

ANNUAL REPORT
OF THE
UNIVERSITY OF MASSACHUSETTS
FOR THE FISCAL YEAR ENDED JUNE 30, 2018

The following Annual Report of the University of Massachusetts (the “University” or “UMass”) is submitted in connection with Continuing Disclosure Agreements for bonds issued by the Massachusetts Development Finance Agency (MDFA) or its predecessor agency, the Massachusetts Health and Educational Facilities Authority (MHEFA), as follows:

- MHEFA \$99,325,000 Revenue Bonds, Worcester City Campus Corporation Issue (University of Massachusetts Project), Series D (2005)
- MHEFA Variable Rate Demand Revenue Bonds, University of Massachusetts Issue, Series A
- MDFA \$29,970,000 Revenue Refunding Bonds, University of Massachusetts Issue, Series 2011
- MDFA \$10,495,000 Revenue Refunding Bonds, Worcester City Campus Corporation Issue (University of Massachusetts Project), Series 2011

In addition, audited financial statements for the University for the fiscal year ending June 30, 2018 are submitted with the operating data set forth below.

The Worcester City Campus Corporation is submitting its audited financial statements for the year ending June 30, 2018 as its Annual Report filing.

HISTORY AND MISSION

The University is a state coeducational institution for higher education with separate campuses at Amherst, Boston, Dartmouth, Lowell and Worcester in The Commonwealth of Massachusetts (the “Commonwealth”). The University was established in 1863 in Amherst, under the provisions of the 1862 Morrill Land Grant Acts, as the Massachusetts Agricultural College. It became known as the Massachusetts State College in 1932 and in 1947 became the University of Massachusetts. The Boston and Worcester campuses were opened in 1965 and 1970, respectively. The Lowell and Dartmouth campuses (previously the University of Lowell and Southeastern Massachusetts University, respectively) were made a part of the University by a legislative act of the Commonwealth, effective September 1, 1991.

The University’s core mission 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.*” For Fall 2018, the University enrolled 74,702 students. The University’s five campuses are geographically dispersed throughout the Commonwealth and possess unique and complementary missions. In addition, the University has a system-wide online education consortium called UMassOnline, which in academic year 2017-2018 offered approximately 1,500 online and blended courses and had 78,400 course enrollments.

The University was rated as one of the world’s best universities in the *Times Higher Education* of London’s “World University Rankings” for 2018-2019. UMass was ranked in the top 250 universities in the world and was the only public university in New England to be listed in the global top 250. The University was ranked seventh highest in Massachusetts, tenth highest in New England, 35th highest in American public universities and 66th highest of all American institutions (public or private). In addition, all four of the UMass undergraduate campuses were rated in the “National Universities” category in *U.S. News & World Report’s* (“*U.S. News*”) Best Colleges rankings – making UMass one of the few university systems in the nation to have each campus so acclaimed. Bolstering its global reputation, total research and development expenditures at the University reached approximately \$651 million in fiscal year 2018, marking the ninth straight year that the University has exceeded the \$500 million mark.

UNIVERSITY CAMPUSES

The University is composed of five campuses, spread across the Commonwealth in Amherst, Boston, Dartmouth, Lowell and Worcester. Each campus has a unique history and plays a unique role in helping the University meet its mission.

Amherst Campus

The Amherst campus (“UMass Amherst” or the “Amherst Campus”), the University’s flagship campus approximately 90 miles west of Boston, is the largest in the University system. With a student body of 23,779 full-time equivalent (“FTE”) undergraduate and 5,272 FTE graduate students enrolled in Fall 2018, the Amherst Campus offers the most comprehensive and varied programs of the campuses in the University system, including liberal arts and professional programs, in addition to doctoral and research programs. It offers five associate-level programs and 109 bachelor’s, 77 master’s and 48 doctoral degree programs. During the 2017-2018 academic year, 44 associate’s, 6,333 bachelor’s, 385 undergraduate certificates, 1,872 advanced degrees (including 355 doctorate degrees) and 87 graduate certificates were conferred. Students may enroll in the College of Education, College of Engineering, College of Humanities and Fine Arts, College of Information and Computer Sciences, Isenberg School of Management, College of Nursing, College of Natural Sciences, School of Public Health and Health Sciences, College of Social and Behavioral Sciences and the Stockbridge School of Agriculture.

The 1,400-acre Amherst Campus includes more than 13 million square feet in buildings, including the 28-story W.E.B. DuBois Library, containing over six million volumes including eBooks as well as governmental documents and law collections, the 9,000-seat multi-purpose arena, the William D. Mullins Center, and 52 campus residence halls in seven unique residential areas. Since 2008, the campus opened the Studio Arts Building, the Central Heating Plant, a new student recreation center, an integrated sciences building, a new Campus Police Station and Emergency Operations Center (which was the first new construction on campus to meet LEED certification standards), the Life Science Laboratories Complex, a 1400-bed residential and classroom Commonwealth Honors College complex, a state-of-the-art classroom and academic facility, and a completely renovated South College. In the last two years, the campus opened a new innovative wood-constructed Design Building, a state-of-the-art Physical Sciences Building with specialized laboratories and 130 lab benches, and the Isenberg School of Management (“ISOM”) Business Innovation Hub addition. The iconic Old Chapel, closed since 1986 and listed on the National Register of Historic Places in 2015, underwent a complete renovation and opened in late 2016.

The Amherst campus is an AASHE (Association for the Advancement of Sustainability in Higher Education) STARS Gold Campus and is ranked in Princeton Review’s *Top 50 Green Colleges* list. The Amherst campus continues to develop its sustainable infrastructure, including installing the largest solar project on a college campus in New England and a commitment to ensuring that all new construction is 100% LEED-certified.

The Amherst Campus is now ranked 26th among national public universities by *U.S. News*. The 2017 report of The Center for Measuring University Performance, “The Top American Research Universities 2017 Annual Report,” ranks UMass Amherst 66th for both total and federal research expenditures among public research institutions. The Amherst Campus ranks in the top 50 among public research universities on three measures: 38th for SAT score, 42nd in national academy memberships, and 43rd in faculty awards. It is also in the top 70 on a number of other measures of competitive success including doctorates awarded (56th) and postdoctoral appointees (69th). During fiscal year 2018, a total of 1,083 awards were secured for a total of approximately \$161.4 million, including 410 federal awards totaling approximately \$102.7 million.

In 2016, UMass Amherst completed its first major capital campaign – the largest in Massachusetts public higher education history – by raising \$379.0 million, exceeding the \$300.0 million goal one year ahead of schedule.

Boston Campus

The 175-acre Boston campus (“UMass Boston” or the “Boston Campus”), which is located three miles from downtown Boston on a harbor peninsula with the nearby John F. Kennedy Presidential Library and Museum (the “JFK

Library”), the Edward M. Kennedy Institute for the United States Senate (the “Kennedy Institute”) and the Massachusetts State Archives and Commonwealth Museum (the “State Archives”), is a residential campus that can house approximately 1,077 students. The Boston Campus focuses on the academic needs of the local urban and non-traditional populations and the research and policy needs of business, government and communities in the greater Boston metropolitan region. The Boston Campus has a diverse student body consisting of 10,857 FTE undergraduate students and 2,362 FTE graduate students enrolled in Fall 2018. The Boston Campus offers 64 undergraduate degree programs, 13 undergraduate certificate programs, 50 master’s programs, 50 graduate certificate programs, and 30 doctoral programs through the College of Liberal Arts, College of Science and Mathematics, College of Management, College of Nursing and Health Sciences, College of Public and Community Service, McCormack Graduate School of Policy and Global Studies, College of Education and Human Development, College of Advancing and Professional Studies, School for Global Inclusion and Social Development, and School for the Environment.

During the 2017-2018 academic year, the Boston Campus conferred 221 certificates, 2,543 bachelor’s and 1,048 advanced degrees.

The Boston Campus is the only educational institution in the Northeast to share its campus with a presidential library. The students and faculty have access to the JFK Library, as well as to the State Archives, which houses valuable Massachusetts historic and state government records. The Boston Campus also has over 550,000 books and journals at its Healey Library.

UMass Boston completed the construction of the Integrated Sciences Complex in Fall 2015 and a general academic building known as University Hall was opened for the 2016 spring semester. Additionally, the Kennedy Institute opened in Spring 2015. The Integrated Science Complex and University Hall are both operated by the Boston Campus. The Kennedy Institute is operated by a charitable organization registered in the District of Columbia with the same name and is owned by the University of Massachusetts Building Authority (“UMBA”). The Kennedy Institute operates as a civic, academic and research institution focused on the study of the United States Senate. Although the Kennedy Institute has broad public access and is available for target groups outside of the University, one of the primary purposes of the Kennedy Institute is to enhance the academic and research environment available to the students and faculty of the University. Due to the multi-purpose nature of the Kennedy Institute, the University’s annual financial commitment for the capital and operating expenses of the Kennedy Institute is limited to approximately \$1.25 million.

On May 19, 2010, UMBA purchased the Bayside Exposition Center (the “Bayside Site”) for \$18.7 million. The 20-acre Bayside Site is approximately one-half mile from the Boston Campus and will help meet the space needs of the Boston Campus as it begins to develop new campus facilities and renovate outdated existing facilities. The acquisition of the Bayside Site has initiated a University-led planning process to create a vision for redeveloping the site to further University and local objectives. UMass Boston plans to work with the City of Boston, the Commonwealth, neighbors and the surrounding communities to develop a plan that realizes the potential of the Bayside Site, stimulates economic activity, creates jobs and brings greater activity and opportunity to the region. In the interim, the Bayside Site will allow the University to replace parking eliminated during ongoing campus construction.

UMass Boston’s 25-year capital plan calls for the redevelopment of the campus with new and renovated facilities, new infrastructure and green space for greater access to and engagement with the public. The first ten years of the capital plan, launched in 2007, calls for more than \$500 million in new facilities and infrastructure construction on the Boston Campus. UMass Boston opened its first-ever student dormitory in September 2018, achieving a long-held goal of providing students with an on-campus residential option.

Dartmouth Campus

The Dartmouth campus (“UMass Dartmouth” or the “Dartmouth Campus”) distinguishes itself as a vibrant public research university dedicated to engaged learning and innovative research resulting in personal and lifelong student success. The Dartmouth Campus serves as an intellectual catalyst for economic, social and cultural transformation on a global, national and regional scale. The Dartmouth Campus offers 58 undergraduate and 50

graduate programs of study (including 16 at the Doctorate level) through the College of Arts and Sciences (with a School of Education), the Charlton College of Business, the College of Engineering, the College of Nursing, the College of Visual and Performing Arts, the School for Marine Science and Technology and the University of Massachusetts School of Law (the “Law School”). The main campus, designed by the eminent architect Paul Rudolph, is located on 710 acres in Dartmouth and is approximately 55 miles south of Boston and 30 miles east of Providence, Rhode Island. Other Dartmouth Campus sites include the Law School in Dartmouth, the School for Marine Science and Technology on the waterfront in New Bedford, the Star Store Center for the Arts in New Bedford, the Center for Innovation & Entrepreneurship in Fall River and offices in New Bedford, Fall River and Fairhaven.

On February 2, 2010, the Massachusetts Board of Higher Education issued approval for UMass Dartmouth to offer the Juris Doctor (J.D.) degree and the Law School was established as the first public law school in the Commonwealth. Through the donation of assets to the University of Massachusetts Foundation, Inc. (the “Foundation”), including the facility, equipment, systems and furnishings from an existing private law school, Southern New England School of Law (“SNESSL”), the Dartmouth Campus admitted the first class of new students to the Law School in August 2010. The Law School prepared a comprehensive self-study for consideration of provisional American Bar Association (“ABA”) accreditation and received an ABA site visit; the final decision for provisional accreditation was granted on June 12, 2012. On December 6, 2016, the Law School received full accreditation from the ABA. Despite downturns in admissions to law schools across the country, the Fall 2018 overall enrollment grew to 226 students. The Law School has a public-service focus, with a curriculum concentrating on civil and human rights, legal support for businesses, economic justice and community law. The operating plan for the Law School calls for further increases in enrollment, the bar pass rate, employment rate, and reputation, as well as assuring compliance with ABA standards.

