/labor-relations/faculty-labor.aspx	Provost Office
Staff		https://www.uml.edu/hr/labor-relations/	HR/EOO
Other; specify		https://www.uml.edu/hr/equal/guidelines-procedures/eo-complaint-procedure.aspx	

Other	Last Updated	Website location or Publication	Responsible Office or Committee

Please enter any explanatory notes in the box below

**Standard 9: Integrity, Transparency, and Public Disclosure
(Transparency)**

Information	Website location and/or Relevant Publication(s)
How can inquiries be made about the institution? Where can questions be addressed?	https://www.uml.edu/ https://www.uml.edu/Admissions-Aid/Request-Info.aspx
Notice of availability of publications and of audited financial statement or fair summary	https://www.uml.edu/thesolutioncenter/financial-aid/receiving-aid/types-aid/
Processes for admissions	https://www.uml.edu/Admissions-Aid/
Processes for employment	https://www.uml.edu/thesolutioncenter/employment/
Processes for grading	https://www.uml.edu/catalog/undergraduate/policies/academic-policies/grading-policies.aspx
Processes for assessment	https://www.uml.edu/catalog/undergraduate/policies/academic-policies/learning-outcomes-assessment.aspx
Processes for student discipline	https://www.uml.edu/student-services/Student-Conduct/
Processes for consideration of complaints and appeals	https://www.uml.edu/Catalog/Undergraduate/Policies/Academic-Policies/Student-Complaints.aspx
Process for request of public information	https://www.uml.edu/public-records/
Availability of financial statements	https://www.uml.edu/financial-services/controller/financial-statements.aspx

List below the statements or promises made regarding program excellence, learning outcomes, success in placement, and achievements of graduates or faculty and indicate where valid documentation can be found.

Statement/Promise	Website location and/or publication where valid documentation can be found
	https://www.uml.edu/Catalog/Accreditation-Professional-Memberships.aspx
	https://www.uml.edu/Academics/Provost-office/accreditation/AQAD.aspx
	https://www.uml.edu/Institutional-Research/Common-Data-Set.aspx

Date of last review of:	
Print publications	
Digital publications	

Please enter any explanatory notes in the box below

**Standard 9: Integrity, Transparency, and Public Disclosure
(Public Disclosure)**

Information	Website location
Institutional catalog	www.uml.edu/catalog
Obligations and responsibilities of students and the institution	https://www.uml.edu/sga/bill-rights.aspx
Information on admission and attendance	https://www.uml.edu/admissions/
Institutional mission and objectives	https://www.uml.edu/About/mission.aspx
Expected educational outcomes	https://www.uml.edu/Academics/Provost-office/Student-Success/Student-Learning-Outcomes/ https://www.uml.edu/Academics/undergraduate-programs/core-curriculum/Gened/
Status as public or independent institution; status as not-for-profit or for-profit; religious affiliation	https://www.uml.edu/about/
Requirements, procedures and policies re: admissions	https://www.uml.edu/admissions/apply/
Requirements, procedures and policies re: transfer credit	https://www.uml.edu/admissions/transfers/transfer-credits/
A list of institutions with which the institution has an articulation agreement	https://www.uml.edu/admissions/transfers/Community-Colleges/articulation-agreement.aspx
Student fees, charges and refund policies	https://www.uml.edu/thesolutioncenter/bill/tuition-fees/
Rules and regulations for student conduct	https://www.uml.edu/student-services/Student-Conduct/
Procedures for student appeals and complaints	https://www.uml.edu/Registrar/Student-Appeals.aspx https://www.uml.edu/Catalog/Undergraduate/Policies/Academic-Policies/Student-Complaints.aspx
Other information re: attending or withdrawing from the institution	https://www.uml.edu/thesolutioncenter/Academics/degree-program/withdraw.aspx
Academic programs	https://www.uml.edu/Academics/undergraduate-programs/ , https://www.uml.edu/Academics/Graduate-programs/
Courses currently offered	https://www.uml.edu/student-dashboard#class-search/filters
Other available educational opportunities	https://www.uml.edu/student-services/career-services/ https://www.uml.edu/international-programs/
Other academic policies and procedures	https://www.uml.edu/Academics/Policies-Services/ https://gps.uml.edu/policies/policies.cfm
Requirements for degrees and other forms of academic recognition	https://www.uml.edu/thesolutioncenter/Forms/Academic-Forms.aspx
List of continuing faculty, indicating department or program affiliation, degrees held, and institutions granting them	Available on College-Department webpages. for example: https://www.uml.edu/Sciences/faculty-list.aspx https://www.uml.edu/directory/
Names and positions of administrative officers	https://www.uml.edu/about/leadership/ https://www.uml.edu/About/leadership/Org-Charts.aspx

Revised October 2018

9.3

Names, principal affiliations of governing board members	https://www.umassp.edu/bot/members
Locations and programs available at branch campuses, other instructional locations, and overseas operations at which students can enroll for a degree, along with a description of programs and services available at each location	https://gps.uml.edu/
Programs, courses, services, and personnel not available in any given academic year.	n/a
Size and characteristics of the student body	https://www.uml.edu/Institutional-Research/Facts-at-a-glance.aspx
Description of the campus setting	https://www.uml.edu/About/visit/campus/
Availability of academic and other support services	https://www.uml.edu/class/
Range of co-curricular and non-academic opportunities available to students	https://www.uml.edu/student-services/student-activities/
Institutional learning and physical resources from which a student can reasonably be expected to benefit	https://www.uml.edu/About/facilities.aspx https://www.uml.edu/Facilities/Planning-Design-Construction/Planning/Capital-Project-Planning.aspx
Institutional goals for students' education	https://www.uml.edu/student-services/UML-Strive/ https://www.uml.edu/Academics/undergraduate-programs/core-curriculum/Gened/ https://www.uml.edu/Academics/undergraduate-programs/learning.aspx
Success of students in achieving institutional goals including rates of retention and graduation and other measure of student success appropriate to institutional mission. Passage rates for licensure exams, as appropriate	https://www.uml.edu/2020/documents.aspx
Total cost of education and net price, including availability of financial aid and typical length of study	https://uml.studentaidcalculator.com/welcome.aspx https://www.uml.edu/thesolutioncenter/cost-planner.aspx https://www.uml.edu/thesolutioncenter/financial-aid/
Expected amount of student debt upon graduation and loan payment rates	https://www.uml.edu/thesolutioncenter/financial-aid/loans/loan-repayment-calculators.aspx
Statement about accreditation	https://www.uml.edu/About/Accreditation.aspx

Integrity, Transparency and Public Disclosure

The UMass Lowell community collaborates in our efforts to achieve the highest standards of integrity, transparency and public disclosure, as befits our role as a public institution.

Integrity: Description

Recognizing the importance of fostering a culture of integrity that goes beyond mere compliance, the former Institutional Compliance Office was renamed the [Office of Research Integrity](#), a significant step in emphasizing the institution's commitment to ethical conduct in all aspects of its operations. The expanded scope of this office oversees policies and provides training on various ethical matters such as conflict of interest, travel, ethical use of animals, use of human subjects (IRB) and outside activities. Each of these policies can be found on the website and they are periodically reviewed by the vice chancellor for research and innovation in response to feedback and changing requirements.

The Office of Research Integrity enforces a research misconduct policy with a [clear process for investigating accusations](#) of research misconduct, as well as a process for anonymous reporting of suspected academic dishonesty on the part of our faculty. [Student policies on academic integrity](#) can be found in the catalog and are adjudicated through the provost's office. All members of the university community are entitled to appeal any findings of integrity violations.

Campus student policies related to behavior are noted in the [Student Conduct Code](#). This code is reviewed annually. Students are sent a link to the code each semester after the add/drop period, each year in an annual policy notice, and with the Annual Notice for the Security Report ([Clery Act report](#)). Students can report any concern about bias or sexual harassment via the Student Conduct website; these concerns may be reported by any party who witnesses, learns of or is involved in an instance of bias.

Additionally, a "[Report a Concern](#)" form was created specifically for employee-related matters; it is located on the EOO website. All those concerns are sent to the Maxient inbox for the associate vice chancellor for equal opportunity and outreach and the Title IX coordinator. (This position has been vacant since April 2023, but complaints are currently being handled by our deputy Title IX coordinator.) Since 2021, the university has received over 3,105 online reports. (9.1, 9.2, 9.4, 9.11, 9.18)

UMass Lowell is committed to providing working, living and learning environments free of discrimination and harassment. We believe that equal opportunity and safe working and learning environments are the foundations for a respectful, inclusive and highly effective community conducive to academic and personal growth. In 2022, in compliance with new federal Title IX regulations, the UMass system began requiring on-line Title IX training for all employees.

In October 2015, the university's DEI initiatives focused on physical accessibility for the university community and the public, including:

- Making new buildings fully accessible to people with physical disabilities
- Remodeling old buildings to improve accessibility, including our award-winning renovation of the oldest building on campus, Coburn Hall
- Installing elevators in Perry Hall for physical access to all floors and adding new elevators to our tallest residence hall, Fox Hall.

In 2016, to improve access, comfort and safety for LGBTQ+ students, we created [40 gender-neutral bathrooms](#), locating them around the campus. More recently, we established a business [process for students to update their preferred "campus" name and email address](#) in all their student records. UMass Lowell and other system campuses also launched an "[Enable Inclusive Identity Project](#)" in December 2021, with three goals: to deliver an inclusive, respectful and welcoming experience; establish a clear policy and business process for students, faculty and staff to update their name, gender and pronouns; and develop and enable systems that support this business process.

To comply with Title IX and increase campus safety and wellness for all students, faculty and staff, we created a sexual violence and prevention [website](#) in 2014. This was updated and significantly revised based on the work of the university's Gender and Sex-Based Discrimination and Prevention Task Force, the former Task Force on Sexual Harassment, and state and federal regulatory changes. The processes for reporting and reviewing concerns about gender-based harassment and violence from both students and employees are now clearly documented. The university's Nondiscrimination Guidelines and our [Equal Opportunity Complaint and Sexual Harassment Grievance Procedures](#) are posted online.

We review our guidelines and procedures periodically to ensure we are following best practices and are in compliance with state and federal law. Employees receive annual notifications of these guidelines and procedures as well as notices of significant updates. In-person and online training programs include this information, and staff members also can refer matters directly to the [Title IX Coordinator](#), the [Equal Opportunity and Outreach Office \(EOO\)](#), the [Diversity and Inclusion Office](#) and the [Student Conduct Office](#).

In the [Athletics Department](#), all staff and coaches participate in the university's sexual harassment and Clery Act annual certifications. Specific items in all these areas (including FERPA, ADA, Title IX, Clery, the Health Insurance Portability and Accountability Act and the Violence Against Women Act) are presented in athletics staff compliance meetings as new or revised policies and procedures are approved. The university also has adopted new NCAA programming for student-athlete education in many of these areas; athletics began introducing this programming for our student-athletes in summer 2018. Since 2018, Athletics programming now includes, for staff and student-athletes, sexual violence prevention/bystander education, DEI initiatives and mental health care.

We have also made progress in formalizing and making visible other university policies. As part of the overall Enterprise Risk Management effort, the university initiated a program for the creation, revision and implementation of both academic and non-academic policies. This program was rolled out in November 2016 and included the creation of a [Policy Portal](#), beginning with policies administered by Finance and Operations and Student Affairs and Events. Currently, there are 60 policies posted via the UML Policy Portal, and more are added as they become final. Policies posted on the portal have been reviewed and approved by the Executive Cabinet. Communication is sent to our internal administrative support network group advising them of policies posted on the portal, and they are asked to share the policies with their respective departments. These policies may also be viewed on our website.

All adjunct and full-time faculty enjoy intellectual independence and are protected by academic freedom, a value further enshrined by faculty senate affirmation in 2022 (see Standard Six).

Academic freedom ensures that faculty members have the autonomy to pursue their research, teaching, creative and scholarly activities without undue external influence or censorship.

Integrity: Appraisal

UMass Lowell's commitment to an ethical, equitable and respectful environment for learning, teaching and working is reflected in its strategic plans, policies and the [Pillars of Inclusive Excellence](#). This commitment entails upholding high ethical standards, striving for equity, promoting mutual respect, and maintaining a culture of ongoing improvement to ensure these principles are consistently upheld.

At the time of our last review, certain common practices at UMass Lowell were not formally written as university policy. Examples include a lack of clear criteria for establishing or maintaining recognition as a university research or community engagement center or a "seed" center, and a lack of transparency about the approval steps required for various curricular changes. These informal practices were not available to the public for understanding, scrutiny or review; however, as we have expanded, we have steadily systematized these practices and published policies and guidance about them, which are publicly available.

A consistent issue for us is the challenge of managing changes in state and federal laws and regulations, particularly at the pace of change we have maintained since our 2018 interim report. Decentralized policies and practices that suited us when we were a smaller institution have been revisited, systematized and shared with the community, and we continuously work across the university to update and improve our policies, practices and procedures and the trainings that support their implementation. We have also

engaged in a concerted effort to offer anti-bias, bystander and microaggression trainings to employees through the ADVANCE Office (faculty) and Employee Learning, Engagement and Development (faculty and staff). In our 2013 report, we committed to improving our federal and state policy training for university community members, and we have done this largely through these venues.

The university adheres carefully to all academic policies for students, and exceptions are made as necessary with faculty governance oversight, as appropriate to our standards and our mission. For example, when Mount Ida College announced its closure, some of its students were interested in transferring to UMass Lowell. We were eager to welcome them, but many would have been transferring with too many credits to meet our residency requirements for graduation. After consulting NECHE, Admissions, the Provost's Office and the Faculty Senate cooperatively evaluated whether and how to waive this requirement for incoming [Mount Ida transfer](#) students. In the end, the Faculty Senate voted to waive the residency requirements for both undergraduate and graduate transfer students from Mount Ida. While an unusual case, it illustrates the kind of campus dialogues that inform our policy decisions and demonstrate the primacy of our mission in the application of policy.

University processes can be complicated for students to navigate, and we are committed to providing them with clear access to the information they need to be successful; our recent efforts have been well-received. Our Web Services team created a phone app to improve students' access to the [Student Information System](#). The [NOW Dashboard](#) and the [MyUML](#) app give students a snapshot of their schedule, grades, "to do" items and financial hold flags. NOW is also integrated with the Student Success hub to provide students access to their professional and academic advisers. The Web Services team developed a schedule builder to make it easier for students to pick classes that meet their needs and academic requirements. Since its implementation in 2016, the class scheduler has been accessed 5.6 million times, including 1.3 million times between April 21, 2021, and April 21, 2022, with an annual average number of 7,771 users per academic year and 96.1 million schedule permutations.

The Gender and Sex-Based Discrimination and Prevention Task Force was part of the larger [Council on Social Justice and Inclusion](#), established in January of 2020. The council built on the work from the Task Force on Sexual Harassment, the 2020 Committee on Students of Color and International Students, and the 2020 Global Engagement and Inclusive Culture Committee. Two new task forces have been created—Diversity, Equity and Inclusion and Gender and Sex-based Discrimination Prevent—to continue this work and update an action plan. In 2022, the university announced its [DEI Pillars of Inclusive Excellence](#), which grew out of this work; they serve as the foundation for advancing our diversity, equity, inclusion and belonging efforts.

In 2019, Athletics added a database for student-athletes to share any concerns, positive or negative, through an anonymous system. This system collects feedback on student-athletes' experiences, receives and allows for staff responses to urgent concerns, and centralizes documentation of these concerns. This database has been used by all 16 Division I sports programs since 2019. Since its implementation, the number of reports has almost doubled, from 14 in academic year 2019-20 to 27 reports in 2020-21, suggesting wide-spread awareness of and trust in the reporting system.

Our Athletics Department was one of only 15 schools nationwide to receive [a perfect score](#) on the [Athletic Equality Index \(AEI\)](#). Launched in 2017, the AEI measures LGBTQ+ inclusion policies and practices supporting fans, staff, coaches and student-athletes in all NCAA Division I programs. The website outlines the goals, policies and resources available.

Improving physical access, setting clear policies, and creating streamlined business processes to be more inclusive has strengthened community connections, improved the campus climate and promoted a campus that is accepting of all differences.

Transparency and Public Disclosure: Description

The [university website](#) is the primary means by which we communicate all points of public disclosure and compliance: all our policies, comprehensive program information, and any data that we can reliably collect, including degree-specific information about ROI, rates of external licensure exam passage (e.g. for board-certified behavior analysts) and more. Individuals within each college or department, program and administrative unit are tasked with working with the Digital Communications team in University Relations to update their web pages so that they accurately reflect our academic offerings, policy information and resources. The Digital Communications team also reaches out proactively to departments and programs when these updates lag.

Information about campus events, grants, academic and athletic achievements and personnel and policy changes is conveyed to all members of the university community primarily through a daily email digest and website, [Today@UMass Lowell NewsLine](#), a digital publication that is emailed 10 times a year to the university community, supporters and stakeholders, conveys information about the accomplishments of students, faculty and staff in digest form, with links to longer online stories. [UML Magazine](#), which is mailed twice a year to alumni, friends and donors, also highlights university news and events. Biannual or more frequent newsletters also highlight stories, profiles and events of interest to alumni. [Engineering Solutions](#) (twice a year) and [Elements of Science](#) (annual) magazines share news about research in the Francis College of Engineering and the Kennedy College of Sciences. The [university news website](#) and social media platforms are also heavily used to communicate campus news.

Electronic accessibility has been a particular focus over the past decade to ensure that all visitors to our website or other digital media are able to access information. We use [SiteImprove](#), which enables us to “easily follow and adhere to international Web Content Accessibility Guidelines (WCAG) across all conformance levels.” In addition, we have eliminated or remediated more than 7,000 pdfs on the website. All new pdfs are reviewed and converted to accessible web content. If the document must remain a pdf, the university has invested in several services and tools to accomplish remediation: [AbleDocs](#), [Equidox](#) and [Axes Word/PDF](#).

[Blackboard](#) also conforms to global accessibility standards, and the university's [Academic and Instructional Technology](#) team assists faculty to ensure they design and deliver content in the same manner. Blackboard contains adaptive release features that allow faculty to create individualized learning paths for students based on customizable rules. Test exceptions provide accommodations based on individual student needs. The university integrated Blackboard with Ally, a tool to automatically check course materials against WCAG 2.1 accessibility standards. This tool delivers guidance to faculty to improve accessibility of their course content.

Our catalogs and our practices around curriculum guidance are central to transparency in academics. [The Faculty Senate](#) continues to review and approve curricular and academic policies to bring greater clarity and integrity to such areas; the Registrar's Office and Provost's Office work with the Faculty Senate and academic departments to maintain the [undergraduate, graduate and online catalogs](#) for consistency and clarity. Recent issues clarified and made public through this collaborative approach include policies on the maximum number of courses a student can take during winter intersession, revisions of the pass/no credit policy during the pandemic, and student absence guidelines. We also continue working with University Relations and department chairs to ensure that the content of all university web pages is consistent with our catalog.

All degree pathways have been transitioned to a printable format that is fully accessible. In addition, any programmatic changes made through the Faculty Senate, the Graduate Policy & Affairs Committee or the Undergraduate Policy Committee are adjusted in the catalog to ensure that prospective and current students, as well as the public, have accurate information about our programs and requirements as well as optional information about degree pathways, such as what kinds of careers a particular degree can lead to or the average ROI of graduates of that program.

We have improved transparency in decision-making processes as well as in our policies. In 2021, UMass Lowell implemented [Curriculog](#), a software tool designed to modernize and streamline curricular change and policy activity through a collaboration between the Faculty Senate, the Registrar's Office, Academic Affairs and IT. Curriculog facilitates a transparent review of proposals, providing the ability to track each proposal's real-time progress, while recording decisions, comments and committee votes at each level and revealing what is being proposed by other departments. The system provides change control and openly searchable archives of faculty governance actions.

Amendments to the U.S. Higher Education Act require institutions participating in federally funded financial aid programs to make information about the institution available to current and prospective students. At UMass Lowell, the [Office of Data, Analytics and Institutional Research \(DAIR\)](#) has created an online public disclosure resource that includes a form for requesting particular data.

In accordance with Massachusetts regulations on public records access ([950 CMR 32](#)), the UMass System implemented the [University Public Records](#) website in January 2017. This website provides the public with access to a web-based search database and the means to request copies of public records, which are handled by our Media Relations unit. A form is also in place to request other information. A link to the [Requests for Public Information form](#) is available on our website.

The University of Massachusetts is an agency of the Commonwealth of Massachusetts and prepares [annual audited financial statements](#) (see Standard Seven). The Lowell campus is one of five campuses and related affiliates reported by the university as one entity and therefore does not prepare or provide campus-specific financial statements. However, the UMass System Office of the senior vice president for administration and finance regularly posts [budget and financial planning reports](#) that include UMass Lowell campus-level information, such as the annual trustees-approved operating budget, updates to the required five-year financial forecast and trustees-approved capital plans, among other reports.

Our annual [university report cards](#) are the linchpin of our public disclosure policy and our commitment to transparency. Each year, we reported on our progress toward our 2020 goals as specified in the 2020 Strategic Plan, and we continued to publish a report card on the same measures while working on our new 2028 Strategic Plan. The report card helps us to communicate our progress toward strategic goals to external parties and also serves as a useful tool for internal offices to guide priorities and make decisions. We have discussed the annual report card in more detail in Standard Two.

Transparency and Public Disclosure: Appraisal

In our 2013 self-study, we committed to define a process for modifying university websites. That process has now been successfully codified. These guidelines enable us to communicate a coherent, consistent message that reflects our values of transparency and public disclosure. A culture of transparency in a public institution is essential for public trust and for trust within the university community. We are committed to exceeding our legal and ethical obligations in public disclosure. One example is the funding the campus received through the federal CARES Act during the pandemic: We publicly reported the process and results of our HEERF funding distribution.

We continuously strive to improve the quality and quantity of data and information available both internally and publicly (see Standard Eight). Our goal is not only to meet legal requirements, but to fulfill our larger role: educating the campus community, our region and the world. We encourage faculty to share their research as well as how it may apply to current concerns and controversies by participating in conferences and panels, contributing news analysis pieces to *The Conversation* or newspaper op-ed pages, and making themselves available for interviews with external media and for our own publications.

During crises, we strive to be as transparent and timely as possible. Emergency notifications are pushed to the university community in a timely manner through the RAVE Emergency Alert system as emails and text messages. All safety and emergency response procedures are published on the university's website, and any immediate or imminent actions, such as a temporary campus closure or parking restrictions for a snowstorm, are posted prominently on our website's home page. Social media is also used during crises.

Projections

- The Faculty Senate will expand the use of Curriculog to improve additional processes, and we will strengthen collaborations between the senate and the college curriculum committees during the 2023-24 academic year. This will vastly improve transparency about how our separate colleges make their decisions and apply policy and also allow for shared best practices.
- The ADVANCE Office will work with departments during 2023-24 to develop a process by which faculty workloads are more transparent across campus, with the hope of developing metrics that can guide faculty service assignments.
- The Provost's Office and DAIR will establish a more formal data governance body, policy, and practice guidelines to govern, among other things, the gathering of and access to disaggregated and aggregated data.

SPECIAL AREAS OF EMPHASIS

Providing Sufficient Resources to Support and Enhance the University's Core Mathematics Curriculum

Since our [2013 NEASC self-study](#), and even since our 2018 mid-term report, the university has implemented changes that have significantly improved the [Department of Mathematical Sciences](#) (or Math Department), from hiring new faculty and adding new department space to improving the curriculum, with an emphasis on student success. Here we will describe the three key focus areas: faculty strength and teaching load, approaches to improve student success, and changes to the calculus sequence.

Faculty Strength and Teaching Load

Since 2014, 11 tenured or tenure-track faculty members in the Mathematical Sciences Department have retired or resigned, and we have hired 11 new assistant professors. Three of these assistant professors have since been promoted with tenure to associate professor. The department has also increased the number of teaching faculty by hiring seven full-time teaching professors, bringing the total to 13. Overall, full-time faculty in the department have increased from 27 in 2014 to 34 in 2023. During this same period, the department reduced its reliance on adjunct faculty: The number (FTE) of adjuncts peaked at 25.7 in fall 2016 and had decreased to 17.3 by spring 2021.

The increase in full-time faculty has had a positive effect on department morale. The increase in teaching professors was the result of a strategic decision to reduce reliance on part-time adjunct faculty, and a positive outcome was the addition of dedicated faculty members who have the time and commitment to contribute to all department activities. In addition, the department was recently relocated to new office space that is more appropriately sized and provides more opportunity for faculty to interact with one another as well as with faculty in the adjacent [Miner School of Computer and Information Sciences](#), further improving faculty morale and interdisciplinary academic collaborations.

While the overall number of tenured and tenure-track faculty has decreased slightly since 2014, the influx of newly hired assistant professors has increased research activity. In academic year 2020-21, two new [NSF grants](#) were awarded to faculty members hired after 2014. The department hosted a postdoctoral fellow and is recruiting another, and there are currently four students pursuing Ph.D. degrees under the direction of mathematics faculty through the [Computational Mathematics Program administered by the Miner School](#). Consistent with this increased research activity, the department has seen an increase in publications authored by faculty. While challenges remain, the changes within the department since 2014 have contributed to growing research activity and a positive academic environment.

Approaches to Improve Student Success

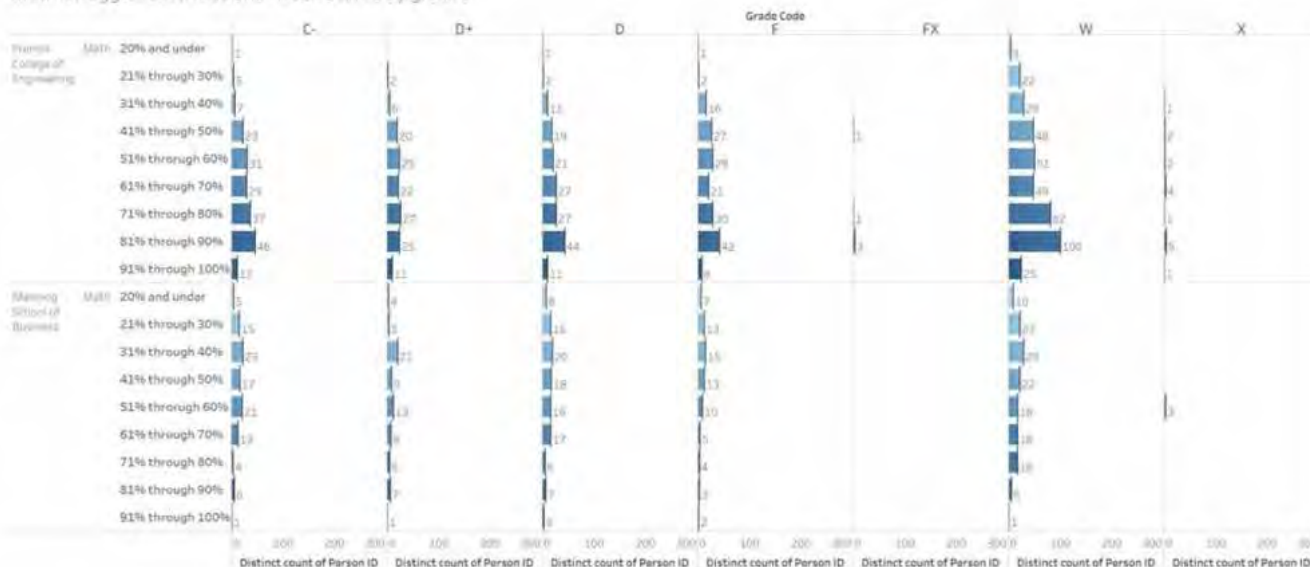
In academic year 2020-21, the Data Analytics and Institutional Research team, in partnership with the NECHE task force on mathematics and quantitative analysis competencies, reviewed the efficacy of the use of the [ALEKS placement test](#) for identifying the initial math course for students pursuing a B.S. in Business Administration or a B.S. in Engineering. The goal was to determine whether having students complete the ALEKS placement at home, prior to Orientation, was effective in supporting student success. These are two large cohorts for UMass Lowell, one of which consists primarily of non-STEM students.

As expected, students admitted to the engineering disciplines performed better on average than students admitted to business administration. The students in the business administration program have a more normal bell-shaped curve distribution across all scoring groups, while those in engineering skew toward higher scores.

We investigated how students' math course grades related to their scores on the ALEKS placement test. Our hypothesis was that if the ALEKS test was effective, then there would be a strong correlation between ALEKS scores and math course grades. We found a reasonable correlation for business administration students, but not for engineering students (details in the appendix analysis). Engineering students may feel pressured to do well on the ALEKS test to avoid being placed in a lower-level Calculus 1A class. Consequently, more students may use additional aids or supports while taking the test at home, resulting in lower accuracy of the exam in determining the appropriate placement for these students.

When we analyzed the data further to focus on students who struggled in their math courses, we observed that a large number of students with high ALEKS scores in engineering were doing poorly or withdrawing from the classes in which they had been placed.

Math Struggles Distributions - ALEK scores by grades



Since we currently use a binary cut-off value to indicate if students should start in Calculus 1A or Calculus 1 for Engineering, and Management Pre-Calculus or Management Calculus for business students, we decided to focus specifically on this cut-off value for engineering. The results demonstrated that although a slightly lower percentage of students scoring over the 75% cut-off value received a C or below, the ALEKS scores were *not* a good indicator of potential success.

As a result of this analysis, the department developed several recommendations:

- Develop a new process to integrate proctored ALEKS test-taking to ensure the integrity of the ALEKS scores; this was implemented during summer 2022
- Increase the number of starting points in the math curriculum to be able to split the lower-performing group into smaller cohorts that focus on specific competency gaps and increase student skills and confidence. This would align with peer schools such as Pennsylvania State University, the University of Indiana and Oregon Institute of Technology.
- Work with faculty members and the ALEKS detailed results to see if there are specific areas of weakness that can be identified for cohorts where additional supports, such as on-demand modules, could be helpful.

Summer Launch! Program

In 2020, we started a new [UML Launch!](#) summer program to support incoming students during their transition to college. This was a general extension of grant-funded early start programs such as [RAMP in engineering](#) and [SoarCS in computer science](#). As part of the program, students participate in weekly seminars on emerging topics in their area of interest, workshops on college success skills and team-building activities. Students also have the opportunity to take one or two classes with tutoring support.

For business students, the recommended classes were [Introduction to Entrepreneurship and Business](#) and Introduction to Microeconomics. In fall 2021, we completed an analysis to see if students in the Launch program had done better in their math classes. The results demonstrate that business students who participated in Launch more often selected the correct math starting course, accessed student success resources more, and had higher pass rates than their peers who did not participate. Similar results were observed for engineering students who completed Launch. The Launch program positively supports student math success and will continue to be offered as one of our summer options.



River Hawk Review

In winter 2022, the Mathematical Sciences Department, in partnership with the Manning School of Business, conducted a pilot of a ["River Hawk Review"](#) program for the Management Calculus class. Management Calculus has consistently had a DFW rate above 40%. The goal of the [River Hawk Review program](#) was to give students who earned between a 49% and 60% final grade a chance to remediate their deficiency through an intensive winter intersession class, without needing to re-take the entire course. Students whose scores fall within that range are nominated by their instructor to take the River Hawk Review class for a small fee and work on the core learning outcomes to improve their grade. Students commit to participating for three weeks: They attend review lectures, solve problems with the instructor and attend daily tutorials. The results of the pilot were very positive, with 50% of students improving their grades. An additional 16% of students reported that they enhanced their skills and confidence while maintaining the same final grade. Given the challenges that these students faced throughout the COVID-19 pandemic, the positive outcome of this pilot encourages an extension of this program to include Management Pre-Calculus and summer semester River Hawk Review opportunities.

Changes in the Calculus Sequence

In 2009, the department stopped offering Precalculus and instead began offering Calculus I-A and Calculus I-B, which distributed the curriculum for Calculus I over two semesters. The purpose was to get the students directly into calculus but have the time to reinforce algebra and precalculus skills as needed. While we felt that the sequence was successful, it has become apparent that more recent incoming students are lacking the skills needed to succeed in these courses.

In summer 2021, more than one year into the pandemic, the Launch students were obviously struggling in Calculus I-A, so the department rapidly created a Preparation for Calculus class to address the need to better prepare students for the calculus sequence. Incoming students in fall 2022 were given a written placement exam during the first week of classes, and new recommendations were offered for course placement. A large portion of these students voluntarily switched from Calculus I-A to Preparation for Calculus. Many students who did not make the switch later expressed regret, as they felt unprepared for their calculus courses.

Additionally, many of our peer institutions offer a precalculus sequence. This had put UML at a disadvantage for attracting transfer students because, until recently, students were unable to transfer their credits for courses lower than Calculus I. As a result, many opted to go to other institutions that accepted those credits.

In light of these issues, the Mathematical Sciences Department began offering [Precalculus Mathematics I](#) and [Precalculus Mathematics II](#) in fall 2022, and it stopped offering Calculus I-A and I-B. Students are now placed in either Precalculus Mathematics I (generally those with an ALEKS score of 46 to 64), Precalculus Mathematics II (ALEKS of 65 to 75 or higher) or [Calculus I](#) (ALEKS of

76 to 100), based on their proctored test scores.

Improving the Tutoring Services Available to Mathematics Students

The department has been operating a Mathematics Tutoring Center in partnership with our Centers for Learning (CLASS) for more than a decade. The tutors are students who have met specific GPA requirements, completed a required course or curriculum, and been recommended by faculty. The demand for tutoring has grown over time, and the department has taken steps to enhance the quality of tutoring and student satisfaction. In-person tutoring was the norm before the pandemic, but in 2020, the center introduced online tutoring services.

The department has developed a tutoring evaluation plan that is in various stages of implementation. The key components are:

- Quality tutor training and support – Tutors are required to attend the CLASS tutor training workshop, after which they will fill out a survey that measures whether the training helps build tutoring skills, stresses the importance of holding students responsible for their own work, and clarifies the expectations for delivering effective tutoring.
- Use of tutoring center – When entering the tutoring center, students scan a QR code that directs them to a “check-in” survey. This is used to determine the number of students using the center, when they are using it and the classes being tutored.
- Use of online math tutoring - Students complete a short survey when they join to determine the number of students using the center, when they are using it and the classes being tutored, as well as whether they are “day” students or GPS students.

Strengthening the English Language Program for International Students

In our 2018 interim report, the university noted the need to “strengthen our programs for international students aimed at increasing their fluency in English beyond minimal TOEFL proficiency.” NECHE’s response looked forward to learning, in this fall 2023 self-study, of our success in ensuring that “students completing an undergraduate or graduate degree program demonstrate collegiate-level skills in the English language.”

We have faced new challenges since the 2018 report, particularly related to political and pandemic-related regulations. International students already had a hard time getting visas from 2018 to 2020, and the pandemic made it impossible for them to travel. Those who were already in the U.S. were isolated. In addition, our contract with Navitas, which provided recruitment, student services and a bridge program, ended in 2020 due to concerns regarding the quality of services provided. There were issues defining academic progress, some students did not complete required coursework or attend classes, and decisions regarding students who went beyond their allotted time were inconsistent. Moreover, Navitas determined graduate student progress by signed contracts rather than academic or language proficiency requirements, and they did not provide any support for graduate students to prepare for and pass language proficiency tests such as TOEFL or IELTS.

Data Collection and Analysis

We need to enhance how we identify and track our international students to serve them better. Until recently, we used two methods: the IPEDS category (nonresident alien) and university sponsorship (F/J students). However, relying solely on these methods caused confusion and overlooked some individuals. To address this inconsistency, we have collaborated with the [International Students & Scholars Office](#) and the [Data Analytics and Institutional Research Office \(DAIR\)](#) to create a new, more comprehensive definition of “international student” that took effect in 2022.

Our new definition combines three groups:

- Nonimmigrant Nonresident Alien (NRA) UML-sponsored visa holders who are in the U.S. under the temporary classification of F-1 Academic Student or J-1 Exchange Visitor
- Nonresident Aliens present in the U.S. and enrolled in other valid study-eligible nonimmigrant statuses (i.e. H-4, J-2, E-2, L-2)
- Nonresident Aliens engaged in Distance Learning from overseas.

These new definitions will allow us to better understand this population. Moving forward, we will have more accurate records of time to degree and retention.

Programming and Services

We are happy to have international students back on campus and recognize that they may need specific help with language and cultural integration. As international students are spread throughout the university, it has been a challenge to provide centralized support. However, since the 2018 report, the International Students and Scholars Office (ISSO) has worked with GPS, Academic Services, and Student Affairs to make significant progress in this area.

- Our Office of Multicultural Affairs has created a new orientation for international students, “culture shock talks,” and [English conversation groups](#).
- We have an updated [website](#) with resources for students and faculty.
- Recognizing the need for more consistent expertise in serving English Language Learners, our [Writing Centers](#), which had previously only employed trained student tutors, hired two professional tutors trained in supporting graduate students and non-native speakers. The Writing Centers offered 619 sessions in fall 2021 and 719 in spring 2022. Tutoring sessions were offered remotely when the campus was closed during the pandemic, and they are offered both in-person and remotely since the campus has reopened.

- Our Writing Centers are located on both North and South Campuses. They have peer and professional tutors, an online scheduling tool and more than 600 available sessions each semester. We know that our international students are using the centers: in spring 2022, writing tutors reported that 30% of their sessions were with multilingual students (although these students were 5% of the overall student body).
- However, we have evidence that many faculty and students on campus are not aware of Writing Center services. First, Writing Center usage was only 67% of available slots in fall 2022. Second, in focus groups conducted in spring 2022, graduate students were found to be largely unaware of the Writing Center and the services it offers. Third, in a survey of graduate coordinators in spring 2022, English language proficiency was “sometimes a concern” for faculty in 52% of programs and “a significant concern” for faculty in 28% of programs. Clearly, better communication and stronger partnerships with academic departments are needed.
- Following the cancellation of our contract with Navitas, we are working on creating a new bridge program for international students in collaboration with Middlesex Community College and with the ASC English School in Boston. The collaboration with Middlesex will create a structured program for students who need time to develop their English. These students will have access to a dormitory that is reasonably close to both campuses, along with advising support. The program builds on our existing [Reserve Placement Program](#). The ASC English School, located in Boston, offers English language preparation for international college-bound students. They have been offering English language services since 1993 to the Boston area community.