The Dartmouth Campus had 6,138 FTE undergraduate and 1,192 FTE graduate students enrolled in Fall 2018. During the 2017-2018 academic year, 19 undergraduate certificates, 1,417 bachelor’s and 647 advanced degrees/certificates were conferred. In the 2018 edition of the *U.S. News* “America’s Best Colleges” report, UMass Dartmouth achieved a National Tier 1 designation for the first time in its history, rising from its previous designation as a regional university. The College of Engineering is listed among the best undergraduate engineering programs in the country, as are the online programs. The Dartmouth Campus, which is implementing its strategic plan, UMassDTransform2020, weaves the research, academic, creative and community service activities of faculty and graduate students into the undergraduate experience and into the economic and cultural life of southeastern Massachusetts and beyond. Areas of focus for the strategic plan include marine science, law and public policy, K-12 education, healthcare and economic development.

In Fall 2016, the Dartmouth campus opened the Charlton College Learning Pavilion, providing approximately 22,000 square feet of classrooms, meeting spaces, an auditorium and technology-enhanced space. In Fall 2017, the Dartmouth Campus opened the \$55 million expansion of the School for Marine Science and Technology in New Bedford.

In 2016, UMass Dartmouth was officially designated as a Doctoral University – Higher Research Activity (R2) by the National Carnegie Classification of Institutions of Higher Education at the Center for Postsecondary Research at Indiana University, achieving a major milestone for the University and the region. UMass Dartmouth is the only Massachusetts research university located south of Boston. This designation elevated UMass Dartmouth from its previous designation as a Master’s University.

Lowell Campus

The Lowell Campus (“UMass Lowell” or the “Lowell Campus”) is a doctoral-level research university committed to educating students for lifelong success and conducting hands-on research and outreach that sustains the economic, environmental and social health of the world.

Located in the historic industrial city of Lowell, approximately 25 miles northwest of Boston, the campus spans more than 125 acres along the Merrimack River in three campus clusters – North, South and East. The Lowell Campus had a student body of 11,872 FTE undergraduate and 2,686 FTE graduate students in Fall 2018. The Lowell

Campus offers four associate's, 122 bachelor's, 49 master's and 26 doctoral degree programs through the College of Fine Arts, Humanities and Social Sciences, the Kennedy College of Sciences, the Francis College of Engineering, the Zuckerberg College of Health Sciences, the Manning School of Business, and the College of Education. The most recent additions to UMass Lowell's degree inventory are bachelor's degrees in Psychology/Behavioral Analysis, Psychology/Clinical Psychology, Psychology/Community Social Psychology, Psychology/Developmental Disabilities, Psychology/Health Psychology, Environmental Engineering, and Exercise Science. During the 2017-2018 academic year, 201 associate's degrees and undergraduate certificates, 2,798 bachelor's degrees and 1,596 advanced degrees/certificates were conferred.

UMass Lowell's dramatic transformation has been driven by the campus' "2020 Strategic Plan", which led to rapid gains in enrollment, retention, student achievement, research expenditures, and fundraising. Undergraduate enrollment has increased 24% since Fall 2010, with over 80% of freshmen now living on what had historically been a commuter campus. The Fall 2018 incoming class is among the strongest in UMass Lowell history, with an average SAT score of 1233, and an average high school GPA of 3.60. Since Fall 2012, freshmen retention has increased from 81% to 85%, the four-year graduation rate has increased from 27% to 44%, and the six-year graduation rate has increased from 54% to 63%. UMass Lowell's 1,737-student Honors College, established in 2014, had a one-year retention rate of 90% for academic year 2017-2018.

The Lowell Campus continues to receive new honors and accolades. The Commonwealth Institute and the *Boston Globe Magazine* ranked UMass Lowell No. 4 among the Top Women-led Businesses in Massachusetts. The new Pulichino Tong Business Center, home to the Manning School of Business, was awarded LEED Gold certification in 2017. In 2019 *U.S. News* named UMass Lowell's online graduate programs in criminal justice (5) and information technology (number 10) in the top ten in the nation and number one among those offered by all public institutions in New England. UMass Lowell's online bachelor's degrees were also highly rated, coming in at number two in New England and in the top 25 in the nation among the more than 200 public and private programs ranked.

During the last nine years, 15 buildings have been constructed, acquired and redeveloped, fully renovated or built via public-private partnership on the Lowell Campus. In 2009, UMBA purchased the former Doubletree Hotel in downtown Lowell and converted the property into the UMass Lowell Inn & Conference Center (the "ICC"), a multi-purpose property that provides hotel accommodations, high-quality conference space and housing for 500 students. In 2010, UMBA acquired the 6,500-seat Tsongas Arena from the City of Lowell, renaming it the Tsongas Center at UMass Lowell and hosting hockey and basketball games, concerts, functions, University events and other community activities. In 2011, UMBA purchased the former St. Joseph's Hospital in Lowell, redeveloping it as University Crossing, an important connection point among UMass Lowell's North, South and East campuses that has become a vibrant hub for students and the community since opening in 2014.

The \$80 million, 84,000-square-foot Mark and Elisia Saab Emerging Technologies and Innovation Center (the "Saab Center") opened in October 2012 as the first new academic building on campus in more than three decades. The opening of the Saab Center was followed by the opening of the \$40 million Health and Social Sciences Building in 2013. Also in 2013, UMass Lowell opened the \$54 million University Suites residence hall, providing suite-style housing for 472 students. A second suite-style residence hall, Riverview Suites, with housing for 800 students, was built by a private developer for lease by UMass Lowell in 2013 with the second phase completed in 2015. In 2014, the Charles J. Hoff Alumni Scholarship Center opened following a private developer's historic renovation and lease to the campus. In 2015, the McGauvran Center reopened as a hub for dining, learning and gathering, following a \$34 million renovation and expansion. During that span, two parking garages were also constructed at a total cost of \$40 million.

The campus's 13th building since 2009, the \$40 million Pulichino Tong Business Center, opened in April 2017. UMass Lowell purchased the \$61.5 million Residences at Perkins Park and the Lofts at Perkins Park near East Campus and reopened it in fall of 2017 as River Hawk Village. A renovation of Perry Hall, which houses UMass Lowell's engineering programs and will facilitate additional industry partnerships, opened in January 2019. In 2015, UMass Lowell launched a \$27 million project with the Commonwealth's Accelerated Energy Program (AEP) that is expected to generate \$1.5 million in annual energy savings and reduce campus-wide energy usage by 20% or more.

In July 2013, UMass Lowell athletics officially elevated to Division I in all sports. Currently 16 sports are part of the America East Conference. The reclassification to full Division I status is a four-year process, which UMass Lowell formally completed in August of 2017. The ice hockey program has competed in Division I since 1983 and is a member of Hockey East.

Worcester Campus

The UMass Medical School (“UMass Medical School”, “UMass Worcester” or the “Worcester Campus”) provides general and specialized medical education, engages in a comprehensive program of basic scientific and clinical research, and provides graduate level training in biomedical sciences and nursing. As Massachusetts’ first and only public medical school, UMass Medical School takes seriously its mission to improve the health and well-being of the people of the Commonwealth and the world through pioneering advances in education, research, and health care delivery. Founded in 1962 by the Massachusetts Legislature and sited in Worcester in 1965, UMass Medical School welcomed its first class of 16 medical students in 1970. Less than 50 years later, UMass Medical School has become an internationally renowned hub for medical education, biomedical research, and health care innovation.

UMass Medical School’s academic community, which is nationally recognized for its primary care education program, is vibrant and includes undergraduate and graduate medical education, graduate-level training in nursing and biomedical sciences, interprofessional training in allied health professions, and continuing education for health care practitioners. UMass Medical School’s three graduate schools – the School of Medicine, the Graduate School of Biomedical Sciences, and the Graduate School of Nursing – educate more than 1,100 medical, science, and nursing students. In collaboration with its primary clinical partner, UMass Memorial Health Care, Inc., UMass Medical School operates a large post-graduate medical residency and fellowship program that annually trains more than 556 residents and fellows.

The School of Medicine, which has the highest student satisfaction scores in the nation, offers medical students an accessible and exceptional academic experience that optimally prepares them to become physicians who are caring, competent, productive, and self-fulfilled in their chosen career. The Graduate School of Biomedical Sciences, composed of the Basic & Biomedical Sciences and Clinical & Population Health Research divisions, trains students in their selected specialty area while emphasizing a broad background in the basic biomedical sciences in preparation for research that is directly relevant to human disease. The Graduate School of Nursing provides high quality master’s and doctoral-level preparation for advanced-practice nurses and nurse educators. In 2012, the educational program leading to the MD degree was successfully re-accredited by the Liaison Committee on Medical Education (“LCME”), for a full eight-year cycle. In addition, the New England Commission of Higher Education (“NECHE”) engaged in a comprehensive re-accreditation process that included a site visit from an external evaluation team. UMass Medical School received the NECHE re-accreditation in May 2013.

While the academic community has evolved over the years, UMass Medical School’s commitment to its founding public mission remains steadfast. UMass Medical School educates the future physicians, researchers and nurses for the Commonwealth. Alumni survey data indicate that 52% of graduates establish their careers in Massachusetts. Moreover, UMass Medical School is recognized as a national leader in primary care training as evidenced by its consistent position among the top ten percent of all medical schools for primary care in *U.S. News and World Report’s Annual Graduate School Rankings*. In the latest primary care rankings, UMass Medical School ranked 14th nationally among 144 Doctor of Medicine (M.D.) and Doctor of Osteopathic Medicine (D.O.) schools. In 2015, UMass Medical School expanded its public service mission to respond to the growing opioid epidemic by becoming the first medical school in the nation to mandate an opioid-conscious curriculum for all medical and nursing students. UMass Medical School’s classification by the Carnegie Foundation as a community-engaged institution both reflects and reinforces a genuine and unyielding commitment to its public mission.

Given its commitment to primary care and to educating the next generation of physicians for the state, UMass Medical School plays an important and unique role in helping to address the health care workforce needs of Massachusetts. UMass Medical School has aligned itself with the Association of American Medical Colleges’ recommendation that medical schools increase the number of physicians they educate to help address the looming

shortage of doctors, especially those in primary care fields. Over the last decade, UMass Medical School has been committed to expanding the School of Medicine's class size. In 2008, the first-year class totaled 100 students; Fall 2018's first-year class grew to 162 students. This significant class size expansion initiative has necessitated identifying and partnering with additional clinical affiliates to ensure that UMass Medical School continues to offer an outstanding educational experience. In 2015, UMass Medical School announced a new affiliation with Cape Cod Hospital in Hyannis, as well as the establishment of its first-ever regional campus, UMMS-Baystate, in partnership with Baystate Health in Springfield.

As of Fall 2018, the UMass Medical School student body was composed of 1,153 FTE medical, nursing and biomedical science students, who are enrolled in one of six master's or six doctoral degree programs. In addition, the UMass Medical School's educational community includes 455 residents and 101 fellows in residency and fellowship training programs accredited by the Accreditation Council for Graduate Medical Education ("ACGME"). The Graduate Medical Education enterprise consists of 20 core residency programs and 34 fellowship programs, all of which are accredited by their respective accreditation bodies.

Consistent with its strategic plan and mission, UMass Medical School also supports a highly productive and collaborative research enterprise that attracts more than \$250 million a year in external research funding, including \$159 million from the National Institutes of Health. Importantly, the Medical School ranked 32nd out of 141 U.S. Medical Schools and 12th among all public medical schools for NIH funding according to the Blue Ridge Institute for Medical Research's latest national rankings.

UMassOnline

In February 2001, the University launched UMassOnline, the University's system-wide online education consortium. Headquartered at the President's Office Collaborative Services Facility in Shrewsbury, Massachusetts, UMassOnline enables the University to provide greater access to its educational programs and to increase revenues that can be used to support the campuses. In fiscal year 2018, UMassOnline and the Continuing Education units at the five campuses collaboratively generated tuition revenue of \$113 million and supported over 78,400 course enrollments.