The operation of both bridge programs, and the progress of students through them, will be assessed by UMass Lowell faculty through a process that is being designed.

Effectively Managing the Growth of the Harbor Place Campus in Haverhill, Massachusetts

The Harbor Place campus is a satellite campus comprised of the Haverhill academic center, which offers credit courses for students to complete a bachelor's degree, and the Haverhill Innovation Hub (iHub). The academic center and the iHub are run as separate, independent units, both designed to serve entrepreneurs and working professionals from the Greater Merrimack Valley and Southern New Hampshire. The commission's response to the 2018 interim report indicated that our next self-study should provide an update on our management of Harbor Place. To support a successful transition and sustainable program at Harbor Place, GPS actively engaged in ongoing planning and assessment activities. In the five years since our interim report, the educational landscape has changed significantly, due to the COVID-19 pandemic and other trends. The result is a reduced demand by working professionals for in-person classes.

In fall 2017, UMass Lowell began offering courses at Harbor Place with the clear intent to transition UML courses that had previously been offered at Northern Essex Community College (NECC) to Harbor Place, so that NECC students could complete a UML bachelor's degree without commuting to Lowell. We offered degrees in business, criminal justice and psychology, all highly subscribed majors attractive to our transfer student population.

Initially, and as we had planned, enrollment was strong, peaking in academic year 2017-18, the first year of our transition to Harbor Place, with 163 total enrollments. In 2018-19, enrollment trended down to 119. Further, the MBA program launch in Haverhill in spring 2019 failed to draw students. Enrollment softened again at the start of academic year 2019-20, and it was then greatly impacted by the pandemic: No courses were offered in Harbor Place during the near-total campus shutdown in spring and summer 2020. Since then, Harbor Place has struggled to grow enrollments despite our best efforts and increased resources.

All plans for Harbor Place were predicated on a pipeline of NECC students who would take advantage of the opportunity to complete their UML degrees at a location closer to where they worked and lived. However, community college enrollments in Massachusetts have been declining in recent years, which has affected the potential to grow our transfer enrollments from NECC. Furthermore, while UML was nearly fully open with on-campus classes and activities in fall 2021, NECC continued to run most of its classes remotely. We understand that NECC students, like many community college students, have embraced remote learning and are generally less interested in taking in-person classes than before 2020.

These declining numbers led us to reassess our operations and program offerings, as well as our resource deployment, beginning with staffing. In 2019, we enlisted one of our most senior student service staff members to work out of the Harbor Place campus to both manage enrollment and examine the operation. In addition to planning the schedule, this individual had numerous meetings with NECC staff, the iHub staff and community leaders to gather feedback about potential programming.

In 2019, the university appointed a committee to review the status of Harbor Place, partially in response to the NECHE 2018 reviewers' report that cited the satellite campus as an area of emphasis. The committee examined program offerings at Harbor Place—including and beyond credit-based programs—and how the university promotes and administers the site.

Promotion

GPS employs a multipronged and targeted promotion strategy for the Harbor Place campus. In addition to maintaining a [micro page for Harbor Place on the GPS website](#), and clear signage on the building itself, we purchased mail lists targeted at the surrounding communities and limited to adults without a college degree. Several times each year, leading up to the start of each term, the GPS marketing unit sends promotional postcards out to names on these mailing lists.

In addition, we recognized that the iHub is a built-in opportunity to promote and develop educational programs through interactions with the Haverhill Chamber of Commerce, Haverhill High School leaders and local businesses. Over the last few years, we have hosted several events at Harbor Place for NECC leadership, advisers, counselors and faculty. The goal is always to showcase the learning space during events when NECC and UML faculty and staff come together to discuss collaboration between the two institutions. Finally, for academic year 2022-23, we reduced tuition at Harbor Place to \$300 per credit hour as an incentive to attract students.

Site Administration

Another area that we examined was staffing. When Harbor Place opened, the original plan was for the GPS advising manager to provide oversight and management for the academic center at Harbor Place, while the iHub was managed by the executive director for innovation initiatives and an associate director. The advising manager worked full-time on the Lowell campus and spent two evenings each week at Harbor Place. Although students enrolled in classes at the Harbor Place site had ID-controlled access to the facility from 12:00 to 9:00 p.m. on weekdays, staff presence during these hours was minimal, meaning there was no staff person available to greet and assist students and to ensure classes were running smoothly. Also, when the university opened the Harbor Place site, university staff no longer maintained a presence on the NECC campus, so active recruiting on the NECC campus ceased.

We identified the shortcomings of this arrangement, and when the campus reopened after the pandemic shutdown, GPS hired a part-time site administrator to oversee the academic center. This strategic hire was a former employee of NECC who had been tangentially involved in the startup of Harbor Place, so she was familiar with our campus and offerings as well as the needs and expectations of transfer students. The academic center now has an experienced and dedicated staff member who is present when classes are in session, and she also regularly interacts with faculty, plans course offerings, resolves student issues, ensures activities are coordinated with the iHub, and reaches out to NECC and other neighboring community colleges to promote Harbor Place.

Projections

Growing our enrollments at Harbor Place has been challenging, and while we have learned valuable lessons over the last several years, it may not be viable to continue to offer courses there.

Now that the executive director for innovation and workforce development (formerly the executive director of innovation initiatives) will have oversight of both the academic center and the iHub, there will be more coordination and collaboration between the two units and additional support for the academic center. We see potential growth opportunities in the following areas:

Training for corporate partners: Aligning non-credit corporate programming with the iHub and Harbor Place will be a focus for expanding activity in Haverhill. We envision offering professional development, which could include both credit and non-credit programs, to corporate partners and/or businesses that become connected to the iHub or the [GPS corporate unit](#). For example, the iHub has signed a contract to lease office and storage space to the regional state coordinator for K-12 school nurses. The coordinator chose the iHub for its location and because of the classroom space in the academic center, and she plans on using the classrooms to deliver trainings for school nurses. There are also opportunities to offer non-credit trainings targeted toward employees at local businesses, including those at the iHub, such as project management, leadership and skill development. These types of offerings align with GPS's corporate unit, which now reports to the same person who is managing the iHub.

Partnerships for credit programs: We are currently in discussions with the Haverhill public schools about offering our Urban Education graduate certificate for teachers at Harbor Place. Classes would be delivered at Harbor Place, perhaps in a low-residency format. Similarly, UML's Department of Criminology and Justice Studies has approached GPS about using Harbor Place as a host location for police training, with the longer-term plan of offering credit-based certificates to the police force.

Workforce training: GPS is exploring partnerships with the Greater Lowell and Northeast MassHire Workforce boards to develop workforce training programs. Representatives from the workforce boards indicate that there is generous state funding for such programs and that they would like to work with an educational partner. The dean of GPS and the executive director for innovation and workforce development have had initial conversations with MassHire staff about potential offerings. One focus would be information technology. This is a priority for the state, and it is also an area of strength for UMass Lowell. GPS currently offers IT programs at the associate, bachelor's and master's levels, as well as a variety of IT-related certificates.

If these initiatives are not successful, we will need to consider whether it is in the institution's best interest to retain the Harbor Place campus. Ultimately, the university's goal is to support the student's desire to continue their education and secure a bachelor's degree. We will continue to monitor the effectiveness of these strategies and will adapt our offerings and delivery modes based on the aspirations and needs of our students.

APPENDICES

AFFIRMATION OF COMPLIANCE WITH FEDERAL REGULATIONS RELATING TO TITLE IV

Periodically, member institutions are asked to affirm their compliance with federal requirements relating to Title IV program participation, including relevant requirements of the Higher Education Opportunity Act.

1. Credit Transfer Policies. The institution's policy on transfer of credit is publicly disclosed through its website and other relevant publications. The institution includes a statement of its criteria for transfer of credit earned at another institution of higher education along with a list of institutions with which it has articulation agreements. (NECHE Policy 95. See also *Standards for Accreditation* 4.29-4.32 and 9.18.)

URL	https://www.uml.edu/catalog/undergraduate/policies/admissions-policies/transfer-students.aspx https://www.uml.edu/catalog/graduate/policies/transfer-credit.aspx
Print Publications	N/A
Self-study/Fifth-year Report Page Reference	Standard Four

2. Student Complaints. "Policies on student rights and responsibilities, including grievance procedures, are clearly stated, well publicized and readily available, and fairly and consistently administered." (*Standards for Accreditation* 5.18, 9.8, and 9.18.)

URL	https://www.uml.edu/catalog/undergraduate/policies/academic-policies/student-complaints.aspx https://www.uml.edu/catalog/graduate/policies/university-appeals-process-regarding-academic-non-misconduct-issues.aspx
Print Publications	N/A
Self-study/Fifth-year Report Page Reference	Standard Nine

3. Distance and Correspondence Education: Verification of Student Identity: If the institution offers distance education or correspondence education, it has processes in place to establish that the student who registers in a distance education or correspondence education course or program is the same student who participates in and completes the program and receives the academic credit The institution protects student privacy and notifies students at the time of registration or enrollment of any projected additional student charges associated with the verification of student identity. (NECHE Policy 95. See also *Standards for Accreditation* 4.48.)

Method(s) used for verification	UMass Lowell's Division for Undergraduate, Graduate and Professional Studies follows nationally recognized best practices, both technological and pedagogical, to ensure the verification of student identity in online education. These measures both promote student integrity and protect student privacy. Login information requires access to an assigned UMS ID number, retrievable only with the date of birth and SSN or employee ID. The use of login information is governed by strict IT data security policy (http://www.uml.edu/IT/Policies). Faculty are trained on effective use of anti-plagiarism and anti-dishonesty measures (e.g. rigid testing settings) available through Blackboard LMS> Additionally, faculty plan for extensive contact with and among students that allows them to assess the consistency and quality of work and to evaluate its authenticity.
Self-study/Fifth-year Report Page Reference	N/A

4. FOR COMPREHENSIVE EVALUATIONS ONLY: Public Notification of an Evaluation Visit and Opportunity for Public Comment: The institution has made an appropriate and timely effort to notify the public of an upcoming comprehensive evaluation and to solicit comments. (NECHE Policy 77.)

URL	UML Today Announcement for Faculty & Staff: https://www.uml.edu/myuml/Submissions/2023/2023-07-25-12-32-24-UMass-Lowell-Invites-Public-Comment.aspx UML Today Announcement for Students: https://www.uml.edu/myuml/Submissions/2023/2023-07-25-12-32-24-UMass-Lowell-Invites-Public-Comment.aspx UML Institutional Accreditation Website: https://www.uml.edu/academics/provost-office/accreditation/neche/ InsideLowell.com (website and social media platforms): https://insidelowell.com/public-service-announcement-re-umass-lowell-accreditation/ UML Alumni Magazine: https://www.uml.edu/docs/Summer-2022-Magazine-Remediated_tcm18-359173.pdf (see page 68) UML LinkedIn: https://www.linkedin.com/feed/update/urn:li:share:7102035456208326656/
Print Publications	Lowell Sun, Section A, page 6, August 20, 2023 Boston Herald, page 13, August 20, 2023
Self-study Page Reference	N/A

The undersigned affirms that [UNIVERSITY OF MASSACHUSETTS LOWELL](https://www.uml.edu) meets the above federal requirements relating to Title IV program participation, including those enumerated above.

Chief Executive Officer: 

Date: 09.08.2023

March 2016, June 2020, August 2021

E-Series Forms: Making Assessment More Explicit

Option E1: Part A. Inventory of Educational Effectiveness Indicators

CATEGORY	1. Where are the learning outcomes for this level/program published?	2. Other than GPA, what data/ evidence is used to determine that graduates have achieved the stated outcomes for the degree?	3. Who interprets the evidence? What is the process?	4. What changes have been made as a result of using the data/evidence?	5. Date of most recent program review
At the institutional level:	For graduate programs, within the program website; for undergraduate programs, within the program website and at https://www.uml.edu/Academics/Provost-office/Student-Success/Student-Learning-Outcomes/	AQAD reporting, including DAIR data decks, direct assessment of authentic artifacts, focus groups, analysis of course syllabi, monitoring of DWF rates with intervention as needed.	Faculty senate, volunteer faculty and students, program committees in departments offering courses, Vice Provost for Academic Affairs, Director of Assessment & Accreditation. External AQAD reviewers, Dean and Provost.	Update of AQAD procedures to reflect campus priorities and mission; outreach to faculty; professional development in pedagogy; technology and resources for teaching; pedagogy migrants; changes in program curricula and pedagogy.	Continuous
For general education if an undergraduate institution:	https://www.uml.edu/catalog/undergraduate/core-curriculum/elol/ and https://www.uml.edu/catalog/undergraduate/core-curriculum/bok.aspx	Direct assessment of authentic artifacts, /focus groups, VALUE rubrics, analysis of course syllabi.	Core Curriculum Committee (7 ELOs on a 3-year cycle), standing committee of faculty senate, programs offering the courses that meet the BOKs, Director of Assessment & Accreditation.	Tailored offerings of professional development in pedagogy; changes in program curricula and pedagogy; changes to faculty senate bylaws and committee charges.	Continuous; For 2023, focus on Applied and Integrative Learning
DEGREE PROGRAMS	1. Where are the learning outcomes for this level/ program published?	2. Other than GPA, what data/ evidence is used to determine that graduates have achieved the stated outcomes for the degree?	3. Who interprets the evidence? What is the process?	4. What changes have been made as a result of using the data/evidence?	5. Date of most recent program review
College of Fine Arts, Humanities, and Social Sciences					
American Studies (BA) <i>General Sports Studies</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course, course surveys, in-class reflection	Program coordinator reviews student work to determine their level of achievement, investigate curriculum coherence annually.	Added new Sports Studies concentration, considering additional changes to the program. No review process for college interdisciplinary programs.	n/a
Art (BFA) <i>Animation & Interactive Media Graphic Design Studio Art</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Incoming portfolio requirement. Artistic expression/display/ performance, Assignment/exam/ paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Exit exam created by the program/department, formal critique of portfolio of student work, Senior exit portfolio, fine art exhibitions in Lowell and within the campus, Supervisor or employer evaluation of student performance outside the classroom. The capstone project is a body of artwork or design, methodology statement. Juried and competitive outside exhibitions. Alumni survey that contains self-reports of learning outcome achievement/preparation, student reflection	Course instructor(s) assessed evidence from their own students. Ad hoc faculty group senior incoming assessment. Used a rubric or scoring guide, Used professional judgment (no rubric or scoring guide used). Visiting Critics review work in some classes. Who decided what would be assessed? The instructor per course, the senior studio faculty for incoming seniors, the foundations faculty for incoming freshmen. Outcomes studied include Mastery of the skill set for the discipline, quality of writing, communication skills, research, professional practice. Portfolio analysis, oral defense, public critique and constructive criticism of peers/ peer review.	Assessment tool or procedure changes, Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes, Student support/ student experience changes. In Design and Animation, we evaluate by job placement and salary offers. In Studio Art, how many people go to grad school, how many people have exhibitions (solo or group) after school. We rebuilt our assessment procedures in the last couple of years in anticipation of NASAD in the pursuit of a successful evaluation.	NASAD 2015-2016 Next review 2025-2026
Crim Just & Criminology (PhD) <i>Crime, Criminals & Comm Global Pers Crime & Justice Justice System & Policy Technology & Criminal Justice Terrorism Studies Victims, Crime & Justice</i>	https://www.uml.edu/catalog/graduate/fahss/criminal-justice/phd-program.aspx	Discussions with faculty about student success. Discussions with students regarding experience in the program	Ph.D. program director and graduate committee made up of select faculty members Used professional judgment (no rubric or scoring guide used). A new Ph.D. program director was appointed and selected a committee to review the curriculum, the exam structure, and dissertation requirement. Based on feedback from the faculty experience in teaching and working with Ph.D. students, decisions to change the curriculum were determined.	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.), Curriculum changes (new degree requirements or other structural changes beyond the course level	AQAD 2016 AQAD in progress 2023-2024
Criminal Justice - Security Studies (MA) <i>General Homeland Defense Industrial & Economic Security International Security (MS) General CBRNE Security Critical Infrastructure Protection Cybersecurity</i>	https://www.uml.edu/catalog/graduate/fahss/criminal-justice/masters-program.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Thesis or dissertation used for program-level assessment in addition to individual student evaluation Alumni survey that contains self-reports of learning outcome achievement/preparation, Interviews or focus groups that contain self-reports of learning outcome achievement	Standing faculty committee Scored exams/tests/ quizzes, Compiled survey results, Used qualitative methods on an interview, focus group, or open-ended response data. Our internal measures of review include an Undergraduate and a Graduate Committee whose responsibility it is to bring curriculum issues to the attention of the School at our monthly meetings. This has been a regular occurrence and has resulted in frequent modifications to the curriculum. *Anonymous Student Exit Survey provides information about the impact our program has had on their development of skills, their satisfaction with course content and delivery, the program's relevance to their future goals, and any suggestions they have for changes to the current program.	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.), Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes, Celebration of student success. We are currently reviewing all syllabi for M.A. graduate-level courses offered both on campus and on-line. This might include insights about assessment procedures, teaching and learning, and achievements in program assessment in this reporting period. We are currently moving towards a more routinized mechanism regarding program assessment.	AQAD 2016 AQAD in progress 2023-2024
Criminal Justice (BS) <i>General Corrections Crime & Mental Health Homeland Security Information & Technology Police Violence</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product (e.g. written project or non-thesis paper). Interviews or focus groups that contain self-reports of learning outcome achievement, Student survey that contains self-reports of learning outcome achievement	Course instructor(s) assessed evidence from their own students, Standing faculty committee. Used professional judgment (no rubric or scoring guide used). Compiled survey results, Used qualitative methods on an interview, focus group, or open-ended response data. The Undergraduate Committee examines annually the results of our Undergraduate Exit Survey completed by all graduating seniors. The Undergraduate Coordinator also collects the grade distributions for the capstone projects (which consists of a policy paper on a topic of the student's choice) and coordinates with the 3 faculty who teach this course to assess the degree to which learning outcomes are achieved in that course. These grades are also presented to and discussed annually in the Undergrad Committee.	Results indicated no action needed because student work met expectations. Our capstone course has only been offered for 3 semesters, so the 3 faculty teaching this course have met and made changes to the capstone project assignment after 1 year of offering the course. The assignment was somewhat different (with different expectations and learning outcomes) depending on faculty member, and so the project was changed to ensure uniformity. The rest of our outcomes are in line with our expectations, and so no changes were required. Based on our exist survey results (which have been consistent from year-to-year), our graduates feel that they have made great strides in the most critical skill areas germane to future employment and career success, and our faculty are rated quite favorably in terms of their teaching. This might include insights about assessment procedures, teaching and learning, and achievements in program assessment in this reporting period.	AQAD 2016 AQAD in progress 2023-2024
Digital Media (BA)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product (e.g. written project or non-thesis paper).	Course instructor(s) assessed evidence from their own students. Internship involves external assessment of learning. Evaluation of two-semester capstone projects.	This new program enrolled its first students in 2022 and is currently developing a strategic plan including assessment. No review process for college interdisciplinary programs.	n/a

Economics (BA) <i>General</i> Economics (BS) <i>Quantitative Economics</i>	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment. Oral performance (oral presentation, conference presentation), Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements). Employer meeting/survey/interview about student learning outcome achievement	Course instructor(s) assessed evidence from their own students and survey results from graduates. Survey revealed students were less prepared for the quantitative tasks in their workplaces; the new BS aims to strengthen this skill for all majors. In its recent program review, the department studied success gaps in race and gender. Newly developed diagnostic quizzes in upper-level Macro and Micro theory were used to determine whether students were transferring knowledge from pre-requisite courses, with a roughly 77% success rate. Analysis is included in the AQAD report.	The minimum overall GPA requirement for the economics major has been raised to 2.2, and we are tracking the impact on retention and graduation rates. The program has steadily increased the percentage of students of color, but still struggles to attract women.	AQAD 2021-2022
Education (PhD) <i>Leadership in Education</i> <i>Literacy Studies</i> <i>Research & Eval in Education (EDD)</i> <i>Language Arts & Literacy</i> <i>Leadership in Schooling-STEM</i> <i>Education</i>	Internally within the Department	Learning outcomes are measured with course level assessments, comprehensive exams, and the doctoral dissertation. The formal process of annual review of faculty and the tenure and promotion process is the way faculty are reviewed on how well they are fostering student progress towards learning outcomes. The assessment of student learning outcomes informs programmatic changes and course revisions.	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The Ph.D. in Leadership has continually revised its comprehensive exam format so that in addition to serving as high-stakes decision points, the examination process contributes to students' progress towards their dissertations. A survey of three cohorts of Ed.D. students indicated that in nearly all program areas students (92%) indicated that they strongly agreed that the program was effective.	AQAD 2018-2019
Education (MED) <i>General</i> <i>Applied Behvr Anlyns & Ed</i> <i>Education Administration</i> <i>Mathematics</i> <i>Special Education</i> <i>TESOL</i>	Internally within the Department	Admissions data, grades on assessments, GPA at 12 and 21 credits, and dispositions assessments. Students are asked to evaluate the program at completion.	The College of Education evaluates the success of its licensure candidates through the MA DESE data system (called EDWIN), which includes completer, supervising practitioner, and hiring principal feedback from DESE-administered surveys. The MA DESE system also tracks licensure completers through their Massachusetts public teaching careers.	Results of a survey of M.Ed. students revealed high (91%) rates of satisfaction with their learning experience, but slightly lower rates (44%) of student indicating that the program was extremely or very effective in improving their career.	AQAD 2018-2019
Education (EDS) <i>Reading & Language</i> <i>Admin Planning & Policy</i>	Internally within the Department	Capstone course and portfolio	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Not evaluated separately in the AQAD report.	AQAD 2018-2019
Education (BA) <i>General</i> <i>Disability Studies Education</i> <i>Elem & Moderate Disability</i>	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course and portfolio	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	New program - awaiting first cycle	AQAD 2018-2019
English (BA) <i>English Studies</i> <i>Journalism & Prof. Writing</i> <i>Literature</i> <i>Theatre Arts</i> <i>Creative Writing</i>	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment. Capstone work product (e.g. written project or non-thesis paper), Portfolio of student work, Student publication, grant proposal, or other work with a specific external audience. Student reflections in all senior-level courses.	Course instructor(s) assessed evidence from their own students. Journalism and Professional Writing Faculty Committee assessed portfolios for students in that concentration. Used a rubric or scoring guide. Used professional judgment (no rubric or scoring guide used). A department-wide committee on assessment for a program-wide assessment of the artifacts as a larger group. Journalism and professional Writing students complete electronic portfolios. JPW faculty collaboratively evaluates each portfolio using a rubric. While assessing portfolios, JPW faculty look for rhetorical awareness and for 3-8 pieces of writing for a public audience.	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.). Curriculum changes (new degree requirements or other structural changes beyond the course level, Student support/student experience changes, Use is pending.	AQAD 2015-2016 AQAD in progress 2023-2024
Global Studies (PhD) <i>Conflict, Cooperation, Security & Human Rights</i> <i>International Political Economy, Trade & Development</i> <i>Theory in Global Studies</i>	https://www.uml.edu/catalog/graduate/fahss/global-studies/doctoral.aspx	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	No review process for college interdisciplinary programs.	n/a
History (BA)	https://www.uml.edu/catalog/undergraduate/fahss/departments/history/learning-outcome-history.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment ** Note that this assessment relies upon voluntary submission of a paper by the student and thus is not comprehensive in any way. Student evaluations of classroom teaching.	Analysis of student performance by GPA in predictive courses: HIST2980 Introduction to Historical Methods, and HIST4320 Research Seminar. Graduates are surveyed to evaluate preparation for employment and graduate programs. Roughly 70% of alumni respondents said the department was extremely or very effective in preparing them for work or for graduate programs. More analysis in AQAD report.	Addition of a required capstone research methods course.	AQAD 2021-2022
Liberal Arts (BLA)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Creation of an introductory and a senior-level seminar to promote integration of multiple disciplines and methodologies. No review process for college interdisciplinary programs.	n/a
Music Education (MM) <i>Community Music</i> <i>Music Education- Research</i> (MME) <i>Music Education- Certification</i>	Internally within the Department	Thesis and oral defense, course work, supervisor observations, teacher work samples and lesson plans, teacher reflections.	The Professional Standards for Teachers are applied to student work to assure the required outcomes are being met. The curriculum has been carefully mapped. Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Details of assessment results were not included in the NASM report.	NASM 2014-2015 Next review 2024-2025
Music (BM) <i>Composition for New Media</i> <i>Music Business</i> <i>Music Performance</i> <i>Music Studies</i> <i>Sound Recording Technology</i>	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Artistic expression display/performance, Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product (e.g. written project or non-thesis paper), Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements). Student reflection.	The 16 assessments used for Musicianship & Analysis courses have been largely developed collaboratively by all of the faculty who teach these courses. Outcomes in performance, composition and arranging, analysis, aural recognition and internal hearing, and general musical sensibilities are measured using standard rubrics. Each semester ends with a capstone project that requires the students to capture elements of the various topics covered. Students sit for faculty evaluation at least 4 times across the six required Applied Music courses. Adjudicators are generally selected from the full-time faculty with knowledge of or expertise in the given performance areas. General guidelines are provided for the grading of these evaluations. However, adjudicators often rely on professional judgment in the areas of technique, style, and stage presence.	New concentration in Composition for New Media was added to meet demand for skills related to contemporary employment opportunities. Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.), Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes, Program policy changes, Student support/student experience changes, Celebration of student success. Revision of Applied Music assessments (and curriculum) based on observed patterns in the student results. Such changes are regularly discussed in faculty meetings and asynchronous fora.	NASM 2014-2015 Next review 2024-2025 Composition for New Media approved by NASM in 2020

Peace & Conflict Studies (MA)	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	No review process for college interdisciplinary programs.	n/a
Peace & Conflict Studies (BA)	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	No review process for college interdisciplinary programs.	n/a
Philosophy (BA) <i>General Communi. & Critical Thinking Philosophy & Religious Studies</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Recognizing a need for more coordinated assessment, the department has instituted a required capstone course, which will be used as a first source of authentic assessment data.	AQAD 2021-2022
Political Science (BA) <i>American Politics International Relations & Comparative Politics Law & Politics Political Communication & Public Opinion Sustainability & Environmental Politics</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Student publication, grant proposal, or other work with a specific external audience, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements), Alumni survey that contains self-reports of learning outcome achievement/preparation, Interviews or focus groups that contain self-reports of learning outcome achievement	Ad hoc faculty group, Department chairperson, UML Research Staff Member from outside the department assisted by graduate student. Compiled survey results, Used qualitative methods on interview, focus group, or open-ended response data. The Department as a whole created questions for the assessment. These questions were forwarded to a focus group expert and assistant for refinement.	Personnel or resource allocation changes, Student support/student experience changes, Use is pending. The Department is using the current AQAD evaluation process to figure out the best way to advise students and provide them with the courses they need to graduate on time. The Department was pleased with the method for discovering student concerns and will likely continue to conduct focus groups on a regular basis.	AQAD 2018-2019
Psychology (PhD) <i>Applied Psychology & Prevention Science</i>	https://www.uml.edu/catalog/graduate/fahs/psychology/doctoral/applied-psychology.aspx#POB	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Oral performance (oral presentation, conference presentation), Portfolio of student work, Student publication, grant proposal, or other work with a specific external audience, Thesis or dissertation used for program-level assessment in addition to individual student evaluation. Interviews or focus groups that contain self-reports of learning outcome achievement	The standing PhD faculty committee decided what would be assessed. Assessment materials included course assignments (exams, response papers, final papers, oral presentations), substantive qualifying paper, and quantitative qualifying paper, conference presentations, and papers submitted for publication. These materials were studied for evidence of the program learning outcomes.	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.), Curriculum changes (new degree requirements or other structural changes beyond the course level). The program has minimized the number of Directed Studies that students take in order to address the knowledge requirement of doctoral programs outlined by the American Psychological Association.	AQAD 2020-2021
Psychology (MS) <i>Applied Behavior Analysis & Autism Studies</i>	The Autism Studies Program has a "Verified Course Sequence," (VCS) that is reviewed by the Behavior Analyst Certification Board (BACB). Six courses in the program are part of this VCS. The learning outcomes are available online here: https://www.bacb.com/task-list/	Exam created by an external organization (e.g. licensure exam (please specify), Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements), Students in the Applied Behavior Analysis Option meet the requirements to sit for a national certification exam that is administered by the Behavior Analyst Certification Board (BACB). Our pass rate for this exam is an indicator of level of our graduates. Alumni survey that contains self-reports of learning outcome achievement/preparation	Graduate Program Coordinator. External organization/person analyzed data (e.g. licensing exam) Graduate Survey	The survey of graduate students has been created and launched in 2020 to assess the degree of preparation achieved by students. Passage rates from BACB	AQAD 2020-2021 "Verified Course Sequence" reviewed by the Behavior Analyst Certification Board (BACB) renewed 2018
Psychology (BA) <i>General Behavior Analysis Clinical Psychology Community Social Psychology Developmental Disabilities Health Psychology</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Student survey that contains self-reports of learning outcome achievement	Standing faculty committee. Compiled survey results from annual student surveys. Annual assessment of a chosen Core Curriculum ELO by faculty	Use is pending. Thus far, the results have primarily been used to improve advising and to develop a Concentrations Workshop for students to help them navigate options for career preparation.	AQAD 2020-2021
Public Administration (MPA) <i>General Human Services Justice Administration Public Humanities & the Arts</i>	Internally within program.	Capstone Experience	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	No review process for college interdisciplinary programs.	n/a
Sociology (BA) <i>General Policy & Social Problems Racial Equity & Inclusion</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Capstone course	Surveys and focus groups of current students and recent graduates related to program curricula. Department review of curriculum and courses. In a 2020 Alumni survey, 89% of respondents were employed full-time.	Advances in the discipline and demand for this focus from faculty and students alike led to the development of the new concentration in Racial Equity & Inclusion.	AQAD 2020-2021
World Languages (BA) <i>French Spanish/French Spanish/Italian Spanish</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Artistic expression/display/performance, Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Oral performance, Student publication, grant proposal, or other work with a specific external audience, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements), Student reflection, Student survey that contains self-reports of learning outcome achievement	By following the ACTFL guidelines of second language acquisition, faculty assesses the four skills of speaking, writing, listening, and reading through short quizzes, tests, interviews, close readings, essays, critical thinking, digital power point presentation, video projects, group work, etc. Coordinators and faculty discuss their syllabi, curriculum content, learning goals and outcomes, assessments, identify and implement curriculum improvements. Faculty assesses students' learning to achieve the learning goals established by ACTFL, and assessments are designed to verify the program learning outcomes.	Regular and consistent evaluation of student learning vis-à-vis learning goals and course-specific outcomes within language programs has led to changes in the Department curriculum. Integration of DEIB considerations and practices into the curriculum. World Ready outcomes require more rigorous measures of intercultural competence.	AQAD 2022-23
Francis College of Engineering					
Biomedical Engineering & Biotechnology (PhD) (UMass System Program)	System program	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	System program	AQAD 2022-2023
Biomedical Engineering & Biotechnology (MS) (UMass System Program)	System program	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	System program	AQAD 2022-2023
Biomedical Engineering (BSE)	https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	ABET 2021-2022

Chemical Engineering (PhD)	Internally within the Department	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Chemical Engineering (MSE) <i>Leadership</i>	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Chemical Engineering (BSE) <i>General Biological Engineering Nanomaterials Engineering Nuclear</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	ABET 2019-2020 Next review 2024-2025
Civil Engineering (PhD)	Internally within the Department	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	2022 AQAD indicates that an assessment process was proposed, but implementation is not described.	AQAD 2022-2023
Civil Engineering (MSE) <i>Environmental Geoenvironmental Geotechnical Leadership Structural Transportation</i>	Internally within the Department	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Exam created by an external organization	Course instructor(s) assessed evidence from their own students, Department chairperson, Persons or organization outside UML. External AQAD reviewers. Scored exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used). Compiled survey results, External organization/ person analyzed data (e.g. licensing exam).	2022 AQAD indicates that an assessment process was proposed, but implementation is not described.	AQAD 2022-2023
Civil Engineering (BSE)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	NCEES FE (Fundamentals of Engineering) exam, Capstone course	NCEES, Department faculty	Students are routinely assessed on their achievement of ABET learning outcomes. Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	ABET 2019-2020 Next review 2024-2025
Civil Engineering Tech (BET) <i>Environmental General</i>	Internally within the Department	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Not reported in 2022 AQAD	AQAD 2022-2023
Civil Engineering Tech (AET) <i>General Water Treatment Wastewater Treatment Survey</i>	Internally within the Department	Course outcomes	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Not reported in 2022 AQAD	AQAD 2022-2023
Computer Engineering (PhD)	Internally within the Department	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Computer Engineering (MSE)	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Computer Engineering (BSE)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	ABET 2019-2020 Next review 2024-2025
Electrical Engineering (PhD)	Internally within the Department	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Electrical Engineering (MSE) <i>Leadership Optics</i>	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Electrical Engineering (BSE)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Revised program learning outcomes and course mapping. Curriculum changes based on assessments and external ABET and ACM, IEEE guidelines. We assess for core skills and modify as required.	ABET 2019-2020 Next review 2024-2025
Electronic Eng Tech (BS)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/engineering/electronic-engineering-technology.aspx	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Revised program learning outcomes and course mapping. Curriculum changes based on assessments and external ABET and ACM, IEEE guidelines. We assess for core skills and modify as required.	ABET 2021-2022 Next review 2026-2027
Electronic Eng Tech (AS)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/engineering/electronic-engineering-technology.aspx	Course outcomes	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Not reported in 2022 AQAD	AQAD 2022-2023
Energy Engineering (PhD)	Internally within the Department	Qualifying Exam and Dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Energy Engineering (MS) <i>Nuclear Engineering Renewable (Solar) Engineering</i>	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Engineering Management (MS) <i>Design and Manufacturing Engineering Services/ Infrastructure Management Operations and Supply Management</i>	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Environmental Studies (MS) <i>Environmental Engineering Sciences</i>	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Environmental Engineering (MSE)	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023

Environmental Engineering (BSE)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Measured student success in courses tied to ABET learning outcomes. New degree program, currently seeking initial ABET accreditation. See program report, students met all seven ABET outcomes.	Initial ABET visit forthcoming Sept. 2023
Industrial Engineering (PhD)	Internally within the Department	Qualifying exam and dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	This program is new; analysis of student outcomes was unavailable for the 2022 AQAD self-study.	AQAD 2022-2023
Industrial Engineering (BSE)	Internally within the Department	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	New Program Report pending graduates
Mechanical Engineering (PhD)	Internally within the Department	Qualifying exam and dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Mechanical Engineering (MSE)	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Mechanical Engineering (BSE)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	ABET 2019-2020 Next review 2024-2025
Mechanical Eng Tech (BS)	https://www.uml.edu/academics/provost-office/student-learning-outcomes/engineering/mechanical-engineering-technology.aspx	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Detailed reports on specific outcomes and rates of student achievement are detailed in the Continuous Improvement (Criterion 4) section of the ABET report.	ABET 2021-2022 Next review 2026-2027
Mech. Engineering Tech (AS)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/engineering/mechanical-engineering-technology.aspx	Course outcomes	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Outcomes for this program were not addressed in the AQAD report.	AQAD 2022-2023
Plastics Engineering (PhD)	Internally within the Department	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Student publication, grant proposal, or other work with a specific external audience, Qualifying or comprehensive exam for program-level assessment in addition to individual student evaluation, Thesis or dissertation used for program-level assessment in addition to individual student evaluation. Alumni survey that contains self-reports of learning outcome achievement/preparation, Student survey that contains self-reports of learning outcome achievement	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes.	AQAD 2022-2023
Plastics Engineering (MSE)	Internal within department	Qualifying exam and thesis with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	The recent ABET self-study resulted in a decision to institute a graduate course evaluation process similar to what is done at the undergraduate level.	AQAD 2022-2023
Plastics Engineering (BSE)	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Oral performance, Student publication, grant proposal, or other work with a specific external audience. Project design/Hardware prototypes. Alumni survey that contains self-reports of learning outcome achievement/preparation, Employer meeting/survey/interview about student learning outcome achievement, Interviews or focus groups that contain self-reports of learning outcome achievement, Student survey that contains self-reports of learning outcome achievement	Course instructor(s) assessed evidence from their own students, Standing faculty committee, Department chairperson, Persons or organization outside UML. Used a rubric or scoring guide, Scored exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used), Compiled survey results, Used qualitative methods on interview, focus group, or open-ended response data. ABET guidelines implemented by Chair	Curriculum changes (new degree requirements or other structural changes beyond the course level, Program policy changes, Student support/student experience changes. Made 5 major program changes. Increased faculty participation in assessment and curricular planning.	ABET 2019-2020 Next review 2024-2025
Kennedy College of Sciences					
Applied Biology (PhD) <i>Biomedical Science Cellular & Molecular Biology Development & Evolutionary Biology Quantitative Biology & Biophysics</i>	Internal within department	Observation during two separate laboratory research rotations, evaluation of industrial internship. Comprehensive qualifying exams. Public defense.	Department faculty evaluate students in didactic courses and in the laboratory. Internship hosts evaluate students and inform program goals.	AQAD report pending	AQAD 2022-2023
Biological Sciences (MS) <i>General Bioinformatics Biotechnology Education, Comm. & Outreach (PSM) Environmental Biotechnology</i>	https://www.uml.edu/sciences/biology/programs-of-study/masters.aspx	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2022-2023
Biology (BS) <i>General Bioinformatics Biotechnology Ecology, Evolution and Organismal Biology Pre-Med/Pre-Health</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2022-2023