UMassOnline's mission is to provide access to a University of Massachusetts education to students who are unable to attend one of the campuses, serving community needs for education in the critical areas of economic development, health and welfare and education, and raising revenues for support of students, faculty, teaching, outreach and research. To this end, UMassOnline supports the campuses in developing, growing and marketing online programs by funding the development of new online programs, and providing faculty support, development and training. UMass Online also provides technology support and creates and maintains a robust platform for online learning, assessing new teaching and learning technologies, and deploying marketing programs that will position the University as a high-quality national leader in online higher education, as well as increase online course and program enrollments in the Massachusetts, New England, national and international markets.

In academic year 2017-2018, the University offered over 160 online degrees, certificates and continuing medical education programs, as well as 1,500 online and blended courses.

The University of Massachusetts Club

The University, acting through UMBA, has established an Alumni dining club, known as "the University of Massachusetts Club" or the "Club." The Club opened on October 31, 2005 and is now located on the 32nd floor of One Beacon Street in downtown Boston. As of August 1, 2015, the Club was managed by the not-for-profit organization University Services, Inc.

UNIVERSITY RELATED ORGANIZATIONS

The financial statements of the University include the University and certain other organizations that have a significant relationship with the University. The financial statements include the University's blended component

units, which are UMBA, a public instrumentality of the Commonwealth created by Chapter 773 of the Acts of 1960 of the Commonwealth, as amended, the Worcester City Campus Corporation (“WCCC”), a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1986, and the University of Massachusetts Amherst Foundation, Inc. (the “UMass Amherst Foundation”), a tax-exempt organization that was established in 2003.

The purposes of UMBA are to provide dormitories, dining commons and other buildings and structures for use by the University and other entities associated with the University and to issue bonds to finance such projects. The University created WCCC in 1992 to purchase various assets of Worcester City Hospital, to operate as a real estate holding company, and to foster and promote the growth, progress, and general welfare of the University’s Worcester Campus and all of its locations. The subsidiaries of WCCC include Worcester Campus Services, Inc. (“WCS”) and U Health Solutions, Inc. (“UHS”) (formerly Public Sector Partners, Inc. (“PSP”). WCS has 12 real estate holding company subsidiaries. Through its Board of Directors, the UMass Amherst Foundation leads and supports private fundraising on behalf of UMass Amherst faculty, students and facilities.

The University’s discretely presented component units are the University of Massachusetts Foundation, Inc. (the “Foundation”) and the University of Massachusetts Dartmouth Foundation, Inc. (the “Dartmouth Foundation”). These foundations are tax-exempt organizations related to the University and were established 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. The Foundation manages the majority of the University’s endowments, including the endowment of the UMass Amherst Foundation. Separate financial statements are presented for the Foundation and the Dartmouth Foundation.

GOVERNANCE

Under the General Laws of the Commonwealth (the “General Laws”), the University is governed by a Board of Trustees (the body herein called the “University Trustees” or the “Board of Trustees of the University”) under the coordinating authority of the Commonwealth’s Department of Higher Education (“DHE”) (successor to the Commonwealth Board of Higher Education). The day-to-day operations of the University are directed by a team of administrative officers of the University, the chief executive officer being the President of the University (the “President”).

The General Laws give the University Trustees the authority to govern the University and to appoint the President, the Chancellors (the senior administrative officers of each campus) and other officers and members of the professional staff. The General Laws also grant to the University Trustees the legal right to establish and manage non-appropriated funds, including, for example, tuition, certain student fees, grants and contracts, and funds used to support certain self-sufficient operations within the University. See “UNIVERSITY REVENUES AND BUDGETING” below. The University Trustees consist of 19 voting members and three non-voting members. Seventeen voting members of the University Trustees are appointed by the Governor of the Commonwealth (the “Governor”). One of these appointees is the Secretary of Education, as mandated by Chapter 27 of the Acts of 2008 and at least five of those appointed must be alumni of the University and one must be a representative of organized labor. Two of the voting members are full-time students of the University and three additional full-time students act as non-voting members. The student members are elected annually from each of the five campuses and the two voting student positions are rotated annually among the members representing the five campuses. The University Trustees, except for the student members, serve five-year staggered terms, and are eligible for reappointment for an additional five-year term.

The President is responsible for implementing the policies of the University Trustees and for providing leadership for the activities and operations of the University. The President’s Office is responsible for the development of academic and financial policies, overall coordination of University activities, and certain University-wide operational activities, including Internal Audit, the General Counsel’s office, the Treasurer’s and Controller’s functions, Information Systems and Human Resources.

Department of Higher Education

The University is subject to the coordinating authority of the Department of Higher Education (“DHE”), which has the statutory responsibility to develop, foster and advocate for the public higher education system in Massachusetts (which consists of the University, nine state universities, and 15 community colleges), to review and establish tuition at the state universities and the community colleges, to approve changes in academic programs at these institutions, and to collaborate with the public institutions of higher education in order to identify and define institutional missions.

The Board of the DHE consists of 13 voting members; one of whom is the Secretary of Education, nine members appointed by the Governor reflecting regional geographic representation and three members chosen to represent public institutions of higher education. Of the members appointed by the Governor, at least one must be a representative of organized labor, one must be a representative of the business community and one must be a full-time undergraduate student at a public institution of higher education. Of the members chosen to represent public institutions of higher education, one must be a member of the Board of Trustees of the University as voted by the University Trustees, one must be a member of a board of trustees of a state university chosen by vote of the chairs of the boards of trustees of each of the state universities, and one must be a member of a board of trustees of a community college chosen by vote of the chairs of the boards of trustees of each of the community colleges. Three of the DHE members appointed by the Governor are appointed for terms coterminous with that of the Governor. The undergraduate members of the Board of the DHE are appointed annually. The remaining members are appointed to serve five-year terms. The chairperson of the Board of the DHE is selected by the Governor.

Board of Trustees

The present members and officers of the University Trustees, their original appointment dates and the expiration dates of their respective current terms are set forth below. The term expiration date is September 1 of the applicable year; however, University Trustees generally continue to serve until a successor University Trustee is appointed.

| Name and Position; Month and Year Initially Appointed | Current Term Expiration Date |
|---|-------------------------------------|
| Robert J. Manning, <i>Board of Trustees Chair</i> , Swampscott <i>Appointed August 2015</i> Chairman and Co-CEO, MFS Investment Management | 2021 |
| R. Norman Peters, Esq., <i>Board of Trustees Vice Chair</i> , Paxton <i>Appointed September 2009</i> Partner, Peters & Sowyrda | 2019 |
| Mary L. Burns, Lowell <i>Appointed December 2016</i> Principal, Splash Media Group Boston, LLC | 2021 |
| Robert Epstein, Boston <i>Appointed September 2015</i> President & CEO, Horizon Beverage Group | 2020 |
| David G. Fubini, Brookline <i>Appointed April 2013</i> Senior Lecturer, Harvard Business School | 2018 |
| Maria D. Furman, Boston <i>Appointed November 2009</i> Former Managing Director and Bond Portfolio Manager of Standish Mellon Asset Management (retired) | 2019 |

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| Stephen R. Karam, Fall River <i>Appointed September 2017</i> Principal, Karam Financial Group | 2022 |
| Brian J. Madigan, Braintree <i>Non-voting Student Member, Appointed April 2018</i> University of Massachusetts, Lowell | 2019 |
| Katherine E. Mallet, Worcester <i>Non-voting Student Member, Appointed April 2018</i> University of Massachusetts, Medical School | 2019 |
| Jiya Nair, Shrewsbury <i>Non-voting Student Member, Appointed April 2018</i> University of Massachusetts, Amherst | 2019 |
| Michael O'Brien, Southborough <i>Appointed December 2016</i> Vice President, WinnCompanies | 2021 |
| Kerri Osterhaus-Houle, M.D., Hudson <i>Appointed September 2007</i> Partner, Women's Health of Central Massachusetts, PC | 2018 |
| Imari K. Paris Jeffries, M.Ed., M.A., Boston <i>Appointed December 2016</i> Executive Director, Parenting Journey | 2021 |
| James A. Peyser, MALD, Milton <i>Appointed January 2015</i> Secretary of Education, Executive Office of Education Commonwealth of Massachusetts | <i>Serves ex-officio</i> |
| Silavong Phimmason, Indian Orchard <i>Voting Student Member, Appointed April 2018</i> University of Massachusetts, Dartmouth | 2019 |
| Elizabeth D. Scheibel, South Hadley <i>Appointed November 2016</i> Principal/Consultant, Scheibel Associates | 2021 |
| Sara Tariq, Braintree <i>Voting Student Member, Appointed April 2018</i> University of Massachusetts, Boston | 2019 |
| Henry M. Thomas, III, J.D., Springfield <i>Appointed September 2007</i> President, Urban League of Springfield, Inc. | 2017 |
| Steven A. Tolman, Brighton <i>Appointed September 2017</i> President, Massachusetts AFL-CIO | 2022 |
| Victor Woolridge, Springfield <i>Appointed November 2009</i> Vice President, Barings | 2019 |
| Charles F. Wu, MBA, Newton <i>Appointed December 2016</i> Senior Lecturer, Harvard Business School Founding Partner, Baynorth Capital, LLC | 2021 |

Administrative Officers

The following is a list of the current administrative officers of the University.

Martin T. Meehan, J.D.

Martin T. Meehan, J.D., began his term as President of the University on July 1, 2015. Mr. Meehan was previously the Chancellor of the Lowell Campus since July 2007. Prior to that, Mr. Meehan represented the Fifth Congressional District of Massachusetts in the U.S. House of Representatives since 1993. He has also served as the First Assistant District Attorney for Middlesex County from 1991 to 1992. Mr. Meehan was also the Director of Public Affairs for the Massachusetts Secretary of the Commonwealth and the Deputy Secretary of State for Securities and Corporations from 1986 to 1990. Mr. Meehan earned his B.S. in Education and Political Science from the University of Massachusetts, Lowell, a Master's degree in Public Administration from Suffolk University and a J.D. degree from Suffolk University Law School. He holds honorary degrees from Suffolk University, Green Mountain College in Vermont and Shenkar College of Engineering & Design in Israel.

James R. Julian, Jr., J.D., Executive Vice President and Chief Operating Officer

James R. Julian, Jr., J.D., has been the Executive Vice President at the University since January 1996. Prior to joining the University, he served as Chief of Staff and Counsel for the former Massachusetts Senate President, William M. Bulger, from 1991 to 1996. He holds a B.S. degree in Political Science from Suffolk University and a J.D. degree from the New England School of Law.

Lisa A. Calise, Senior Vice President for Administration & Finance and Treasurer

Lisa A. Calise was appointed to the position of Senior Vice President for Administration & Finance and Treasurer in February 2017. Ms. Calise was most recently the Chief Financial Officer at Perkins School for the Blind, focusing on global services and education for those living with blindness and deafblindness. Before joining Perkins in 2010, Ms. Calise served the City of Boston for over a decade, most recently as the Director of Administration and Finance, and previously as Chief Financial Officer and Collector-Treasurer and Budget Director, implementing efficiency improvements and managing the City's finances through challenging economic times. Prior to coming to Boston, Ms. Calise served in the White House Office of Management and Budget as a budget examiner. Ms. Calise recently served as a member of both the MBTA Finance and Management Control Board and MassDOT Board. Ms. Calise obtained a B.A. degree from Boston College and a Master's Degree in Public Management from the University of Maryland.