Chemistry (PhD) <i>Biochemistry Environmental Studies Polymer Science Sustainability</i>	Internally within the Department	Dissertation used for program-level assessment in addition to individual student evaluation.	Ad hoc faculty group. Used professional judgment (no rubric or scoring guide used). We did not undertake any formal assessment of the graduate curriculum during the period in question. Our main program level evaluation measure was dissertations.	Celebration of student success, Results indicated no action needed because student work met expectations. To date, there have been no changes proposed based on the metrics that we have tracked.	AQAD 2019-2020 American Chemical Society Review 2020
Chemistry (MS) <i>General (PSM) Chemistry & Polymer Science Pharmaceutical Biochemistry</i>	Internally within the Department	Thesis used for program-level assessment in addition to individual student evaluation.	Ad hoc faculty group. Used professional judgment (no rubric or scoring guide used). We did not undertake any formal assessment of the graduate curriculum during the period in question. Our main program level evaluation measure was theses.	Celebration of student success, Results indicated no action needed because student work met expectations. To date, there have been no changes proposed based on the metrics that we have tracked.	AQAD 2019-2020 American Chemical Society Review 2020
Chemistry (BS) <i>General Biochemistry Forensic Science</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Course instructor(s) assessed evidence from their own students. Scored exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used)	Program policy changes (e.g. admissions requirements, grade requirements, course evaluation changes). Course Added to Program.	AQAD 2019-2020 American Chemical Society Review 2020
Computer Science (PhD) <i>General Computational Mathematics</i>	Internal within department	Qualifying exam and dissertation with public defense; written and oral examinations and written reports. Alumni survey.	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2017-2018 AQAD in progress 2023-2024
Computer Science (MS) <i>General Cybersecurity Information Technology</i>	Internal within department	Thesis and oral defense; written and oral examinations and written reports. Alumni survey.	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2017-2018 AQAD in progress 2023-2024
Computer Science (BS) <i>General Bio-Cheminformatics Cybersecurity Data Science Information Technology</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Written and oral examinations and written reports. Alumni survey.	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2017-2018 AQAD in progress 2023-2024
Information Technology (AS) <i>General</i>	Internally within the Department	Written and oral examinations and written reports. Alumni survey.	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2017-2018 AQAD in progress 2023-2024
Earth System Science (PhD)	https://www.uml.edu/sciences/eas/programs/graduate/doctoral-ess.aspx	Written and oral examinations and written reports. Qualifying exam, public dissertation defense.	Individual instructors and advisory committees assess student work.	AQAD report pending	AQAD 2017-2018 AQAD in progress 2023-2024
Marine Science (PhD) <i>(UMass System Program)</i>	System program	Qualifying Exam and Dissertation with public defense	System program	System program	n/a
Environmental Studies (MS) <i>Atmospheric Science Environmental Geoscience</i>	Internally within the Department	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Oral performance, Student publication, grant proposal, or other work with a specific external audience, Supervisor or employer evaluation of student performance outside the classroom, Thesis or dissertation used for program-level assessment in addition to individual student evaluation Alumni survey that contains self-reports of learning outcome achievement/preparation.	Course instructor(s) assessed evidence from their own students Used a rubric or scoring guide, Scored exams/tests/ quizzes. Our department did not conduct a formal assessment of learning outcomes. Each course is assigned specific outcomes by the professor, and stated explicitly in the syllabus. The graded assignments, tests and projects reflect the success of addressing the learning outcome for each specific course.	AQAD report pending	AQAD 2017-2018 AQAD in progress 2023-2024
Environmental Science (BS) <i>Atmospheric Science Environmental Science Environmental Studies Geoscience</i> Environmental Science (BA) <i>Sustainability Meteorology and Atmospheric Science (BS)</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Oral performance, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements). Alumni survey that contains self-reports of learning outcome achievement/preparation. AQAD external review team report (2-day campus meeting with faculty and students)	Course instructor(s) assessed evidence from their own students. Scored exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used) Our department did not conduct a formal assessment of learning outcomes. Each course is assigned specific outcomes, some include university-required essential learning outcomes. The graded assignments reflect the success of addressing the learning outcome for each specific course. The required courses are designed to specifically meet the stated learning outcomes/objectives for each option within the environmental science major.	Curriculum changes (new degree requirements or other structural changes beyond the course level, Student support/student experience changes, Celebration of student success. Assessment results led to the revision of degree pathways for all options in 2018	AQAD 2017-2018 AQAD in progress 2023-2024
Mathematics (MS) <i>General Applied & Computational Mathematics Probability & Statistics Mathematics for Teachers</i>	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually. Student evaluations are used to assess effectiveness of instruction.	Not included in the most recent AQAD report.	AQAD 2022-2023
Mathematics (BS) <i>General Applied Computational Math Probability/Statistics Computer Science Business Applications Bioinformatics Teaching Mathematics (BA)</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually. Student evaluations are used to assess effectiveness of instruction.	Though not considered in the AQAD review, see the NECHE 2023 self-study for the section on the math curriculum for details of student outcome assessment.	AQAD 2022-2023
Physics (PhD) <i>General Applied Mechanics Aerospace Sciences Medical Physics</i>	Internally within the Department	Qualifying exam and dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2015 -2016 AQAD in progress Fall 2023

Physics (MS) <i>General Optical Sciences</i> Radiological Sciences & Protection (MS) Medical Physics (MS)	Internally within the Department	Thesis and oral defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	AQAD 2015 -2016 AQAD in progress Fall 2023
Physics (BS) <i>General Astronomy & Astrophysics Radiological Health Physics Photonics</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AAQAD report pending.	AQAD 2015-2016 AQAD in progress Fall 2023 ABET for RHP option currently under review 2023-2024
Manning School of Business					
Business Administration (PhD) <i>Accounting Entrepreneurship Finance International Business Leadership/Organization Studies Management Information Systems Management Science Marketing</i>	https://www.uml.edu/catalog/graduate/business/doctoral-program.aspx	Capstone work product (e.g. written project or non-thesis paper), Oral performance (oral presentation, conference presentation), Qualifying or comprehensive exam for program-level assessment in addition to individual student evaluation, Thesis or dissertation used for program-level assessment in addition to individual student evaluation. We also consider student placement as an indirect (or higher level) measure of student learning and program quality. The doctoral program has achieved an outstanding placement record with its first graduating cohort (May 2017). All were placed in full-time, assistant professor positions at peer or aspirant schools, including several placements at doctoral degree granting business schools.	The four learning goals previously established for the Ph.D. BA program are: functional specific knowledge, communication skills (oral & written), research skills, and ethical skills. <ul style="list-style-type: none"> • Comprehensive/ Qualifying exams assess functional specific knowledge skills, including theory and methods. • A required first-year paper and dissertation assess communication and research skills at two different times during the program. It is evaluated by a minimum of two faculty. • The dissertation is the final step before graduation and is evaluated by the dissertation committee, comprised of a minimum of three faculty. • Ethical skills are currently assessed through completion of an appropriate Institutional Review Board training module and/or through the inclusion of ethics questions within the first-semester research course required of all doctoral students. This requirement is being formalized for the next cohort to assure consistent assessment of all students. 	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.). Celebration of student success. Review of the assessment efforts indicated room for improvement in how Ethical skills are assessed. A more consistent approach is being formalized to assure assessment of all students.	AACSB 2023-2024
Accounting (MS)	AACSB Report and equivalent to those of the M.B.A. program https://www.uml.edu/academics/provost-office/student-success/business/mba-learning-outcomes.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Exam created by an external organization (e.g. licensure exam (please specify), Exit exam created by the program/ department Alumni survey that contains self-reports of learning outcome achievement/ preparation, Employer meeting/ survey/interview about student learning outcome achievement, Interviews or focus groups that contain self-reports of learning outcome achievement	Course instructor(s) assessed evidence from their own students, Standing faculty committee, Department chairperson, Dean or administrator, Program Coordinator and Accounting Advisory Board. Used a rubric or scoring guide, Scored exams/tests/ quizzes, Used professional judgment (no rubric or scoring guide used), Compiled survey results, Used qualitative methods on interview, focus group, or open-ended response data. Discussed in the AQAD Report	Assessment tool or procedure changes Curriculums were revisited the results were not up to the mark, Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes, Program policy changes, Student support/student experience changes, Celebration of student success. The program coordinator and the department faculty revisited the minimum GMAT and TOEFL requirements. Additionally, the group revisited the requirements for electives and prerequisites. Department added instruction on tax software, FASB codifications, data analytics, etc	AACSB 2023-2024
Business Analytics (MS)	AACSB Report and equivalent to those of the M.B.A. program https://www.uml.edu/academics/provost-office/student-success/business/mba-learning-outcomes.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Oral performance (oral presentation, conference presentation) Interviews or focus groups that contain self-reports of learning outcome achievement	Course instructor(s) assessed evidence from their own students, Persons or organization outside UMass Lowell, Other: MSBA Program Coordinator. Scored exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used) The general approach to assessment is being discussed by faculty teaching in the program. It is expected that individual faculty members will determine assignments that best match with the program learning objectives. Input from advisory board members is being collected and will be incorporated into the assessment plan.	Program policy changes, Celebration of student success. (1) Improve curriculum coherence; (2) Improve sequence of course offerings; (3) Adjust program pre-requisites. Results are forthcoming	Awaiting first review
Entrepreneurship (MS)	https://www.uml.edu/catalog/graduate/business/masters/ms-entrepreneurship-innovation.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Oral performance, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements). Student survey that contains self-reports of learning outcome achievement	Assessments were initiated through the Graduate Programs Committee (GPC) during the Summer of 2016. The college-level objectives of Analytical Skills and Global Awareness were assessed using same SurveyMonkey assessment tool that was used by the MBA for both Global Awareness and Analytical Skills objectives. Survey of students including self-report of learning.	We added a Global Awareness module to the Capstone course We required that their group projects incorporate a global markets component. We changed the name of the program from Masters of Science in Innovation and Technology Entrepreneurship (MSITE) to Masters of Science in Entrepreneurship (MSE) We are currently evaluating possible curriculum changes	AACSB 2023-24
Finance (MS)	AACSB Report and equivalent to those of the M.B.A. program https://www.uml.edu/academics/provost-office/student-success/business/mba-learning-outcomes.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment. Exam created by an external organization (e.g. licensure exam Chartered Financial Analyst (CFA) Certification Level I exam for investment professionals. Interviews or focus groups that contain self-reports of learning outcome achievement	All departmental faculty members participate in assessment decisions. We collectively decided to assess analytical skills and global awareness learning objectives in the first round. We did assessment based on evidence generated internally, such as percentage of student scores in exams and assignments.	Based on the assessment results, we decided to restrict the waiver of some admission requirements such as GMAT and TOEFL because many students with such waivers were not able to adjust the level of rigor required by the MSF curriculum. We also decided to offer more courses on campus instead of just offering them online because the online medium was not suitable for some students in terms of their ability to learn certain topics. The faculty came to the conclusion that we need to collect more evidence related to assessment that includes sending surveys to program alums.	AACSB 2023-2024

Business Administration (MBA) Accounting Business Analytics Entrepreneurship Finance Information Technology Healthcare International Business Managerial Leadership Marketing	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/business/mba-learning-outcomes.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Exit exam created by the program/department, Oral performance (oral presentation, conference presentation) Program exit survey.	Global Awareness and Analytical Skills were assessed using a questionnaire with content specific questions covering these topics. Participation was voluntary. We have rubrics available for all program learning outcomes.	We've seen that we have inconsistencies in coverage of global awareness in the curriculum and will work with faculty to ensure that the courses have cases covering this objective. We are also adding analytics electives and a Business Analytics option to the MBA, which will give the program more electives that are computational. We are in the process of implementing course-based assessment to mirror what is being done with ELOs at the undergraduate level, and reviewing potential external assessment tools for some outcomes.	AACSB 2023-2024
Business Administration (BSBA) Accounting Analytics & Operations Management Entrepreneurship Finance International Business Management Management Info Systems Marketing	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Exam created by an external organization (e.g. licensure exam) Oral performance, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements), Employer meeting/survey/interview about student learning outcome achievement, Student reflection (essay, portfolio, self-assessment) of their learning outcome, Student survey that contains self-reports of learning outcome achievement	The Assessment committee determines the schedule for assessments to spread out the work and learning outcomes across years, ensuring that each outcome is measured at least twice in the 5 year AACSB cycle. The Manning School of Business has developed a survey instrument to test the learning of some of the outcomes, rubrics for use to evaluate in course assignment for some outcomes, and a feedback mechanism for internships and projects including feedback from employers. The survey tool was used for 3 years and the past year has been spent evaluating its effectiveness as a tool. Feedback from AACSB reviewers expressed concern about our ability to use the results to benchmark to other peer and aspirant peer schools. We are reviewing the potential use of externally validated assessment tools for some program learning outcomes (e.g. ETS business school instrument).	See https://www.uml.edu/msb/about-us/assurance-learning-center/ The results also demonstrated a need to continue to build on the analytics presented to students so they have reinforcement of the skills in their concentration courses. The Accounting department and the Operations and Information Systems department are actively engaged in developing opportunities to explore applications of analytics in accounting. Guest speakers are being brought in to support both faculty and students in exploring this important analytical topic. The finance department has worked to formalize the coverage of material to better prepare students for the professional CFA exam. This includes integrating Bloomberg data system skills and development of practical applications of financial theories.	AACSB 2023-2024
Business Administration (AS)	Internally within the Department	Course outcomes	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	No results of assessment activities were reported.	AACSB 2023-2024
Zuckerberg College of Health Sciences					
Applied Biomedical Sciences (MS)	Internally within the Department	Monitoring of student academic performance; course evaluations; graduate exit interviews and surveys; retention and graduation rates	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Results of assessment activities were not included in the 2022-23 AQAD report.	AQAD 2022-2023
Applied Biomedical Sciences (BS) Clinical Science Medical Laboratory Science Pre-Medical/Pre-Health	Department catalog page and https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Exam created by an external organization, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements) Medical Laboratory Scientist Board of Certification Exam offered by ASCP (American Society for Clinical Laboratory Science). Alumni survey that contains self-reports of learning outcome achievement/preparation, Employer meeting/survey/interview about student learning outcome achievement, Student survey that contains self-reports of learning outcome achievement	The MLS Program has a Continuous Assessment and Quality Improvement Plan in place that outlines identifiable assessment methods, outcome measures, and timelines for the systematic review of the effectiveness of the program. This includes: Faculty Evaluations, Course Evaluations, Medical Laboratory Science Board of Certification Exam Scores, Clinical Affiliate Evaluations, MLS Program Evaluations, Graduate Exit Surveys, Alumni Surveys, and Employer Surveys. Clinical Affiliate Evaluations are completed by students following each of their clinical practicum experiences. These evaluations are used to assess the clinical instructors and student preparation for the clinical experience. MLS Program Evaluations are completed by clinical instructors following each clinical practicum experience. This survey is used to assess the clinical experience, educational preparedness of the students, and overall program effectiveness. A Graduate Exit Survey evaluates program resources, learning experiences in the program, and readiness to enter the workforce. Employer surveys are administered every two years to assess the performance of program graduates in the workplace. The MLS Program Director in consultation with the Department Chair determines what will be assessed. This is also outlined as part of our accreditation standards.	Curriculum changes (new degree requirements or other structural changes beyond the course level, Program policy changes, Student support/student experience changes. As mentioned above, the program used feedback from surveys to initiate a curriculum restructure. We are currently in the process of moving that forward. Once the new curriculum is in place, we will monitor the effectiveness of the changes by continuing to monitor ASCP-Board of Certification Exam pass rates, graduation/attrition rates, and placement rates. In addition, the surveys listed above will continue to be used to monitor student, graduate, clinical instructor, and employer feedback. A specific question or set of questions related to the curriculum restructure may be added to further evaluate this change. 76% licensure passage rate in 2022 improved from 69% in 2021.	AQAD 2022-2023 NAACL 2017 Next review 2027
Nursing (PhD)	Internally within the Department	Qualifying exam and dissertation with public defense, student exit surveys, retention and graduation rates	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Not included in 2022-23 AQAD report.	AQAD 2022-2023
Nursing (DNP)	https://www.uml.edu/health-sciences/nursing/programs/doctoral/dnp/	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Exit exam created by the program/department, Oral performance, Portfolio of student work, Student publication, grant proposal, or other work with a specific external audience, Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements), DNP scholarly project. Alumni survey that contains self-reports of learning outcome achievement/ preparation, Student reflection (essay, portfolio, self-assessment) of their learning outcome, Student survey that contains self-reports of learning outcome achievement	Course instructor(s) assessed evidence from their own students, Standing faculty committee, Department chairperson, Dean or administrator Used a rubric or scoring guide, Scored exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used), Compiled survey results, Used qualitative methods on interview, focus group, or open-ended response data. Individual faculty are evaluated per MSP contract Outcomes studied are: how effective the teaching was, how good the book and assigned readings were, teaching techniques, how much the student thought s/he learned, meeting the DNP essentials and in which course, what change occurred in the student's career as a result of earning the DNP degree. These assessments were decided upon by the faculty to align with the DNP essentials and DNP competencies and align with criteria established by CCNE.	We are currently in the process of planning curriculum changes in the DNP program. This will include a proposal for the startup of a Post Baccalaureate-to-DNP program. The results of the student surveys indicated no need for change in the Post Master's DNP Program. The proposed development of the Post Baccalaureate-to-DNP program is in direct response to changing markets and the need for preparing for the anticipated requirement in 2025 for the DNP degree to be required for professional certification as an APRN. A student post-graduation survey showed that the student respondents were either completely satisfied or satisfied with their outcomes post-graduation, and all of the graduates were functioning in a leadership role as a result of their DNP degree	AQAD 2022-2023 CCNE 2016 Next review 2026

Nursing (MS) <i>Family Health Nursing Practitioner</i> <i>Adult-Gerontological Nursing</i>	https://www.uml.edu/health-sciences/nursing/programs/masters/masters.aspx	Assignment/exam/paper completed as part of regular coursework and used for program-level assessment, Capstone work product, Oral performance, Portfolio of student work, Student publication, grant proposal, or other work with a specific external audience. Qualifying or comprehensive exam for program-level assessment in addition to individual student evaluation, supervisor or employer evaluation of student performance outside the classroom, Thesis or dissertation used for program-level assessment in addition to individual student evaluation. Alumni survey that contains self-reports of learning outcome achievement/preparation, Employer meeting/survey/interview about student learning outcome achievement, Interviews or focus groups that contain self-reports of learning outcome achievement	For the AQAD report, we used formal surveys from current students and alumni and they also came to campus for a group meeting with the evaluators. For the AQAD report we had the curriculum mapped to demonstrate its congruence with the national standards for PhD in nursing programs. We mapped the course objectives to program objectives as well. Similarly, we had another extra School of Nursing review in 2017 and external reviewers interviewed PhD and other graduate students about the program. Once per semester, the PhD Program Committee evaluates course descriptions, learning objectives and how they meet the program objectives. In addition we review student program on qualifying examinations, course progression and dissertation progress monthly.	Curriculum changes (new degree requirements or other structural changes beyond the course level, Student support/student experience changes. As noted we have partnered with 2 other departments (Criminology and Psychology) to take their 2 courses for statistics with their PhD students on a trial basis starting in Fall 2018. No additional discoveries to report here. Program students have had a 96-100% passage rate for the Family Nurse Practitioner Certification since 2018. They have had a 92-100% passage rate for the Adult-Gerontology Primary Care NP Certification since 2018.	AQAD 2022-2023; CCNE 2106 Next review 2026
Nursing (BS)	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Clinical faculty meet with students weekly to assess progress towards CCNE required skills. Standardized testing.	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually. Standardized test scores are analyzed and mapped to curriculum.	Students in the program have had a 91-100% passage rate for the RN Pre-Licensure exam since 2018.	CCNE 2016 Next review 2026
Nutritional Science (BS) <i>General Science</i> <i>Nutrition & Wellness</i> <i>Dietetics</i>	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Monitoring of student academic performance; course evaluations; graduate exit interviews and surveys; retention and graduation rates	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Results of assessment activities were not included in the 2022-23 AQAD report.	AQAD 2022-2023
Pharmaceutical Sci (PhD) <i>General</i> <i>Clinical Research</i> <i>Drug Discovery</i> <i>Medicinal Chemistry Nanopharmacology</i> <i>Nuclear Pharmacology & Imaging</i> <i>Pharmacogenomics</i>	Internally within the Department	Qualifying exam and dissertation with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Initial AQAD report pending	New program, awaiting first review
Pharmaceutical Sci (MS)	Internally within the Department	Qualifying exam and thesis with public defense	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	Initial AQAD report pending	New program, awaiting first review
Pharmaceutical Sci (BS) <i>Pharmaceutical Marketing & Management</i>	https://www.uml.edu/academics/provost-office/student-success/student-learning-outcomes/	Capstone course	Department faculty collect/analyze student work to determine their level of achievement, investigate curriculum coherence annually.	AQAD report pending	New program, awaiting first review
Physical Therapy (DPT)	https://www.uml.edu/catalog/graduate/health-sciences/physical-therapy/doctoral-program.aspx	<ul style="list-style-type: none"> National Physical Therapy Exam Alumni survey that contains self-reports of learning outcome achievement/preparation Employer meeting/survey/interview about student learning outcome achievement, Interviews or focus groups that contain self-reports of learning outcome achievement Student survey that contains self-reports of learning outcome achievement Surveys of clinical education faculty for assessments on the students Feedback from our advisory Board 	Course instructor(s) assessed evidence from their own students, Standing faculty committee, Ad hoc exams/tests/quizzes, Used professional judgment (no rubric or scoring guide used), Compiled survey results, Used qualitative methods on interview, focus group, or open-ended response data, External organization/person analyzed data (e.g. licensing exam), Curriculum committees, faculty, department chair/Program Director, ad hoc committees, Associate Program director, Director and Associate Director of Clinical Education. Outcomes studied were passing rates, graduation rates, licensure passing rates, employment rate, clinical experiences pass rates. Approach taken was: discussion, surveys, focus groups, summarizing surveys, graphing.	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.), Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes, Program policy changes, Student support/student experience changes, Celebration of student success, Results indicated no action needed because student work met expectations. We have formed subcommittees to evaluate the entire program. We make changes to the curriculum according to findings. We plan a thorough evaluation to continue over the next 2 years. Course changes,	AQAD 2021-2022 CAPTE 2020 Next review 2030-2031
Exercise Science (BS) <i>Clinical</i> <i>Exercise & Fitness Mgmt</i> <i>Pre-Physician Assistant</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Supervisor or employer evaluation of student performance outside the classroom (Internship, clinical, practicum placements), Exit survey. Employer meeting/survey/interview about student learning outcome achievement, Student reflection. Student survey that contains self-reports of learning outcome achievement, practicum employer meeting	Course instructor(s) assessed evidence from their own students, Ad hoc faculty group, Department chairperson, Program Director. Used a rubric or scoring guide, Used professional judgment (no rubric or scoring guide used), Compiled survey results, Used qualitative methods on interview, focus group, or open-ended response data. EP Program Curriculum committee decided what would be assessed, reviewed and made changes over time. Program curriculum committee assesses both student learning outcomes and program outcomes were assessed.	Assessment tool or procedure changes (SLOs revised, curriculum maps or rubrics created or altered, communications with faculty, course evaluation items or surveys created, etc.), Curriculum changes (new degree requirements or other structural changes beyond the course level, Personnel or resource allocation changes, Program policy changes, Student support/student experience changes, Celebration of student success. As indicated above. We plan to evaluate the effectiveness of changes at our year end faculty retreat and reassess.	AQAD 2021-2022
Public Health (MPH) <i>Epidemiology</i> <i>Healthcare Management</i> <i>Social & Behavioral Sciences</i> <i>Dietetics</i>	https://www.uml.edu/health-sciences/public-health/programs-of-study/masters/mpm.aspx	Curriculum Committee makes recommendations on program level assessment processes.	Curriculum Committee recommendations are brought to the department faculty for approval and implementation.	Curriculum changes (new degree requirements or other structural changes beyond the course level. Curriculum changes aligned the curriculum with CEPH competencies. MPH Dietetics had 100% passage rate in 2021; this rate has steadily rising since 2019, when the rate was 67%.	CEPH accreditation application pending after campus self-study and visit 2022-2023
Health Information Management (MS) <i>Health Informatics</i>	https://www.ahima.org/education-events/academic-center/resource-pages/academic-curricula/	Thesis and oral defense	The syllabi for the nine core courses and all elective courses; identifies applicable AHIMA graduate level core health information management competencies that may be achieved through the successful completion of coursework.	Not specified in initial 2022 CAHIM application.	CAHIM 2022-2023 Next review 2030-2031
Public Health (BS) <i>Health Sciences</i> <i>Community Health/Health Promotion</i>	Department catalog page and https://www.uml.edu/academics/provost-office/student-learning-outcomes/	Curriculum Committee makes recommendations on program level assessment processes.	Standing faculty committee, Department chairperson. Used professional judgment (no rubric or scoring guide used). The undergraduate curriculum committee worked over a 2 year period to align the curriculum with the competencies outlines in the Council on Education in Public Health (CEPH).	Curriculum changes (new degree requirements or other structural changes beyond the course level. Other.. Used to enhance the curriculum to meet CEPH competencies.	CEPH accreditation application pending after campus self-study and visit 2022-2023

E-Series Forms: Making Assessment More Explicit
Option E1: Part B. Inventory of Specialized and Program Accreditation

(1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name).	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.). *	(5) Date and nature of next scheduled review.
College of Fine Arts, Humanities, and Social Sciences				
Art (BFA) National Association of Schools of Art and Design (NASAD)	2017 Accredit	• Completion and proper operation of ventilation system for Expanded Media Fabrication Lab	• Senior capstone • Juried exhibitions • Alumni survey	2025-2026 Comprehensive review
Education – Teacher Preparation Programs <i>Elementary Education & Moderate Disabilities (BA)</i> <i>Curriculum & Instruction – Initial Licensure (MED)</i> <i>Reading & Language (MED, EDS)</i> <i>Education Administration, K-12 (MED)</i> Massachusetts Department of Elementary & Secondary Education (DESE)	2017 Accredit	No issues identified	• MTEL Exam: state educator licensure • Alumni survey • Action research project • Case study/action plan • MA Preservice Performance Assessment • Mentor teacher survey • Employer survey	2024-2025 Comprehensive Review
Music Graduate and Undergraduate Programs in Performance National Association of Schools of Music (NASM)	2016 Accredit	No issues identified	• Panel/jury evaluation each semester • Recitals with adjudication • Composition projects	2023-2024 Comprehensive review
Music Sound Recording Technology (BM) National Association of Schools of Music (NASM)	2016 Accredit	No issues identified	• Job placement rates • Alumni surveys	2023-2024 Comprehensive review
Music Sound Recording Technology (MM) National Association of Schools of Music (NASM)	2016 Accredit	No issues identified	• Job placement rates • Alumni surveys • Thesis or project	2023-2024 Comprehensive review
Music Business (BM) National Association of Schools of Music (NASM)	2016 Accredit	No issues identified	• Internship	2023-2024 Comprehensive review
Francis College of Engineering				
Chemical, Civil, Computer, Electrical, Mechanical and Plastics Engineering (BSE) Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET)	2019 Accredit	• Improve assessment of student learning with use of direct evidence • Balance faculty and staff lines with growing enrollment	• Performance targets of 11 student outcomes • Capstone design portfolio • GPA outcomes • Graduating student exit survey • Individual course surveys • NCEES Fundamentals of Engineering (FE) exam • Employment rate • Alumni survey • Traditional faculty evaluations	2024-2025 Comprehensive review
Electronic Engineering Tech (BET) Mechanical Engineering Tech (BET) Engineering Technology Accreditation Commission (ETAC) of the Accreditation Board for Engineering and Technology (ABET)	2021 Accredit	• Measurable continuous improvement: provide additional evidence of student learning outcomes assessment data	• Projects • Laboratory performance • Laboratory reports • Oral presentations and/or exams that assess performance criteria for each outcome • Alumni and employer surveys	2026-2027 Comprehensive review
Kennedy College of Sciences				
Physics and Applied Physics, Radiological Sciences- Medical Physics (PhD) Commission for Accreditation of Medical Physics Educational Programs (CAMPEP)	2018 Accredit	• Feedback not filed	• Qualifying comprehensive examination • Capstone project • GPA • Dissertation	2023-2024 Comprehensive review underway
Medical Physics (MS) Commission for Accreditation of Medical Physics Educational Programs (CAMPEP)	2018 Accredit	• Feedback not filed	• GPA • Thesis	2022-2023 Comprehensive review underway
Radiological Sciences and Protection (MS) Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET)	2019 Accredit	• Feedback not filed	• Thesis or project • Technical presentations • Laboratory reports • Internship • Course grades • Alumni surveys • Employer surveys	2023-2024 Comprehensive review underway
Physics and Applied Physics, Radiological Health Physics (BS) Commission for Accreditation of Medical Physics Educational Programs (CAMPEP)	2017 Accredit	• Feedback not filed	• Laboratory reports • Capstone project • Internship • GPA • Exit interviews • Alumni surveys • Employer surveys	2022-2023 Comprehensive review

Manning School of Business				
All programs Association to Advance Collegiate Schools of Business, International (AACSB)	2019 Accredit	• Sufficient faculty and staff for size of program	• Exit surveys • Written case analysis • Exams • Presentations • Projects • Alumni survey • Graduate exit survey • E-portfolios	2023-2024 Comprehensive Review
Zuckerberg College of Health Sciences				
Applied Biomedical Sciences - Medical Laboratory Science (BS) National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)	2017 Accredit	• Use of outcomes measures for curriculum and program improvement, resource allocation • Change control for annual reporting practices	• Student exit survey • Employer survey • National Credentialing Agency for Laboratory Personnel (NCA) exam • Alumni survey • Graduation rates • Job placement rates	2026-2027 Comprehensive Review
Public Health - Dietetics (MPH) (Coordinated Program) Accreditation Council for Education in Nutrition and Dietetics (ACEND)	2019 Accredit	No issues identified	• Authentic assessment of AHIMA graduate level core competencies as mapped across the nine core courses in the program. Program designed assessments, grading schemata, evaluation methods.	2028-2029 Comprehensive Review
Nutritional Science - Dietetics (BS) Accreditation Council for Education in Nutrition and Dietetics (ACEND)	2022 Accredit	No issues identified	• Data for KRDN competency/ performance indicator assessment drawn from authentic course assignments as reflected in the curriculum map.	2027-2028 Comprehensive Review
Health Informatics & Management (MS) Commission on Accreditation for Health Informatics and Information Management (CAHIIM)	2023 Accredit (initial)	• Clarify curriculum summaries for "Body of Knowledge" requirements in Patho., Pharm., A&P, and Medical Terminology	• Authentic assessment of AHIMA graduate level core competencies as mapped across the nine core courses in the program. Program designed assessments, grading schemata, evaluation methods.	2030-2031 Comprehensive Review
Nursing (DNP) Commission on Collegiate Nursing Education (CCNE)	2021 Accredit	No issues identified	• Preceptor and clinical site evaluations • Overall and course GPA • Rubric evaluation of coursework • Student surveys • Alumni surveys	2030-2031 Comprehensive review
Nursing (MS) Commission on Collegiate Nursing Education (CCNE)	2016 Accredit	No issues identified	• American Academy of Nurse Practitioners (AANP) or American Nurses Credentialing Center (ANCC) certification exam • Alumni surveys • Employer satisfaction surveys	2025-2026 Comprehensive review
Nursing (BS) Commission on Collegiate Nursing Education (CCNE)	2016 Accredit	• Implementation of articulated plan to improve NCLEX-RN results	• National Council Licensure Examination for RNs (NCLEX-RN) • Alumni surveys • Employer satisfaction surveys	2025-2026 Comprehensive review
Physical Therapy (DPT) Commission on Accreditation of Physical Therapy Education (CAPTE)	2021 Accredit	No issues identified	• National Physical Therapy Association licensure exam (NPTE) • Graduation rate • Graduating student surveys • Employment rate	2030-2031 Comprehensive review
Public Health (MPH) Council of Education for Public Health (CEPH)	2023 Candidate for Accreditation	n/a	n/a	Spring 2023 Initial review with on-site evaluation



University of Massachusetts

Annual Financial Report 2022





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University Administration

As of November 2022

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Letter from the President

Dear Friends,

I am pleased to present the annual financial report of the University of Massachusetts, which details the university's financial position and activities over the past year and highlights our steadfast commitment to active fiscal management and accountability.

Over the last two plus years, we have continued to adapt to pressing challenges that the COVID-19 pandemic created. In fiscal year 2022, we experienced a return to relatively normal operations and the transition of students back to our campuses.

Despite the challenging economic environment of the last few years, we have maintained strong enrollment of over 74,000 students and graduated the Class of 2022 with roughly 18,000 students earning degrees. Our research portfolio rose to a record \$752 million — behind only Harvard and MIT in the state — with research concentrated in areas critical to the Commonwealth's innovation economy. UMass was also recognized as the number one public university in New England by Times Higher Education.

Our Amherst, Boston, Dartmouth, and Lowell campuses continued to be nationally ranked top-tier institutions by the U.S. News & World Report, and UMass Chan Medical School was ranked among the best in the country.

We have continued to focus on affordability and accessibility of our programs. During fiscal year 2022, we froze tuition for in-state students and increased institutional financial aid available to students while maintaining the outstanding academic quality that ensures student success.

These efforts have distinguished UMass as a well-managed university, and external evaluators have taken notice. This past March, Moody's reaffirmed the University's Aa2 credit rating with a stable outlook, citing strong management, excellent strategic positions, and disciplined fiscal oversight.

I am proud of what our administration, faculty and staff have achieved this past fiscal year, and I'm confident that our university community is prepared to face the opportunities and challenges that lie ahead. Together, we will ensure UMass continues to fulfill its critical mission to "provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world."

Sincerely,

Martin T. Meehan
President

Report of Independent Auditors



KPMG LLP
Two Financial Center
60 South Street
Boston, MA 02111

Independent Auditors' Report

Board of Trustees of the
University of Massachusetts:

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and the aggregate discretely presented component units of the University of Massachusetts (the University), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the University's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the University, as of June 30, 2022 and 2021, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions. The financial statements of the University of Massachusetts Foundation, Inc. were not audited in accordance with *Government Auditing Standards*.

Emphasis of Matters

Reporting Entity

As discussed in Note 1, the financial statements of the University are intended to present the financial position, the changes in financial position, and, where applicable, cash flows of only that portion of the business-type activities, each major fund, and the aggregate discretely presented component units of the Commonwealth of Massachusetts that is attributable to the transactions of the University. They do not purport to, and do not, present fairly the financial position of the Commonwealth of Massachusetts as of June 30, 2022 and 2021, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles. Our opinions are not modified with respect to this matter.

Adoption of New Accounting Pronouncements

As discussed in note 1, in 2022, the University adopted Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, and GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. Our opinions are not modified with respect to this matter.

KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.



Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and required supplementary information as listed in the accompanying table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.



Other Information

Management is responsible for the other information included in the annual financial report. The other information comprises the University administration and letter from the president but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 15, 2022 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

KPMG LLP

Boston, Massachusetts
December 15, 2022



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Management's Discussion and Analysis (unaudited)

June 30, 2022

Introduction

This Management's Discussion and Analysis (MD&A) provides an overview of the financial position and activities of the University of Massachusetts (the University or UMass) for the fiscal years ended June 30, 2022 and 2021, and should be read in conjunction with the accompanying financial statements and notes. The financial statements, notes and this discussion are the responsibility of management.

The University of Massachusetts was established in 1863 as the Massachusetts Agricultural College, located in Amherst. Since then it has grown into a system that is nationally and internationally known for the quality of its academic programs and the scope and excellence of its faculty research. From Nobel Prize-winning research in gene-silencing to research in critical areas such as renewable energy, nanotechnology, cybersecurity, life sciences and marine science, the University of Massachusetts is expanding the boundaries of knowledge and opening doors of discovery that benefit the Commonwealth of Massachusetts (Commonwealth), the nation and the world. UMass consistently ranks as one of the best, most innovative universities in the world.

UMass Amherst is the flagship campus of the University. True to its land-grant roots, UMass Amherst is engaged in research and creative work in all fields and is classified by the Carnegie Foundation for the Advancement of Teaching as a doctoral university with the "highest research activity". Major areas of emphasis include climate science, food science, alternative energy, nano manufacturing, polymer science, computer science and linguistics. Consistently rated as a "Top Producer of Fulbright Students," UMass Amherst is ranked 26th among the nation's top public schools in the 2022 *U.S. News & World Report*.

UMass Boston is nationally recognized as a model of excellence for urban public research universities. Located on Boston Harbor, it is the metropolitan area's only public research university. UMass Boston's distinguished intellectual contributions span the social sciences, education, health

and wellness. With a student population that represents 136 countries, UMass Boston is committed to educating people from modest-income backgrounds, first-generation college students and those from urban areas here and abroad.

UMass Dartmouth distinguishes itself as a vibrant university dedicated to engaged learning and innovative research resulting in personal and lifelong student success. Located on 710 acres on the south coast of Massachusetts, UMass Dartmouth offers students high-quality academic programs through undergraduate majors and professional and doctoral programs, including the state's only public law school.

UMass Law, which is part of UMass Dartmouth and the only public law school in Massachusetts, is committed to providing an excellent, affordable, and accessible legal education that balances legal theory, doctrine, skills, experience, and professionalism. UMass Law prepares students to thrive in a changing profession and advances justice through research, writing, teaching, learning, and practice. UMass Law's February 2022 Massachusetts first-time bar passage rate was 82%, the fourth highest passage rate of the Massachusetts law schools.

UMass Lowell is ranked 87th among the nation's top public schools within the 2022 *U.S. News & World Report*, with programs supporting workforce and economic development through innovation, entrepreneurship and public-private partnerships. UMass Lowell prepares students emphasizing experiential learning through cooperative education, service and research.

UMass Chan Medical School founded in 1962 and situated in Worcester, is the Commonwealth's only public medical school and the University's Nobel-prize winning health sciences education and research campus. In September of 2021, the Medical School received an endowment gift of \$175 million from The Morningside Foundation with annual distributions from the fund to be used for unrestricted purposes by the Medical School. In recognition of this transformational gift, the Medical School was renamed to the UMass Chan Medical School (UMass Chan). UMass Chan's three graduate schools were also renamed

in recognition of this gift: the T.H. Chan School of Medicine, the Morningside Graduate School of Biomedical Sciences, and the Tan Chingfen Graduate School of Nursing. Consistently ranked by *U.S. News & World Report* in the top 10 percent of medical schools in the U.S. for primary care training, UMass Chan has remained true to its founding mission while also becoming globally recognized in biomedical research. Unique among medical schools, UMass Chan is also home to Commonwealth Medicine, a health care consulting division that partners with states and the federal government in delivering health services to vulnerable populations; and MassBiologics, the only non-profit, FDA-licensed manufacturer of vaccines and biologics in the nation.

UMass Global, in September of 2021, the University acquired Brandman University to expand educational opportunities for adult learners. This agreement officially launched UMass Global, a nonprofit blended component unit of UMass that delivers expanded online educational opportunities to adult learners in Massachusetts, across the nation and around the globe through a strengthened technology platform and tailored student support services. In addition to providing new educational opportunities, UMass Global will also streamline efforts to build workforce development partnerships with local and national employers, community colleges, other educational partners, non-profits, government agencies, and the U.S. military.



Financial Management

Accountability Framework

The University has strengthened its long-term fiscal outlook by adopting a framework for financial accountability. The framework is based on four key tenets:

- **Oversight:** independent and objective assurance that analyzes data, processes, policies and controls
- **Internal Controls:** standard processes designed to provide reasonable assurance regarding the achievement of objectives
- **Transparency:** reliable, timely information that is accessible and understandable
- **Risk Management:** systematic approach to identifying, assessing and managing risks across the organization.

FIGURE 1 –UMass Financial Accountability Framework



Through the accountability framework, the University has made consistent improvement in its financial management in a number of areas.

- Identifying and assessing systemwide risk mitigation strategies focused on University's Top 10 risks;
- Developing and evaluating multi-year financial forecasts to guide policy and programmatic decisions;
- Reporting of complete and accurate financial results through a quarterly close process;
- Developing and evaluating quarterly projections to monitor performance and make resulting operational adjustments;
- Tracking student enrollment data in real time to quickly observe trends that may impact campus projections;
- Implementing and tracking creative, high-impact cost containment strategies across its campuses, including expanding the University's shared services initiative;

- Building out UM-Plan, the University's budgeting application, to utilize tool's built-in best practices to develop more accurate projections and scenario planning;
- Addressing deferred maintenance by developing targets and utilizing dashboards to track progress;
- Creating a reserve policy to mitigate unforeseen events, advance University priorities, and maintain strong credit ratings;
- Tracking several key financial ratios: operating margin, operating cash flow margin, debt service and financial leverage ratios, to evaluate the University's fiscal health and performance against peer institutions; and
- Monitoring available cash and short-term investments available to support daily operations: operating liquidity.

Using this framework, the University continues to work towards strategic goals to ensure financial sustainability, mitigate risk, deliver efficient operations, and to ensure access and affordability to students while improving our capacity to deliver quality service to our customers.

COVID-19 Response

The University engaged all four quadrants of the accountability framework in FY2022, FY2021 and FY2020 to ensure the University could evaluate real-world impacts, forecast potential impacts, and withstand the harsh financial reality the COVID-19 pandemic created. Activities included:

- Leveraging the University system-wide Enterprise Risk Management program to coordinate COVID-19 response and mitigation activities across the University system, including actively tracking and sharing data, facilitating access to testing and personal protective equipment, sharing near real-time information on COVID-19 updates and requirements placed on higher education, and facilitating information-sharing to support bringing full student populations back on our campuses (*Risk Management, Transparency*);
- Conducting sensitivity analysis to account for the various revenue and expense impacts related to the implementation of COVID-19 response and mitigation plans (*Oversight*);
- Adding a new metric, operating liquidity, to the suite of key financial ratios tracked regularly (*Oversight, Transparency*);
- Developing a cash-flow forecasting model, with flexibility to forecast based on varying scenarios (*Internal Controls, Oversight, Transparency*);
- Restructuring cash management planning, including executing a line of credit in May 2021 and renewing line of credit in May 2022 (*Internal Controls, Oversight, Transparency*);
- Increasing level of proactive resource demand management, contract re-negotiation and sourcing efforts to limit cost exposures to the campuses (*Risk Management, Oversight*); and
- With guidance from the Advisory Working Group on Financial Planning, developing and launching a new dashboard using real-time information to provide campuses access to key financial information on academic programs and assist them in their planning (*Oversight, Transparency*).

Shared Services Initiatives

At a time of financial challenge for public higher education, the University must continuously push itself to find more efficient ways of doing business. In that spirit, in 2019 President Meehan called for the development and implementation of a shared services model of delivering administration and finance services to the campuses. The resulting plan, developed by a team of subject matter experts that included representatives from each campus, delineated the application of a shared services model for accounts payable and procurement. This effort also laid the foundation for the exploration of future efficiencies.

To implement this plan, the University formally kicked off its Unified Procurement Services Team (UPST) in January 2020, led by a new University Chief Procurement Officer. Comprised of a team of procurement professionals from across the UMass system, they were tasked with providing high-quality services while driving transaction efficiency. The UPST supports the campuses in cost optimization through proactive commodity sourcing and contracting with innovative suppliers and partners that support the UPST in delivering on its "better, faster, and cheaper" mission. The team manages approximately \$1 billion in





third-party spend annually and approximately 30,000 suppliers and partners. The UPST manages this through leveraging optimized technology, data-driven business intelligence, training, and enhanced operational processes.

Since its inception through June 2022, the UPST has achieved \$87.1 million in annualized cost benefits. This was achieved through more than 280 initiatives across all campuses and the UMass President's Office. The resulting system benefits reached five times the target savings of \$16.5 million and 5 times the return on investment to date of \$16.1 million.

To continue 'better, faster, cheaper' services, a robust pipeline of process improvement, cost benefit and recovery projects has been developed. The UPST has identified dozens of additional projects to optimize services over the coming 18-24 months which are expected to result in continued savings, efficiencies, and process improvements for the University. Included in these projects is a system-wide effort to automate and integrate travel and expense technology, drive UMass-wide proactive sourcing practices and contracts adoption, and deployment of updated vendor performance guidelines that continue to help UMass manage risk while optimizing cost benefits to the system. Programs to increase supplier diversity and environmental sustainability considerations across the vendor portfolio are rolling out to match the values of the University System.

Based on the success of the UPST, the University began its second shared service initiative in FY2022 with a focus on payroll services. The University has created a roadmap, identified campus priorities, and drafted a preliminary design of future

processes. To deliver on these initiatives, the UMPO Employee Services Team (EST) was established in October 2021, and a system-wide payroll director was hired. The EST will be working in FY2023 to improve delivery of system-wide employee services including payroll services, HR application management, and customer service.

Using the Annual Financial Report

The University's financial statements are prepared in accordance with U.S. generally accepted accounting principles as prescribed by the Government Accounting Standards Board (GASB), which establishes financial reporting standards for public colleges and universities. The University's significant accounting policies are summarized in Note 1 of the accompanying financial statements, including further information on the financial reporting entity.

This report includes the University's Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, and the Statements of Cash Flows for the fiscal years ended June 30, 2022 and 2021, as well as certain required supplementary information. The University's net position (the difference between assets, deferred outflows, deferred inflows, and liabilities) is one indicator of the University's financial health. Over time, increases or decreases in net position are indicators of the improvement in or erosion of an institution's financial health when considered together with non-financial factors such as enrollment levels and the condition of facilities.

Statements of Net Position include all assets and liabilities, as well as deferred inflows and outflows of resources of the University. Net position is further broken down into three categories: net investment in capital assets, restricted and unrestricted. Amounts reported in net investment in capital assets represent the historical cost of property and equipment, reduced by the balance of related debt outstanding and depreciation expense charged over the years. Net position is reported as restricted when constraints are imposed by third parties, such as donors or enabling legislation. Restricted net position is either non-expendable, as in the case of endowment gifts to be held in perpetuity, or expendable, as in the case of funds to be spent on scholarships and research. All other assets are unrestricted; however, they may be committed for use under contract or designation by the Board of Trustees (the Board). Note 17 to the accompanying financial statements depicts the designations of unrestricted net position at June 30, 2022 and 2021, respectively.

Statements of Revenues, Expenses and Changes in Net Position present the revenues earned and expenses incurred during the year. Activities are reported as either operating or non-operating, as prescribed by GASB. According to the GASB definitions, operating revenues and expenses include tuition and fees, grant and contract activity, auxiliary enterprises and activity for the general operations of the institution not including appropriations from state and federal sources. Non-operating

revenues include appropriations, capital grants and contracts, gifts, investment income, and non-operating federal grants (such as Pell grants, and COVID-19 related Higher Education Emergency Relief Fund grants). With a public university's dependency on support from the state, Pell grants, and gifts, it is common for institutions to have operating expenses exceed operating revenues. This is because the financial reporting model prescribed by GASB classifies state and federal appropriations, Pell grants, and gifts as non-operating revenues. Due to the materiality of the state appropriations upon which the University relies, these appropriation amounts are included in certain analyses throughout this MD&A as operating revenue. The utilization of capital assets is reflected in the financial statements as depreciation expense, which amortizes the cost of a capital asset over its expected useful life. Depreciation expense is considered an operating expense.

Statements of Cash Flows present cash receipts and payments of the University. The purpose of these statements is to present the sources of cash coming into the University, how that cash was expended, and the change in the total cash balance during the year.

Notes to the Financial Statements present additional information to support the financial statements. Their purpose is to clarify and expand on the information in the financial statements.



Required Supplementary Information (RSI) presents additional information that differs from the basic financial statements in that the auditor applies certain limited procedures in reviewing the information. In this report, RSI includes schedules of the University's proportionate share of the Massachusetts State Employees' Retirement System (MSERS) pension liability and other postemployment benefits (OPEB) liability, contributions to the MSERS pension and OPEB plans and related ratios, and this MD&A.

Reporting Entity

The financial statements of the University include financial activities of the following blended component units: the University of Massachusetts Building Authority (Building Authority), Worcester City Campus Corporation and Subsidiary (WCCC), the University of Massachusetts Global (UMG), the University of Massachusetts Medical School Foundation, the University of Massachusetts Amherst Foundation and the University of Massachusetts Lowell Applied Research Corporation (UMLARC). The individual financial statements of the Building Authority can be obtained by contacting the Building Authority directly: www.umassba.net. The individual financial statements of UMG can be obtained on www.guidestar.org.

Separate Statements of Financial Position and Statements of Activities are presented in this report for the University's discretely presented component units, the University of Massachusetts Foundation, Inc. (UMF), and the University of Massachusetts Dartmouth Foundation, Inc. (UMDF). The statements for these entities are presented in accordance with Financial Accounting Standards Board (FASB) standards, which differ from GASB standards in certain areas such as reporting of pledges to endowment and net position. The individual financial statements of each foundation can be obtained by contacting the foundations directly: www.umassfoundation.org for UMF and giving@umassd.edu for UMDF.

University of Massachusetts Foundation, Inc.

UMF was established in 1950 to foster and promote the growth, progress and general welfare of the University, and to solicit, receive and administer gifts and donations for such purposes. UMF maintains a portion of the University's investment portfolio, predominantly the endowment, quasi-endowment investments, and certain other investments. The total investments held at UMF on behalf of the University at June 30, 2022, 2021 and 2020 were \$915.0 million, \$1.1 billion and \$923.7 million, respectively.

University of Massachusetts Dartmouth Foundation, Inc.

UMDF was established in 1973 to raise funds for the development and improvement of the academic and educational environment for students at the Dartmouth campus and the continued engagement of its alumni. In addition to holding investments for the University, UMF holds a significant portion of the UMDF

investments. The total investments of UMDF at June 30, 2022, 2021 and 2020 were \$61.6 million, \$76.1 million and \$57.8 million, respectively, of which \$61.2 million, \$74.4 million and \$56.0 million is invested with UMF, respectively.

Financial Highlights

In March 2020, the World Health Organization declared a pandemic as a result of the novel coronavirus (COVID-19). As cases began to increase in the country and in Massachusetts, the University suspended in-person education and other campus-based activities and provided refunds to students for a portion of their residence and dining fees during FY2020. The University took significant budget actions across all campuses to address the resulting loss of revenue. These actions included salary freezes, furloughs, and targeted operating and personnel reductions as well as multiple non-personnel strategies including halting or delaying capital projects. Due to the ongoing pandemic, campus operations in FY2021 continued predominantly online and classes were held remotely. Some campus operations resumed in a limited fashion during the second half of FY2021, in accordance with CDC and Massachusetts guidelines. Beginning with the Fall semester of FY2022, all campuses resumed full campus operations.

The University was awarded \$255.6 million under the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan of 2021 (ARPA), collectively provided under the Higher Education Emergency Relief Fund (HEERF). An additional \$3.0 million was awarded under the Governor's Emergency Education Relief Funds. The total funding is split into awards specifically for students and others specifically for use by the University to cover costs related to significant changes to the delivery of instruction due to the coronavirus, partial recovery of lost revenue, and can also be used to provide additional aid to students. The University provided emergency financial aid grants to students of \$72.3 million and \$27.1 million and 14.7 million in FY2022, FY2021 and FY2020, respectively. An additional \$70.4 million, \$54.9 million and \$13.9 million was used to recover a portion of lost revenue and additional financial aid to students in FY2022, FY2021 and FY2020, respectively. The remaining unspent funds are expected to be used, and corresponding revenue recognized, in FY2023.

In Fall 2021, the University acquired Brandman University in exchange for \$139.3 million. As part of the transaction, the University launched UMass Global (UMG), a private, nonprofit institution, provides online degree and certificate programs in a wide range of disciplines, serving adult learners. UMG maintains a robust and scalable service and technology platform, allowing for the delivery of a wide variety of primarily online certificate and degree programs, including employer-funded degree programs and competency-based education (CBE). UMG offers over 90 undergraduate, graduate (including two professional doctoral programs), credential, certificate, and non-degree credit programs in the fields of education, arts and sciences,

business and professional studies, and nursing. These programs are offered through fully online and hybrid (online and face-to-face) modalities at the UMG campus in Irvine, California and at 24 satellite campuses located in California and Washington (including six United States military bases).

Selected financial highlights for the fiscal year ended June 30, 2022 include:

- Postemployment benefit expenses related to GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75) and GASB 68, *Accounting and Reporting for Pensions* (GASB 68) have a significant impact on the operating margin results. Gains and losses from these GASB standards are heavily impacted by economic conditions and actuarial assumptions outside of the University's control. The University's FY2022 income before other revenues, expenses, gains, and losses was \$187.6 million for FY2022, including a gain of \$107.5M from GASB 68 and GASB 75. Excluding the impact of these GASB standards the University's income before other revenues, expenses, gains, and losses was a \$80.1 million.
- From FY2021 to FY2022, the University's operating revenues increased by \$418.0 million, largely due to auxiliary services returning to normal operations during FY2022. Operating expenses increased by \$221.7 million primarily driven by the return of campus operations to prepandemic levels. Non-operating revenues increased \$37.7 million primarily attributed to continued funding received under HEERF

and an increase in state appropriations. As a result, the University's net position increased \$160.8 million from \$2.6 billion in FY2021 to \$2.7 billion in FY2022.

- During FY2022, the University adopted the requirements of GASB 87 effective July 1, 2021 and has applied the provisions of this standard to the beginning of the earliest comparative period presented on the financial statements. As a result of recording lease assets and related lease liabilities as well as lease receivables and related deferred inflows of resources, the beginning net position in fiscal year 2021 was reduced by \$1.9 million.

Net Position

Condensed schedules of net position for the University at June 30, 2022, 2021, and 2020, respectively, are presented in **Figure 2**.

Assets totaled \$8.8 billion, \$8.3 billion, and \$7.6 billion at June 30, 2022, 2021, and 2020, respectively. These balances are primarily driven by capital assets net of accumulated depreciation, which remain stable in the three years presented.

Liabilities totaled \$5.4 billion, \$5.7 billion and \$5.4 billion at June 30, 2022, 2021, and 2020, respectively. The majority of the University's long-term liabilities in all three years are long-term debt and pension and OPEB liabilities.

Net position represents the difference between total assets and total liabilities, and in addition to capital, includes cash,

FIGURE 2 – Condensed Schedule of Net Position

As of June 30, 2022, 2021, and 2020 (\$ in thousands)

Net position	2022	2021	2020*
Assets			
Current assets	\$ 1,347,213	\$ 1,172,142	\$ 1,156,836
Noncurrent assets – Capital assets, net	5,527,062	5,435,274	5,206,569
Noncurrent assets – All other noncurrent assets	1,975,000	1,712,544	1,225,544
Total assets	8,849,275	8,319,960	7,588,949
Deferred outflows of resources	433,998	551,553	531,271
Liabilities			
Current liabilities	783,441	740,806	680,069
Noncurrent liabilities	4,666,224	4,946,592	4,750,458
Total liabilities	5,449,665	5,687,398	5,430,527
Deferred inflows of resources	1,085,656	596,953	256,926
Net position			
Net investment in capital assets	2,281,471	2,307,233	2,376,333
Restricted – Nonexpendable	22,515	22,378	22,252
Restricted – Expendable	262,669	232,833	223,803
Unrestricted	181,297	24,718	(189,621)
Total net position	\$ 2,747,952	\$ 2,587,162	\$ 2,432,767

* Does not reflect adoption of GASB-87

liquid investments, as well as non-cash items and illiquid investments. Total net position was \$2.7 billion, \$2.6 billion and \$2.4 billion at June 30, 2022, 2021 and 2020, respectively. The largest component of net assets for the University remains the net investment in capital assets which held steady between \$2.3–\$2.4 billion for the three years presented.

Unrestricted net position increased in both FY2022 and FY2021 due to operating cost reductions, unfilled staffing and faculty positions, and increased non-operating revenues from pandemic related federal funding received under HEERF. In FY2022, auxiliary operations returned to normal offsetting some of the losses experienced during FY2021 and FY2020. FY2020

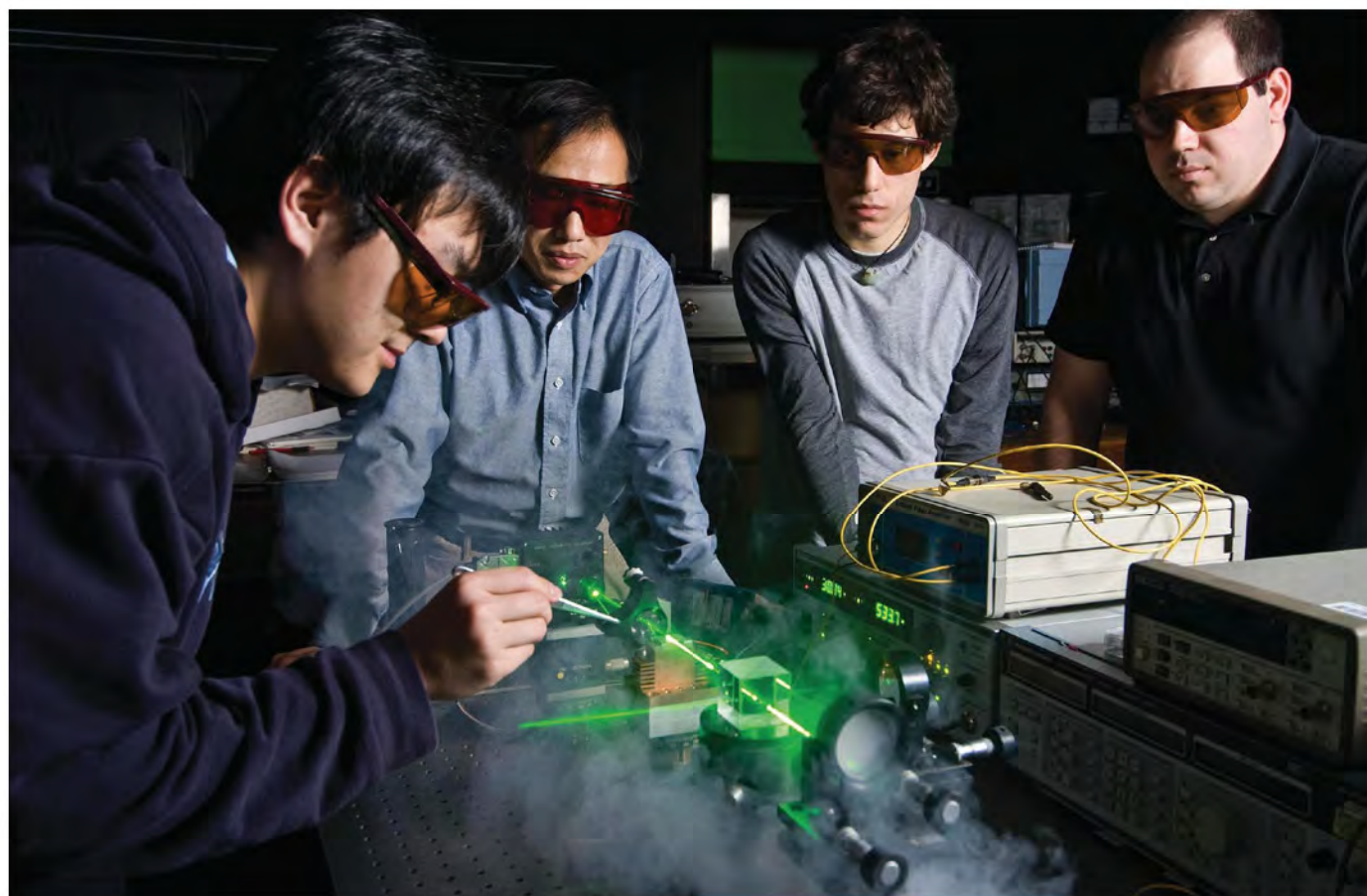
had a negative unrestricted net position, due to large employee postemployment benefits (pension and OPEB) liabilities totaling \$1.3 billion.

As of June 30, 2022, the University's endowment, held at UMF, experienced a decrease of \$165.0 million from \$1.1 billion in FY2021 to \$915.0 million in FY2022. The reduction is the result of a period of economic downturn after a year of historic returns experienced in FY2021. In FY2021, the University rebalanced its portfolio and currently splits its portfolio between long and short term horizons. **Figure 3** shows the liquidation and rebalancing of the University's investments from FY2020 to FY2022.

FIGURE 3 – Investment Liquidation and Rebalancing

As of June 30, 2022, 2021, and 2020 (\$ in thousands)

Investment	2022	%	2021	%	2020	%
Short-term investments	\$ 787,356	43%	\$ 639,162	35%	\$ 620,771	45%
Long-term investments	1,052,299	57%	1,163,888	65%	748,689	55%
Total investments	\$ 1,839,655	100%	\$ 1,803,050	100%	\$ 1,369,460	100%



Revenues, Expenses, and Changes in Net Position

Condensed schedules of revenues, expenses, and changes in net position of the University for the three years ended June 30, 2022, 2021, and 2020, are presented in **Figure 4**.

FIGURE 4 – Condensed Schedules of Revenues, Expenses, and Changes in Net Position

For the years ended June 30, 2022, 2021, and 2020 (\$ in thousands)

Revenue and expense	2022	2021	2020*
Operating revenues			
Tuition and fees, net of scholarships	\$ 1,007,124	\$ 930,613	\$ 917,876
Grants and contracts	719,479	667,149	581,850
Auxiliary enterprises	434,129	163,821	378,314
Other operating revenues	560,561	541,720	547,990
Total operating revenues	2,721,293	2,303,303	2,426,030
Operating expenses	3,601,764	3,380,022	3,437,442
Operating loss	(880,471)	(1,076,719)	(1,011,412)
Nonoperating revenues (expenses)			
Federal appropriations	5,588	5,953	6,774
State appropriations	880,003	845,481	810,518
Interest expense	(117,244)	(109,144)	(109,186)
Nonoperating federal grants	221,628	173,592	115,601
Other nonoperating income	78,061	114,412	99,753
Total nonoperating revenues (expenses)	1,068,036	1,030,294	923,460
Income (loss) before other revenues, expenses,			
Gains and losses	187,565	(46,425)	(87,952)
Other revenues, expenses, gains and losses			
Capital appropriations, grants and other sources	95,908	71,120	59,041
Endowment return, net of amount used for operations	(148,089)	148,514	(2,917)
Other additions (deductions)	25,406	(16,869)	(7,787)
Total other revenues, expenses, gains, and losses	(26,775)	202,765	48,337
Total increase (decrease) in net position	160,790	156,340	(39,615)
Net position			
Effect on beginning net position due to GASB-87 restatement	-	(1,945)	-
Net position at the beginning of the year, as restated	2,587,162	2,432,767	2,472,382
Net position at the end of the year	\$ 2,747,952	\$ 2,587,162	\$ 2,432,767

*Does not reflect adoption of GASB-87

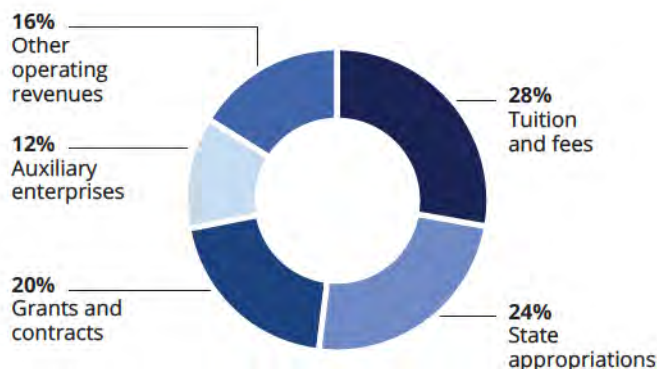
Operating Revenues and Expenses

While not classified on the financial statements as operating revenue, state appropriations serve as a primary source for funding the core mission of the University. State appropriations revenue, described in detail below, is used almost exclusively to fund payroll for University employees, and as such is considered to be operating revenue for management's planning and analysis purposes. The University's operating revenue, including state appropriations, increased by \$452.5 million to \$3.6 billion in FY2022, primarily due to auxiliary revenues returning to normal operations, increases in grants and contracts, and the addition of UMG's tuition and fee revenues. In FY2021 and FY2020 operating revenues remained essentially flat at approximately \$3.2 billion due to the impact of COVID-19 on operations, primarily on auxiliary revenues in the second half of FY2020 and all of FY2021 which was offset by an increase in grants and contracts and state appropriations from FY2020 to FY2021.

As noted in Figure 5, over 50% of the University's FY2022 operating revenues were from tuition and fees and state appropriations. Auxiliary enterprises revenue includes housing and dining revenue. These three revenue categories make up the primary revenue sources related to providing student with an academic education and combined make up 60% of the University's operating revenue.

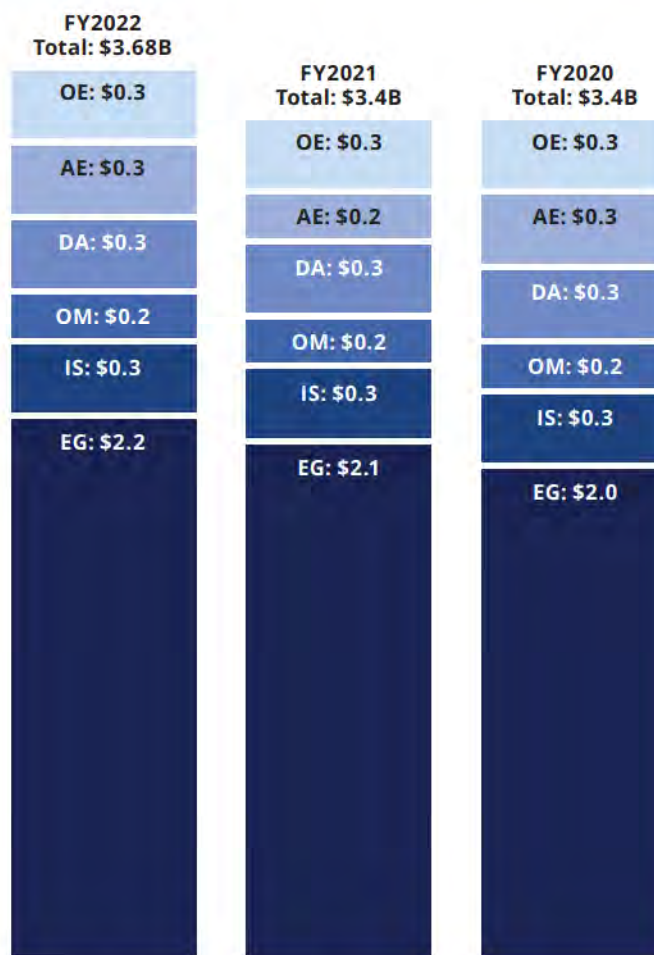
Other operating revenues include revenues generated from CWM programs. These programs provide public consulting and services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. In addition to CWM activities, other operating revenues also include revenue earned by UMass Chan for educational services it provides to its clinical affiliate UMass Memorial Health Care, Inc. (UMass Memorial) as required by the enabling legislation enacted by the Commonwealth in 1997. Grants and contracts revenue includes federal, state and privately sponsored research and other programs.

FIGURE 5 – Fiscal Year 2022 Operating Revenues (including State Appropriations)



In FY2022, operating expenses, including depreciation and amortization, totaled \$3.6 billion, as compared to \$3.4 billion in FY2021 and FY2020. Of the FY2022 total, \$2.2 billion or 61.1% was used to support the academic core activities of the University, including \$551.4 million in research. The education and general portion of the three-year operating expenses shown in Figure 6 represents expenses in the following functional categories: instruction, research, public service, academic support, student services and scholarships and fellowships. Public service activities expense, included in education and general, include payments made to the Commonwealth pursuant to requirements of legislation enacted by the Commonwealth.

FIGURE 6 – Three Year Operating Expenses by Function
(\$ in billions)



Key
 EG = Education and general
 IS = Institutional support
 OM = Operation and maintenance of plant
 DA = Depreciation and amortization
 AE = Auxiliary enterprises
 OE = Other expenditures

State Appropriations

In FY2022, state appropriations represented approximately 23% of all revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriations are unrestricted revenue, nearly 100% of the state appropriations support payroll and benefits for University employees. In addition to the direct state appropriation there are several smaller appropriations that add to the total state support for the University. While these smaller line items are in support of campus-specific programs and do not support general University operations, they are included in the state appropriations line in the accompanying financial statements, and in the state appropriations line in **Figure 7**.

The Commonwealth pays fringe benefits for University employees paid from state appropriations. Therefore, such fringe benefit support is added to the state appropriations financial statement line item in the accompanying Statements of Revenues, Expenses and Changes in Net Position. The University pays the Commonwealth for the fringe benefit cost of the employees paid from funding sources other than state appropriations. These amounts are not included in state appropriations.

The University's state appropriations including fringe benefits increased in FY2022 by \$34.5 million from FY2021, primarily due to an increase in available state funding and increases in collective bargaining determined by the Commonwealth. The University's state appropriations including fringe benefits increased in FY2021 by \$35.0 million from FY2020 primarily due to an increase in reimbursements for costs related to increases in collective bargaining determined by the Commonwealth and the implementation of the Paid Family Medical Leave (PFML) law.

Figure 7 details the state appropriations for the fiscal years ended June 30, 2022, 2021, and 2020.

State Capital Appropriations

The University faces a financial challenge to maintain and upgrade its capital assets including its infrastructure, buildings and grounds. To have a successful capital program, the

University must rely on a combination of revenue sources to fund its capital investments. In FY2022, FY2021 and FY2020, the capital support provided to the University through appropriations and grants from the Commonwealth was \$87.1 million, \$62.6 million and \$51.5 million, respectively. Beginning in FY2020, the Commonwealth established a strategic framework for approving the allocation of state funding for capital projects across higher education. The new framework provides funding in four distinct categories: major projects, critical repairs, critical infrastructure and readiness determination projects.

Grant and Contract Revenue

Among Massachusetts colleges and universities, the University ranks third in research and development expenditures, behind only the Massachusetts Institute of Technology (MIT) and Harvard University. Most research at the University is externally funded, with the federal government providing a majority of the funding through the National Institutes of Health, the National Science Foundation, and other agencies.

Collectively, UMass Amherst and UMass Chan account for approximately three-quarters of the University's total grants and contracts revenue of \$719.5 million, \$667.1 million and \$581.9 million at June 30, 2022, 2021 and 2020. **Figure 8** details the University's grant and contract revenues by source for the year ended June 30, 2022.

FIGURE 8 – Grant and Contract Revenue FY2022



FIGURE 7 – State Appropriations

For the years ended June 30, 2022, 2021, and 2020 (\$ in thousands)

Appropriation	2022	2021	2020
State appropriations	\$ 618,245	\$ 569,081	\$ 567,612
Plus: fringe benefits	261,758	276,400	242,906
Commonwealth support	\$ 880,003	\$ 845,481	\$ 810,518

Tuition and Fees

Effective for academic year 2022–2023, in-state undergraduate tuition was raised an average of 2.5%, consistent with prepandemic trends. This follows two years of frozen tuition for in-state undergraduate programs. Due to affordability considerations and impacts of the COVID-19 pandemic, in-state undergraduate tuition was frozen for the academic years 2020–2021 and 2021–2022. This resulted in a reduction of \$43.4 million in recurring revenue due to freezing tuition during the COVID-19 period, \$29.1 million in academic year 2021–2022 and \$14.3 million in academic year 2020–2021. Affordability continues to be a priority of the University and increases in fees are considered in conjunction with Commonwealth support on an annual basis.

Enrollment

As shown in **Figure 9**, total enrollment in the fall of 2021 was 64,786 FTE (74,554 headcount students), a decrease of 1.9% over the fall of 2020 enrollment of 66,070 FTE (75,065 headcount students). Enrollment in the fall of 2019 was 66,010 FTE (75,065 headcount students). Although the University experienced a minor decline in the five-year enrollment of .02% from the fall of 2017 – fall of 2021, other institutions of higher education have experienced more significant declines in enrollments over this period. This is consistent with the University's efforts to increase its reach across the Commonwealth and to recruit non-resident students, and is reflective of the quality of the education provided by the University of Massachusetts. Improving student retention remains a key focus of the University's strategic goals to help offset the declining enrollment.

Admission to the University is open to residents of the Commonwealth and non-residents on a competitive basis. For the fall semester, Massachusetts residents accounted for 82.7% of the University's total undergraduate enrollment in fall 2021 and 83.4% in fall 2020, as shown in **Figure 10**.

FIGURE 10 – Fall 2021 Undergraduate Enrollment by Type

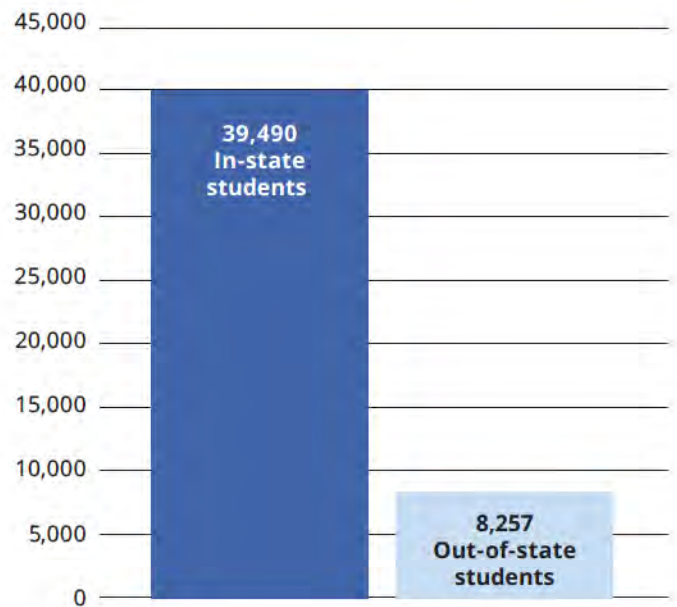
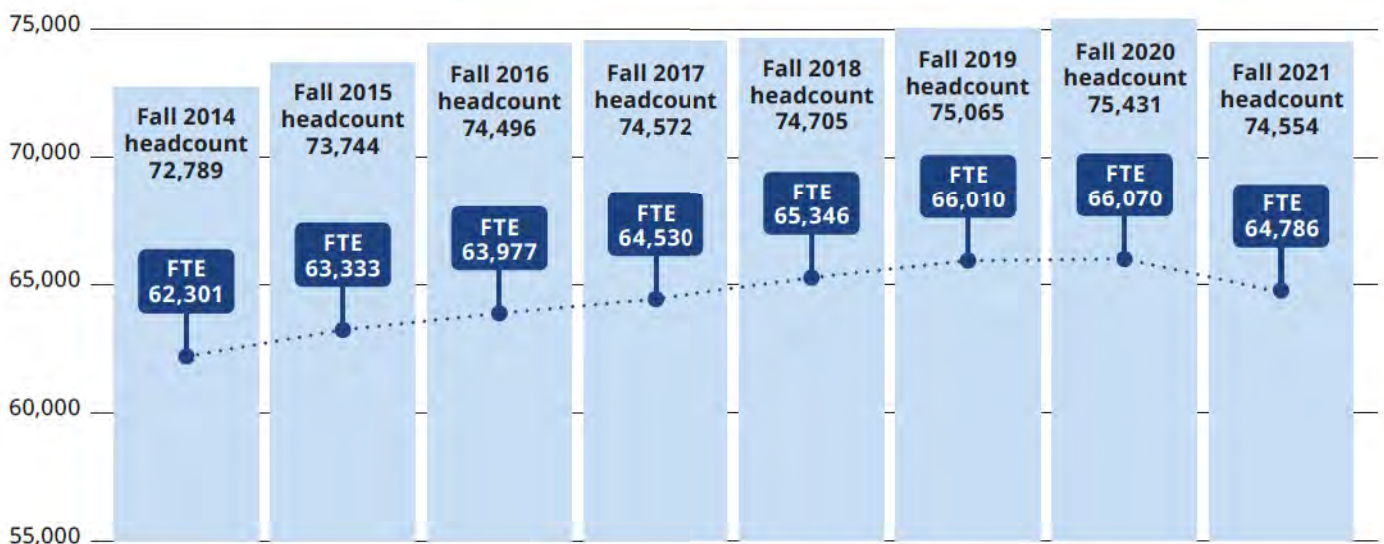


FIGURE 9 – Total Enrollment



Investments Held by UMF

As of June 30, 2022, the University's investments, held at UMF, were reduced by \$165.0 from \$1.1 billion to \$914.8 million. The change in investment value is due to investments losses of \$131.1 million (13.5% annualized return), distributions under the approved spending rule of \$34.9 million, offset by contributions of \$1.0 million. This reduction follows a year of a historic 37.1 percent fiscal year return experienced during FY2021 when the endowment grew by \$156.1 million to \$1.1 billion. Previously, the endowment generated an annualized return of 8.2 percent, exceeding UMF's long-term return objective and reflecting the strategic growth of the portfolio's exposure to global equities and strong partnerships with high caliber investment managers. This ten-year return was produced with annual investment results that ranged from a low of -3.7 percent in FY2016 to 37.1 percent in FY2021, underscoring the importance of having a long-term focus.