Kumble R. Subbaswamy, Ph.D., Chancellor, Amherst Campus

Kumble R. Subbaswamy, Ph.D., became the Chancellor of the Amherst Campus in July 2012. Dr. Subbaswamy previously served as provost at the University of Kentucky since 2006. He joined the University of Kentucky's physics faculty in 1978 after serving as a post-doctoral fellow at the University of California, Irvine. During his first 18 years at the University of Kentucky, he served as Associate Dean of Arts and Sciences and as chair of the Department of Physics and Astronomy. Dr. Subbaswamy was also Dean of the College of Arts and Sciences at the University of Miami from 1997 to 2000, when he left to become Dean of Arts and Sciences at Indiana University in Bloomington, where he served until 2006. Dr. Subbaswamy holds a B.S. degree in Physics from Bangalore University, an M.S. degree in Physics from Delhi University and a Ph.D. degree in Physics from Indiana University.

Katherine S. Newman, Ph.D., Interim Chancellor, Boston Campus

Katherine S. Newman, Ph.D., was appointed interim chancellor of the Boston Campus effective July 1, 2018. Previously, Dr. Newman was the Senior Vice President for Academic Affairs for the University System. She previously served as Provost and Senior Vice Chancellor for Academic Affairs and Torrey Little Professor of Sociology at UMass Amherst from 2014 to 2017, and as the James B. Knapp Dean of the Arts and Sciences at Johns

Hopkins University from 2010 to 2014. Prior to becoming the Dean at Johns Hopkins, Dr. Newman was the Forbes Class of 1941 Professor of Sociology and Public Affairs at Princeton and Director of the Institute for International and Regional Studies, the founding Dean of Social Science at the Radcliffe Institute of Advanced Study and the director of Harvard's Multidisciplinary Program on Inequality and Social Policy. She taught for 16 years in the Department of Anthropology at Columbia University and for two years in the School of Law at the University of California Berkeley. Dr. Newman holds a bachelor's degree in Philosophy and Sociology from the University of California, San Diego, and a Ph.D. in Anthropology from the University of California, Berkeley.

Robert E. Johnson, Ph.D., Chancellor, Dartmouth Campus

Robert E. Johnson, Ph.D., became chancellor of the University of Massachusetts Dartmouth on July 1, 2017. Prior to his appointment, Dr. Johnson served as President of Becker College in Worcester, MA for six years. Prior to becoming Becker College's president, Dr. Johnson served as Senior Vice President of Sinclair Community College, Vice President of Enrollment Management at the University of Dayton, Vice Provost at Oakland University, and Executive Director of Enrollment Management at Central State University. Dr. Johnson has previously served as a member of the Massachusetts Board of Higher Education, vice chair of the Massachusetts Technology Collaborative and chair of the Worcester Regional Chamber of Commerce. Dr. Johnson holds a bachelor's degree in Economics from Morehouse College, a Master's degree in Education Administration from the University of Cincinnati, and a Ph.D. in Higher Education Administration from Touro University International.

Jacqueline Moloney, Ed. D., Chancellor, Lowell Campus

Jacqueline Moloney, Ed.D, was appointed Chancellor of the Lowell Campus in August 2015. Previously, Dr. Moloney served as Executive Vice Chancellor of the Lowell campus since 2007. Prior to becoming Executive Vice Chancellor, Dr. Moloney served as Dean of the Division of Online and Continuing Education at UMass Lowell since 1994 and Executive in Residence for UMassOnline since 2000. Dr. Moloney also served as Dean of University College and Director of the Centers for Learning at UMass Lowell from 1990 to 1994. Dr. Moloney received a B.S. degree in Sociology from UMass Lowell, an M.A. degree in Social Psychology from Goddard College, and an Ed.D. degree from UMass Lowell.

Michael F. Collins, M.D., Chancellor, Worcester Campus and Senior Vice President for Health Sciences

Michael F. Collins, M.D., was appointed Chancellor of the Worcester Campus, where he also serves as professor of quantitative health sciences and medicine, on September 26, 2008. Dr. Collins served as interim Chancellor of the Worcester Campus from June 2007 to September 2008. In June 2007, Dr. Collins was appointed Senior Vice President for Health Sciences at the University of Massachusetts. Dr. Collins served as Chancellor of the UMass Boston Campus from 2005 through 2007. Prior to joining the University of Massachusetts, Dr. Collins served as President and Chief Executive Officer of Caritas Christi Health Care from 1994 to 2004 and from 1994 to 2001 he served as President of St. Elizabeth's Medical Center in Brighton, a university academic medical center affiliated with Tufts University School of Medicine. A board certified physician in internal medicine and a Fellow of the American College of Physicians, Dr. Collins has held a number of faculty and academic leadership positions over the course of his career. At Texas Tech University Health Sciences Center, his posts included Assistant Professor of Internal Medicine and Assistant Dean for Patient Care Resources. At Tufts University, he served as Clinical Professor of Internal Medicine and Associate Dean of Government and Medical Affairs in the School of Medicine and as a senior fellow at the Jonathan M. Tisch College of Citizenship and Public Service. Dr. Collins received a B.A. degree from the College of the Holy Cross and earned an M.D. degree from Tufts University School of Medicine.

Faculty and Staff

The University had 5,784 faculty members for Fall 2018, including 4,179 full-time faculty. Of the total faculty (excluding Worcester faculty), 35.5% were tenured, 15.0% were on track for tenure and the remaining 49.5% were not on tenure track. In addition, the University had 11,957 staff members for Fall 2018, of which 93.9% were full-time. The University faculty has received some of the world's most prestigious awards and honors, including the MacArthur Fellowship, the Pulitzer Prize, the National Book Award and the Nobel Prize. The University faculty also

includes National Science Foundation grant winners and Fulbright Scholars. The University student FTE to faculty FTE ratios, excluding continuing education, are 17:1, 16:1, 16:1 and 17:1 for the Amherst, Boston, Dartmouth and Lowell campuses, respectively. The Worcester Campus ratio is not presented because the delivery of graduate medical education is not comparable to that of campuses offering a traditional range of undergraduate and graduate programs.

STRATEGIC INITIATIVES

Under the leadership of President Meehan and the University Trustees, the University is engaged in a series of strategic initiatives identified as a result of an interactive, collaborative process between the President's Office and campus leadership. The strategic initiatives acknowledge the unique strengths of each of the campuses and recognize the important role of the University in supporting the Commonwealth's economic success. The initiatives are as follows:

- *Accountability* – The University has set benchmarks and peer comparisons for each of the five UMass campuses and specific goals have been set for each campus Chancellor.
- *Expanding Research and Development* – The University participates as a member of the Mass Green High Performance Computing Center providing increased capacity for research and created the UMass Innovation Institute to expand the University's capacity for applied research.
- *Fundraising* – The University is developing and focusing its fundraising efforts across all five campuses.
- *Stewards of Resources* – The University continues to increase cost efficiency in providing educational services to students.
- *Efficient and Effective* – The University has been charged by the University Trustees to find ways to achieve the same or better results through more efficient and effective means.
- *Excellence* – The University continues to enhance its reputation and rankings, providing the Commonwealth with a high-quality public education. UMass is the No. 1 public university in New England and one of the 35 best public universities in the nation according to the *Times Higher Education World University Rankings* and is one of the few university systems in the country to have all of its undergraduate campuses ranked National Universities by *U.S. News & World Report*.
- *Quality* – The University continues to admit high-quality students and strives to increase the academic profiles of all five campuses. The Fall 2018 incoming class is among the strongest in University history, with average SAT scores of 1296 and 1233, and average high school GPAs of 3.90 and 3.60 at the Amherst and Lowell Campuses, respectively. In addition, UMass faculty includes Nobel Laureate and Pulitzer Prize winners, members of the National Academy of Sciences, an American Book Award winner and Fulbright, Guggenheim, MacArthur and Mellon fellows.
- *Student Success* – The University continues to review policies and other best practices that focus on ways to improve student output measures. Since Fall 2011, one-year retention rates have increased from 83.1% to 84.3% while six-year graduation rates have increased from 58.2% to 68.8%.

ACADEMIC PROGRAMS AND ACCREDITATION

The University offers a broad spectrum of academic programs, granting Bachelor of Arts degrees in over 60 fields, Bachelor of Science degrees in over 50 fields and bachelor's degrees in a number of other areas, including Fine Arts and Business Administration. Master of Arts degrees are granted in more than 25 fields, Master of Science degrees in over 45 academic fields and a variety of other master's degrees are granted in specialized areas including Education, Teaching, Business Administration and Public Health. In addition, the University grants Doctor of Philosophy degrees in over 50 fields, as well as Doctor of Education, Doctor of Science, Doctor of Engineering, Doctor of Audiology, Doctor of Nursing Practice, Doctor of Physical Therapy, Juris Doctor and Doctor of Medicine

degrees. The academic resources of the University are also accessible to part-time students, to local, national and international businesses and to the general community through the continuing education programs.

Each campus of the University is accredited by NECHE, the major accrediting body for institutions of higher education in New England. The Amherst, Boston, Dartmouth, Lowell and Worcester Campuses are accredited through 2018, 2025, 2020, 2023 and 2020, respectively. The Amherst campus completed its comprehensive self-study in August 2018 and the NECHE visiting team was on campus in October 2018. The NECHE Commission will meet in April 2019, at which point the Amherst campus is expected to receive full reaccreditation. The Medical School at the Worcester Campus is a member of the Association of American Medical Colleges and was given full accreditation through the 2019-2020 academic year by the LCME, the major accrediting body for programs leading to the M.D. degree. On December 6, 2016, the Law School at the Dartmouth Campus received full accreditation from the ABA. In addition to the foregoing, individual schools and academic programs are accredited by the appropriate agencies in their particular fields.

The University is also an institutional member of numerous organizations of higher learning and professional societies, including, among others, the Association of American Colleges, the Association of Public and Land-Grant Universities, the American Council on Education, the American Association of Colleges for Teacher Education, the American Association of Colleges of Nursing, the Council of Colleges of Arts and Sciences and the New England Board of Higher Education.

ENROLLMENT

Admission to the University is open to residents and non-residents of the Commonwealth on a competitive basis. Massachusetts residents accounted for 82.7% and 53.0% of the University’s total undergraduate and graduate enrollment, respectively, during Fall 2018.

For Fall 2018, total full-time equivalent enrollment at the University (including continuing education) was 65,310, representing an increase of 4.8% over the five-year period.

Total Full-Time Equivalent Enrollment, Fall 2014-2018

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|------------------------|---------------|---------------|---------------|---------------|---------------|
| Undergraduate | 49,725 | 50,816 | 51,209 | 51,642 | 52,646 |
| Graduate | <u>12,576</u> | <u>12,517</u> | <u>12,769</u> | <u>12,889</u> | <u>12,664</u> |
| Total | 62,301 | 63,333 | 63,978 | 64,531 | 65,310 |

Head Count Enrollment

The following tables show opening head count enrollment as of the University’s Fall semester for each of the five campuses since 2014.