In FY2020, the University investments held at UMF totaled \$922.0 million and generated a return of 3.3 percent.

Long-Term Debt

Long-term debt (including commercial paper) is the University's largest liability at June 30, 2022, 2021 and 2020. The University had outstanding long-term debt of \$3.7 billion at June 30, 2022, \$3.3 billion at June 30, 2021 and \$3.2 billion at June 30, 2020. The principal issuer of the University's debt is the Building

Authority. Additional issuers utilized by the University include Massachusetts Health and Educational Facilities Authority (MHEFA), Massachusetts Development Financing Authority (MDFA), UMG and WCCC.

During FY2022, the University issued \$86.7 million in new commercial paper to finance the New Education and Research Building at the Chan Medical School campus, the Substructure Demolition & Quadrangle Development at the Boston campus, and the Science and Engineering Building at the Dartmouth campus with interest rates from .07% to 1.13%.

On March 29, 2022, the Authority issued \$215.0 million of Project Revenue Bonds, Series 2022-1 and \$211.2 million of federally taxable Project Revenue Bonds, Series 2022-2. The 2022-1 bonds included a premium of \$26.3 million. Part of bond proceeds was used to pay off commercial paper, leaving \$20M commercial paper outstanding as of June 30, 2022.

The debt financed through the Building Authority is being used for construction and renovation of residence halls and general education buildings, replacement of core infrastructure, and construction of academic, laboratory, and research facilities. The proceeds from the UMass MHEFA bonds were used to create an internal revolving loan program and to fund the construction of two new campus centers at the Boston and Lowell campuses (funded jointly with the Commonwealth).

For further details on outstanding balances with each issuer, refer to Note 11 of the accompanying financial statements.



University Bond Rating

The University relies on a carefully planned and executed debt strategy to support master and strategic planning at the campuses and for the University as a whole. Bonds issued by the University and the Building Authority are rated Aa2 by Moody's Investor Service, AA by Fitch Ratings, and AA- by Standard and Poor's Global Rating.

During FY2022, all three ratings agencies re-affirmed the University's ratings, citing the University's flagship role in public higher education in Massachusetts, strong fiscal oversight, steady enrollment, positive operating performance, growth in financial resources and solid support from the Commonwealth.

Line of Credit

During FY2021, the University entered into line of credit agreements with Bank of America and State Street Bank with a maximum loan amount of \$75.0 million each, for a total maximum loan amount of \$150.0 million. The lines of credit had a maturity date of May 10, 2022.

During FY2022, the University amended the line of credit agreement with Bank of America for a maximum loan amount of \$150.0 million and allowed the State Street Bank line of credit to expire. The line of credit has a maturity date of May 1, 2023.

As of June 30, 2022, the outstanding balance on the line of credit was \$0.

Limitations on Additional Indebtedness

The University may, without limit, issue additional indebtedness or request the Building Authority to issue additional indebtedness on behalf of the University so long as such indebtedness is payable from all available funds of the University. As noted in the Board of Trustee policy, each campus' debt service cannot exceed 8% of its total operating expenditures.

The Building Authority is authorized by its enabling act to issue bonds with the unconditional guarantee of the Commonwealth for the punctual payment of the interest and principal on the guaranteed bonds. The full faith and credit of the Commonwealth are pledged for the performance of its guarantee. The enabling act, as amended, currently limits to \$200.0 million the total principal amount of notes and bonds of the Building Authority that may be Commonwealth guaranteed and outstanding at any one time. During FY2021, the University retired its remaining Commonwealth guaranteed debt. As of June 30, 2022, the University does not have any outstanding Commonwealth guaranteed debt.

Capital Plan

A majority of the capital spending during FY2022 and FY2021 related to continued investments in deferred maintenance. In September 2021, the University's Board approved an updated five-year capital plan for FY2022–FY2026 totaling \$1.9 billion. The University's capital plan is funded through a combination of University operations, bonds issued by the Building Authority and MHEFA, Commonwealth appropriations, and private fundraising.

The University's five-year capital plan for FY2022–FY2026 includes major projects that were previously approved by the Board in prior-year capital plans. The University's capital approval process provides for a multi-step review process involving the President's Office, the Building Authority and the Board. Additional approvals have been put in place for any capital project seeking alternative funding and/or delivery options.

Factors Impacting Future Periods

There are a number of issues of University-wide importance that directly impact the financial operations of the University. A key continuing factor that continues to impact the University's financial results is the COVID-19 pandemic. Continuing into FY2023 the University continues to monitor the pandemic's impact on enrollment and auxiliary services.

Other issues, such as improving academic quality, ensuring enrollment stability, realizing strong financial results, investing in capital assets, expanding fundraising capacity, operating more efficiently, being the most effective University for students and the Commonwealth given the available resources, and measuring performance are ongoing activities of continuous importance to the Board and University leadership that impact the financial planning each year. Student enrollment, the level of state support, the impact of collectively bargained wage increases, and the ability of student-fee supported activities to meet inflationary pressures determine the limits of program expansion, new initiatives and strategic investments, as well as the ability of the University to meet its core mission and ongoing operational needs.

Contacting the University

This financial report is designed to provide the University, the Commonwealth, the public and other interested parties with an overview of the financial results of the University and an explanation of the University's financial condition. If you have any questions about this report or require additional information, please contact the University Controller's Office by email at generalacctg_inquiry@umassp.edu.

Financial Statements

Statements of Net Position

As of June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

Assets and liabilities	2022	2021
Assets		
Current assets		
Cash and cash equivalents	\$ 121,053	\$ 74,547
Cash held by state treasurer	25,054	22,242
Deposits with bond trustees	11,326	47,075
Accounts receivable, net	336,589	332,324
Lease receivable	16,464	13,561
Short-term investments	787,356	639,162
Other current assets	49,371	43,231
Total current assets	1,347,213	1,172,142
Noncurrent assets		
Cash held by state treasurer	30,177	23,734
Deposits with bond trustees	508,440	186,336
Accounts receivable, net	48,968	44,316
Lease receivable	317,654	277,502
Long-term investments	1,052,299	1,163,888
Other assets	17,462	16,768
Capital assets, net	5,527,062	5,435,274
Total noncurrent assets	7,502,062	7,147,818
Total assets	8,849,275	8,319,960
Deferred outflows of resources	433,998	551,553
Liabilities		
Current liabilities		
Accounts payable and accrued expenses	418,601	422,989
Unearned revenues and advances	126,065	100,044
Lease liability, current portion	15,047	11,322
Long-term debt, current portion	121,662	105,055
Commercial paper notes	20,000	31,000
Other current liabilities	82,066	70,396
Total current liabilities	783,441	740,806
Noncurrent liabilities		
Unearned revenues and advances	73,960	60,559
Lease liability	185,609	189,483
Long-term debt	3,545,711	3,121,427
Net pension liability	276,313	644,879
Net other postemployment benefits liability	485,141	829,808
Other long-term liabilities	99,490	100,436
Total noncurrent liabilities	4,666,224	4,946,592
Total liabilities	5,449,665	5,687,398
Deferred inflows of resources	1,085,656	596,953
Net position		
Net investment in capital assets	2,281,471	2,269,411
Restricted – Nonexpendable	22,515	22,378
Restricted – Expendable	262,669	232,833
Unrestricted	181,297	62,540
Total net position	\$ 2,747,952	\$ 2,587,162

Statements of Revenues, Expenses, and Changes in Net Position

For the years ended June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

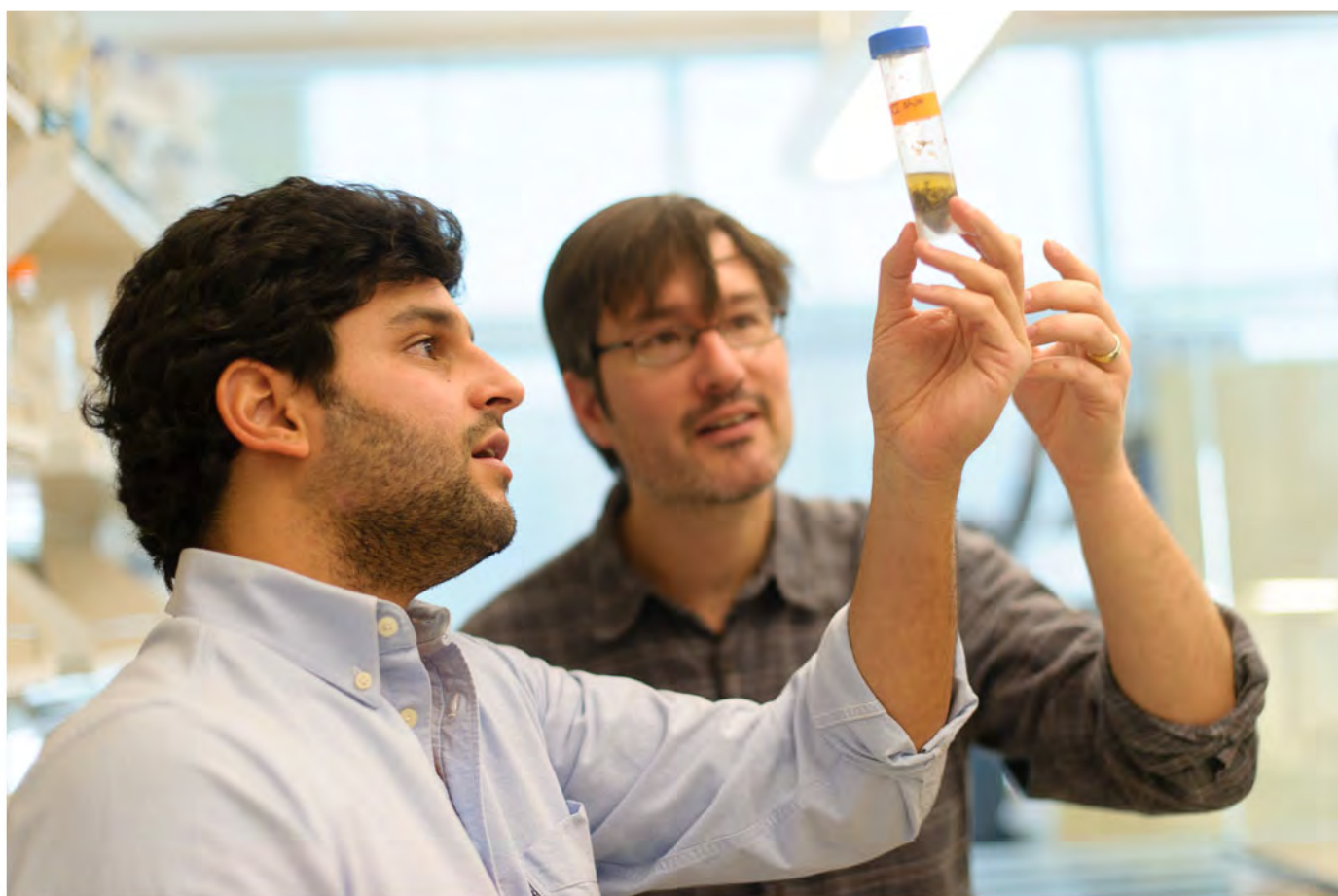
Revenues and expenses	2022	2021
Operating revenues		
Tuition and fees (net of scholarship allowances of \$369,902 at June 30, 2022 and \$345,128 at June 30, 2021)	\$ 1,007,124	\$ 930,613
Grants and contracts	719,479	667,149
Sales and services, educational activities	40,907	30,253
Auxiliary enterprises	434,129	163,821
Other operating revenues:		
Sales and services, independent operations	66,929	50,961
Sales and services, public service activities	321,954	334,567
Other	130,771	125,939
Total operating revenues	2,721,293	2,303,303
Operating expenses		
Educational and general		
Instruction	930,362	934,708
Research	551,367	550,593
Public service	71,649	88,770
Academic support	194,153	199,456
Student services	211,088	141,107
Institutional support	315,810	311,629
Operation and maintenance of capital assets	242,749	221,750
Depreciation and amortization	330,715	318,828
Scholarships and fellowships	121,334	85,500
Auxiliary enterprises	320,535	213,499
Other expenditures:		
Independent operations	58,582	53,485
Public service activities	253,420	260,697
Total operating expenses	3,601,764	3,380,022
Operating loss	(880,471)	(1,076,719)
Nonoperating revenues (expenses)		
Federal appropriations	5,588	5,953
State appropriations	880,003	845,481
Gifts	67,948	41,262
Investment return, net	(24,164)	35,406
Endowment return used for operations	34,944	31,965
Interest expense	(117,244)	(109,144)
Nonoperating federal grants	221,628	173,592
Other nonoperating income (loss)	(667)	5,779
Net nonoperating revenues	1,068,036	1,030,294
Gain/(Loss) before other revenues, expenses, gains, and losses	187,565	(46,425)
Other revenues, expenses, gains and losses		
Capital appropriations	87,062	62,592
Capital grants, contracts and gifts	8,846	8,528
Endowment return, net of amount used for operations	(148,089)	148,514
Other additions (deductions)	25,406	(16,869)
Total other revenues, expenses, gains, and losses	(26,775)	202,765
Total increase in net position	160,790	156,340
Net position at beginning of year, as restated	2,587,162	2,430,822
Net position at end of year	\$ 2,747,952	\$ 2,587,162

Statements of Cash Flows

For the years ended June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

Cash flow	2022	2021
Cash flows from operating activities		
Tuition and fees	\$ 1,106,745	\$ 1,025,916
Grants and contracts	724,415	650,603
Payments to suppliers	(1,055,007)	(817,593)
Payments to employees	(1,766,320)	(1,595,504)
Payments for benefits	(561,537)	(465,580)
Payments for scholarships and fellowships	(122,685)	(89,267)
Loans issued to students and employees	(10,746)	(6,433)
Collections of loans to students and employees	18,619	15,094
Auxiliary enterprises	434,311	162,954
Sales and services, educational	40,750	30,543
Sales and services, independent operations	66,929	50,961
Sales and services, public service activities	312,617	339,788
Student related fiduciary activities inflows	15,012	9,520
Student related fiduciary activities outflows	(11,583)	(6,692)
Other receipts, net	131,112	115,530
Net cash used for operating activities	(677,368)	(580,160)
Cash flows from noncapital financing activities		
Federal appropriations	5,588	5,953
State appropriations	880,003	845,481
Grants, contracts and gifts for other than capital purposes	73,268	41,377
Nonoperating federal grants	221,628	173,592
Other noncapital financing activities	(816)	-
Net cash provided by noncapital financing activities	1,179,671	1,066,403
Cash flows from capital and other financing activities		
Proceeds from debt issuances	486,620	721,153
Proceeds from premiums received	26,327	71,803
Bond issuance costs paid	(2,423)	(3,992)
Swap termination payments	-	(50,938)
Capital appropriations	87,062	62,592
Capital grants and contracts	3,525	8,413
Proceeds from sales of capital assets	47,586	2,668
Purchases of capital assets and construction	(378,227)	(322,341)
Lease receipts	18,200	13,805
Interest on leases	5,180	3,950
Principal paid on debt and leases	(210,816)	(722,552)
Interest paid on debt and leases	(135,125)	(156,636)
Net cash used for capital financing activities	(52,091)	(372,075)
Cash flows from investing activities		
Proceeds from sales and maturities of investments	1,263,822	1,048,212
Interest on investments	25,990	54,561
Purchases of investments	(1,474,851)	(1,325,603)
Cash received from acquisition of subsidiary	76,943	-
Net cash used for investing activities	(108,096)	(222,830)
Net (decrease) increase in cash and cash equivalents	342,116	(108,662)
Cash and cash equivalents - beginning of the year	353,934	462,596
Cash and cash equivalents - end of the year	696,050	353,934

Cash flow	2022	2021
Reconciliation of operating loss to net cash used for operating activities		
Operating loss	(880,471)	(1,076,719)
Adjustments to reconcile loss to net cash used for operating activities:		
Depreciation and amortization expense	330,715	318,828
Changes in assets and liabilities:		
Accounts receivable, net	4,532	(5,275)
Other assets	(430)	12,659
Accounts payable and accrued expenses	(17,623)	85,044
Unearned revenues and advances	668	6,881
Other liabilities	15,352	8,788
Postemployment benefits liability, net	(107,520)	92,330
Fiduciary transactions	2,366	1,081
Changes in deferred inflows related to future revenues	(24,957)	(23,777)
Net cash used for operating activities	(677,368)	(580,160)
Supplemental disclosure of noncash activities		
Assets acquired and included in accounts payable and other liabilities	41,364	49,478
Assets acquired in exchange for lease obligation	483	-
Loss on disposal of capital assets	(10,845)	(12,083)
Donated assets	241	652



Component Unit Statements of Financial Position

As of June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

Component units	2022	2021
Assets		
Cash	\$ 2,654	\$ 733
Pledges receivable, net	170,929	26,499
Other receivables	873	3,200
Investments of the Foundations	1,731,288	1,905,099
Prepaid expenses and other assets	6,644	3,718
Land, property, plant and equipment, net	15,213	15,634
Total assets	1,927,601	1,954,883
Liabilities		
Accounts payable and accrued expenses	3,316	821
Deferred revenue	11,845	2,645
Obligations to beneficiaries of split-interest agreements	2,335	2,581
Assets held on behalf of others	935,331	1,108,178
Total liabilities	952,827	1,114,225
Net assets		
Without donor restrictions	52,776	46,521
With donor restrictions	921,998	794,137
Total net assets	974,774	840,658
Total liabilities and net assets	\$ 1,927,601	\$ 1,954,883



Component Unit Statement of Activities

For the years ended June 30, 2022 and 2021 (with summarized financial information for the year ended June 30, 2020) (\$ in thousands).

Component units	Without donor restriction	With donor restriction	Total 2022	Total 2021
Support and revenue				
Gifts, bequests and grants	\$ 4,176	\$ 281,418	\$ 285,594	\$ 19,810
Other contributions	863	10,545	11,408	5,009
Total investment income, including net gains (losses) – net of fees	(148,169)	(140,965)	(289,134)	374,590
Investment management fee	12,528	-	12,528	12,309
Net assets released from restrictions	21,988	(21,988)	-	-
Total support and revenue	(108,614)	129,010	20,396	411,718
Expenses				
Distributions to University	42,894	(230)	42,664	35,265
Program services	5,546	-	5,546	5,786
Fundraising support	4,706	-	4,706	7,094
Administrative and general, Foundation	2,983	1,189	4,172	2,139
Administrative and general, University	1,185	-	1,185	-
Total expenses	57,314	959	58,273	50,284
Excess of support and revenue over expenses	(165,928)	128,051	(37,877)	361,434
Less: Fiscal year activity related to assets held on behalf of University	164,968	-	164,968	(156,127)
Less: Fiscal year activity related to assets held on behalf of Edward M. Kennedy Institute	7,879	-	7,879	(3,965)
Transfers (from) to other funds	(403)	403	-	-
Other	(261)	(593)	(854)	(343)
Change in net assets	6,255	127,861	134,116	200,999
Net assets, beginning of year	46,521	794,137	840,658	639,659
Net assets, end of year	\$ 52,776	\$ 921,998	\$ 974,774	\$ 840,658



Notes to Financial Statements

1. Summary of Significant Accounting Policies

Reporting Entity

The University of Massachusetts (University or UMass), a federal land grant institution, is governed by Massachusetts General Laws Chapter 75. Its Board of Trustees (Board or Trustees) consists of nineteen voting members and three non-voting members. The voting members consist of two full-time students, the Secretary of Education of the Commonwealth of Massachusetts (Commonwealth) and sixteen members appointed by the governor. The non-voting members consist of student representatives who may only participate in open meetings of the full Board of Trustees.

The University is a business-type activity of the Commonwealth. The financial balances and activities included in these financial statements are, therefore, also included in the Commonwealth's annual comprehensive financial report.

On September 2, 2021 the University completed the transfer of control of Brandman University to UMass. This launched the University of Massachusetts Global (UMG) that will deliver expanded online education opportunities to adult learners. For purposes of financial reporting, beginning in fiscal 2022, UMG is now presented as a blended component unit.

The financial statements of the University include the campuses of Amherst, Boston, Dartmouth, Lowell, Chan Medical School (UMass Chan), and the President's Office of the University, UMG, Worcester City Campus Corporation (WCCC), University of Massachusetts Lowell Applied Research Corporation (UMLARC), the University of Massachusetts Amherst Foundation (UMass Amherst Foundation), University of Massachusetts Medical School Foundation (UMMSF) as well as the University of Massachusetts Building Authority (Building Authority).

The Building Authority is a public instrumentality of the Commonwealth created by Chapter 773 of the Acts of 1960 (referred to as the Enabling Act), whose purpose is to provide dormitories, dining commons, and other buildings and structures for use by the University. The UMLARC is a legally separate 501(c)(3) non-profit corporation which was formed on June 24, 2020. The purpose of UMLARC is to promote efficient and effective applied research and development by entering into grants, contracts, and other contractual mechanisms for services. UMLARC also provides analytic and technology solutions to government and non-government entities to extend the impact of the University's technology enterprise. UMG was launched in September of 2021 and is a California based not-for-profit institution of higher learning. WCCC is a tax-exempt organization founded to support research and real property activities for the University. The UMass Amherst Foundation was established in 2003 to support private fundraising on behalf of the faculty and students of the Amherst campus. The UMMSF was established in 1991 to support fundraising and philanthropic activities of the UMass Chan. These component units are blended in the financial statements of the University because of the significance and exclusivity of their financial relationships with the University. Refer to Note 19 for condensed financial information for these blended component units.

The University also includes the financial information of the University's discretely presented component units, the University of Massachusetts Foundation, Inc. (UMF) and the University of Massachusetts Dartmouth Foundation, Inc. (UMDF). In these financial statements, UMF and UMDF are collectively known as the Foundations. These are related tax-exempt organizations founded to foster and promote the growth, progress and general welfare of the University.

Basis of Presentation

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB) using the economic resources measurement focus and the accrual basis of accounting. The Foundations' financial statements are prepared in accordance with accounting and reporting requirements prescribed by the Financial Accounting Standards Board (FASB). As such, certain revenue recognition criteria and presentation features are different from GASB revenue recognition criteria and presentation features. No modifications have been made to the Foundations' financial information in the University's financial reporting entity for these differences.

The University's activities are considered to be a single business-type activity and accordingly, are reported in a single column in the financial statements. Business-type activities are those that are financed in whole or in part by funds received from external parties for goods or services.

On the Statements of Revenues, Expenses and Changes in Net Position, the University's operating activities consist of tuition and fees, grants and contracts, sales and services, auxiliary enterprise and other operating revenues. Other operating revenues include sales and services provided by UMass Chan under its Commonwealth Medicine (CWM) programs, which provide consulting services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. Also included in other operating revenues are payments received by UMass Chan for educational services it provides to its clinical affiliate, UMass Memorial Medical Center (UMass Memorial).

Operating expenses include, among other items, payroll, fringe benefits, utilities, supplies and services, depreciation, and amortization. Nonoperating revenues or expenses are those in which the University receives or gives value without directly giving or receiving equal value, such as State and Federal appropriations, COVID-19 related Higher Education Emergency Relief Fund (HEERF) revenue, Federal Pell grants, private gifts, and investment income.

Revenues for exchange transactions are recognized when earned and expenses are recognized when incurred. Restricted grant revenue is recognized only when all eligibility requirements have been met. The University applies restricted net assets first when an expense or outlay is incurred for purposes for which both restricted and unrestricted net assets are available.

The University receives unconditional promises to give through private donations or pledges from corporations, foundations, alumni and other supporters of the University. Revenue is recognized when a pledge is received and all eligibility requirements, including time and purpose requirements, are met. Endowment pledges are not recorded until paid because the inherent time restriction has not been met until the funds are able to be invested in perpetuity.

Net Position

Net position is classified into the following categories:

- **Net investment in capital assets:** Capital assets, at historical cost or fair market value on the date of gift, net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction or improvement of those assets.
- **Restricted nonexpendable:** Resources subject to externally imposed stipulations that they be maintained permanently by the University.
- **Restricted expendable:** Resources whose use by the University is subject to externally imposed stipulations. Such assets include restricted grants and contracts, the accumulated net gains/losses on true endowment funds, as well as restricted funds loaned to students, restricted gifts and endowment income, and other similar restricted funds.
- **Unrestricted:** The net position that is not subject to externally imposed restrictions governing their use. The University's unrestricted net position may be designated for specific purposes by management or the Board of Trustees. Substantially all of the University's unrestricted net position is designated to support academic and research initiatives or programs, auxiliary enterprises, quasi-endowments, or commitments to capital construction projects. Note 17 describes these designations in more detail.

Cash and Cash Equivalents

Cash and cash equivalents include cash balances maintained in checking accounts, overnight repurchase agreements and amounts held in permitted money market mutual funds with an original maturity date of three months or less.

Massachusetts Municipal Depository Trust

The University is authorized to invest in the Massachusetts Municipal Depository Trust (“MMDT”), a pooled money market-like fund, established under Massachusetts General Laws, Chapter 29, Section 38A. MMDT is an external investment pool that meets the criteria to report its holdings at amortized cost. As such, the University reports its position in MMDT at amortized cost which approximates the net asset value of \$1.00 (one dollar) per share. MMDT has a maturity of less than one year and is not rated.

Accounts Receivable, Net

Accounts receivable consist of receivables for tuition and fees, grants and contracts, student loans, pledges and CWM related activities. The University establishes an allowance for accounts receivable based on management’s expectation regarding the collection of the receivables and the University’s historical experience for collections.

Investments

Investments are reported at fair value. Short-term investments consist of deposits with original maturities of less than one year and are available for current use. Securities received as gifts are recorded at estimated fair value at the date of the gift. Investment income includes dividends and interest income and is recognized on the accrual basis. In computing realized gains and losses, cost is determined on a specific identification basis.

Endowment

UMF maintains and administers the University’s endowment assets and other long-term investments. UMF utilizes the pooled investment concept whereby all invested funds are included in one investment pool, unless otherwise required by the donor.

Pooled investment funds will receive an annual distribution, based on the endowment fund’s average market value for the preceding twelve quarters on a one-year lag. Only quarters with funds on deposit are included in the average. In addition, a prudence rule is utilized, limiting spending from a particular endowment fund to be no lower than 93% of its carrying value. The spending rate approved for the years ended June 30, 2022 and 2021 was 4%.



Capital Assets

Capital assets (excluding intangible right-to-use lease assets) are stated at cost on the date of acquisition or, in the case of gifts, fair value upon date of donation. Construction in progress is stated at cost, which includes direct construction costs and other expenditures related to construction including capitalized interest, if any. All construction costs related to projects which are not yet completed are charged to construction in progress until such time as the projects are completed and placed in operation. Repairs and maintenance costs are expensed as incurred, whereas major improvements that extend the estimated useful lives of the assets are capitalized as additions to capital assets. The University does not capitalize works of art, historical treasures or library books.

The University capitalizes assets with useful lives greater than one year and acquisition costs greater than or equal to \$5,000. The University computes depreciation using the straight-line method over the asset's useful life and applies a half year convention in the year the asset is acquired or placed in service. Land is not depreciated.

Table 1 presents the range of useful lives for the University's depreciable assets:

TABLE 1 – Depreciable Assets

Depreciable asset category	Useful life
Land improvements	20 years
Buildings	12–50 years
Infrastructure	50 years
Building improvements	3–20 years
Equipment, furniture and IT infrastructure	3–15 years
Software	5 years

Newly implemented accounting standards

i) In June 2017, the Governmental Accounting Standards Board (GASB) issued GASB Statement No. 87, *Leases*. This standard requires the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and as inflows of resources or outflows of resources recognized based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right-to-use an underlying asset. Under this standard, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources.

The University adopted GASB 87 effective July 1, 2020, which resulted in adjustment to its previously reported net position as shown in Table 2 (\$ in thousands):

TABLE 2 – Adjustment to previously reported net position

(\$ in thousands)

Net position	Adjustment
Net position as of July 1, 2020 as previously reported	\$ 2,432,767
Plus implementation of GASB Statement No. 87	(1,945)
Net position as of July 1, 2020, as restated	\$ 2,430,822

In addition to the impact on net position as of July 1, 2020, the adoption of GASB 87 also resulted in immaterial reclassifications to previously reported 2021 amounts including capital assets as well as various other net position balances and corresponding revenues and expenses.

ii) The University adopted GASB Statement 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* as of July 1, 2021. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. Prior to the adoption of GASB 89, during the year ended June 30, 2021, the University capitalized approximately \$7.4 million, net of interest income.

Leasing

The University determines if an arrangement is a lease at inception. The University has leases under which it is obligated as a lessee and leases for which it is a lessor. The University is a lessee for various noncancellable real estate. In addition, the University is a lessor of various leases of buildings, office space and ground leases.

Short-term Leases — For lease arrangements with a maximum possible term of 12 months or less at commencement, the University recognizes expense based on the provisions of the lease contract.

Lease Arrangements Other Than Short-Term — For all other leases (i.e. those that are not short-term), the University recognizes a lease liability, and an intangible right-to-use lease asset.

For leases, where the University is a lessor, the University recognizes a lease receivable and a deferred inflow of resources.

Measurement of Lease Amounts —

- **Lessee:** At lease commencement, the University initially measures the lease liability at the present value of payments expected to be made during the lease term.

Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. If the University is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the underlying asset.

- **Lessor:** At lease commencement, the University initially measures the lease receivable at the present value of payments expected to be received during the lease term.

Subsequently, the lease receivable is reduced by the principal portion of lease payments made. The deferred inflows of resources are initially measured as the initial amount of the lease receivable plus any payments received at or before the commencement of the lease term that relate to future periods. Subsequently, the deferred inflows of resources are amortized into lease revenue on a straight-line basis over the shorter of the lease term or the useful life of the underlying lease receivable.

Key Estimates and Judgments — Key estimates and judgments include how the University determines (1) the discount rate it uses to calculate the present value of the expected lease and subscription payments, (2) lease and subscription term, and (3) lease and subscription payments.

When available, the University will use the interest rate explicitly or implicitly stated in the lease contract. If the rate is not provided within the contract, the University will use its incremental borrowing rate (IBR), based on the University's applicable bond rates. The University's IBR for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments, under similar terms, as of the lease commencement or amendment dates.

The lease includes the noncancellable period of the lease plus any additional periods covered by either a University or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the University and the lessor/vendor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.

Payments are evaluated by the University to determine if they should be included in the measurement of the lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as purchase options, payments for termination penalties, and other payments.

Remeasurement of Lease Amounts — The University monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease liability or lease receivable, the liability or receivable is remeasured, and a corresponding adjustment is made to the lease asset (for lessee arrangements) or deferred inflows of resources (for lessor arrangements).

Presentation in Statement of Net Position — Lease assets are reported with capital assets and lease liabilities are reported within current and non-current liabilities in the Statement of Net Position. Lease receivables are reported with current and non-current assets and deferred inflows of resources in the Statements of Net Position.

Deferred Outflows and Inflows of Resources

The University accounts for certain transactions that result in the consumption or acquisition in one period that are applicable to future periods as deferred outflows and deferred inflows, respectively, to distinguish them from assets and liabilities. Deferred outflows of resources increase net position, similar to assets and deferred inflows of resources decrease net position, similar to liabilities.

The components of deferred outflows and inflows of resources as of June 30, 2022 and 2021 (\$ in thousands) are presented in **Tables 3 and 4**:

TABLE 3 – Deferred Outflows of Resources

As of June 30, 2022 and 2021 (\$ in thousands)

Deferred outflow	2022	2021
Debt refunding	\$ 115,519	\$ 125,201
Certain asset retirement obligations	1,159	1,158
Excess consideration provided for acquisition*	45,435	-
Impact of changes in assumptions and investment value:		
Pension liability	115,027	185,335
Other postemployment benefits liability	156,858	239,859
Total deferred outflows of resources	\$ 433,998	\$ 551,553

*Deferred outflow resulting from the acquisition of Brandman University during FY2022. See Note 8 for further detail.

TABLE 4 – Deferred Inflows of Resources

As of June 30, 2022 and 2021 (\$ in thousands)

Deferred inflow	2022	2021
Future lease revenues	\$ 232,271	\$ 185,502
Sale of future revenues	44,451	54,921
Experience gains for:		
Pension liability	266,206	18,297
Other postemployment benefits liability	542,728	338,233
Total deferred inflows of resources	\$ 1,085,656	\$ 596,953

Compensated Absences

Employees earn the right to be compensated during absences for annual vacation leave and sick leave. Upon retirement, termination, or death, certain employees are compensated for unused sick and vacation leave, subject to certain limitations, at their current rate of pay. Within the Statements of Net Position, a liability is recorded for vacation and sick leave benefits earned as of the fiscal year-end. The recorded liability is classified as current and noncurrent on the Statements of Net Position based on the amount estimated to be paid to eligible employees in one year and beyond one year, respectively.

Unearned Revenue and Advances

Unearned revenue consists of amounts billed or received in advance of the University providing goods or services. Unearned revenue is subsequently earned as qualifying expenses are incurred.

Advances include funds advanced to the University by the U.S. government under the Federal Perkins Loan Program (the Program). Under federal law, the authority for colleges and universities to make new loans under the Program ended on September 30, 2017, and final distributions were permitted through June 30, 2019. The University's Statements of Net Position include both the notes receivable from students and the related refundable loan liability to the Federal government.

Bond Issuance Costs

The University incurs certain costs associated with bond issuances. For the years ended June 30, 2022 and 2021, bond issuance costs amounted to \$2.4 million and \$4.0 million, respectively, and were expensed in accordance with the provisions of GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*.

Tuition and Fees, Net of Scholarship Allowances

Student tuition and fees, housing, dining, and other similar auxiliary revenues are reported net of any related scholarships and fellowships applied to student accounts. However, scholarships and fellowships paid directly to students are separately reported as scholarships and fellowships expense.

Grants and Contracts

The University receives grants and contracts for research and other activities including medical service reimbursements from federal and state government agencies. The University records revenue at the point all eligibility requirements (e.g. allowable costs are incurred) are met.

The University records the recovery of indirect costs applicable to research programs and other activities which provide for the full or partial reimbursement of such costs, as revenue. Recovery of indirect costs for the years ended June 30, 2022 and 2021 was \$173.4 million and \$141.4 million, respectively, and is a component of grants and contracts revenue on the Statements of Revenues, Expenses, and Changes in Net Position.

As a result of the COVID-19 pandemic, the University was awarded \$255.6 million of COVID-19 assistance, collectively provided under the Higher Education Emergency Relief Fund (HEERF), of which \$253.3 million has been recognized to date. An additional \$3.0 million was awarded under the Governor's Emergency Education Relief Funds. Under Section 18004(a)(1) of the CARES Act, Section 314(a)(1)



of CRRSAA and ARPA, the University provided emergency financial aid grants to students of \$72.3 million and \$27.1 million for the years ended June 30, 2022 and 2021, respectively. These funds were recognized as revenue under nonoperating federal grants. An additional, \$70.4 million and \$54.9 million for the years ended June 30, 2022 and 2021, respectively, was used to recover a portion of lost revenue and additional financial aid to students. These funds were also recorded under nonoperating federal grant revenue.

Auxiliary Enterprises

An auxiliary enterprise is an activity that exists to furnish a service to students, faculty or staff acting in a personal capacity, and that charges a fee for the use of goods and services.

Fringe Benefits for Current Employees and Postemployment Obligations

The University participates in the Commonwealth's fringe benefit programs, including active employee and postemployment health insurance, unemployment compensation, pension, and workers' compensation benefits. Health insurance and pension costs for active employees and retirees are paid through a fringe benefit rate charged to the University by the Commonwealth. Workers' compensation costs are assessed separately based on actual University experience.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from these estimates. The most significant areas that require management estimates relate to valuation of certain investments and derivative instruments, useful lives and related depreciation of capital assets, and accruals for pension and other postemployment related benefits.