Total Headcount Enrollment

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| In-state undergraduate | 45,312 | 45,817 | 46,784 | 46,924 | 47,200 |
| Out-of-state undergraduate | 10,080 | 10,441 | 10,077 | 9,905 | 9,869 |
| In-state graduate | 9,220 | 9,172 | 9,232 | 9,351 | 9,344 |
| Out-of-state graduate | <u>8,177</u> | <u>8,314</u> | <u>8,403</u> | <u>8,392</u> | <u>8,292</u> |
| Total | 72,789 | 73,744 | 74,496 | 74,572 | 74,705 |

Amherst Campus

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| In-state undergraduate | 16,949 | 17,277 | 17,833 | 17,846 | 17,879 |
| Out-of-state undergraduate | 5,303 | 5,471 | 5,540 | 5,542 | 5,636 |
| In-state graduate | 2,260 | 2,282 | 2,308 | 2,423 | 2,515 |
| Out-of-state graduate | <u>4,123</u> | <u>4,239</u> | <u>4,356</u> | <u>4,529</u> | <u>4,563</u> |
| Total | 28,635 | 29,269 | 30,037 | 30,340 | 30,593 |

Boston Campus

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| In-state undergraduate | 10,734 | 10,866 | 10,765 | 10,720 | 10,871 |
| Out-of-state undergraduate | 1,966 | 2,083 | 2,082 | 1,945 | 1,833 |
| In-state graduate | 2,698 | 2,638 | 2,544 | 2,415 | 2,230 |
| Out-of-state graduate | <u>1,358</u> | <u>1,443</u> | <u>1,456</u> | <u>1,335</u> | <u>1,230</u> |
| Total | 16,756 | 17,030 | 16,847 | 16,415 | 16,164 |

Dartmouth Campus

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|
| In-state undergraduate | 6,939 | 6,762 | 6,394 | 6,142 | 6,107 |
| Out-of-state undergraduate | 515 | 533 | 605 | 621 | 734 |
| In-state graduate | 979 | 939 | 957 | 1,018 | 1,064 |
| Out-of-state graduate | <u>678</u> | <u>682</u> | <u>691</u> | <u>625</u> | <u>608</u> |
| Total | 9,111 | 8,916 | 8,647 | 8,406 | 8,513 |

Lowell Campus

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|----------------------------|--------------|--------------|--------------|--------------|--------------|
| In-state undergraduate | 10,690 | 10,912 | 11,792 | 12,216 | 12,343 |
| Out-of-state undergraduate | 2,296 | 2,354 | 1,850 | 1,797 | 1,666 |
| In-state graduate | 2,451 | 2,508 | 2,614 | 2,714 | 2,721 |
| Out-of-state graduate | <u>1,747</u> | <u>1,676</u> | <u>1,601</u> | <u>1,589</u> | <u>1,520</u> |
| Total | 17,184 | 17,450 | 17,857 | 18,316 | 18,250 |

Worcester Campus

| Enrollment Type | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|------------------------|-------------|-------------|-------------|-------------|-------------|
| Medical School | 508 | 515 | 543 | 565 | 617 |
| Other | <u>595</u> | <u>564</u> | <u>565</u> | <u>530</u> | <u>568</u> |
| Total** | 1,103 | 1,079 | 1,108 | 1,095 | 1,185 |

**Does not include the head count of registrants in the various continuing medical education programs offered at the Worcester Campus.

From Fall 2017 to Fall 2018, total new freshmen enrollees increased by approximately 9.1% for the system as a whole, while total new transfer enrollees decreased by 5.0% for the system as a whole, based on headcount. The number of total new freshmen enrollees reflected a 6.3% increase in the size of the entering class at the Amherst Campus, a 23.1% increase in new freshmen at the Boston Campus, a 6.6% increase at the Dartmouth Campus, and a 4.5% increase at the Lowell Campus. The number of total new transfer enrollees reflected an 8.5% decrease at the Amherst Campus, a 14.2% decrease at the Boston Campus, a 19.0% increase at the Dartmouth Campus, and a 0.8% decrease at the Lowell Campus.

The University saw an increase of approximately 4.0% in freshmen applications in Fall 2018 compared to Fall 2017. The increase in total freshmen applications included a 0.7% decrease at the Amherst Campus, a 13.3% increase at the Boston Campus, a 9.3% increase at the Dartmouth Campus, and a 9.1% increase at the Lowell Campus.

Transfer applications included an 18.0% increase at the Amherst Campus, an 8.4% decrease at the Boston Campus, a 43.4% increase at the Dartmouth Campus, and a 3.3% decrease at the Lowell Campus.

The following tables provide aggregate data for the campuses (except the Worcester Campus) on University applications, acceptances and matriculations for first year undergraduates and for transfer students.

First Year Applicants, Acceptances and Matriculants, Fall 2014-2018

| Fiscal Year | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|--|-------------|-------------|-------------|-------------|-------------|
| Applications Received | 62,497 | 67,602 | 70,025 | 71,495 | 74,333 |
| Number of Acceptances | 40,347 | 41,582 | 43,604 | 46,334 | 49,584 |
| Percent of Applicants Accepted | 65% | 62% | 62% | 65% | 67% |
| Number of Matriculants | 9,339 | 9,377 | 9,343 | 9,925 | 10,832 |
| Percent Matriculated of Those Accepted | 23% | 23% | 21% | 21% | 22% |

Transfer Student Applicants, Acceptances and Matriculants, Fall 2014-2018

| Fiscal Year | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|--|-------------|-------------|-------------|-------------|-------------|
| Applications Received | 10,048 | 9,961 | 9,971 | 9,980 | 10,900 |
| Number of Acceptances | 7,988 | 7,727 | 7,818 | 8,001 | 7,815 |
| Percent of Applicants Accepted | 79% | 78% | 78% | 80% | 72% |
| Number of Matriculants | 4,893 | 4,869 | 4,746 | 4,777 | 4,538 |
| Percent Matriculated of Those Accepted | 61% | 63% | 61% | 60% | 58% |

The following tables show the most currently available retention and graduation rates for undergraduate freshmen entering the University. The level and changes in retention and graduation rates reflect the diversity of the entering students.

One-Year Retention Rates - Fall Term (%)

| Fiscal Year | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|--------------------------|-------------|-------------|-------------|-------------|-------------|
| Range of Campus Averages | 79-90 | 75-91 | 73-91 | 74-91 | 71-91 |

Six-Year Graduation Rates (%)

| Fiscal Year | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|--|-------------|-------------|-------------|-------------|-------------|
| Year of Entry | 2008 | 2009 | 2010 | 2011 | 2012 |
| Graduation After 6 Years - Range of Campus Averages ⁺ | 42-76 | 42-78 | 45-77 | 48-77 | 48-80 |

⁺The low-end averages of the University data result from the Boston Campus, which focuses on the needs of non-traditional students.

The following table shows the average Scholastic Aptitude Test (“SAT”) scores for entering University undergraduate freshmen.

SAT Scores for Incoming Freshmen

| Academic Year | <u>2013-2014*</u> | <u>2014-2015*</u> | <u>2015-2016*</u> | <u>2016-2017*</u> | <u>2017-2018*</u> |
|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Range of Campus Averages | 1029-1218 | 1029-1226 | 1022-1225 | 1095-1268 | 1084-1296 |

* Combined Mathematics and Critical Reasoning scores.

Degrees Awarded

The University awards four levels of degrees: associate's, bachelor's, master's and doctoral/professional degrees. Trends in University degrees and certificates awarded for the past five years are shown in the following table.

Trends in Degrees Awarded

| Academic Year | <u>2013-2014</u> | <u>2014-2015</u> | <u>2015-2016</u> | <u>2016-2017</u> | <u>2017-2018</u> |
|----------------------------|------------------|------------------|------------------|------------------|------------------|
| Associate's/Certificate | 472 | 538 | 508 | 578 | 653 |
| Bachelor's | 11,544 | 11,875 | 12,125 | 12,754 | 13,091 |
| Master's/CAGS ⁺ | 4,385 | 4,679 | 4,578 | 4,755 | 4,827 |
| Doctorate/Professional | 773 | 759 | 812 | 845 | 841 |

⁺CAGS means Certificate of Advanced Graduate Studies.

TUITION AND FEES

The following tables show tuition and mandatory fees for full-time graduate and undergraduate students in effect at the Amherst, Boston, Dartmouth, Lowell and Worcester Campuses for fiscal years 2015 through 2019.

AMHERST CAMPUS
Tuition & Mandatory Fees: FY 2015-2019

| | <u>Actual</u> 2015 ¹ | <u>Actual</u> 2016 ² | <u>Actual</u> 2017 ³ | <u>Actual</u> 2018 ⁴ | <u>Actual</u> 2019 ⁵ |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| TUITION | | | | | |
| Undergraduate (MA resident) | \$1,714 | \$1,714 | \$14,590 | \$15,030 | \$15,406 |
| Undergraduate (non-resident) | 9,937 | 9,937 | 31,823 | 33,096 | 34,089 |
| Graduate (MA resident) | 2,640 | 2,640 | 13,524 | 13,930 | 14,348 |
| Graduate (non-resident) | 9,937 | 9,937 | 29,644 | 30,533 | 31,449 |
| OTHER MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$11,544 | \$12,457 | \$381 | \$381 | \$481 |
| Undergraduate (non-resident) | 18,876 | 20,567 | 381 | 381 | 481 |
| Graduate (MA resident) | 11,411 | 12,114 | 2,089 | 2,157 | 2,176 |
| Graduate (non-resident) | 18,609 | 20,037 | 2,089 | 2,157 | 2,176 |
| TOTAL TUITION & MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$13,258 | \$14,171 | \$14,971 | \$15,411 | \$15,887 |
| Undergraduate (non-resident) | 28,813 | 30,504 | 32,204 | 33,477 | 34,570 |
| Graduate (MA resident) | 14,051 | 14,754 | 15,613 | 16,087 | 16,524 |
| Graduate (non-resident) | 28,546 | 29,974 | 31,733 | 32,690 | 33,625 |
| DORMITORY RESIDENTS ONLY | | | | | |
| Average Room & Board | \$10,957 | \$11,503 | \$11,897 | \$12,258 | \$12,626 |
| TUITION, MANDATORY FEES, ROOM & BOARD | | | | | |
| Undergraduate (MA resident) | \$24,215 | \$25,674 | \$26,868 | \$27,669 | \$28,513 |
| Undergraduate (non-resident) | 39,770 | 42,007 | 44,101 | 45,735 | 47,196 |
| Graduate (MA resident) | 25,008 | 26,257 | 27,510 | 28,345 | 29,150 |
| Graduate (non-resident) | 39,503 | 41,477 | 43,630 | 44,948 | 46,251 |

¹ Reflects the tuition and mandatory curriculum fee freeze for resident undergraduates as supported by the second year of the 50/50 Initiative. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

² Includes an increase in fees approved by the University Trustees on June 17, 2015.

³ Reflects the restructuring of tuition and fees enabled by the tuition retention legislation and includes an increase in tuition approved by the University Trustees on July 14, 2016. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

⁴ Includes an increase in tuition approved by the University Trustees on July 17, 2017.

⁵ Includes an increase in tuition approved by the University Trustees on July 13, 2018.

BOSTON CAMPUS
Tuition & Mandatory Fees: FY 2015- 2019

| | <u>Actual</u> <u>2015</u> ¹ | <u>Actual</u> <u>2016</u> ² | <u>Actual</u> <u>2017</u> ³ | <u>Actual</u> <u>2018</u> ⁴ | <u>Actual</u> <u>2019</u> ⁵ |
|--|---|---|---|---|---|
| TUITION | | | | | |
| Undergraduate (MA resident) | \$1,714 | \$1,714 | \$13,110 | \$13,503 | \$13,841 |
| Undergraduate (non-resident) | 9,758 | 9,758 | 31,698 | 32,660 | 33,640 |
| Graduate (MA resident) | 2,590 | 2,590 | 16,863 | 17,375 | 17,896 |
| Graduate (non-resident) | 9,758 | 9,758 | 32,913 | 33,915 | 34,932 |
| OTHER MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$10,252 | \$10,968 | \$325 | \$325 | \$326 |
| Undergraduate (non-resident) | 18,632 | 20,162 | 325 | 325 | 326 |
| Graduate (MA resident) | 12,428 | 13,525 | 355 | 355 | 355 |
| Graduate (non-resident) | 19,334 | 21,357 | 355 | 355 | 355 |
| TOTAL TUITION & MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$11,966 | \$12,682 | \$13,435 | \$13,828 | \$14,167 |
| Undergraduate (non-resident) | 28,390 | 29,920 | 32,023 | 32,985 | 33,966 |
| Graduate (MA resident) | 15,018 | 16,115 | 17,218 | 17,730 | 18,251 |
| Graduate (non-resident) | 29,092 | 31,115 | 33,268 | 34,270 | 35,287 |
| DORMITORY RESIDENTS ONLY | | | | | |
| Average Room & Board (Undergraduate only) | | | | | \$14,858 |
| TUITION, MANDATORY FEES, ROOM & BOARD | | | | | |
| Undergraduate (MA resident) | | | | | \$29,025 |
| Undergraduate (non-resident) | | | | | 48,824 |

¹ Reflects the tuition and mandatory curriculum fee freeze for resident undergraduates as supported by the second year of the 50/50 Initiative. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

² Includes an increase in fees approved by the University Trustees on June 17, 2015.

³ Reflects the restructuring of tuition and fees enabled by the tuition retention legislation and includes an increase in tuition approved by the University Trustees on July 14, 2016. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

⁴ Includes an increase in tuition approved by the University Trustees on July 17, 2017.

⁵ Includes an increase in tuition approved by the University Trustees on July 13, 2018.

DARTMOUTH CAMPUS
Tuition & Mandatory Fees: FY 2015-2019

| | <u>Actual</u> <u>2015¹</u> | <u>Actual</u> <u>2016²</u> | <u>Actual</u> <u>2017³</u> | <u>Actual</u> <u>2018⁴</u> | <u>Actual</u> <u>2019⁵</u> |
|--|--|--|--|--|--|
| TUITION | | | | | |
| Undergraduate (MA resident) | \$1,417 | \$1,417 | \$12,783 | \$13,166 | \$13,496 |
| Undergraduate (non-resident) | 8,099 | 8,099 | 27,068 | 27,880 | 28,716 |
| Graduate (MA resident) | 2,071 | 2,071 | 14,999 | 15,449 | 15,912 |
| Graduate (non-resident) | 8,099 | 8,099 | 27,068 | 27,880 | 28,716 |
| Graduate Law School (MA resident) | 2,071 | 2,071 | 26,241 | 27,016 | 27,826 |
| Graduate Law School (non-resident) | 8,099 | 8,099 | 34,393 | 35,413 | 36,475 |
| OTHER MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$10,264 | \$11,171 | \$405 | \$405 | \$425 |
| Undergraduate (non-resident) | 16,520 | 18,074 | 405 | 405 | 425 |
| Graduate (MA resident) | 11,881 | 12,092 | 405 | 405 | 425 |
| Graduate (non-resident) | 16,520 | 26,173 | 405 | 405 | 425 |
| Graduate Law School (MA resident) | 21,631 | 24,541 | 405 | 405 | 425 |
| Graduate Law School (non-resident) | 23,295 | 32,293 | 405 | 405 | 425 |
| TOTAL TUITION & MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$11,681 | \$12,588 | \$13,188 | \$13,571 | \$13,921 |
| Undergraduate (non-resident) | 24,619 | 26,173 | 27,473 | 28,285 | 29,141 |
| Graduate (MA resident) | 13,952 | 14,973 | 15,404 | 15,854 | 16,337 |
| Graduate (non-resident) | 24,619 | 26,173 | 27,473 | 28,285 | 29,141 |
| Graduate Law School (MA resident) | 23,702 | 24,541 | 26,646 | 27,421 | 28,251 |
| Graduate Law School (non-resident) | 31,394 | 32,293 | 34,798 | 35,818 | 36,900 |
| DORMITORY RESIDENTS ONLY | | | | | |
| Average Room & Board | \$11,435 | \$11,622 | \$12,296 | \$12,753 | \$13,299 |
| TUITION, MANDATORY FEES, ROOM & BOARD | | | | | |
| Undergraduate (MA resident) | \$23,116 | \$24,210 | \$25,484 | \$26,324 | \$27,220 |
| Undergraduate (non-resident) | 36,054 | 37,795 | 39,769 | 41,038 | 42,440 |
| Graduate (MA resident) | 25,387 | 26,595 | 27,700 | 28,607 | 29,636 |
| Graduate (non-resident) | 36,054 | 37,795 | 39,769 | 41,038 | 42,440 |
| Graduate Law School (MA resident) | 35,137 | 36,163 | 38,942 | 40,174 | 41,550 |
| Graduate Law School (non-resident) | 42,829 | 43,915 | 47,094 | 48,571 | 50,199 |

¹ Reflects the tuition and mandatory curriculum fee freeze for resident undergraduates as supported by the second year of the 50/50 Initiative. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

² Includes an increase in fees approved by the University Trustees on June 17, 2015.

³ Reflects the restructuring of tuition and fees enabled by the tuition retention legislation and includes an increase in tuition approved by the University Trustees on July 14, 2016. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

⁴ Includes an increase in tuition approved by the University Trustees on July 17, 2017.

⁵ Includes an increase in tuition approved by the University Trustees on July 13, 2018.

LOWELL CAMPUS
Tuition & Mandatory Fees: FY 2015-2019

| | <u>Actual</u> 2015 ¹ | <u>Actual</u> 2016 ² | <u>Actual</u> 2017 ³ | <u>Actual</u> 2018 ⁴ | <u>Actual</u> 2019 ⁵ |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| TUITION | | | | | |
| Undergraduate (MA resident) | \$1,454 | \$1,454 | \$13,932 | \$14,350 | \$14,710 |
| Undergraduate (non-resident) | 8,567 | 8,567 | 30,500 | 31,415 | 32,357 |
| Graduate (MA resident) ⁺ | 1,637 | 1,637 | 14,304 | 14,590 | 14,590 |
| Graduate (non-resident) ⁺ | 6,425 | 6,425 | 25,853 | 26,370 | 26,370 |
| OTHER MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$10,993 | \$11,973 | \$375 | \$450 | \$470 |
| Undergraduate (non-resident) | 18,833 | 20,558 | 375 | 450 | 470 |
| Graduate (MA resident) ⁺⁺ | 11,162 | 12,162 | 375 | 450 | 470 |
| Graduate (non-resident) ⁺⁺ | 16,553 | 18,053 | 375 | 450 | 470 |
| TOTAL TUITION & MANDATORY FEES | | | | | |
| Undergraduate (MA resident) | \$12,447 | \$13,427 | \$14,307 | \$14,800 | \$15,180 |
| Undergraduate (non-resident) | 27,400 | 29,125 | 30,875 | 31,865 | 32,827 |
| Graduate (MA resident) | 12,799 | 13,799 | 14,679 | 15,040 | 15,060 |
| Graduate (non-resident) | 22,978 | 24,478 | 26,228 | 26,820 | 26,840 |
| DORMITORY RESIDENTS ONLY | | | | | |
| Average Room & Board | \$11,278 | \$11,670 | \$12,073 | \$12,495 | \$12,748 |
| TUITION, MANDATORY FEES, ROOM & BOARD | | | | | |
| Undergraduate (MA resident) | \$23,725 | \$25,097 | \$26,380 | \$27,295 | \$27,928 |
| Undergraduate (non-resident) | 38,678 | 40,795 | 42,948 | 44,360 | 45,576 |
| Graduate (MA resident) | 24,077 | 25,469 | 26,752 | 27,535 | 27,808 |
| Graduate (non-resident) | 34,256 | 36,148 | 38,301 | 39,315 | 39,588 |

¹ Reflects the tuition and mandatory curriculum fee freeze for resident undergraduates as supported by the second year of the 50/50 Initiative. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

² Includes an increase in fees approved by the University Trustees on June 17, 2015.

³ Reflects the restructuring of tuition and fees enabled by the tuition retention legislation and includes an increase in tuition approved by the University Trustees on July 14, 2016. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

⁴ Includes an increase in tuition approved by the University Trustees on July 17, 2017.

⁵ Includes an increase in tuition approved by the University Trustees on July 13, 2018.

⁺ Graduate tuition charges at UMass Lowell are on a 9-credit load basis.

⁺⁺ Graduate fee charges at UMass Lowell are on a 9-credit load basis.

WORCESTER CAMPUS
Tuition & Mandatory Fees: FY 2015-2019

| | <u>Actual</u> <u>2015¹</u> | <u>Actual</u> <u>2016²</u> | <u>Actual</u> <u>2017³</u> | <u>Actual</u> <u>2018⁴</u> | <u>Actual</u> <u>2019⁵</u> |
|---|--|--|--|--|--|
| TUITION | | | | | |
| Medical School (resident) | \$8,352 | \$8,352 | \$25,842 | \$28,426 | - |
| Medical School (Class of '19 and beyond) | - | - | 33,600 | 34,600 | \$35,500 |
| Medical School (non-resident) | - | - | 59,400 | 59,400 | 61,050 |
| Graduate School of Nursing (MA resident) | 2,640 | 2,640 | 9,900 | 13,500 | 13,870 |
| Graduate School of Biomedical Sciences (MA resident) | 2,640 | 2,640 | 6,424 | 13,930 | 14,300 |
| Graduate School of Nursing (non-resident) | 9,856 | 9,856 | 14,850 | 18,450 | 18,960 |
| Graduate School of Biomedical Sciences (non-resident) | 9,856 | 9,856 | 13,640 | 30,533 | 31,400 |
| OTHER MANDATORY FEES | | | | | |
| Medical School (resident) | \$14,998 | \$17,158 | \$2,057 | \$2,078 | \$2,276 |
| Medical School (Class of '19 and beyond) | - | 25,665 | 2,057 | 2,078 | 2,276 |
| Medical School (non-resident) | - | 58,517 | 2,057 | 2,078 | 2,276 |
| Graduate School of Nursing | 8,330 | 8,354 | 1,257 | 1,278 | 1,356 |
| Graduate School of Biomedical Sciences | 4,302 | 4,326 | 932 | 953 | 1,031 |
| TOTAL TUITION & MANDATORY FEES | | | | | |
| Medical School (resident) | \$23,350 | \$25,510 | \$27,899 | \$30,504 | - |
| Medical School (Class of '19 and beyond) | - | 34,017 | 35,657 | 36,678 | \$37,776 |
| Medical School (non-resident) | - | 58,517 | 61,457 | 61,478 | 63,326 |
| Graduate School of Nursing (MA resident) | 10,970 | 10,994 | 11,157 | 14,778 | 15,226 |
| Graduate School of Biomedical Sciences (MA resident) | 6,942 | 6,966 | 7,356 | 14,883 | 15,331 |
| Graduate School of Nursing (non-resident) | 18,186 | 18,210 | 16,107 | 19,728 | 20,316 |
| Graduate School of Biomedical Sciences (non-resident) | 14,158 | 14,182 | 14,572 | 31,486 | 32,431 |

¹ Includes an increase in fees approved by the University Trustees on June 18, 2014.

² Includes an increase in fees approved by the University Trustees on June 17, 2015.

³ Reflects the restructuring of tuition and fees enabled by the tuition retention legislation and includes an increase in tuition approved by the University Trustees on July 14, 2016. See "UNIVERSITY REVENUES AND BUDGETING - Appropriated Funds - Annual Appropriations."

⁴ Includes an increase in tuition approved by the University Trustees on June 14, 2017.

⁵ Includes an increase in tuition approved by the University Trustees on June 20, 2018.

Student Financial Aid

Eligible University students receive financial aid packages primarily awarded from the federal government, with varying combinations of grants and scholarships, loans and part-time employment. Grants and scholarships represent financial aid that does not require repayment by the student. The primary federal grants and scholarships awarded to eligible University students were Federal Pell Grants of approximately \$78.4 million and Federal Supplemental Education Opportunity Grants of approximately \$3.1 million for fiscal year 2018. New loans processed by the University for eligible students under federal student loan programs and federally guaranteed loan programs totaled approximately \$380.6 million for fiscal year 2018. Eligible University students also received approximately \$5.0 million through the Federal Work-Study Program for fiscal year 2018.

UNIVERSITY REVENUES AND BUDGETING

In general, the University receives revenues from multiple sources: Commonwealth appropriations, student fees and self-supporting activities for which fees are charged to cover the cost of providing the service, and federal and state contracts. In fiscal year 2018, Commonwealth appropriations provided approximately 23% of all operating and non-operating revenues of the University (not including University Related Organizations), tuition and fees accounted for approximately 27% of all operating and non-operating revenues and other non-appropriated funds (including grants and contracts, auxiliary enterprises and other operating revenues) provided the remaining 50%.

The University prepares annual financial statements in accordance with generally accepted accounting principles on an accrual basis. The financial statements of the University as of June 30, 2018 and June 30, 2017 have been audited by Grant Thornton LLP, independent certified public accountants. The consolidated audited financial statements of the University should be read in their entirety, including the footnotes and the Management Discussion and Analysis attached thereto.