Income Tax Status

The University is exempt from Federal and state income tax under the doctrine of intergovernmental tax immunity. The University qualifies as a public charity eligible to receive charitable contributions under Section 170(b)(1)(A)(v) of the Internal Revenue Code, as amended (the Code).

The University and its component units are required to assess uncertain tax positions and have determined that there were no such positions that are material to the financial statements as of June 30, 2022 and 2021, respectively.

Reclassifications

Certain reclassifications were made in the prior year to conform to current year presentation.

2. Cash Held by State Treasurer

Accounts payable, accrued salaries and outlays for future capital projects to be funded from state-appropriated funds totaled \$55.2 million and \$46.0 million at June 30, 2022 and June 30, 2021. The University has recorded a comparable amount of cash held by the State Treasurer for the benefit of the University, which will be subsequently utilized to pay for allowable expenditures. The cash is held in the State Treasurer's pooled cash account. The Commonwealth requires all bank deposits in excess of insurance coverage by the FDIC to be collateralized with a perfected pledge of eligible collateral. Eligible collateral must be pledged in an amount equal to 102% of the amount of the deposits that exceed FDIC insurance. Sufficient collateral to cover total Commonwealth deposits in excess of the FDIC insured amount must be pledged and held in safekeeping by a custodian that is approved by and under the control of the Commonwealth Treasurer and Receiver - General.

3. Deposits with Bond Trustees

Deposits with bond trustees primarily consist of unspent bond proceeds, amounts held for the future payment of debt service on such borrowings and designated funds from the University's pool loan program.

At June 30, 2022 and 2021, deposits with bond trustees are presented in **Table 5** (\$ in thousands):

TABLE 5 – Deposits with Bond Trustees

As of June 30, 2022 and 2021 (\$ in thousands)

Deposits	2022	2021
Cash	\$ 27,042	\$ 23,904
MMDT	297,003	206,695
Permitted Money Market Accounts	-	2,812
U.S Treasury Securities	195,721	-
Total deposits with bond trustees	\$ 519,766	\$ 233,411

At June 30, 2022, amounts restricted by bond trust agreements for capital projects and other purposes were \$501.5 million and \$18.3 million, respectively.

Custodial Credit Risk — The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. As of June 30, 2022 and 2021, the bank balances of uninsured deposits totaled \$8.5 million and \$7.7 million, respectively.

Interest Rate Risk — Interest rate risk is the extent that changes in interest rates of debt investments will adversely affect the fair value of an investment. These investments include certain short-term cash equivalents, various long-term items and restricted assets by maturity in years. The University minimizes the risk of the fair value of securities falling due to changes in interest rates by ensuring securities have effective maturities of less than a year. MMDT and permitted money market accounts have effective maturities of less than one year, thereby limiting the interest rate risk.

Credit Risk — Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. The risk is measured by the assignment of a rating by a nationally recognized statistical rating organization. MMDT and permitted money market accounts are not rated.

4. Investments

The investment portfolio of the University reflected on the Statements of Net Position for the years ended June 30, 2022 and 2021, respectively, are shown in **Tables 6 and 7** (\$ in thousands):

TABLE 6 – Investment Portfolio

As of June 30, 2022 and 2021 (\$ in thousands)

Investment type	2022	2021
Short-term investments	\$ 787,356	\$ 639,162
Long-term investments	1,052,299	1,163,888
Total	\$ 1,839,655	\$ 1,803,050

Investment policies are established by the Board. The goals of these policies are to preserve capital, provide liquidity, and generate investment income. The University has statutory authority under Massachusetts General Laws, Chapter 75 to collect, manage, and disburse its trust funds. UMF holds certain investments on behalf of the University, referred to as foundation agency funds.

The investment holdings of the University, including foundation agency funds, as of June 30, 2022 and 2021, respectively are summarized in **Table 7** (\$ in thousands):

TABLE 7 – Investment holdings of the University

As of June 30, 2022 and 2021 (\$ in thousands)

University investment holdings	2022	2021
University managed funds		
Cash and cash equivalents	\$ 54,009	\$ 65,009
Money market and other investments	333,002	332,568
MMDT	262,000	117,000
Fixed income investments	269,203	192,738
Commercial ventures and intellectual property	2,564	5,950
Annuity life income funds	4,041	9,980
Total non-agency funds	924,819	723,245
Foundation agency funds		
Pooled investments – Fund I	777,573	920,212
Pooled investments – Fund II	-	9,419
Short term pool	137,263	150,174
Total Foundation agency funds	914,836	1,079,805
Total investments	\$ 1,839,655	\$ 1,803,050

Fund I — represents the endowment funds and University operating cash held at UMF. The endowment funds include both donor-restricted endowments and quasi-endowments. The investment horizon for this portfolio is 5 to 10 years.

Fund II — represents a portion of the operating cash balances of the University that were transferred to UMF for investment purposes only. This portfolio was previously used by the University as an intermediate term investment vehicle. As part of the University's changing investment strategy, Fund II was liquidated as of June 30, 2022.

Short-Term Pool — represents a portion of the operating cash balances of the University that have been transferred to UMF for investment purposes only. This portfolio has a high degree of liquidity. The asset allocation is 25% U.S. equities and 75% short-term corporate bonds. The University Treasurer has the authority to request the return of funds at any time to meet the operating needs of the University.

In addition to foundation agency funds, the Foundations' assets also include investments not reported within the University's Statements of Net Position. Total investments of the Foundations as of June 30, 2022 and 2021, respectively, are summarized in **Table 8** (\$ in thousands):

TABLE 8 – Investment holdings of the Foundations

As of June 30, 2022 and 2021 (\$ in thousands)

Fund	2022	2021
Investments of the Foundations		
Cash and cash equivalents	\$ 40,544	\$ 35,055
Money market and other investments	9,195	6,211
Fixed income investments	384	1,579
Pooled investments – Fund I	762,925	778,979
Annuity life income funds	3,404	3,470
Total non-agency funds	816,452	825,294
Foundation agency funds (Detailed in Table 7)	914,836	1,079,805
Total Foundations investments	\$ 1,731,288	\$ 1,905,099

Custodial Credit Risk — Investment securities are exposed to custodial credit risk if they are uninsured or not registered in the name of the University and are held by either the counterparty or the counterparty's trust department or agent but not in the University's name.

The carrying amounts of cash balances with uninsured or uncollateralized deposits were \$109.6 million and \$113.0 million, at June 30, 2022 and 2021, respectively.

The University held non-money market investments with a fair market value of \$1.1 billion and \$1.0 billion at June 30, 2022 and 2021, respectively. In the event of negligence due to the University's custodian and/or investment manager(s), it is expected that the investment balances would be fully recovered. However, these amounts are subject to both interest rate risk and credit risk.

Concentration of Credit Risk — As of June 30, 2022 and 2021, there is no concentration of investments from one issuer equal to or greater than 5% of the portfolio. Investments issued or guaranteed by the U.S. government, as well as investments in mutual funds and other pooled investments are excluded from consideration when evaluating concentration risk.



Credit Risk — The University's Investment Policy and Guidelines Statement allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager. Nationally recognized statistical rating organizations, such as Standard & Poor's (S&P) assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors.

Table 9 presents the rated debt investments, excluding U.S. Treasury funds, at fair value by credit quality of the University's investment portfolio as of June 30, 2022 (\$ in thousands):

TABLE 9 – S&P Quality Ratings FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	AAA	AA	A	BBB	BB	Unrated	Total
Government agency bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,929	\$ 6,929
Asset backed securities	20,697	1,258	3,869	3,366	-	679	29,869
Commercial mortgage-backed securities	23,103	-	-	1,432	-	2,019	26,554
Government mortgage-backed securities	-	-	-	-	-	16,354	16,354
Non-government backed collateralized mortgage obligations	3,304	-	-	-	-	99	3,403
Corporate bonds	1,312	2,273	41,162	70,506	379	376	116,008
Municipal and provincial bonds	235	4,061	1,549	356	-	351	6,552
Index linked government bonds	-	-	-	-	-	522	522
Bond funds, including exchange traded funds	20	904	603	-	-	103,635	105,162
Total debt securities	\$ 48,671	\$ 8,496	\$ 47,183	\$ 75,660	\$ 379	\$ 130,964	\$ 311,353

Table 10 presents the rated debt investments, excluding U.S. Treasury funds, at fair value by credit quality of the University's investment portfolio as of June 30, 2021 (\$ in thousands):

TABLE 10 – S&P Quality Ratings FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	AAA	AA	A	BBB	BB	Unrated	Total
Government agency bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 869	\$ 869
Asset backed securities	16,130	351	2,211	1,921	-	1,220	21,833
Commercial mortgage-backed securities	14,768	-	-	767	-	2,999	18,534
Government mortgage-backed securities	-	-	-	-	-	11,033	11,033
Non-government backed collateralized mortgage obligations	3,124	365	-	-	-	168	3,657
Corporate bonds	-	1,507	28,490	53,912	615	42	84,566
Municipal and provincial bonds	-	1,424	1,114	379	-	-	2,917
Index linked government bonds	-	-	-	-	-	977	977
Bond funds, including exchange traded funds	-	25	34	1,781	752	112,538	115,130
Total debt securities	\$ 34,022	\$ 3,672	\$ 31,849	\$ 58,760	\$ 1,367	\$ 129,846	\$ 259,516

Interest Rate Risk — The University's Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by limiting investments through targeted allocations to different asset classes.

Table 11 presents the fair value of the rated debt investments component of the University's investment portfolio by investment maturity as of June 30, 2022 (\$ in thousands):

TABLE 11 – Investment Maturity (in years), FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	Less than 1	1 to 5	6 to 10	More than 10	Total
U.S. Treasury securities	\$ -	\$ 89,244	\$ 29,756	\$ 4,515	\$ 123,515
Government agency bonds	-	440	978	5,511	6,929
Asset backed securities	6,369	20,351	3,149	-	29,869
Commercial mortgage-backed securities	5,617	19,135	1,802	-	26,554
Government mortgage-backed securities	2,760	4,908	8,686	-	16,354
Non-government backed collateralized mortgage obligations	-	3,403	-	-	3,403
Corporate bonds	16,126	88,470	11,033	379	116,008
Municipal and provincial bonds	3,627	2,574	351	-	6,552
Index linked government bonds	-	522	-	-	522
Bond funds, including exchange traded funds	-	104,023	1,119	20	105,162
Total debt securities	\$ 34,499	\$ 333,070	\$ 56,874	\$ 10,425	\$ 434,868

Table 12 presents the fair value of the rated debt investments component of the University's investment portfolio by investment maturity as of June 30, 2021 (\$ in thousands):

TABLE 12 – Investment Maturity (in years), FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	Less than 1	1 to 5	6 to 10	More than 10	Total
U.S. Treasury securities	\$ -	\$ 77,241	\$ 7,314	\$ -	\$ 84,555
Government agency bonds	-	302	567	-	869
Asset backed securities	4,448	14,568	2,817	-	21,833
Commercial mortgage-backed securities	5,304	12,272	958	-	18,534
Government mortgage-backed securities	169	8,824	1,236	804	11,033
Non-government backed collateralized mortgage obligations	932	2,725	-	-	3,657
Corporate bonds	10,269	64,333	9,566	398	84,566
Municipal and provincial bonds	1,137	1,780	-	-	2,917
Index linked government bonds	-	977	-	-	977
Bond funds, including exchange traded funds	-	113,676	1,429	25	115,130
Total debt securities	\$ 22,259	\$ 296,698	\$ 23,887	\$ 1,227	\$ 344,071

Fair Value Measurement — Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The University categorizes these assets and liabilities measured at fair value using a three-tiered hierarchy based on the valuation methodologies employed. The hierarchy is defined as follows:

Level 1 — Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that are available at the measurement date.

Level 2 — Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 — Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Unobservable inputs reflect the University's own assumptions about the inputs market participants would use in pricing the asset or liability (including assumption about risk). Unobservable inputs are developed based on the best information available in the circumstances and may include the University's own data.

When available, quoted prices are used to determine fair value. When quoted prices in active markets are available, investments are classified within Level 1 of the fair value hierarchy. The University's Level 1 investments primarily consist of investments in U.S. Treasury obligations, equity securities, and mutual funds. When quoted prices in active markets are not available, fair values are based on evaluated prices received from the University's investment custodian in conjunction with a third-party service provider and are reported within Level 2 of the fair value hierarchy. The inputs for Level 2 include, but are not limited to, pricing models such as benchmarking yields, reported trades, broker-dealer quotes, issuer spreads and benchmarking securities, among others. The University's Level 2 investments primarily consist of investments in U.S. government and agency obligations, asset-backed securities, and corporate debt securities that did not trade on the University's fiscal year end date.

As a practical expedient to estimate the fair value of the University's interests, certain investments in commingled funds and limited partnerships are reported at the net asset value (NAV) determined by the fund managers. Because these investments are not readily marketable, their estimated fair values may differ from the values that would have been assigned had a ready market for such investments existed, and such differences could be material. As of June 30, 2022 and 2021, the University had no plans or intentions to sell such investments at amounts different from NAV.



Table 13 summarizes the fair value of the University's investments by type as of June 30, 2022 (\$ in thousands):

TABLE 13 – Fair Value Hierarchy of Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Investment	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	\$ 424,859	\$ -	\$ -	\$ 424,859
Debt securities					
U.S. Treasury securities	-	123,515	-	-	123,515
Government agency bonds	-	-	6,929	-	6,929
Asset backed securities	-	-	29,869	-	29,869
Commercial mortgage-backed securities	-	-	26,554	-	26,554
Government mortgage-backed securities	-	-	16,354	-	16,354
Non-government backed collateralized mortgage obligations	-	-	3,403	-	3,403
Corporate bonds	-	-	115,966	42	116,008
Municipal and provincial bonds	-	-	6,552	-	6,552
Index linked government Bonds	-	-	522	-	522
Bond funds, including exchange traded funds	-	105,162	-	-	105,162
Total debt securities	-	228,677	206,149	42	434,868
Equity securities					
Domestic equities	-	93,934	-	1,635	95,569
International equities	-	29,611	-	-	29,611
Total equity securities	-	123,545	-	1,635	125,180
Alternative investments					
Multi-strategy hedge funds					
Equity	218,694	-	-	-	218,694
Long/short	150,695	-	-	-	150,695
Fixed income	31,424	-	-	-	31,424
Absolute return	34,678	-	-	-	34,678
Real assets	6,508	-	-	-	6,508
Private equity and venture capital	74,198	-	-	-	74,198
Private debt	14,521	-	-	-	14,521
Private real estate	8,021	-	-	-	8,021
Total alternative investments	538,739	-	-	-	538,739
Total investments at fair value	538,739	777,081	206,149	1,677	1,523,646
Cash and cash equivalents	-	-	-	-	54,009
MMDT	-	-	-	-	262,000
Total investments at cost	-	-	-	-	316,009
Total investments	\$ 538,739	\$ 777,081	\$ 206,149	\$ 1,677	\$ 1,839,655

Table 14 presents unfunded commitments, redemption terms, restrictions, and notice period for investments that have been valued using NAV as a practical expedient as of June 30, 2022 (\$ in thousands):

TABLE 14 – Alternative Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds					
Equity	\$ 218,694	\$ -	Daily to annual	1-90 days	Lock-up provisions range from none to 2 years.
Long/short	150,695	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 2 years.
Fixed income	31,424	-	Quarterly to semi-annual	60-90 days	No lock-up restrictions
Absolute return	34,678	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	6,508	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	74,198	20,191	Closed end funds	(1)	Not redeemable
Private debt	14,521	9,515	Closed end funds	(1)	Not redeemable
Private real estate	8,021	1,411	Closed end funds	(1)	Not redeemable
Total	\$538,739	\$ 31,117			

(1) The University has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.



Table 15 summarizes the fair value of the University's investments by type as of June 30, 2021 (\$ in thousands):

TABLE 15 – Fair Value Hierarchy of Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Investment	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	\$ 621,839	\$ -	\$ -	\$ 621,839
Debt securities					
U.S. Treasury securities	-	84,555	-	-	84,555
Government agency bonds	-	-	869	-	869
Asset backed securities	-	-	21,833	-	21,833
Commercial mortgage-backed securities	-	-	18,534	-	18,534
Government mortgage-backed securities	-	-	11,033	-	11,033
Non-government backed collateralized mortgage obligations	-	-	3,657	-	3,657
Corporate bonds	-	-	84,524	42	84,566
Municipal and provincial bonds	-	-	2,917	-	2,917
Index linked government Bonds	-	-	977	-	977
Bond funds, including exchange traded funds	-	115,130	-	-	115,130
Total debt securities	-	199,685	144,344	42	344,071
Equity securities					
Domestic equities	-	117,864	-	1,635	119,499
International equities	-	27,914	-	-	27,914
Total equity securities	-	145,778	-	1,635	147,413
Alternative investments					
Multi-strategy hedge funds					
Equity	219,855	-	-	-	219,855
Long/short	144,898	-	-	-	144,898
Fixed income	31,261	-	-	-	31,261
Absolute return	15,115	-	-	-	15,115
Real assets	7,405	-	-	-	7,405
Private equity and venture capital	63,243	-	-	-	63,243
Private debt	16,017	-	-	-	16,017
Private real estate	7,355	-	-	-	7,355
Total alternative investments	505,149	-	-	-	505,149
Total investments at fair value	505,149	967,302	144,344	1,677	1,618,472
Cash and cash equivalents	-	-	-	-	67,578
MMDT	-	-	-	-	117,000
Total investments at cost	-	-	-	-	184,578
Total investments	\$ 505,149	\$ 967,302	\$ 144,344	\$ 1,677	\$ 1,803,050

Table 16 presents unfunded commitments, redemption terms, restrictions, and notice period for investments that have been valued using NAV as a practical expedient as of June 30, 2021 (\$ in thousands):

TABLE 16 – Alternative Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds					
Equity	\$ 219,855	\$ -	Daily to quarterly	1-90 days	Lock-up provisions range from none to 2 years.
Long/short	144,898	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 3 years.
Fixed income	31,261	-	Quarterly to semi-annual	60-90 days	Lock-up provisions range from none to 1 year.
Absolute return	15,115	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	7,405	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	63,243	12,460	Closed end funds	(1)	Not redeemable
Private debt	16,017	10,125	Closed end funds	(1)	Not redeemable
Private real estate	7,355	1,475	Closed end funds	(1)	Not redeemable
Total	\$ 505,149	\$ 24,060			

(1) The University has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

5. Accounts Receivable, Net

Accounts receivable as of June 30, 2022 and 2021 are presented in **Table 17** (\$ in thousands):

TABLE 17 – Accounts Receivable, Net

As of June 30, 2022 and 2021 (\$ in thousands)

Accounts receivable	2022	2021
Student tuition and fees	\$ 68,216	\$ 60,329
Student loans	26,731	36,014
Pledges	50,458	30,718
Grants and contracts	129,634	116,980
CWM program	75,374	65,269
UMass Memorial	9,791	17,028
Other	57,239	85,770
Total	417,443	412,108
Less: allowance for doubtful accounts and discount to present value for pledges	(31,886)	(34,513)
Accounts receivable, net	\$ 385,557	\$ 377,595

6. UMass Memorial Medical Center

In 1998, the University entered into an Amended and Restated Definitive Agreement (Definitive Agreement) with certain unaffiliated parties whereby the University separated its clinical health care operations from its ongoing academic operations. As part of the Definitive Agreement, the University entered into a 99-year Academic Affiliation and Support Agreement (Affiliation Agreement), expiring on June 30, 2097, with UMass Memorial (successor to the clinical operations) whereby UMass Memorial is required to make annual inflation adjusted payments to the University, for the remainder of the agreement term provided the University continues to operate a medical school. For the years ending June 30, 2022 and 2021, the inflation adjusted income recognized totaled approximately \$20.4 million and \$19.9 million and was recorded as other operating revenue in the accompanying financial statements.

Other provisions of the Definitive agreement include the University being reimbursed by, and reimbursing UMass Memorial, for shared services, cross-funded employees, and other agreed upon activities provided and purchased. For the years ended June 30, 2022 and 2021, the reimbursements received for services provided to UMass Memorial and recorded as other revenue were \$174.8 million and \$161.6 million, respectively. Included in these amounts are payroll paid by the University on behalf of UMass Memorial in an agency capacity, recorded as an offset to operating expenses, in the amount of \$109.9 million and \$100.3 million for the years ended June 30, 2022 and 2021, respectively.

As of June 30, 2022 and 2021, the University has recorded a receivable in the amount of \$9.8 million and \$17.0 million, respectively from UMass Memorial which includes \$1.7 million and \$10.0 million, respectively, in payroll and related fringe charges. The University has recorded a payable of \$4.8 million and \$6.4 million at June 30, 2022 and 2021, respectively, primarily for cross-funded payroll.

7. Capital Assets

Table 18 represents the University's capital assets activity for the years ended June 30, 2022 and 2021 (\$ in thousands):

TABLE 18 – Capital Assets Activity

For the years ended June 30 (\$ in thousands)

Asset	As of 2020	Additions	Retirements / adjustments	As of 2021	Additions*	Retirements / adjustments	As of 2022
Land	\$ 166,024	\$ 4,015	\$ (52)	\$ 169,987	\$ 19,288	\$ (801)	\$ 188,474
Buildings and improvements	7,357,104	376,699	(54,255)	7,679,548	210,606	(23,447)	7,866,707
Software	120,001	6,284	(217)	126,068	2,439	-	128,507
Equipment and furniture	712,513	43,560	(69,414)	686,659	73,091	(42,942)	716,808
Library books	39,618	-	(6,995)	32,623	-	(6,983)	25,640
Right of use assets (note 10)	186,543	968	25,423	212,934	18,780	3,658	235,372
Total	8,581,803	431,526	(105,510)	8,907,819	324,204	(70,515)	9,161,508
Accumulated depreciation/ amortization	(3,547,761)	(320,126)	116,404	(3,751,483)	(358,831)	65,251	(4,045,063)
Total	5,034,042	111,400	10,894	5,156,336	(34,627)	(5,264)	5,116,445
Construction in progress	359,070	287,957	(368,089)	278,938	306,844	(175,165)	410,617
Total capital assets, net	\$ 5,393,112	\$ 399,357	\$ (357,195)	\$5,435,274	\$ 272,217	\$ (180,429)	\$5,527,062

*Includes assets of \$53.3 million from acquisition of Brandman University

8. Business Acquisition

Effective September 1, 2021 the University acquired Brandman University in exchange for \$139.3 million and the assumption of all Brandman's existing liabilities totaling \$59.2 million. The acquisition included all of the assets of Brandman University totaling \$150.7 million.

The transaction resulted in deferred outflows of resources of \$47.8 million as of the acquisition date. The deferred outflows of resources are being amortized over a 10 year period. As of June 30, 2022 there were \$45.4 million of deferred outflows of resources remaining associated with the acquisition.

9. Public Private Partnerships (PPP)

On November 8, 2016, the University entered into an agreement whereby the Building Authority sub-leased land on the Boston campus to Provident Commonwealth Educational Resources, Inc. (PCER), a Massachusetts not-for-profit corporation, for a term of 40 years (2056). The land is ground-leased to the Building Authority by the Commonwealth. PCER engaged a contractor to construct a 1,082-bed student housing facility on the site (the Boston Project). The Boston Project reverts to the Building Authority when the lease terminates. Commencing January 1, 2019, the annual rental amount payable to the Building Authority under the ground lease is \$1.0 million.

The Boston Project was financed with \$130.1 million of revenue bonds issued on October 26, 2016 (Series 2016 Bonds) by the Massachusetts Development Finance Agency (MassDevelopment) pursuant to a Loan and Trust Agreement between MassDevelopment and PCER. Neither the Building Authority, University nor Boston campus have pledged revenues to secure the payment of the Series 2016 bonds or have any obligation with respect to payment of the Series 2016 bonds.

Pursuant to the Dining Facility Sublease dated November 8, 2016 between PCER, as sub-lessor and the Building Authority, as sub-lessee, PCER leased the dining facility, located within the Boston Project, to the Building Authority and the Building Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Building Authority. This lease only relates to the operations and maintenance of the dining facility. The annual rent payable is \$1.00.

On November 14, 2018, the Building Authority entered into an agreement whereby the Building Authority sub-leased land on the University of Massachusetts Dartmouth campus to Provident Commonwealth Educational Resources II, Inc. (PCER II), a Massachusetts not-for-profit corporation, for a term of 45 years (2064). The land is ground-leased to the Building Authority by the Commonwealth. PCER II engaged a contractor to construct a 1,210-bed student housing facility on the site (the Dartmouth Project). The Dartmouth Project reverts to the Building Authority when the lease terminates. Commencing on January 1, 2021, the annual rental amount payable to the Building Authority under the ground lease was \$625,000, increasing by 3% every five years.

The Dartmouth Project was financed with \$132.2 million of revenue bonds issued on November 14, 2018 (Series 2018 Bonds) by the Massachusetts Development Finance Agency (MassDevelopment) pursuant to a Loan and Trust Agreement between MassDevelopment and PCER II. The Building Authority, University nor Dartmouth campus have pledged revenues to secure the payment of the Series 2018 bonds or have any obligation with respect to payment of the Series 2018 bonds.

Pursuant to the Dining Facility sublease dated November 13, 2018, between PCER II, as sub-lessor and the Building Authority, as sub-lessee, PCER II leased the dining facility, located within the Dartmouth Project, to the Building Authority and the Building Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Building Authority. This lease only relates to the operations and maintenance of the dining facility. The annual rent payable is \$1.00.

Management evaluated the applicability of relevant GASB guidance against the underlying Boston and Dartmouth Project agreements and indentures and has concluded that the associated debt should not be recognized on the financial statements of the Building Authority.

10. Leases

Lessee Leases

The University is a lessee for various noncancellable real estate.

The University has executed long-term leases with the Commonwealth, acting by and through the Trustees, covering the land on which facilities owned by the Building Authority are located on the University's campuses. These leases call for nominal annual payments to the Commonwealth. Some of these leases renew automatically for subsequent five- or ten-year periods unless the Building Authority notifies the University that it does not wish to renew. Other leases require the Building Authority to notify the University of its desire to renew. As of June 30, 2022, all leases with the Commonwealth were in good standing and any leases requiring action by the Building Authority during the year to facilitate their renewals were properly renewed.

As provided in the Enabling Act, each of the above-referenced leases also terminates when the Building Authority no longer has any bonds outstanding, at which time all Building Authority property becomes the property of the Commonwealth.

Table 19 presents a summary of right of use asset activity during the year ended June 30:

TABLE 19 – Right of Use Asset Activity

For the years ended June 30 (\$ in thousands)

Asset	As of 2020	Additions	Remeasurements / terminations	As of 2021	Additions	Remeasurements / terminations	As of 2022
Right of use assets							
Real estate	\$ 186,543	\$ 968	\$ 25,423	\$ 212,934	\$ 18,503	\$ 3,658	\$ 235,095
Equipment	-	-	-	-	277	-	277
Total	186,543	968	25,423	212,934	18,780	3,658	235,372
Accumulated amortization	-	(19,181)	-	(19,181)	(30,475)	2,556	(47,100)
Total right of use assets, net	\$186,543	\$ (18,213)	\$ 25,423	\$193,753	\$ (11,695)	\$ 6,214	\$188,272

Lease Liabilities

Table 20 presents a summary of changes in the related lease liabilities during the year ended June 30, 2022 (\$ in thousands):

TABLE 20 – Lease Liabilities, FY2022

For the years ended June 30, 2022 (\$ in thousands)

Liability	As of 2021	Additions	Remeasurements	Deductions	As of 2022	Due in one year
Real estate	\$ 200,805	\$ 7,150	\$ 6,223	\$ (14,341)	\$ 199,837	\$ 12,911
Equipment	-	119	755	(55)	819	2,136
Total	\$ 200,805	\$ 7,269	\$ 6,978	\$ (14,396)	\$ 200,656	\$ 15,047

Table 21 presents a summary of changes in the related lease liabilities during the year ended June 30, 2021 (\$ in thousands):

TABLE 21 – Lease Liabilities, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Liability	As of 2020	Additions	Remeasurements	Deductions	As of 2021	Due in one year
Real estate	\$ 188,900	\$ 968	\$ 25,423	\$ (14,486)	\$ 200,805	\$ 11,322

Future annual lease payments are presented in **Table 22** (\$ in thousands):

TABLE 22 – Future Annual Lease Payments

As of June 30, 2022 (\$ in thousands)

Fiscal year	Principal	Interest	Total
2023	\$ 15,047	\$ 4,561	\$ 19,608
2024	14,327	4,260	18,587
2025	13,831	3,961	17,792
2026	12,977	3,678	16,655
2027	12,996	3,400	16,396
2028–2032	62,874	12,543	75,417
2033–2037	48,872	5,869	54,741
2038–2042	15,506	1,091	16,597
2043–2047	4,226	171	4,397
Total	\$ 200,656	\$ 39,534	\$ 240,190

For the years ended June 30, 2022 and 2021, the University recognized \$4.7 million and \$3.7 million, respectively, of interest expense related to its operating leases.

Lessor Leases

The University is a lessor of various leases of buildings, office space and ground leases.

Lease Receivables

Table 23 presents a summary of changes in the related lease receivable during the year ended June 30, 2022 (\$ in thousands):

TABLE 23 – Lease Receivables, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Receivable	As of 2021	Additions	Remeasurements	Deductions	As of 2022	Due in one year
Real estate	\$ 189,368	\$ 59,546	\$ 1,710	\$ (13,127)	\$ 237,497	\$ 11,391
Direct financing arrangement	101,694	-	-	(5,072)	96,622	5,073
Total lease receivable	\$ 291,062	\$ 59,546	\$ 1,710	\$ (18,199)	\$ 334,119	\$ 16,464

Table 24 presents a summary of changes in the related lease receivable during the year ended June 30, 2021 (\$ in thousands):

TABLE 24 – Lease Receivables, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Receivable	As of 2020	Additions	Remeasurements	Deductions	As of 2021	Due in one year
Real estate	\$ 195,941	\$ 2,160	\$ -	\$ (8,733)	\$ 189,368	\$ 8,489
Direct financing arrangement	106,760	-	-	(5,066)	101,694	5,072
Total lease receivable	\$ 302,701	\$ 2,160	\$ -	\$ (13,799)	\$ 291,062	\$ 13,561

For the years ended June 30, 2022 and 2021, the University recognized \$20.7 million and \$18.0 million, respectively, of revenue related to its lessor operating leases, which is included in auxiliary enterprise revenue, other operating revenue and other nonoperating income in the accompanying financial statements.

Direct Financing Arrangement

In accordance with the GASB 87 transition guidance, the Building Authority has not restated the underlying assets nor the existing unearned interest income related to its direct financing arrangement.

On October 27, 2009, the Building Authority entered into an agreement to lease its facility located on Morrissey Boulevard in Dorchester, Massachusetts to the Edward M. Kennedy Institute for the United States Senate (EMKI), a charitable corporation registered in the District of Columbia. The lease agreement provides for an initial term of ninety-nine years commencing in October 2009, and thereafter, at the option of EMKI, may be extended for two additional, ninety-nine periods.

EMKI has an option to purchase the Facility for one dollar at any time after the earlier of: (i) payment of no less than fifty-one percent (51%) or defeasement of the original amount of the associated revenue bonds. The University has right of first refusal in the event EMKI decides to sell or otherwise dispose of the ownership of the Facility.

The project was financed with \$74.4 million of revenue bonds. Rent is equal to the debt service on the outstanding bonds and payable semi-annually through fiscal year 2043.

At June 30, 2022 and 2021, the University recorded gross lease receivable of approximately \$96.6 million and \$101.7 million, respectively, related to the EMKI lease. Also, at June 30, 2022 and 2021, the University recorded unearned interest income of approximately \$25.9 million and \$28.2 million, respectively related to the EMKI lease. The University presents the unearned interest income associated with the EMKI lease as other current liabilities of approximately \$2.2 million and \$2.3 million and other noncurrent liabilities of approximately \$23.7 million and \$25.9 million as of June 30, 2022 and 2021, respectively.



11. Long-Term Debt

Table 25 represents the outstanding long-term debt as of June 30, 2022, and the related activity during the fiscal year (\$ in thousands):

TABLE 25 – Long-Term Debt, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Debt	Original borrowing	Maturity date	Interest rate	As of 2021	Additions	Reductions	As of 2022
Building Authority							
Series 2009-2	\$ 271,855	2039	6.4–6.6%	\$ 16,945	\$ -	\$ -	\$ 16,945
Series 2009-3	28,570	2039	5.8–6.2%	23,135	-	(735)	22,400
Series 2010-2	430,320	2040	3.8–5.5%	430,320	-	(16,710)	413,610
Series 2010-3	3,005	2040	6%	2,490	-	(70)	2,420
Series 2013-1	212,585	2043	2.0–5.0%	13,735	-	(5,325)	8,410
Series 2013-2	71,970	2043	0.4–4.3%	32,010	-	(2,420)	29,590
Series 2013-3	24,640	2043	4.0–5.0%	945	-	(460)	485
Series 2014-1	293,890	2044	3.0–5.0%	66,825	-	(3,890)	62,935
Series 2014-3	67,635	2029	2.0–5.0%	28,635	-	(4,290)	24,345
Series 2014-4	157,855	2025	0.2–3.4%	13,865	-	(5,165)	8,700
Series 2015-1	298,795	2045	4.0–5.0%	266,880	-	-	266,880
Series 2015-2	191,825	2036	3.0–5.0%	157,765	-	(24,435)	133,330
Series 2017-1	165,130	2047	4.0–5.3%	165,130	-	-	165,130
Series 2017-2	19,510	2027	1.6–3.4%	15,100	-	(1,530)	13,570
Series 2017-3	187,680	2038	3.0–5.0%	155,630	-	(3,480)	152,150
Series 2018-1	37,650	2043	2.0–2.9%	37,650	-	-	37,650
Series 2019-1	208,725	2039	5%	208,725	-	-	208,725
Series 2020-1	200,840	2050	5%	200,840	-	-	200,840
Series 2020-2	129,830	2050	1.8–3.5%	129,830	-	(1,985)	127,845
Series 2020-3	319,345	2044	1.7–3.5%	317,795	-	(2,130)	315,665
Series 2020-4	329,930	2043	0.4%–3.0%	329,930	-	-	329,930
Series 2021-1	312,330	2037	5.0%	302,270	-	(10,520)	291,750
Series 2021-2	46,585	2036	0.2%	46,585	-	(15,750)	30,835
Series 2022-1	188,650	2052	5.0%	-	188,650	-	188,650
Series 2022-2	211,270	2045	2.2–4.3%	-	211,270	-	211,270
Unamortized bond premium				242,430	26,327	(27,149)	241,608
Total Building Authority				3,205,465	426,247	(126,044)	3,505,668
MHEFA/MDFA							
Series A	20,000	2030	variable	20,000	-	-	20,000
Total MHEFA/MDFA				20,000	-	-	20,000
WCCC MHEFA/MDFA							
Series 2005-D	99,325	2029	5.0–5.3%	425	-	-	425
Unamortized bond premium				20	-	(5)	15
WCCC MHEFA/MDFA				445	-	(5)	440
MDFA							
Clean renewable energy bonds	1,625	2027	3.50%	572	-	(94)	478
Total bonds payable				3,226,482	426,247	(126,143)	3,526,586
UMG*							
Working capital note	21,100	2025	2.2%	-	21,100	-	21,100
Building note	37,000	2027	2.2%	-	37,000	-	37,000
Change in control note	96,000	2031	0.0%	-	96,000	-	96,000
Unamortized discount				-	(14,814)	1,501	(13,313)
Total notes payable				-	139,286	1,501	140,787
Total long-term debt				\$ 3,226,482	\$ 565,533	\$ (124,642)	\$ 3,667,373

* Includes debt incurred through Brandman University acquisition

Table 26 represents the outstanding long-term debt as of June 30, 2021, and the related activity during the fiscal year (\$ in thousands):

TABLE 26 – Long-Term Debt, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Debt	Original borrowing	Maturity date	Interest rate	As of 2020	Additions	Reductions	As of 2021
Building Authority							
Series 2008-1	\$ 232,545	2038	Variable	\$ 145,515	\$ -	\$ (145,515)	\$ -
Series 2008-A	26,580	2038	Variable	16,050	-	(16,050)	-
Series 2009-2	271,855	2039	6.4–6.6%	16,945	-	-	16,945
Series 2009-3	28,570	2039	5.8–6.2%	23,825	-	(690)	23,135
Series 2010-1	118,985	2020	5.0%	15,900	-	(15,900)	-
Series 2010-2	430,320	2040	3.8–5.5%	430,320	-	-	430,320
Series 2010-3	3,005	2040	6%	2,555	-	(65)	2,490
Series 2011-1	135,040	2034	Variable	122,010	-	(122,010)	-
Series 2011-2	101,700	2034	Variable	92,800	-	(92,800)	-
Series 2013-1	212,585	2043	2.0–5.0%	95,170	-	(81,435)	13,735
Series 2013-2	71,970	2043	0.4–4.3%	58,200	-	(26,190)	32,010
Series 2013-3	24,640	2043	4.0–5.0%	1,380	-	(435)	945
Series 2014-1	293,890	2044	3.0–5.0%	147,675	-	(80,850)	66,825
Series 2014-3	67,635	2029	2.0–5.0%	50,680	-	(22,045)	28,635
Series 2014-4	157,855	2025	0.2–3.4%	30,540	-	(16,675)	13,865
Series 2015-1	298,795	2045	4.0–5.0%	298,795	-	(31,915)	266,880
Series 2015-2	191,825	2036	3.0–5.0%	179,805	-	(22,040)	157,765
Series 2017-1	165,130	2047	4.0–5.3%	165,130	-	-	165,130
Series 2017-2	19,510	2027	1.6–3.4%	16,595	-	(1,495)	15,100
Series 2017-3	187,680	2038	3.0–5.0%	160,015	-	(4,385)	155,630
Series 2018-1	37,650	2043	2.0–2.9%	37,650	-	-	37,650
Series 2019-1	208,725	2039	5%	208,725	-	-	208,725
Series 2020-1	200,840	2050	5%	200,840	-	-	200,840
Series 2020-2	129,830	2050	1.8–3.5%	129,830	-	-	129,830
Series 2020-3	319,345	2044	1.7–3.5%	319,345	-	(1,550)	317,795
Series 2020-4	329,930	2043	0.4%–3.0%	-	329,930	-	329,930
Series 2021-1	312,330	2037	5.0%	-	312,330	(10,060)	302,270
Series 2021-2	46,585	2036	0.2%	-	46,585	-	46,585
Unamortized bond premium				205,039	71,803	(34,412)	242,430
Total Building Authority				3,171,334	760,648	(726,517)	3,205,465
MHEFA/MDFA							
Series A	20,000	2030	Variable	20,000	-	-	20,000
Total MHEFA/MDFA				20,000	-	-	20,000
WCCC MHEFA/MDFA							
Series 2005-D	99,325	2029	5.0–5.3%	475	-	(50)	425
Unamortized bond premium				25	-	(5)	20
Total WCCC MHEFA/MDFA				500	-	(55)	445
MDFA							
Clean renewable energy bonds	1,625	2027	3.50%	669	-	(97)	572
Total bonds payable				3,192,503	760,648	(726,669)	3,226,482
Notes payable				1,486	-	(1,486)	-
Total long-term debt				\$3,193,989	\$ 760,648	\$ (728,155)	\$3,226,482

Pledged Revenues

The University is obligated under its contracts for financial assistance, management and services with the Building Authority to collect rates, rents, fees and other charges with respect to such facilities sufficient to pay principal and interest on the Building Authority's bonds and certain other costs such as insurance on such facilities.