Budget Process

The University's fiscal year, like that of the Commonwealth, is from July 1 through June 30. A key source of University revenues is the annual state appropriation determined in the Commonwealth's annual budget process. This process begins approximately one year in advance of each fiscal year. The University prepares its consolidated state budget request and forwards it to the Governor and the House and Senate Committees on Ways and Means. A copy of the University's request is also forwarded to the DHE, which incorporates the University's request in whole or in part into its state budget request for the entire public higher education system. The Governor makes funding recommendations to the state legislature (the "Legislature"). The Legislature in turn appropriates funds through its annual budget and other appropriating acts to the University Trustees, who distribute the funds to the five campuses. The Commonwealth budget process, however, is only one of several ongoing budgetary and review processes that culminate in the presentation to the University Trustees of the overall annual University operating budget.

Appropriated Funds

Tuition Retention

Massachusetts had historically been an anomaly in higher education because of the way it charged students to attend the University. In Massachusetts, mandatory curriculum fees made up the bulk of the cost of attending the University, rather than tuition. Tuition, which had not increased in over two decades, was set by the Massachusetts Board of Higher Education and was generally remitted to the Commonwealth's General Fund as a user fee. In fiscal year 2016, the University remitted approximately \$30.5 million in tuition collected from in-state students. Fees, which had previously accounted for the majority of student charges, were set by the University Trustees and were retained by the University to fund its operations. The fees have fluctuated over the years as the level of state support provided in the state budget has changed. Over time, this led to a high fee, low tuition billing model that was antiquated and confusing.

In July 2015, the Legislature passed and the Governor signed into law provisions in the fiscal year 2016 state budget that would give the University the tools to adopt a new system of billing that conforms to best practices in higher education and is consistent with the rest of the nation. The ability for the University to retain tuition, referred to as "Tuition Retention," is the main provision of the law that allowed the University to rationalize and restructure its tuition and fees in a way that is transparent and consistent with its peer institutions.

Fiscal year 2017 reflects the first year of full Tuition Retention. This was an important step toward making the University more accountable and transparent to students, their families, Legislators and other stakeholders by

showing student charges in a way that alleviates the confusion that had previously existed between tuition and mandatory fees.

Annual Appropriations

The following tables detail the University's appropriations received from the Commonwealth for fiscal years 2015-2019 and the calculation of total Commonwealth support reported in the financial statements for fiscal years 2014-2018. Table A details the University's base maintenance appropriation as provided for in the annual budget of the Commonwealth for fiscal years 2015 through 2019. An explanation of the legislative appropriation process by fiscal year is described in detail below. Table B details the total Commonwealth support received by the University from all sources for fiscal years 2014 through 2018, and is reflected in the University's financial statements.

TABLE A
Commonwealth Appropriations by Fiscal Year

| | Years Ended June 30* | | | | |
|--------------------------------------|----------------------|----------------|---------------------------|----------------|----------------|
| | (\$ millions) | | | | |
| <u>Commonwealth Appropriations</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> |
| | <u>Budget</u> | <u>Budget</u> | <u>Budget⁺</u> | <u>Budget</u> | <u>Budget</u> |
| UMass Base Appropriation | \$519.0 | \$531.8 | \$508.3 | \$513.5 | \$519.2 |
| Collective Bargaining Costs | 2.2 | 10.9 | 0 | 0 | 22.9 |
| 9C Budget Reductions | <u>(7.8)</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| Total UMass Base State Appropriation | <u>\$513.4</u> | <u>\$542.7</u> | <u>\$508.3</u> | <u>\$513.5</u> | <u>\$542.1</u> |

*Totals may not add due to rounding.

⁺ The 2017 appropriation amount was the result of a reduction related to the Tuition Retention Legislation passed as part of the fiscal year 2016 budget. With the University now able to retain approximately \$30.5 million in tuition, the state appropriation was reduced by a corresponding amount in order to ensure that Tuition Retention is cost-neutral to both the University and the Commonwealth.

The Commonwealth pays the fringe benefit cost for those University employees who are paid from Commonwealth appropriations. Therefore, such fringe benefit support is added to the "State Appropriations" financial statement line item as presented in the table below. The University pays the Commonwealth for the fringe benefit cost of the employees paid from funding sources other than Commonwealth appropriations. The University includes tuition collected in the line item in its financial statements captioned "Tuition and Fees" under "Combined Statements of Revenue, Expenses and Changes in Net Position" and prior to 2017 removed the equal amount from the "State Appropriations" line item through the netting process presented in the following table.

TABLE B

| Fiscal Year | Years Ended June 30 | | | | |
|-----------------------------------|---------------------|------------------|------------------|------------------|------------------|
| | (\$ thousands) | | | | |
| | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
| Gross Commonwealth Appropriations | \$486,656 | \$516,794 | \$546,953 | \$512,900 | \$528,868 |
| Plus: Fringe Benefits | 141,881 | 159,403 | 178,032 | 207,917 | 223,026 |
| Less: Tuition Remitted | <u>(34,325)</u> | <u>(31,055)</u> | <u>(30,583)</u> | <u>0</u> | <u>0</u> |
| Net Commonwealth Appropriations | <u>\$570,618</u> | <u>\$621,200</u> | <u>\$669,749</u> | <u>\$720,817</u> | <u>\$751,894</u> |

The fiscal year 2014 budget approved in July 2013 included a new funding model pursuant to which the Commonwealth's appropriations are set at an amount expected to cover approximately 50% of the cost to educate Massachusetts undergraduate students at the University (the "50/50 Initiative"). The 50/50 Initiative required an

increase in the Commonwealth's base state appropriation of \$39.1 million in each of fiscal year 2014 and 2015. This investment, along with additional fringe support of \$10.8 million provided the University with \$100 million in additional appropriations over fiscal years 2014 and 2015. The Governor and the Legislature embraced the 50/50 Initiative for the fiscal year 2014 budget, and provided the increased funding which allowed the University to freeze undergraduate tuition and mandatory fees for Massachusetts residents for the 2013-2014 academic year. The 50/50 Initiative had an immediate and meaningful impact on thousands of Massachusetts residents as their undergraduate tuition and mandatory curriculum fees did not increase in the 2013-2014 academic year. It is expected to provide such undergraduate students with long-term relief by allowing them to graduate and enter the workforce with less student debt. The total base state appropriation for fiscal year 2014 was \$478.9 million.

The fiscal year 2015 budget approved in July 2014 supported the second year of the 50/50 Initiative by increasing the University's base appropriation to \$519.0 million. With the approval of the Commonwealth's fiscal year 2015 budget and the corresponding increase in appropriations for the University, the University continued the implementation of the 50/50 Initiative. At its June 18, 2014 Board Meeting, the University's Trustees approved the freezing of tuition and mandatory curriculum fees for in-state undergraduate students for the 2014-2015 academic year.

On February 3, 2015, Governor Baker exercised his 9C Authority to address a projected \$765 million shortfall in the Commonwealth's fiscal year 2015 budget, by proposing legislation to make certain budgetary reductions. The final bill, which was signed by the Governor on February 13, 2015, reduced the University's fiscal year 2015 base appropriation of \$519.0 million by approximately \$7.8 million to \$511.2 million. The University absorbed these reductions into its operations for fiscal year 2015. The University requested funding to account for the first year of collective bargaining increases with parameters set by the Commonwealth's administration with a total first year cost of \$13.1 million. Supplemental funding was supported in Chapter 10 of the Acts of 2015 for \$2.2 million of the total need.

The fiscal year 2016 budget approved in July 2015 included a base state appropriation of \$531.8 million, representing an increase of 2.5% over the original fiscal year 2015 amount. The original 2016 base appropriation did not include funding for the fiscal year 2015 or fiscal year 2016 collective bargaining increases and fell short of the University's request of \$578 million. Given the level of state funding, the University did not continue to freeze tuition and fees for fiscal year 2016. On June 17, 2015, the University Board of Trustees approved a 5% tuition and mandatory fee increase for in-state undergraduate students. Supplemental funding for collective bargaining was subsequently supported in Chapter 70 of the Acts of 2016 for \$10.9 million, satisfying the remaining need for the first year cost of the collective bargaining increases.

The fiscal year 2017 budget approved in July 2016 included a base state appropriation of \$508.3 million, representing an increase of 1.5% over the original fiscal year 2016 appropriation, and a decrease of 1% from the 2016 appropriation including supplemental funds. The 2017 appropriation amount was also the result of a reduction related to the Tuition Retention Legislation passed as part of the fiscal year 2016 budget. With the University now being able to retain approximately \$30.51 million in tuition, the state appropriation was reduced by a corresponding amount in order to ensure that Tuition Retention is cost-neutral to both the University and the Commonwealth. With flat state appropriations and no additional funds for the second or third years of collective bargaining increases, the University Board of Trustees approved an average increase to tuition and mandatory fees of 5.6% for in-state undergraduates at a special meeting on July 14, 2016.

The fiscal year 2018 budget approved in July 2017 included a base state appropriation of \$513.5 million, representing an increase of 1.0% over the fiscal 2017 appropriation. The budget did not include a specific reserve or funding for collective bargaining as the parameters were not yet available. Subsequent to the approval of the state budget, bargaining parameters were established for the fiscal year 2018 – 2020 period; this was ultimately funded during fiscal year 2019. With the base appropriation falling short of the University's funding request, the Board of Trustees approved an average increase to tuition and mandatory fees of 3.1% at a special meeting on July 17, 2017.

The fiscal year 2019 budget approved in July 2018 included a base state appropriation of \$519.2 million, representing an increase of 1.0% over the fiscal 2018 appropriation. The state budget included a collective bargaining

reserve however that reserve was short of the total needed to fund all contracts under negotiations (not limited to the University). Working closely with the Administration, the University secured a commitment to fund \$11.3 million for the retroactive adjustment for fiscal year 2018; of that amount, \$10.9 million has been transferred to date with the remaining \$339K pending the completion of certain contracts. Additionally, \$22.9 million was committed for fiscal year 2019 with \$14.3 million transferred to date. Of the remaining fiscal year 2019 amount to be transferred, \$8.2 million is pending the passage of a supplemental budget that was filed in early February.

The University has submitted its budget request to the Administration for fiscal year 2020. UMass is requesting a base appropriation of \$568.3 million, which assumes that the base appropriation will include the value of collective bargaining secured in fiscal year 2019 (\$22.9 million), will fund the incremental value of collective bargaining for fiscal year 2020 (\$11.8 million), and requests additional funding for fixed cost increases of the University (\$14.4 million). The fiscal year 2020 budget process is currently underway. On January 23, 2019, the Governor released his budget recommendations, which included \$558.0 million in base appropriations for the University. This amount represents the requested collective bargaining amounts plus a 1.0% increase to assist with fixed costs. The House and Senate continue to develop their recommendations, which are expected in April and May, respectively.

Management of Non-Appropriated Funds

All non-appropriated funds are managed and grouped for budgetary purposes into several trust funds. Non-appropriated funds are funds derived by the University from revenue sources other than Commonwealth appropriations and include, for example, student fees, gifts, grants, contracts and sponsored programs. The University Trustees establish and collect certain student fees and charges, including charges for room and board. Non-appropriated funds are retained by the University. Approximately 77% of the University's operating and non-operating revenues for fiscal year 2018 were non-appropriated.

University trust funds are financial accounts that are established by the University Trustees under authority granted by the Legislature in connection with self-supporting operations, such as student services, parking and certain research and public service activities. Revenues received from these self-supporting activities are expended by law for the respective purposes for which each trust fund was established. The University Trustees exercise oversight and control over these funds through official policy guidelines, annual budget review and approval and periodic internal audits of certain accounts.

The University's financial operations consist of two major expense categories: Educational and General and Auxiliary Enterprises. The Educational and General expense budget includes research, academic programs, public service programs, student services programs, academic and institutional support programs, physical plant operations and financial aid. These activities are funded from student tuition and fees, Commonwealth and Federal appropriations, and grants and contracts. Auxiliary Enterprises are a set of self-sufficient services ancillary to the general educational mission of the University. These include such items as dining and residence halls, student health services and parking facilities. The Auxiliary Enterprises budget is a revenue-based trust fund. No assurance can be given that future trust fund revenues will continue to be sufficient to support self-amortizing projects or other Auxiliary Enterprises. The University reviews fees annually with the goal of having the Auxiliary Enterprises budget be self-sufficient.