The University's spendable cash and investments secures the obligations of the University with respect to the MHEFA/MDFA Series A Bonds. The University is required to certify annually that there are sufficient funds in spendable cash and investments to cover the debt service on the Series A Bonds.

Principal and Interest

Principal and interest, which is estimated using rates in effect at June 30, 2022, on bonds and notes payable for the next five fiscal years and in subsequent five-year periods are presented in **Table 27** (\$ in thousands):

TABLE 27 – Principal and Interest on Long-term Debt

(\$ in thousands)

Fiscal year	Bonds – principal	Bonds – interest	Bonds – interest subsidy*	Direct placement bonds – principal	Direct placement bonds – interest	Notes payable – principal	Notes payable – interest	Total
2023	\$ 112,180	\$ 139,501	\$ (7,224)	\$ -	\$ 763	\$ 5,000	\$ 2,302	\$ 252,522
2024	123,166	133,162	(6,993)	-	754	10,000	1,086	261,175
2025	121,066	128,515	(6,729)	1,655	718	15,000	824	261,049
2026	117,306	123,556	(6,445)	1,690	684	20,000	453	257,244
2027	120,391	118,345	(6,153)	1,725	649	20,100	111	255,168
2028–2032	666,340	507,601	(25,992)	1,760	3,695	84,000	-	1,237,404
2033–2037	670,425	361,359	(15,989)	8,355	2,709	-	-	1,026,859
2038–2042	661,135	206,094	(4,110)	20,110	1,225	-	-	884,454
2043–2047	427,085	90,157	-	2,355	47	-	-	519,644
2048–2052	204,550	27,327	-	-	-	-	-	231,877
2053–2057	23,669	592	-	-	-	-	-	24,261
Total	\$3,247,313	\$1,836,209	\$ (79,635)	\$ 37,650	\$ 11,244	\$ 154,100	\$ 4,776	\$5,211,657

* These interest rate subsidies are provided by the United States Government related to the Authority's issuance of bonds under the Build America Bond ("BAB") program. Under the BAB program, the Government provides a direct subsidy of the interest rate paid to bondholders up to 35%. The University's November 1, 2021, and May 1, 2022 subsidy payments related to the Senior Series 2009-2 Project Revenue Build America Bonds and the Senior Series 2010-2 Project Revenue Build America Bonds were 32.94% and 33.00%, respectively. For fiscal year 2023 through fiscal year 2043, the estimated subsidy reflected in the table above is 33.00%.

Bond Activity

In FY2022, the University issued \$188.7 million of Senior Series 2022-1 Project Revenue Bonds and \$211.3 million of Senior Series 2022-2 Project Revenue Bonds.

In FY2021, the University issued \$312.3 million of Refunding Revenue Bonds, Series 2021-1 and \$376.5 million of federally taxable Refunding Revenue Bonds, Series 2020-4 and 2021-2. The refunding bonds refunded the 2008-1, 2008-A, 2011-1 and the 2011-2 bonds in the amount of \$358.4 million, the 2013-2 and 2014-1 bonds in the amount of \$26.8 million, and the 2013-1, 2013-2, 2014-1, 2014-3 and 2015-1 bonds in the amount of \$200.1 million. The University escrowed funds sufficient to provide for all future debt service payments on the refunded bonds until the bonds are called. These advanced refunded bonds are considered defeased and, accordingly, the liability for the bonds payable and the assets held to repay the debt are not recorded in the University's financial statements.

In FY2021, the University defeased approximately \$619.0 million of bonds outstanding from refunding activities.

Bond Premium (Discount)

The University amortizes the premiums received as a reduction of interest expense over the life of the respective bond issue. In FY2022 and FY2021, the University received premiums at issuance totaling \$26.3 million and \$71.8 million, respectively.

The \$96.0 million note payable does not have a stated interest rate. As a result, this note has imputed an interest rate, which resulted in a discount of \$14.8 million to be amortized over the life of the note payable.

Interest Rate Swaps

During fiscal year 2021, the University terminated all interest rate swaps. For the year ended June 30, 2021, the Building Authority incurred fees related to its variable rate debt program totaling approximately \$582.0 thousand dollars.

Notes Payable

In FY2022, the University entered into three notes payable as part of the Brandman University acquisition agreement. A working capital note payable of \$21.1 million, a building note payable for \$37.0 million and a change in control note payable of \$96.0 million.

Commercial Paper

The maximum aggregate principal amount of commercial paper which may be outstanding at one time is \$200.0 million. The Commercial Paper Series 2013-A2 are secured by a standby liquidity facility agreement that expired on August 12, 2022 and subsequently rolled with maturity dates through January 26, 2023.

TABLE 28 – Commercial Paper

As of June 30 (\$ in thousands)

Commercial paper	As of June 30, 2020	Additions	Reductions	As of June 30, 2021	Additions	Reductions	As of June 30, 2022
Commercial paper	\$ -	\$ 31,000	\$ -	\$ 31,000	\$ 86,700	\$ (97,700)	\$ 20,000

The University incurred total fees of \$0.7 million in FY2022 and FY2021, respectively, associated with the use of commercial paper.

Line of Credit

During fiscal 2022, the University entered into line of credit agreements with Bank of America and State Street Bank with a maximum loan amount of \$75.0 million each, for a total maximum loan amount of \$150.0 million. The agreements had a maturity date of May 10, 2022.

During FY2022, the University amended the line of credit agreement with Bank of America for a maximum loan amount of \$150.0 million and allowed the State Street Bank line of credit to expire. The line of credit has a maturity date of May 1, 2023.

As of June 30, 2022, the outstanding balance on the line of credit was \$0.

12. Other Liabilities

Table 29 shows current and long-term portions of other liabilities as recorded in the Statements of Net Position (\$ in thousands):

TABLE 29 – Current Portion and Total Other Liabilities

As of June 30 (\$ in thousands)

Liabilities	As of June 30, 2021	Current portion as of June 30, 2021	As of June 30, 2022	Current portion as of June 30, 2022
Compensated absences*	\$ 121,440	\$ 97,562	\$ 129,152	\$ 104,112
Workers' compensation*	18,538	2,541	19,656	3,544
Unearned revenues	142,951	96,685	180,763	120,833
Advances and deposits	19,734	5,441	19,262	5,232
Other liabilities	136,675	70,396	139,995	82,066

* The University includes compensated absences and workers' compensation short-term liabilities within accounts payable and accrued expenses on the Statements of Net Position.

13. Fringe Benefits

During the years ended June 30, 2022 and 2021, the Commonwealth paid \$430.9 million and \$364.9 million, respectively, for the University's portion of fringe benefit costs which includes pension expense, health insurance for active employees and retirees, and terminal leave. Of this amount, the University reimbursed the Commonwealth \$158.0 million and \$119.3 million during the years ended June 30, 2022 and 2021, respectively. The remaining portion is included in revenue as state appropriations.



14. Benefit Plans

Defined Benefit Plan

The Massachusetts State Employees' Retirement System (MSERS) is a public employee retirement system (PERS) that administers a cost-sharing multi-employer defined benefit plan covering substantially all employees of the Commonwealth including University employees.

MSERS provides retirement, disability, survivor and death benefits to members and their beneficiaries. Massachusetts General Laws (MGL) establishes uniform benefit and contribution requirements for all contributory PERS. These requirements provide for superannuation retirement allowance benefits up to a maximum of 80% of a member's highest three-year to five-year average annual rate of regular compensation depending on the date of hire. Benefit payments are based upon a member's age, length of creditable service, and group creditable service, and group classification. The authority for amending these provisions rests with the Legislature.

The MSERS' funding policies were established by Chapter 32 of MGL. The Legislature has the authority to amend these policies. The annuity portion of the MSERS retirement allowance is funded by employees, who contribute a percentage of their regular compensation. Costs of administering the plan are funded out of plan assets.

Member contributions for MSERS vary depending on the most recent date of membership are presented in **Table 30**:

TABLE 30 – Membership Contributions

Hire Date	% of Compensation
Prior to 1975	5% of regular compensation
1975 – 1983	7% of regular compensation
1984 – 6/30/1996	8% of regular compensation
7/1/1996 – present	9% of regular compensation except for State Police which is 12% of regular compensation
1979 – present	An additional 2% of regular compensation in excess of \$30,000

In addition, members within this group who join the system on or after April 2, 2012 will have their withholding rate reduced to 6% after achieving 30 years of creditable service.

The University makes contributions on behalf of the employees through a fringe benefit charge assessed by the Commonwealth. The fringe benefit charge amounted to \$178.9 million and \$141.7 million for the years ended June 30, 2022 and 2021, respectively. Annual covered payroll was 76.9% and 78.3% of annual total payroll for the University for the years ended June 30, 2022 and 2021, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The net pension liability as of June 30, 2022 was determined based on a measurement date of June 30, 2021 from an actuarial valuation as of January 1, 2021 rolled forward to June 30, 2021. The net pension liability measured as of June 30, 2021 was determined based on a measurement date of June 30, 2020 from an actuarial valuation as of January 1, 2020 rolled forward to June 30, 2020. There are no significant changes known which would impact the total pension liability between the measurement date and the reporting date, other than typical plan experience.

At June 30, 2022 and 2021, the University reported a liability of \$276.3 million and \$644.9 million, respectively, for its proportionate share of MSERS net pension liability, respectively. The University's proportion of the net pension liability was based on a projection of the University's long-term share of contributions to the pension plan relative to the total projected contributions of all participating entities, actuarially determined. The University's proportion of the pension plan at measurement dates of June 30, 2021 and 2020 was 2.65% and 3.76%, respectively.

For the fiscal years ended June 30, 2022 and 2021, the University recognized a net pension benefit of \$5.3 million and net pension expense of \$100.9 million, respectively.

The University reported its proportionate share of MSERS's deferred outflows of resources and deferred inflows of resources related to pensions from the following sources as of June 30, 2022 and 2021 as presented in **Tables 31 and 32** (\$ in thousands):

TABLE 31 – University's Proportionate Share of MSERS, FY2022

As of June 30, 2022 (\$ in thousands)

Pension resource	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 18,837	\$ -
Changes in proportion due to internal allocation	41,536	136,997
Employer contributions after measurement date	45,010	-
Differences between expected and actual experience	9,534	20,005
Net difference between projected and actual investment earnings on pension plan investments	-	108,331
Changes in proportion from Commonwealth	110	873
Total	\$ 115,027	\$ 266,206

TABLE 32 – University's Proportionate Share of MSERS, FY2021

As of June 30, 2021 (\$ in thousands)

Pension resource	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 36,564	\$ -
Changes in proportion due to internal allocation	60,820	12,552
Employer contributions after measurement date	31,495	-
Differences between expected and actual experience	20,519	4,173
Net difference between projected and actual investment earnings on pension plan investments	35,450	-
Changes in proportion from Commonwealth	487	1,572
Total	\$ 185,335	\$ 18,297

Amounts reported as deferred outflows of resources relating to pension resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction to pension expense (benefit) in the next fiscal year. The remaining difference between the University's balances of deferred outflows and inflows of resources will be recognized in pension expense (benefit) as presented in **Table 33**:

TABLE 33 – Amortization of Pension Expense in Future Years

(\$ in thousands)

Year ended June 30	Pension
2023	\$ (43,520)
2024	(42,752)
2025	(49,171)
2026	(60,746)
Total	\$ (196,189)

Actuarial Assumptions

Significant actuarial assumptions used at each respective measurement date are presented in **Table 34**:

TABLE 34 – Actuarial Assumptions

Assumption	June 30, 2021	June 30, 2020
Investment rate of return	7.00%	7.15%
Interest rate credited to the annuity savings fund	3.50%	3.50%
Cost of living increases on the first \$13,000 per year	3.00%	3.00%
Salary increases*	4.0% to 9.0%	4.0% to 9.0%
Mortality rates:		
Pre-retirement	RP-2014 Blue Collar Employees Scale MP-2020 **	RP-2014 Blue Collar Employees Scale MP-2016 **
Post-retirement	RP-2014 Blue Collar Healthy Annuitant Scale MP-2020 **	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **
Disability	RP-2014 Blue Collar Healthy Annuitant Scale MP-2020 ***	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **

* Salary increases were based on analysis of past experiences depending on group and length of service

** Set forward one year for females.

*** Set forward one year

Investment Allocation

Investment assets of MSERS are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2021 and 2020 are summarized in **Tables 35 and 36**:

TABLE 35 – Target Asset Allocation as of June 30, 2021

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.30%
Private equity	13.00%	7.80%
Portfolio completion strategies	11.00%	2.90%
Real estate	10.00%	3.70%
Value added fixed income	8.00%	3.90%
Timber / natural resources	4.00%	4.30%
Total	100.00%	

TABLE 36 – Target Asset Allocation as of June 30, 2020

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.70%
Private equity	13.00%	8.20%
Portfolio completion strategies	11.00%	3.20%
Real estate	10.00%	3.50%
Value added fixed income	8.00%	4.20%
Timber / natural resources	4.00%	4.10%
Total	100.00%	

Discount Rate

The discount rate used to measure the total pension liability was 7.00% and 7.15% at June 30, 2021 and 2020, respectively. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Commonwealth's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity Analysis

Table 37 illustrates the impact of a 1% change in the discount rate for the net pension liability at June 30, 2022 and 2021 (\$ in thousands):

TABLE 37 – Sensitivity Analysis of Discount

As of June 30, 2022 and 2021 (\$ in thousands)

Fiscal year ended	1% Decrease	Current discount rate	1% Increase
June 30, 2022	\$ 422,938	\$ 276,313	\$ 155,799
June 30, 2021	849,667	644,879	476,558

Defined Contribution Plan

Non-vested faculty and certain other employees of the University can opt out of MSERS and participate in a defined contribution plan, the Optional Retirement Plan (ORP), administered by the Commonwealth's Department of Higher Education. As of June 30, 2022 and 2021, there were 2,191 and 2,057 participants in the ORP, respectively. Employees contribute at the same rate as members in MSERS and the Commonwealth matches 5% of employee contributions. The Commonwealth contributed \$8.9 million and \$8.5 million in 2022 and 2021, respectively. University employees contributed \$21.3 million and \$19.6 million in 2022 and 2021, respectively.

The MSERS and ORP retirement contributions of employees who become members of MSERS or ORP after January 1, 2011 are subject to a state compensation limit. Effective January 1, 2011, the University established a defined contribution plan, the University of Massachusetts 401(a) Retirement Gap Plan (Gap Plan). Employees with MSERS or ORP membership dates after January 1, 2011 are eligible to participate in the Gap Plan. Eligible employees begin participation in the Gap Plan when their regular compensation exceeds the state compensation limit in effect for the plan year, at which point their contributions to MSERS or ORP are required to stop for the remainder of the plan year. Employee contributions to the Gap Plan are mandatory and at the same rate as MSERS and ORP; the University contributes 5%. As of June 30, 2022 and 2021, the plan assets of the Gap Plan were \$8.8 million and \$9.4 million, respectively.

In addition, UMG offers a defined contribution retirement plan. Employees working at least 20 hours a week are eligible to participate in the plan after 90 days of employment. UMG contributes 3% of each employee's eligible annual salary, as defined by the plan.

Eligible employees may contribute up to 6% of their eligible salary and the University matches their contributions. UMG's total contribution to the plan was \$2.8 million for the period from September 1, 2022 to June 30, 2022.

Other component units may opt to offer defined contribution retirement plans. These are not material in relation to the University as a whole and detailed plan information is therefore not presented.

15. Other Postemployment Benefits

The Commonwealth administers the State Retirees' Benefit Trust, a single employer defined Postemployment Benefits Other Than Pensions (OPEB) Plan (the Plan). Benefits are managed by the Group Insurance Commission (GIC) and investments are managed by the Pension Reserves Investment Management Board (PRIM).

Benefits Provided

Under Chapter 32A of the MGL the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth. Substantially all of the Commonwealth's employees may become eligible for these benefits if they reach retirement age while working for the Commonwealth. Eligible retirees are required to contribute a specified percentage of the health care/benefit costs, which are comparable to contributions required from employees.

Employer and employee contribution rates are set in MGL. The Commonwealth recognizes its share of the costs on an actuarial basis. As of June 30, 2022 and 2021, the retirees' share of premium costs is between 10% - 20%, depending on the date of hire.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

The total OPEB liability as of June 30, 2022 was determined based on a measurement date of June 30, 2021 from an actuarial valuation as of January 1, 2021 rolled forward to June 30, 2021. The total OPEB liability as of June 30, 2021 was determined based on a measurement date of June 30, 2020 from an actuarial valuation as of January 1, 2020 rolled forward to June 30, 2020. There are no significant changes known which would impact the total OPEB liability between the measurement date and the reporting date, other than typical plan experience.

As of June 30, 2022 and 2021, the University reported a liability of \$485.1 million and \$829.8 million, respectively, for its proportionate share of the OPEB liability. The University's proportion of the OPEB liability was based on a projection of the University's long-term share of contributions to the OPEB plan relative to the total projected contributions of all participating entities, actuarially determined. The University's proportion of the OPEB plan at measurement dates of June 30, 2021 and 2020 was 3.03% and 4.01%, respectively.

For the fiscal years ended June 30, 2022 and 2021, the University recognized a net OPEB benefit of \$35.3 million and a net OPEB expense of \$40.5 million, respectively.

The University reported its proportionate share of deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources as of June 30, 2022, as shown in **Tables 38 and 39** (\$ in thousands):

TABLE 38 – University's Proportionate Share of OPEB, FY2022

As of June 30, 2022 (\$ in thousands)

OPEB resources	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 40,744	\$ 95,435
Changes in proportion due to internal allocation	82,095	353,890
Employer contributions after measurement date	21,091	-
Differences between expected and actual experience	12,384	85,400
Net difference between projected and actual investment earnings on OPEB plan investments	-	5,896
Changes in proportion from Commonwealth	544	2,107
Total	\$ 156,858	\$ 542,728

TABLE 39 – University's Proportionate Share of OPEB, FY2021

As of June 30, 2021 (\$ in thousands)

OPEB resources	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 68,336	\$ 80,198
Changes in proportion due to internal allocation	128,426	234,735
Employer contributions after measurement date	16,539	-
Differences between expected and actual experience	22,901	20,482
Net difference between projected and actual investment earnings on OPEB plan investments	2,399	-
Changes in proportion from Commonwealth	1,258	2,818
Total	\$ 239,859	\$ 338,233

Amounts reported as deferred outflows of resources relating to OPEB resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction to OPEB expense (benefit) in the next fiscal year. The remaining difference between the University's balances of deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense (benefit) as shown in **Table 40**:

TABLE 40 – Amortization of OPEB Expense in Future Years

(\$ in thousands)

Year ended June 30	Pension
2023	\$ (91,194)
2024	(81,254)
2025	(80,638)
2026	(78,302)
2027	(75,573)
Total	\$ (406,961)

Actuarial Assumptions

Significant actuarial assumptions used at the 2021 measurement date are as follows:

Long-term rate of return on investment: 7.00%

Annual healthcare cost trend rates:

Developed based on the most recent published SAO-Getzen trend rate model, version 2021_b.

Short-term: Based on review of the plan's historical trend rates during fiscal years 2020 and 2021, along with industry surveys, separately for non-Medicare and Medicare benefits. The industry surveys were used to predict short-term future per capita cost increases.

Long-term: Based on the most recent published SAO-Getzen model for trend rates beginning in 2022 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy. See **Table 41** for annual healthcare cost trend rates.

TABLE 41 – Annual Healthcare Cost Trend Rates

Year	Medicare benefits	Non-Medicare benefits
2021	4.40%	7.30%
2022	4.49%	7.06%
2023	4.57%	6.83%
2024	4.66%	6.59%
2025	4.75%	6.36%
2030	5.18%	5.18%
2040	5.18%	5.18%
2050	5.18%	5.18%
2060	4.83%	4.83%
2070	4.38%	4.38%
2075+	4.04%	4.04%

Getzen long run growth factors:

- Inflation: 2.50%
- Real GDP Growth: 1.50%
- Excess Medical Growth: 1.10%

Mortality rates:

RP-2014 Blue Collar Employees projected with Scale MP-2020 from the central year, with females set forward one year

Participation rates:

- 100% of employees currently electing healthcare coverage are assumed to elect coverage at retirement.
- 35% of employees currently opting out of active health coverage are assumed to elect to enroll in retiree coverages.
- 85% of current and future vested terminated participants will elect health care benefits at age 55 or if later, the participant's current age.
- Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.
- 100% of spouses are assumed to elect to continue coverage after retiree's death.
- Current non-Medicare eligible retirees and spouses (if covered) under age 65 who are in a POS/PPO plan are assumed to move to an Indemnity plan if they are Medicare eligible at 65. All others are assumed to remain in their currently elected product type (Indemnity/POS/PPO/HMO).
- Future retirees are assumed to enroll in the existing plan in the same proportion as the current retiree mix, as shown in **Table 42**. These proportions are established separately for non-Medicare and Medicare coverage for each product type.

TABLE 42 – Future Enrollment Proportions

Plan	Retirement age under 65	Retirement age over 65
Indemnity	28.0%	96.0%
POS/PPO	60.0%	0.0%
HMO	12.0%	4.0%

Significant actuarial assumptions used at the 2020 measurement date are as follows:

Long-term rate of return on investment: 7.15%

Annual healthcare cost trend rates:

Developed based on the most recent published GAO-Getzen trend rate model, version 2020_b.

Short-term: Based on review of the plan's historical trend rates during fiscal years 2019 and 2020, along with industry surveys, separately for non-Medicare and Medicare benefits. Surveys were used to predict short-term future per capita cost increases.

Long-term: Based on the most recent published SAO-Getzen model for trend rates beginning in 2024 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy. See **Table 43** for annual healthcare cost trend rates.

TABLE 43 – Annual Healthcare Cost Trend Rates

Year	Medicare benefits	Non-Medicare benefits
2020	4.90%	6.70%
2021	4.80%	6.60%
2022	4.70%	6.50%
2023	4.60%	6.40%
2024	4.70%	6.20%
2030	5.18%	5.18%
2040	5.18%	5.18%
2050	5.18%	5.18%
2060	4.84%	4.84%
2070	4.38%	4.38%
2075+	4.04%	4.04%

Getzen long run growth factors:

- Inflation: 2.50%
- Real GDP Growth: 1.50%
- Excess Medical Growth: 1.10%

Mortality rates:

RP-2014 Blue Collar Employees projected with Scale MP-2016 with females set forward one year

Participation rates:

- 100% of employees currently electing healthcare coverage are assumed to elect coverage at retirement.
- 35% of employees currently opting out of active health coverage are assumed to elect to enroll in retiree coverages.
- 85% of current and future vested terminated participants will elect health care benefits at age 55 or later.
- Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.
- 100% of spouses are assumed to elect to continue coverage after retiree's death.

- Current non-Medicare eligible retirees and spouses (if covered) under age 65 who are in a POS/PPO plan are assumed to move to an Indemnity plan if they are Medicare eligible at 65. All others are assumed to remain in their currently elected product type.
- Future retirees are assumed to enroll in the existing plan in the same proportion as the current retiree mix, as shown in **Table 44**. These proportions are established separately for non-Medicare and Medicare coverage for each product type.

TABLE 44 – Future Participation Rates

Plan	Retirement age under 65	Retirement age over 65
Indemnity	28.0%	96.0%
POS/PPO	60.0%	0.0%
HMO	12.0%	4.0%

Investment Allocation

Investment assets of the Plan are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2021 and 2020 are summarized in **Tables 45** and **46**:

TABLE 45 – Target Asset Allocation as of June 30, 2021

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.30%
Private equity	13.00%	7.80%
Portfolio completion strategies	11.00%	2.90%
Real estate	10.00%	3.70%
Value added fixed income	8.00%	3.90%
Timber / natural resources	4.00%	4.30%
Total	100.00%	

TABLE 46 – Target Asset Allocation as of June 30, 2020

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.70%
Private equity	13.00%	8.20%
Portfolio completion strategies	11.00%	3.20%
Real estate	10.00%	3.50%
Value added fixed income	8.00%	4.20%
Timber / natural resources	4.00%	4.10%
Total	100.00%	

Discount Rate

The discount rates used to measure the total OPEB liability as of June 30, 2021 and 2020 were 2.77% and 2.28%, respectively. These rates were based on a blend of the Bond Buyer Index rates of 2.16% and 2.21%, respectively, as of the measurement dates June 30, 2021 and 2020 and the long term rate of return on Plan investments of 7.00% and 7.15%, respectively. The Plan's fiduciary net position was not projected to be available to make all projected future benefit payments for current plan members. The projected "depletion date" when projected benefits are not covered by projected assets is 2041. Therefore, the long-term expected rate of return on plan investments was not applied to all periods of projected benefit payments to determine the total OPEB liability as of June 30, 2021 and 2020.

Sensitivity Analysis of Discount

Table 47 presents the net OPEB liability of the Commonwealth calculated using the discount rate, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1- percentage-point lower or 1-percentage-point higher than the current rate (\$ in thousands):

TABLE 47 – Sensitivity Analysis of Discount

As of June 30, 2021 and 2020 (\$ in thousands)

Fiscal year ended	1% Decrease	Current discount rate	1% Increase
June 30, 2021	\$ 576,343	\$ 485,141	\$ 411,679
June 30, 2020	934,562	829,808	697,550

Sensitivity Analysis of Healthcare Cost Trend Rate

Table 48 presents the net OPEB liability of the Commonwealth, as well as what the net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate (\$ in thousands):

TABLE 48 – Sensitivity Analysis of Healthcare Cost Trend Rate

As of June 30, 2021 and 2020 (\$ in thousands)

Fiscal year ended	1% Decrease	Current discount rate	1% Increase
June 30, 2021	\$ 397,231	\$ 485,141	\$ 599,717
June 30, 2020	673,996	829,808	1,036,817



16. Operating Expenses and Interest

Table 49 summarizes the University's operating and interest expenses by natural and functional classification for the year ended June 30, 2022 (\$ in thousands):

TABLE 49 – Operating Expenses and Interest, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Expense / interest	Compensation and benefits	Supplies and services	Scholarships and fellowships	Depreciation and amortization	Interest	Total
Educational and general						
Instruction	\$ 814,334	\$ 116,028	\$ -	\$ -	\$ -	\$ 930,362
Research	320,970	230,397	-	-	-	551,367
Public service	53,090	18,559	-	-	-	71,649
Academic support	134,984	59,169	-	-	-	194,153
Student services	137,545	73,543	-	-	-	211,088
Institutional support	234,661	81,149	-	-	-	315,810
Operation and maintenance of plant	109,063	133,686	-	-	-	242,749
Depreciation and amortization	-	-	-	330,715	-	330,715
Scholarships and fellowships	-	-	121,334	-	-	121,334
Auxiliary enterprises	141,473	179,062	-	-	-	320,535
Other expenditures						
Independent operations	23,860	34,722	-	-	-	58,582
Public service activities	105,589	147,831	-	-	-	253,420
Total operating expenses	\$ 2,075,569	\$ 1,074,146	\$ 121,334	\$ 330,715	\$ -	\$ 3,601,764
Interest expense	-	-	-	-	117,244	117,244
Total operating expenses and interest	\$ 2,075,569	\$ 1,074,146	\$ 121,334	\$ 330,715	\$ 117,244	\$ 3,719,008



Table 50 summarizes the University's operating expenses and interest by natural and functional classification for the year ended June 30, 2021 (\$ in thousands):

TABLE 50 – Operating Expenses and Interest, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Expense / interest	Compensation and benefits	Supplies and services	Scholarships and fellowships	Depreciation and amortization	Interest	Total
Educational and general						
Instruction	\$ 837,583	\$ 97,125	\$ -	\$ -	\$ -	\$ 934,708
Research	325,462	225,131	-	-	-	550,593
Public service	70,992	17,778	-	-	-	88,770
Academic support	147,941	51,515	-	-	-	199,456
Student services	118,152	22,955	-	-	-	141,107
Institutional support	199,746	111,883	-	-	-	311,629
Operation and maintenance of plant	115,842	105,908	-	-	-	221,750
Depreciation and amortization	-	-	-	318,828	-	318,828
Scholarships and fellowships	-	-	85,500	-	-	85,500
Auxiliary enterprises	120,690	92,809	-	-	-	213,499
Other expenditures						
Independent operations	24,101	29,384	-	-	-	53,485
Public service activities	95,425	165,272	-	-	-	260,697
Total operating expenses	\$ 2,055,934	\$ 919,760	\$ 85,500	\$ 318,828	\$ -	\$ 3,380,022
Interest expense	-	-	-	-	109,144	109,144
Total operating expenses and interest	\$ 2,055,934	\$ 919,760	\$ 85,500	\$ 318,828	\$ 109,144	\$ 3,489,166

17. Unrestricted Net Position

According to the University's reserve policy, unrestricted net position is designated for certain purposes. Below are the designations used by the University, as described in the University's policy:

- **Unexpended plant and facilities:** funds designated for capital projects, equipment and the major renovations of all existing buildings including research, education and general, and auxiliary.
- **Auxiliary enterprises:** funds related to self-supporting activities which provide non-instructional support in the form of goods and services to students, faculty, and staff upon payment of a specific user charge or fee.
- **Education and general:** funds designated for operational requirements, academic initiatives, research, faculty recruitment, and University initiatives.
- **Quasi-endowment:** funds related to unrestricted resources invested in the Foundation's pooled endowment fund, intended to be invested for the long-term unless otherwise approved by the Board of Trustees or a designated authority.
- **Stabilization:** funds designated to provide budgetary stabilization for operations due to unforeseen and/or uncontrollable circumstances to ensure responsible long-term financial stability.
- **Other unrestricted:** funds undesignated for a specific use or purpose.

Table 51 summarizes the University's unrestricted net position as of June 30, 2022 and 2021 (\$ in thousands):

TABLE 51 – Unrestricted Net Position

As of June 30, 2022 and 2021 (\$ in thousands)

Unrestricted resources	2022	2021
Unexpended plant and facilities	\$ 418,477	\$ 264,704
Auxiliary enterprises	89,237	104,751
Education and general	410,252	394,833
Quasi-endowment	379,143	475,167
Stabilization	152,667	144,684
Other unrestricted	30,023	84,424
Subtotal	1,479,799	1,468,563
Unfunded portion of pension liabilities	(427,492)	(477,841)
Unfunded portion of postretirement benefits other than pension liabilities	(871,010)	(928,182)
Total unrestricted net position	\$ 181,297	\$ 62,540

18. Commitments and Contingencies

In June 2019, the University entered into an agreement to lease property located at 200 Mount Vernon Street in Dorchester, Massachusetts to an unrelated party (the Developer). The Developer plans to develop a mixed-use opportunity at the site. Under the terms of the agreement, the developer, subject to certain contingencies, may enter into a 99-year ground lease for an initial fixed rent upfront payment of up to \$235.0 million, with a minimum payment of \$192.5 million.

As of June 30, 2022, pursuant to the agreement, the Developer has made deposits totaling \$11.0 million into an escrow account that will be applied to the initial fixed rent payment at closing. As of June 30, 2022, the \$11.0 million in funds would only be returned to the Developer if the University failed to perform at closing.

In October 2022, the \$11.0 million became a fully non-refundable deposit that has been withdrawn from escrow and released to the University without conditions. Additionally, the University has the ability to terminate the agreement at any time subject to the terms of the agreement.

The University has outstanding purchase commitments with contractors for the construction of certain facilities as of June 30, 2022 and 2021 of \$181.5 million and \$162.8 million, respectively. The University has entered an energy performance contract that is being managed by the Commonwealth's Division of Capital Asset Management and Maintenance (DCAMM) under its Clean Energy Investment Program. This project includes 32 energy conservation measures. The University has a commitment to the Commonwealth for Clean Energy Investment Program funds used through June 30, 2022 and 2021 of \$36.4 million and \$41.2 million, respectively.

From time to time, the University is involved in routine litigation that arises in the ordinary course of business. There are no significant legal proceedings to which the University is a party for which management believes the ultimate outcome would have a material adverse effect on the University's financial position.

19. Blended Component Units

Condensed information for the University's blended component units, the Building Authority, WCCC and UMG as of June 30, 2022 is presented in **Tables 52, 53 and 54** (\$ in thousands):

TABLE 52 – Condensed Information from the Statements of Net Position, FY2022

As of June 30, 2022 (\$ in thousands)

Condensed Information from the Statements of Net Position	Building Authority	Eliminations	WCCC	Eliminations	UMG	Eliminations
Capital assets, net	\$ 3,886,205	\$ (457,933)	\$ 377,949	\$ -	\$ 50,197	\$ -
Lease receivable	161,183	(8,360)	174,211	-	-	-
Other assets	787,816	213,692	141,208	-	61,097	-
Deferred outflows	109,949	(284)	8,120	-	-	-
Total assets and deferred outflows	4,945,153	(252,885)	701,488	-	111,294	-
Debt, including commercial paper	3,525,668	(200,883)	311,871	-	140,787	-
Lease liability	30,796	(10,068)	-	-	5,671	-
Other liabilities	113,860	(13,708)	14,501	-	29,201	-
Deferred inflows	64,358	(3,189)	169,128	-	-	-
Total liabilities and deferred inflows	3,734,682	(227,848)	495,500	-	175,659	-
Total net position	\$1,210,471	\$ (25,037)	\$ 205,988	\$ -	\$ (64,365)	\$ -

TABLE 53 – Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position	Building Authority	Eliminations	WCCC	Eliminations	UMG	Eliminations
Other revenues	\$ 306,884	\$ (153,122)	\$ 97,388	\$ (52,816)	\$ 101,936	\$ -
Total revenues	306,884	(153,122)	97,388	(52,816)	101,936	-
Operation and maintenance of capital assets	5,743	(1,055)	26,632	(25,118)	-	-
Depreciation	164,139	(23,001)	17,771	-	4,292	-
Interest expense	114,102	(105,069)	9,717	-	2,702	-
Other expenses	9,557	(7,714)	20,455	(27,698)	111,480	(420)
Total expenses	293,541	(136,839)	74,575	(52,816)	118,474	(420)
Increase (decrease) in net position	\$ 13,343	\$ (16,283)	\$ 22,813	\$ -	\$ (16,538)	\$ 420

TABLE 54 – Condensed Information from the Statements of Cash Flows, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Condensed Information from the Statements of Cash Flows	Building Authority	Eliminations	WCCC	Eliminations	UMG	Eliminations
Net cash provided by (used in) operating activities	\$ 186,174	\$ (16,283)	\$ 2,948	\$ -	\$ (26,682)	\$ 420
Net cash provided by (used in) investing activities	(195,862)	-	(33,474)	-	-	-
Net cash provided by noncapital financing activities	-	-	-	-	2,915	-
Net cash provided by (used in) capital and other financing activities	98,007	-	33,133	-	(2,957)	-
Change in cash and cash equivalents	\$ 88,319	\$ (16,283)	\$ 2,607	\$ -	\$ (26,724)	\$ 420

Condensed information for the University's blended component units, the Building Authority and WCCC as of June 30, 2021 is presented in **Tables 55, 56 and 57** (\$ in thousands):

TABLE 55 – Condensed Information from the Statements of Net Position, FY2021

As of June 30, 2021 (\$ in thousands)

Condensed Information from the Statements of Net Position	Building Authority	Eliminations	WCCC	Eliminations
Capital assets, net	\$ 3,817,026	\$ (450,458)	\$ 372,320	\$ -
Lease receivable	161,854	(8,926)	103,414	-
Other assets	525,874	166,039	151,604	(2,544)
Deferred outflows	119,261	(941)	8,764	-
Total assets and deferred outflows	4,624,015	(294,286)	636,102	(2,544)
Debt, including commercial paper	3,236,465	(234,002)	329,798	-
Lease liability	22,320	-	-	-
Other liabilities	109,632	(29,662)	24,981	(2,544)
Deferred inflows	58,470	(3,803)	137,648	-
Total liabilities and deferred inflows	3,426,887	(267,467)	492,427	(2,544)
Total net position	\$ 1,197,128	\$ (26,819)	\$ 143,675	\$ -

TABLE 56 – Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position	Building Authority	Eliminations	WCCC	Eliminations
Other revenues	\$ 226,638	\$ (121,893)	\$ 104,756	\$ (53,591)
Total revenues	226,638	(121,893)	104,756	(53,591)
Operation and maintenance of capital assets	4,711	(5,033)	25,834	(23,782)
Depreciation	158,488	(19,510)	29,195	-
Interest expense	109,213	(104,534)	6,636	-
Other expenses	10,064	(9,821)	19,619	(29,809)
Total expenses	282,476	(138,898)	81,284	(53,591)
Increase in net position	\$ (55,838)	\$ 17,005	\$ 23,472	\$ -

TABLE 57 – Condensed Information from the Statements of Cash Flows, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Condensed Information from the Statements of Cash Flows	Building Authority	Eliminations	WCCC	Eliminations
Net cash provided by (used in) operating activities	118,497	\$ 17,005	\$ 4,976	\$ -
Net cash provided by (used in) investing activities	8,381	-	(51,428)	-
Net cash provided by (used in) capital and other financing activities	(250,177)	-	47,861	-
Change in cash and cash equivalents	\$ (123,299)	\$ 17,005	\$ 1,409	\$ -

The UMass Amherst Foundation, UMass Medical School Foundation and the UMLARC are not material in relation to the other blended component units nor the University as a whole and is therefore not presented in the above condensed information.

20. Discretely Presented Component Units

As described in Note 1, UMF and UMDF are discretely presented component units. These Foundations are presented in the aggregate in the accompanying financial statements. Following is supplemental information on UMF's non-agency investments, which is not included in its entirety elsewhere in these financial statements.

This note excludes non-University agency investments in the amount of \$20.5 million and \$28.4 million as of June 30, 2022 and 2021. This note does not include investment information for UMDF assets not held by UMF given the immaterial nature of UMDF's balances and activities.

Custodial Credit Risk

UMF maintains depository, payroll, disbursement, receipt, and imprest accounts. In addition to bank account deposits, UMF held money market instruments which are classified as investments. Interest bearing and money market accounts carry Federal Deposit Insurance Corporation (FDIC) insurance up to \$250,000 per account. None of the accounts are collateralized above the FDIC insured amounts.

Concentration of Credit Risk — As of June 30, 2022 and 2021, there is no concentration of investments from one issuer equal or greater than 5% of the portfolio. Investments issued or guaranteed by the U.S. government, as well as investments in mutual funds and other pooled investments are excluded from consideration when evaluating concentration risk.

Credit Risk — UMF's investment policy allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager. Nationally recognized statistical rating organizations, such as Standard & Poor's (S&P) assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors.

Table 58 presents the unrated debt investments at fair value by credit quality of UMF's non-agency investment portfolio as of June 30, 2022 (\$ in thousands):

TABLE 58 – Debt Investments by Credit Quality, FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	2022	S&P rating
U.S. Treasury securities	\$ 67,367	AAA
Bond funds, including exchange traded funds	2,046	Not Rated
Total debt securities	\$ 69,413	

Table 59 presents the unrated debt investments at fair value by credit quality of UMF's non-agency investment portfolio as of June 30, 2021 (\$ in thousands):

TABLE 59 – Debt Investments by Credit Quality, FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	2021	S&P rating
U.S. Treasury securities	\$ 47,550	AAA
Total debt securities	\$ 47,550	

Interest Rate Risk — UMF’s Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by asset class by limiting investments through targeted allocations to different asset classes.

Table 60 presents the fair value by investment maturity of the unrated debt investments of UMF’s non-agency investment portfolio as of June 30, 2022 (\$ in thousands):

TABLE 60 – Debt Investments by Maturity, FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years	Total
U.S. Treasury securities	\$ -	\$ 41,264	\$ 21,381	\$ 4,722	\$ 67,367
Bond funds, including exchange traded funds	40	2,006	-	-	2,046
Total debt securities	\$ 40	\$ 43,270	\$ 21,381	\$ 4,722	\$ 69,413

Table 61 presents the fair value by investment maturity of the unrated debt investments of UMF’s non-agency investment portfolio as of June 30, 2021 (\$ in thousands):

TABLE 61 – Debt Investments by Maturity, FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	2021	Investment maturity
U.S. Treasury securities	\$ 47,550	1 to 5 years
Total debt securities	\$ 47,550	



Fair Value Measurement — UMF's fair value measurement disclosure is captured in Note 4. Additional disclosure related to UMF's non-agency investments is as noted below.

Table 62 summarizes the fair value of UMF's non-agency investments by type as of June 30, 2022 (\$ in thousands):

TABLE 62 – Fair Value Hierarchy of Non-Agency Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Non-agency investments	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	65,637	\$ -	\$ -	\$ 65,637
Debt securities					
U.S. Treasury securities	-	67,367	-	-	67,367
Bond funds, including exchange traded funds	-	2,046	-	-	2,046
Total debt securities	-	69,413	-	-	69,413
Equity securities					
Domestic equities	-	65,685	-	-	65,685
International equities	-	29,907	-	-	29,907
Total equity securities	-	95,592	-	-	95,592
Alternative investments					
Multi-strategy hedge funds					
Equity	228,635	-	-	-	228,635
Long/short	157,063	-	-	-	157,063
Fixed income	31,830	-	-	-	31,830
Absolute return	36,059	-	-	-	36,059
Real assets	8,807	-	-	-	8,807
Private equity	76,036	-	-	-	76,036
Private debt	14,686	-	-	-	14,686
Private real estate	8,388	-	-	-	8,388
Annuity & life income pooled funds	3,404	-	-	-	3,404
Total alternative investments	564,908	-	-	-	564,908
Total investments	\$ 564,908	\$ 230,642	\$ -	\$ -	\$ 795,550

Table 63 summarizes the fair value of UMF's non-agency investments by type as of June 30, 2021 (\$ in thousands):

TABLE 63 – Fair Value Hierarchy of Non-Agency Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Non-agency investments	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	\$ 45,536	\$ -	\$ -	\$ 45,536
Debt securities					
U.S. Treasury securities	-	47,550	-	-	47,550
Total debt securities	-	47,550	-	-	47,550
Equity securities					
Domestic equities	-	85,997	-	554	86,551
International equities	-	30,690	-	-	30,690
Total equity securities	-	116,687	-	554	117,241
Alternative investments					
Multi-strategy hedge funds					
Equity	255,591	-	-	-	255,591
Long/short	167,262	-	-	-	167,262
Fixed income	35,282	-	-	-	35,282
Absolute return	17,588	-	-	-	17,588
Real assets	8,061	-	-	-	8,061
Private equity	71,503	-	-	-	71,503
Private debt	17,644	-	-	-	17,644
Private real estate	8,558	-	-	-	8,558
Annuity & life income pooled funds	3,470	-	-	-	3,470
Total alternative investments	584,959	-	-	-	584,959
Total investments	\$ 584,959	\$ 209,773	\$ -	\$ 554	\$ 795,286



Table 64 presents unfunded commitments, redemption frequency and notice period for non-agency investments that have been valued using NAV as a practical expedient as of June 30, 2022 (\$ in thousands):

TABLE 64 – Alternative Non-Agency Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Common trust funds	\$ 3,404	\$ -	Daily		No lock-up restrictions
Multi-strategy hedge funds					
Equity	228,635	-	Daily to quarterly	1-90 days	Lock-up provisions range from none to 2 years.
Long/short	157,063	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 2 years.
Fixed income	31,830	-	Quarterly to semi-annual	**	No lock-up restrictions
Absolute return	36,059	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	8,807	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	76,036	21,115	Closed end funds	*	Not redeemable
Private debt	14,686	9,839	Closed end funds	*	Not redeemable
Private real estate	8,388	1,476	Closed end funds	*	Not redeemable
Total	\$564,908	\$ 32,430			

* UMF has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

** Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.

Table 65 presents unfunded commitments, redemption frequency and notice period for non-agency investments that have been valued using NAV as a practical expedient as of June 30, 2021 (\$ in thousands):

TABLE 65 – Alternative Non-Agency Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds					
Equity	\$ 255,591	\$ -	Daily to quarterly	1-90 days	Lock-up provisions range from none to 2 years.
Long/short	167,262	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 3 years.
Fixed income	35,282	-	Quarterly	**	Lock-up provisions range from none to 1 year.
Absolute return	17,588	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	8,061	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	71,503	14,498	Closed end funds	*	Not redeemable
Private debt	17,644	11,657	Closed end funds	*	Not redeemable
Private real estate	8,558	1,716	Closed end funds	*	Not redeemable
Annuity & life income pooled funds	3,470	-	Daily		No lock-up restrictions
Total	\$584,959	\$ 27,871			

* UMF has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1-5 years. Liquidity is expected to be received in the next 1-9 years.

** Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.

Related Party Transactions

Members of the University's Board of Trustees and Officers may, from time to time, be associated, either directly or indirectly, with companies doing business with the University. The University requires an annual disclosure of significant financial interests in, family relationships, significant management function, or substantial business with entities doing business with the University by members of the University's Board of Trustees and Officers. When such relationships exist, measures are taken to assess potential conflicts of interest to protect the best interests of the University and ensure compliance with relevant conflict of interest laws and policy. The University's conflict of interest policy also requires, among other things, that no member of the Board of Trustees or Officer may participate in any decision in which they (or an immediate family member) has a material financial interest.

Subsequent Events

On July 7, 2022, the University entered into a public-private partnership agreement with Mass Ave Housing Partners LLC, to carry out the design, construction, financing, operation, management and maintenance of a portion of the Student Housing Project consisting of approximately 600 beds of undergraduate apartment-style housing and related infrastructure, including residential dining commons and parking and approximately 200 beds of graduate student apartment-style housing and related infrastructure, including parking.

The estimated cost of construction of the Student Housing Project is \$250.0 million.

Mass Ave Housing Partners LLC will also manage, maintain, and operate the Student Housing Facilities for a term of 65-years.

For purposes of determining the effects of subsequent events on these financial statements, management has evaluated events subsequent to June 30, 2022 and through December 15, 2022, the date on which the financial statements were issued.



Required Supplementary Information (unaudited)

For the last ten years* (\$ in thousands)

*Until a full ten year trend is compiled, the University is presenting only information for the years for which information is available.

Schedule of the University's Proportionate Share of the Net Pension Liability — Massachusetts State Employees' Retirement System

Based on the measurement date, June 30

Liability	2021	2020	2019	2018	2017	2016	2015	2014
University's proportion of the net pension liability	2.65%	3.76%	3.60%	3.09%	3.28%	3.12%	3.59%	3.49%
University's proportionate share of the net pension liability	\$ 276,313	\$ 644,879	\$ 526,739	\$ 409,319	\$ 420,234	\$ 429,871	\$ 408,418	\$ 237,134
University's covered-employee payroll	\$1,216,914	\$1,264,971	\$1,247,098	\$1,242,525	\$1,168,661	\$1,156,082	\$1,139,719	\$1,061,132
University's proportionate share of the net pension liability as a percentage of its covered-employee payroll	22.71%	50.98%	42.24%	32.94%	35.96%	37.18%	35.83%	22.35%
Plan fiduciary net position as a percentage of total pension liability	77.54%	62.48%	66.28%	67.91%	67.21%	63.48%	67.87%	76.32%

Schedule of the University's Contributions — Massachusetts State Employees' Retirement System

For the fiscal year ended June 30

Contributions	2022	2021	2020	2019	2018	2017	2016	2015
Contractually required contribution	\$ 45,010	\$ 31,495	\$ 40,617	\$ 35,843	\$ 28,292	\$ 25,618	\$ 22,386	\$ 22,386
Contributions in relation to the contractually required contribution	(45,010)	(31,495)	(40,617)	(35,843)	(28,292)	(25,618)	(22,386)	(22,386)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
University's covered-employee payroll	\$1,318,298	\$1,216,914	\$1,264,971	\$1,247,098	\$1,242,525	\$1,168,661	\$1,156,082	\$1,139,719
Contributions as a percentage of covered-employee payroll	3.41%	2.59%	3.21%	2.87%	2.28%	2.19%	1.94%	1.96%

Schedule of the University's Proportionate Share of the Net Other Postemployment Benefits (OPEB) Liability — State Retirees' Benefit Trust

Based on the measurement date, June 30

Liabilities	2021	2020	2019	2018 (restated)	2017
University's proportion of the net OPEB	3.03%	4.01%	5.43%	4.82%	4.67%
University's proportionate share of the net OPEB	\$ 485,141	\$ 829,808	\$ 992,991	\$ 895,669	\$ 817,357
University's covered-employee payroll	\$1,216,914	\$1,264,971	\$1,247,098	\$1,242,525	\$1,168,661
University's proportionate share of the net OPEB as a percentage of its covered-employee payroll	39.87%	65.60%	79.62%	72.08%	69.94%
Plan fiduciary net position as a percentage of total OPEB liability	10.70%	6.40%	6.96%	6.01%	4.80%

Schedule of the University's Contributions — State Retirees' Benefit Trust

For the fiscal year ended June 30

Contributions	2022	2021	2020	2019	2018
Contractually required contribution	\$ 21,091	\$ 16,538	\$ 21,040	\$ 26,137	\$ 21,421
Contributions in relation to the contractually required contribution	(21,091)	(16,538)	(21,040)	(26,137)	(21,421)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
University's covered-employee payroll	\$1,318,298	\$1,216,914	\$1,264,971	\$1,247,098	\$1,242,525
Contributions as a percentage of covered-employee payroll	1.60%	1.36%	1.66%	2.10%	1.72%



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University of Massachusetts

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List of Electronic Work Room Documents

The UMass Lowell electronic work room document is a compilation of resources referenced in the university's self-study. The document is organized by standards and starts by a collection of resources of how we conducted this self-study this past several years. Each standard includes direct links to resources listed in the standard's narrative. In addition, each standard is concluded by a list of documents that could not be linked directly to the UMass Lowell's website. Finally, a representative list of class syllabi from all colleges as well as curriculum vitae of faculty and staff is listed at the end of the electronic work room.

How We Conducted the Self Study Documents:

[NECHE 2023 Early Planning Jan. 2019](#)
[NECHE 2023 Slides Fall 2019 Special Team Kick-Off](#)
[NECHE 2023 Slides Spring 2021 Special Teams Update](#)
[NECHE 2023 Slides Campus Event Nov. 2021](#)
[NECHE 2023 Slides College Outreach Jan. 2023](#)

Standard One - MISSION AND PURPOSES

[UMass Lowell University Mission](#)
[UMass Lowell's Career Connected Work & Experiential Learning](#)
[University of Massachusetts System](#)
[University of Massachusetts System Mission](#)
[UMass Lowell's Values: Pillars of Inclusive Excellence](#)
[UMass Lowell's 2020 Strategic Plan](#)
[Diversity, Equity & Inclusion Action Plan](#)
[UMass Lowell's 2028 Strategic Plan](#)
Article: [September in the City - A UMass Lowell co-sponsored event with the City of Lowell and surrounding community colleges](#)
[UMass Lowell's Strategic Research Plan](#)

Standard Two - PLANNING AND EVALUATION

Article: [Fall 2022 Office Changes at UMass Lowell](#)
Article: [UMass Lowell's Honors College New Location](#)
[UMass Lowell Honors College](#)
Article: [UMass Lowell's Asian American Center for Excellence and Engagement New Location](#)
[UMass Lowell's RIST Institute for Sustainability & Energy](#)
[UMass Lowell's 2020 Strategic Plan](#)
[Office of Data Analytics and Institutional Research \(DAIR\)](#)
[UMass Lowell's 2028 Strategic Plan](#)
[Diversity Action Plan](#)
[Facilities Management Plan \(including the Space Committee\)](#)
[Climate Action Plan](#)
[Transportation Master Plan](#)
[UMass Lowell Summary of Strategic Planning Survey Results](#)
[Enrollment and student success](#)
[A diverse, welcoming and inclusive campus](#)
[Research excellence](#)
[Partnering with our community for mutual benefit](#)

[UMass Lowell 2020 Strategic Plan Report Cards](#)

[Strategic Planning Steering Committee](#)
[UMass Lowell Division I and American East Conference Athletics Classification](#)
[River Hawk Scholars Academy \(RHSA\)](#)
[UMass Lowell Launch Summer Programs](#)
[River Hawk Experience Distinction \(RHED\)](#)
[Launch@UML Faculty Onboarding Program](#)
[ADVANCE Office of Faculty Equity](#)
[Center for Excellence in Learning and Teaching](#)
[Capital Fundraising Campaign](#)
[Article: UML Moved 2,700 Courses Online in 10 Days](#)
[Office of Emergency Management & Life Safety](#)
[Incident Management System \(ICS\)](#)
[UMass Lowell East Campus Proposed Development](#)
[Large Scale Mixed-Use Development of UMass Lowell East Campus](#)
[UMass Lowell 2020 Pillars of Inclusive Excellence](#)
[UMass Lowell's Process of Academic Quality Assessment and Development \(AQAD\)](#)
[UMass Lowell's Core Curriculum](#)
[University's Space Committee](#)

Additional Standard Two Work Room Documents:

[UMass Lowell Preliminary Summary of Strategic Planning Survey Results](#)
UMass Lowell Campus Climate Surveys:
[Faculty Campus Climate Survey](#)
[Student Government Association \(SGA\) Student Success Survey](#)

Standard Three - ORGANIZATION AND GOVERNANCE

[Article: UMass Lowell Board of Trustees Announces Julie Chen as New Chancellor](#)
[UMass System President](#)
[UMass Lowell Board of Trustees](#)
[UMass Lowell Student Government Association](#)
[UMass Lowell Faculty Senate](#)
[Board of Trustees Bylaws](#)
[General Laws of Commonwealth of Massachusetts for Board of Trustees](#)
[UMass System Joint Academic and Financial Initiatives](#)
[UMass Lowell's Executive Cabinet Team](#)
UMass Lowell's Senior Cabinet:
[Deans](#)
[Vice Provosts and Associate Vice Provosts](#)
[Division of Academic and Student Affairs \(ASA\) Organization Chart](#)
[UMass Lowell Office of International Experiences & Study Abroad](#)
[Immersive Scholars Program at UMass Lowell](#)
[River Hawk Experience Distinction Program](#)
[UMass Lowell Career & Co-Op Center](#)
[UMass Lowell Office of Residence Life](#)
[Career-Connected Learning Experiences Initiative at UMass Lowell](#)
[Kennedy College of Sciences](#)
[Zuckerberg College of Health Science](#)
[Manning School of Business](#)
[Francis College of Engineering](#)
[College of Fine Arts, Humanities and Social Sciences \(FAHSS\)](#)
[Honors College](#)

[UMass Lowell Division of Graduate, Online and Professional Studies](#)
[Faculty Senate Executive Committee and Subcommittees-](#)
[Labor Unions and Collective Bargaining Agreements at UMass Lowell:](#)
[MTA – Massachusetts Society of Professors](#)
[International Teamsters Union Local 25](#)
[SEIU Local 888](#)
[MTA - Classified / Technical](#)
[MTA - Maintenance & Trades](#)
[MTA – Grants & Contracts](#)
[Graduate Employee Organization Local 1596 UAW](#)
[Union of Adjunct Faculty, Local 1596, UAW](#)
[Non-Unit Professionals](#)
[Article: Student Government Association at UMass Lowell](#)
[SGA Student Satisfaction Survey](#)
[Advising at UMass Lowell](#)
[Open Education Resources at UMass Lowell](#)

Standard Four – THE ACADEMIC PROGRAM

[Race and Ethnic Studies Minor](#)
[NECHE 2018 Interim Report](#)
[Bachelor's Degrees at UMass Lowell](#)
[Master's Degrees at UMass Lowell](#)
[Doctoral Degrees at UMass Lowell](#)
[Division of Graduate, Online & Professional Studies \(GPS\)](#)
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[Graduate Policy and Affairs Committee](#)
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[Massachusetts Board of Higher Education](#)
[Academic Quality Assessment and Development](#)
[Accreditation Agencies](#)
[UMass Lowell Accreditation website](#)
[Curriculum](#)
[Academic Assistant and Associate Deans for Undergraduate and Graduate Programs](#)
[Faculty Senate website](#)
[UMass Lowell School of Education](#)
[University of Massachusetts Procedures for University Approval of New Academic Degree Programs, Program Changes, and Program Termination](#)
[Academic Catalogs](#)
[Student Learning Outcomes](#)
[Degree Pathways](#)
[Student Information System \(SiS\)](#)
[Core Curriculum:](#)
[Breadth of Knowledge](#)
[Essential Learning Outcomes](#)
[The Academic Catalog](#)
[UMass Lowell First Year Writing Program](#)
[Major-Specific Writing Goals Guide](#)
[UMass Lowell Academic Calendar](#)
[Career Connected Work and Experiential Learning](#)
[Graduate Catalog](#)
[Academic Catalog](#)

[Bachelor's-to-Master's Programs](#)
[Interdisciplinary Graduate Programs](#)
[Graduate Engineering Master's Co-op](#)
[National Science Foundation I-Corps](#)
[GPS Corporate Academic Partnership program](#)
[GPS Online Teaching Training](#)
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[Center for Excellence in Learning and Teaching \(CELT\)](#)
[Blackboard Learning Management System](#)
[Transfer Admissions](#)
[Transfer dictionary](#)
[UMass Lowell Course Equivalency Examinations](#)
[Graduate Transfer Credit Policy](#)
[Commonwealth Collegiate Academy \(CCA\)](#)
[Academic Standing and Eligibility for a Degree Policy at UMass Lowell](#)
[Transfer Alliance Program](#)
Academic Integrity:
 [Undergraduate Level](#)
 [Graduate Level](#)
[Turnitin Plagiarism Detection Tool](#)
[Respondus](#): Online tool for conducting secure online exams

Additional Standard Four Work Room Documents:

- [New UMass Lowell Programs, Options, Concentrations & Certificates – DHE Approval Dates, June 2018-June 2023.](#)
- [UMass Lowell AQAD \(Academic Quality, Assessment, and Development\) Reviews Samples](#)
- [UMass Lowell Sample Syllabus Template Fall 2023](#)
- [UMass Lowell Student Absence Guidelines for Faculty 2021](#)

Standard Five – STUDENTS

[Summer Launch Programs](#)
[The Office of Undergraduate Admissions](#)
[Division of Enrollment Management](#)
[Financial Aid](#)
[Office of Orientation and Enrollment Events](#)
[UMass Lowell's mission](#)
[NACAC & Ethical Practice in College Admission](#)
[Massachusetts Department of Higher Education](#)
[Admissions standards](#)
[The Common Application, the Coalition Application and the University's Own Application Process](#)
[DHE's Undergraduate Admissions Standards for the Massachusetts State University System and the University of Massachusetts](#)
[No Test Option](#)
[Office of Data Analytics and Institutional Research](#)
[Self-Reported Test Scores](#)
[Honors College](#)
[River Hawk Scholars Academy](#)
[Office of Disability Services](#)
[Reserved Placement Program \(RPP\)](#)
[Middlesex Community College \(MCC\)](#)
[Northern Essex Community College \(NECC\)](#)
[MCC2UML Transfer Initiative](#)
[Mass Transfer Program](#)

[UMass Lowell Transfer Alliance Program \(TAP\)](#)
[Bunker Hill Community College](#)
[Transfer Admissions](#)
[Commonwealth Commitment Compact](#)
[UML Open House](#)
[UML Junior Preview Day](#)
[UML Campus Tours](#)
[Undergraduate Admissions](#)
[Virtual Viewbook](#)
[Simpson Scarborough Higher Education Marketing and Branding Agency](#)
[RAMP: Francis College of Engineering Research Academics & Mentoring Pathways Program](#)
[SoarCS: Kennedy College of Sciences Summer Bridge Program](#)
[Complete College America](#)
[Office of Multicultural Affairs](#)
[District of Columbia College Access program \(DC-CAP\)](#)
[GPS UML Graduate Professional and Online Admissions](#)
 [GPS Undergraduate Admissions](#)
 [GPS Graduate Admissions](#)
[International Students and Scholars Office \(ISSO\)](#)
[Standardized Test Scores Waiver Information](#)
[Graduate Students Orientation](#)
[Graduate Student Success Team](#)
[Teaching Assistants Orientation](#)
[Student Guide to Financial Aid](#)
[Federal Direct Loan Entrance Counseling](#)
[Applying for Financial Aid Resources](#)
[Federal Direct Master Promissory Note](#)
[UML Strategic Plan 2020 Financial Wellness & Financial Planning Committee](#)
[Financial Wellness Program](#)
[UML Division of Academic Services](#)
[Advising at UMass Lowell](#)
[UML Career & Co-Op Center](#)
[UML Career Fair Events](#)
[UML Wellness Center](#)
[Office of Prevention and Education](#)
[Office of Student Life & Well-Being](#)
[Office of Disability Services](#)
[UML Tutoring Services](#)
[UML Athletics Department](#)
[Commonwealth Honors Program](#)
[NCAA Graduation Success Rate](#)
[Article: Top Colleges in Massachusetts According to the 2024 Rankings From The Wall Street Journal](#)
[UML Health Services](#)
[Engage: Student Clubs and Organizations Portal](#)
[Office of Student Activities & Leadership](#)
[Student Government Association \(SGA\)](#)
[Graduate Student Association \(GSA\)](#)
[Students Leadership Program: Leaders in Action](#)
[Office of Residence Life](#)
[UML Living & learning Communities \(LLCs\)](#)

Additional Standard Five Work Room Documents:

[UMass Lowell No Test Data](#)

[UML Student Athlete Graduation Success Rate Report](#)

Standard Six - TEACHING, LEARNING, AND SCHOLARSHIP

[Massachusetts Society of Professors \(MSP\)](#)

[Union of Adjunct Faculty \(UAW\)](#)

[Human Resources Search Process Training Tools and Guidelines](#)

[Chronicle of Higher Education's Database for UMass Lowell's Faculty and Staff Salaries](#)

[UML Faculty Success Website](#)

[ADVANCE Office for Faculty Equity](#)

[New Faculty Onboarding Program Launch@UML](#)

[Pedagogy Mini-Grants for Faculty's Professional Development](#)

[Research Seed Grants 2023 Award Recipients](#)

[Guidelines for Promotion and Tenure](#)

[Student Feedback on Instruction](#)

[Division of Academic Services](#)

[The Solution Center](#)

[The Centers for Learning, Advising and Student Success](#)

[The Office of Disability Services](#)

[The Registrar's Office](#)

[Athletics Department](#)

[Office of International Experiences and Study Abroad](#)

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[Office of National Scholarships](#)

[Division of Graduate, Online and Professional Studies \(GPS\)](#)

[Student Success Website](#)

[Online Tutoring Software: ThinkingStorm](#)

[Faculty Research and Community Engagement Symposium](#)

[Center for Excellence in Learning and Teaching-sponsored virtual events](#)

[Commencement](#)

Article: [School of Education-Led Pedagogical Workshops](#)

[Instructional Technology team](#)

[PELT Summer 2020 Virtual Workshops](#)

[Center for Excellence in Learning and Teaching \(CELT\)](#)

[CELT's Workshops Database](#)

[CELT's Newsletter Archive](#)

[Open Educational Resources \(OER\)](#)

[Open Education Resources \(OER\) Mini-Grants](#)

[College-Based Advisors \(CBAs\)](#)

[UML's 2028 Strategic Plan: Research Excellence](#)

Article: [Anne Maglia Promoted to Vice Chancellor for Research & Innovation](#)

[UML's Core Research Facilities](#)

[UML's Pillars of Inclusive Excellence](#)

[Council on Social Justice & Inclusion](#)

[Offices of Research Administration & Research Integrity](#)

[UML's Research and Engagement Centers/Institutes Guidelines](#)

[Pulichino Tong Business Center](#)

[UML's State of the Art Lyophilization Lab](#)

UMass Lowell Research Print and Online Magazines:

[Elements of Science](#)

[Engineering Solutions](#)

[UML's Research Blog](#)

[UML's Faculty Symposium](#)

[Distinguished University Professor](#)

[Manning Prize for Teaching Excellence](#)

[Research & Engagement Centers:](#)

[Jack and Stella Kerouac Center for Public Humanities](#)

[Center for Pathogen Research and Training](#)

[Center for Community Research and Engagement](#)

[Center for Autism Research and Education](#)

[Center for Terrorism and Security Studies](#)

[Lowell Center for Space Science and Technology](#)

[HEROES](#)

[Fabric Discovery Center](#)

[Rist Institute for Sustainability and Energy](#)

[Raytheon UMass Lowell Research Institute](#)

[UMass Lowell Applied Research Corporation](#)

[Massachusetts Medical Device Development Center \(M2D2\) and Biotech Incubator](#)

[Undergraduate Research Opportunities](#)

Additional Standard Six Work Room Documents:

[UML Example Activities Supporting Faculty Success in Research and Scholarship](#)

Standard Seven - INSTITUTIONAL RESOURCES

[UML's Mission](#)

[UML Inn & Conference Center](#)

[Tsongas Center](#)

[Article: How UML Moved 2,700 Courses Online in 10 Days](#)

[UML's Provost Office](#)

[Office of Academic and Instructional Technology](#)

[Student Government Association](#)

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[UML Strive Food Pantry](#)

[UML Innovation Hub](#)

[UML Fabric Discovery Center](#)

[Article: UML-based Medical Device and Biotech Incubator Helping Companies Fight Pandemic](#)

[Article: EMS Continues to Serve Students, Essential Staff Who Must Remain on Campus](#)

[Article: Public Health Students Volunteer as Contact Tracers](#)

[Article: TNEC Offers Free Trainings on COVID-19 Worker Safety](#)

[Center For Learning and Academic Support Services \(Class\)](#)

[UML's Wellness Center](#)

[Article: From Testing to Telehealth, UML Committed to Students' Well-being](#)

[Office of University Relation](#)

[Office of Hospitality & Event Services](#)

[Article: Virtual 2020 Commencement](#)

[UML Office of Digital Communication and Web Services](#)

[UML's 2028 Strategic Plan](#)

[Research Excellence](#)

[Enrollment and Student Success](#)

[A Diverse & Inclusive Campus](#)

[Partnering with Our Community](#)

[UMass System President](#)

[UML Board of Trustees](#)

[UML Executive Cabinet](#)

[UMass System Unified Procurement Services Team \(UPST\)](#)

[UML Board of Trustees Policies -](#)

[UMass President's Office Policies & Guidelines](#)

[Massachusetts Ethics and Conflict of Interest Laws and Policies](#)

[UML's Fraud Policy](#)

[Budget Office](#)

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[UML's Finance & Operations Office](#)

[Facilities Management & Planning](#)

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[Information Technology](#)

[Administrative Services](#)

[Office of Human Resources](#)

[Human Resources Equal Opportunity & Outreach](#)

[Human Resources Diversity & Inclusion Training](#)

[Human Resources LinkedIn Trainings](#)

[UML's Bargaining Units:](#)

[Massachusetts Society of Professors \(MTA\)](#)

[University Police \(Teamsters\)](#)

[Professional Administrative Unit \(SEIU\)](#)

[Classified/Technical \(MTA\)](#)

[Maintenance & Trades \(MTA\)](#)

[Grants & Contracts \(MTA\)](#)

[Graduate Employee Organization \(GEO\)](#)

[Union of Adjunct Faculty \(UAW\)](#)

[Non-Unit Professional](#)

[Human Resources](#)

[Labor Relations](#)

[Performance Planning & Evaluation process](#)

[HR's Employee Learning, Engagement and Development \(ELED\)](#)

[The Office of University Advancement](#)

[Council for the Advancement and Support of Education](#)

[National Association of College and University Business Officers \(NACUBO\)](#)

[UML Difference Maker Program](#)

[UML Student Research & Community Engagement Symposium](#)

[UML FY24 Budget Challenges FAQ](#)

[UML Office of Information Technology \(IT\)](#)

[Center for Excellence in Learning and Teaching \(CELT\)](#)

[Blackboard](#)

[Academic and Instructional Technology](#)

[Data Analytics and Institutional Research](#)

[UML Information Security](#)

[UMass Lowell Library](#)
[William Ernest Hocking Rare Book Collection](#)
[Jack Kerouac and Beat Literature collections](#)
[89 research guides on Lowell history](#)
[Southeast Asian Digital Archive \(SEADA\)](#)
[Portuguese American Digital Archive \(PADA\)](#)
[UML Open Education Resources Initiative](#)
[Ask A Librarian Services](#)
[Office of Multicultural Affairs \(OMA\)](#)
[Center for Women & Work \(CWW\)](#)
[UML School of Education](#)
[UML Library's Edit-a-Thon Series](#)
[Consortium of the Massachusetts Public Higher Education Libraries](#)
[Boston Library Consortium](#)
[Fenway Libraries Organization](#)
[Strategic Development Plan](#)
[Article: Sustainable U](#)
[Massachusetts Environmental Policy Act](#)
[Association for the Advancement of Sustainability in Higher Education \(AASHE\)](#)
[Sustainability Tracking, Assessment, & Rating System \(STARS\)](#)
[Components of Planning, Reporting & Recognition for UML Sustainability](#)
[UML 2022-2027 Strategic Development Plan](#)

Additional Standard Seven Work Room Documents:

[2020 UMass Lowell AANAPISI Eligibility Letter](#)

Standard Eight - EDUCATIONAL EFFECTIVENESS

[UML's Strategic Plan](#)
[Experiential & Co-curricular- Learning](#)
[Center for Excellence in Teaching and Learning \(CELT\)](#)
[UML Mission](#)
[Data Analytics & Institutional Research \(DAIR\)](#)
[Division of Graduate, Professional, and Online Studies \(GPS\)](#)
[Undergraduate Core Curriculum](#)
[Breadth of Knowledge \(BOK\)](#)
[Essential Learning Outcomes](#)
[Applied and Integrative Learning](#)
[Course Finder](#)
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[Core Curriculum Committee](#)
[Program Learning Outcomes](#)
[Annual Program and Learning Summary](#)
[Graduate Catalog](#)
[AQAD Process](#)
[Faculty Senate](#)
[Achieving a Massachusetts Culture of Assessment \(AMCOA\) strategic initiative](#)
[2028 Strategic Plan](#)
[CELT Workshops](#)
[Applied and integrative learning](#)
[Experiential and career-connected learning](#)
[Career & Co-Op Center](#)

[Office of Residence Life](#)
[River Hawk Experience Distinction \(RHED\)](#)
[Blackboard](#)
[Academic and Instructional Technology](#)
[Student Feedback on Instruction](#)
[Course Evaluations](#)
[First Destination Survey \(Evaluation of Post-Graduation Outcomes\)](#)
[Mathematical Sciences Department](#)
[2020 Strategic Plan's report cards](#)
[UML's Pillars of Excellence](#)
[About UMass Lowell Website Information Section](#)
[National Survey of Student Engagement NSSE](#)

Additional Standard Eight Work Room Documents:

[Sample Visualizations Provided by the Office of Data Analytics and Institutional Research \(DAIR\)](#)
[RHED Rubrics & Sample Reflection Guide](#)
[UML DFW Rate Summary of Day Courses - 2018 Spring Through 2022 Fall](#)
[UMass Lowell Residential Satisfaction Survey Data](#)

Standard Nine - INTEGRITY, TRANSPARENCY, AND PUBLIC DISCLOSURE

[Office of Research Integrity](#)
[UML Policy on Student Integrity](#)
[UML Research Misconduct Policy](#)
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[Student Information System \(SiS\)](#)
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[MyUML app](#)
[UML Policy Portal](#)
[UML Student Process to Update their Preferred Campus Name](#)
[UML Enable Inclusive Identity Project](#)
[Sexual Violence & Prevention Website](#)
[Equal Opportunity Complaint and Sexual Harassment Grievance Procedures](#)
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[Title IX Coordinator](#)
[Equal Opportunity and Outreach \(EOO\)](#)
[Diversity and Inclusion Office](#)
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[DEI Pillars of Inclusive Excellence](#)
[Sexual Harassment and Sexual Violence Prevention Training](#)
[My Student Body Training Course](#)
[Center for Hope & Healing](#)
[Lowell General Hospital](#)
[Alternative House \(Lowell\)](#)
[Massachusetts' Regulation on Public Records Access \(950 CMR 32\)](#)
[University Public Records](#)
[Requests for Public Information form](#)

[University's Annual Audited Financial Statements.](#)
[UMass System Budget & Financial Planning Reports](#)
[Division of Graduate, Professional, and Online Studies \(GPS\)](#)
[SiteImprove](#)
[AbleDocs](#)
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[Axes Word/PDF](#)
[Blackboard](#)
[UML Office of Academic and Instructional Technology](#)
[UML Athletics Department](#)
[Article: River Hawks Maintain Perfect Score on NCAA Athletic Equality Index](#)
[Athletic Equality Index \(AEI\)](#)
[Office of Data, Analytics and Institutional Research \(DAIR\)](#)
[UML Report Cards](#)
[UML University Website](#)
[Today@UMass Lowell News Portal](#)
[NewsLine](#)
[UML Magazine](#)
[UML Engineering Solutions Publication](#)
[UML Elements of Science Magazine](#)
[UML's News Website](#)

Other Workroom Materials: REPRESENTATIVE UMASS LOWELL VITAE & SYLLABI

- [College of Fine Arts, Humanities & Social Sciences \(FAHSS\)](#)
- [Francis College of Engineering \(FCOE\)](#)
- [Kennedy College of Sciences \(KCOS\)](#)
- [Manning School of Business \(MSB\)](#)
- [Zuckerberg College of Health Sciences \(ZCHS\)](#)
- [Honors College](#)
- [Academic & Student Affairs \(ASA\) Staff](#)