Responding to a Challenging Fiscal Environment

The University continues to benefit from the increased demand for its educational services. The University's growing reputation, combined with difficult economic conditions in the Commonwealth, have resulted in continued growth in student enrollment and the associated revenue growth from student charges, at all of the University's campuses. In addition, the University benefits from having diverse revenue streams. Grant and contract revenues have grown consistently over the years and the University anticipates continued growth in this area. Modest increases in room and board rates are also expected to generate revenues for auxiliary operations. Additionally, the University's online presence continues to expand. For fiscal year 2018, UMassOnline achieved an approximate 8% increase in

revenue and an approximate 4% increase in enrollment. Compared with the previous year, revenues increased from approximately \$105 million to approximately \$113 million.

Understanding that the current fiscal environment poses significant challenges for the University and its students, the responsibility to be a good steward of limited resources is taken seriously. The University, through its Board of Trustees, created a permanent Task Force on Efficiencies and Effectiveness charged with helping to ensure that improving quality through more efficient and effective operations continues to be a priority for the University. The Task Force, along with the President's Office and the campuses, is working to promote a more standardized approach for cross-campus collaboration and oversight of the entire effort, track and report progress, and quantify the benefits to the University and its campuses. Over the last few years the University has achieved measureable savings and efficiencies and expects current efforts to yield additional savings going forward.

The University continues to focus on improving its competitive position. The University opened the first-ever student dormitories at UMass Boston in September 2018, achieving a long-held goal of providing UMass Boston students with an on-campus residential option. The student housing complex accommodates UMass Boston freshmen and transfer students and was built via an innovative public-private partnership.

Basis of Presentation

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board ("GASB") using the economic resources measurement focus and the accrual basis of accounting. These statements are reported on a combined basis and all intra-University transactions are eliminated.

Operating revenues consist of tuition and fees, grants and contracts, sales and services of educational activities (including royalties from licensing agreements) and Auxiliary Enterprise revenues. Operating expenses include salaries, wages, fringe benefits, utilities, subcontracts on grants and contracts, supplies and services and depreciation and amortization. All other revenues and expenses of the University are reported as non-operating revenues and expenses including state general appropriations, non-capital gifts, short term investment income, endowment income used in operations, interest expenses and capital additions and deductions. Capital items represent all other changes in long term plant and endowment net assets. Revenues are recognized when earned and expenses are recognized when incurred with the exception of revenue earned on certain public service activities. Restricted grant revenue is recognized only when all eligibility requirements have been met, that is to the extent grant revenues are expended or in the case of fixed price contracts, when the contract terms are met or completed. Contributions, including unconditional promises to give (pledges) for non-endowment or non-capital purposes, are recognized as revenues in the period received. Promises of additions to non-expendable endowments are not recognized until cash or other assets are received. Conditional promises to give are not recognized until they become unconditional, that is when the conditions on which they depend are substantially met. When an expense or outlay is incurred for which both restricted and unrestricted net assets are available, the University applies restricted net assets first.

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, as well as disclosures of contingencies at the date of the financial statements and the revenues and expenditures recognized during the reporting period. Significant estimates include the accrual for employee compensated absences, the accrual for workers' compensation liability, the allowance for doubtful accounts, valuation of certain investments and depreciation expense. Actual results could differ from those estimates.

The University reports its financial statements as a business-type activity ("BTA") under GASB Statement No. 35, *Basic Financial Statements - and Management's Discussion and Analysis - for Public Colleges and Universities* ("GASB 35"). BTAs are defined as those that are financed in whole or in part by fees charged to external parties for goods or services.

In order to ensure observance of limitations and restrictions placed on the use of available resources, the accounts of the University are maintained internally in accordance with the principles of "fund accounting". This is

the procedure by which resources for various purposes are maintained in separate funds in accordance with the activities or objectives specified. GASB 35 requires that external financial statements to be reported on a consolidated basis and establishes standards for external financial reporting by public colleges and universities that resources be classified into the following net asset categories:

- **Net investment in capital assets:** Capital assets, at historical cost, or fair market value on 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:** Net assets subject to externally imposed stipulations that they be maintained permanently by the University.
- **Restricted Expendable:** Net assets 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:** Net assets that are not subject to externally imposed stipulations. Substantially all unrestricted net assets are designated to support academic, research, Auxiliary Enterprises or unrestricted funds functioning as endowments or are committed to capital construction projects.

Revenues are reported net of discounts and allowances. As a result, student financial aid expenditures are reported as an allowance against tuition and fees revenue while stipends and other payments made directly to students are recorded as scholarship and fellowship expenditures on the statement of revenues, expenses and other changes to net assets and are included in supplies and services on the statement of cash flows. Discounts and allowances for tuition and fees and Auxiliary Enterprises are calculated using the Alternate Method.

In 2015, the University adopted the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Retirement Benefits – an amendment of GASB Statement No. 27* (“GASB 68”). GASB 68 addresses accounting and financial reporting for pensions that are provided to the employees of state and local governments through pension plans that are administered through trusts that have certain characteristics and establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expenditures. The implementation of GASB 68 resulted in a cumulative effect adjustment of (\$238,906) to the net position in the 2015 Statement of Revenues, Expenses, and Changes in Net Position as of July 1, 2014 for the recording of pensions.

In 2018, the University adopted the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB 75”). The statement supersedes GASB statement No. 45 and establishes new requirements for calculating and reporting the University’s postemployment benefits. The implementation of GASB 75 resulted in a cumulative effect adjustment of (\$742,982) to the net position in the 2018 Statement of Revenues, Expenses, and Changes in Net Position as of July 1, 2017. The application of GASB 75 was recorded effective in the beginning of fiscal year 2018 because this was the earliest date that was practical based on available information.

SUMMARY OF OPERATIONS*

**University
Combined and Condensed Statement of Net Position**

As of June 30 (\$ thousands)

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| ASSETS | | | | | |
| Current Assets | \$ 592,750 | \$ 692,679 | \$ 677,927 | \$ 742,482 | \$918,685 |
| Noncurrent Assets | | | | | |
| Capital Assets, Net | 4,064,786 | 4,333,761 | 4,615,776 | 4,854,110 | 5,075,476 |
| All Other Noncurrent Assets | 1,543,391 | 1,501,421 | 1,294,028 | 1,404,203 | 1,291,309 |
| Total Assets | \$6,200,927 | \$6,527,861 | \$6,587,731 | \$7,000,795 | \$7,285,470 |
| LIABILITIES | | | | | |
| Current Liabilities | \$ 674,330 | \$ 856,460 | \$ 774,837 | \$ 622,084 | \$ 934,525 |
| Noncurrent Liabilities | 2,831,869 | 3,133,710 | 3,294,183 | 3,562,485 | 4,161,911 |
| Total Liabilities | \$3,506,199 | \$3,990,170 | \$4,069,020 | \$4,184,569 | \$5,096,436 |
| NET POSITION | | | | | |
| Net Investment in Capital Assets | \$1,800,767 | \$1,887,941 | \$2,013,966 | \$2,208,370 | \$2,288,599 |
| Restricted | | | | | |
| Nonexpendable | 17,387 | 18,378 | 18,384 | 27,443 | 28,022 |
| Expendable | 174,530 | 169,591 | 218,272 | 201,710 | 222,343 |
| Unrestricted | 825,611 | 591,438 | 549,471 | 616,757 | (150,080) |
| Total Net Position | \$2,818,295 | \$2,667,348 | \$2,800,093 | \$3,054,280 | \$2,388,884 |

* Derived from the Annual Audited Financial Report for Fiscal Years 2014-2018. The University's financial statements include prior year comparative information. Certain prior year amounts have been reclassified to conform with the current year presentation. These reclassifications have no effect on total net assets.

University
Combined Statement of Revenues, Expenses and Changes in Net Position

For The Years Ended June 30 (\$ thousands)

| REVENUES | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| <i>Operating Revenues</i> | | | | | |
| Tuition and Fees* | \$ 740,116 | \$ 765,218 | \$ 826,815 | \$ 847,832 | \$874,826 |
| Grants and Contracts | 511,694 | 510,741 | 528,352 | 560,081 | 560,990 |
| Sales & Service, Educational Activities | 21,792 | 25,601 | 27,500 | 28,910 | 30,591 |
| Auxiliary Enterprises | 349,485 | 362,193 | 383,281 | 400,822 | 416,733 |
| Other Operating Revenues | | | | | |
| Sales & Service, Independent Operations | 44,296 | 48,368 | 47,613 | 79,261 | 68,497 |
| Sales & Service, Public Service Activities | 448,478 | 295,429 | 476,831 | 418,726 | 381,018 |
| Other | 93,418 | 105,234 | 113,104 | 104,957 | 136,159 |
| Total Operating Revenues | \$2,209,279 | \$2,112,784 | \$2,403,496 | \$2,440,589 | \$2,468,814 |
| | | | | | |
| EXPENSES | 2014 | 2015 | 2016 | 2017 | 2018 |
| <i>Operating Expenses</i> | | | | | |
| Educational and General | | | | | |
| Instruction | \$ 690,635 | \$ 712,430 | \$ 794,691 | \$ 824,042 | \$876,235 |
| Research | 407,425 | 433,586 | 434,213 | 447,370 | 471,135 |
| Public Service | 77,985 | 72,910 | 71,457 | 68,083 | 78,238 |
| Academic Support | 151,000 | 167,582 | 181,057 | 177,173 | 187,495 |
| Student Services | 119,295 | 127,988 | 141,915 | 151,033 | 156,934 |
| Institutional Support | 219,920 | 237,212 | 248,379 | 247,740 | 271,535 |
| Operation and Maintenance of Capital Assets | 214,972 | 217,913 | 228,406 | 240,501 | 255,825 |
| Depreciation and Amortization | 204,233 | 221,043 | 240,865 | 245,300 | 261,417 |
| Scholarships and Fellowships | 49,242 | 49,300 | 44,645 | 47,710 | 50,410 |
| Auxiliary Enterprises | 265,080 | 273,680 | 297,089 | 306,850 | 313,741 |
| Other Expenditures | | | | | |
| Independent Operations | 44,861 | 40,961 | 47,930 | 57,276 | 52,211 |
| Public Service Activities | 365,252 | 227,692 | 410,106 | 345,875 | 325,216 |
| Total Operating Expenses | \$2,809,900 | \$2,782,297 | \$3,140,753 | \$3,158,953 | \$3,300,392 |
| Operating Loss | (\$600,621) | (\$669,513) | (\$737,257) | (\$718,364) | (\$831,578) |

* Net of scholarship allowances of \$310,106 at June 30, 2018, \$288,708 at June 30, 2017, \$244,025 at June 30, 2016, \$212,469 at June 30, 2015, and \$201,186 at June 30, 2014.

(continued)

NONOPERATING REVENUES/(EXPENSES)

| | | | | | |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| Federal Appropriations | \$7,020 | \$6,619 | \$6,827 | \$6,602 | \$6,688 |
| State Appropriations | 570,618 | 621,200 | 669,748 | 720,817 | 751,894 |
| Gifts | 29,013 | 30,351 | 42,415 | 26,253 | 39,022 |
| Investment Income | 86,685 | 29,579 | 29,381 | 31,567 | 37,622 |
| Unrealized Gain (Loss) on Investments | | (11,327) | (7,633) | 15,466 | 5,558 |
| Endowment Income | 16,642 | | | | |
| Endowment Income Distributed for Operations | | 23,362 | 24,740 | 26,877 | 26,742 |
| Interest on Indebtedness | (89,496) | (100,332) | (105,276) | (110,069) | (115,851) |
| Non-operating Federal Grants | 74,279 | 76,539 | 75,743 | 74,050 | 81,590 |
| Other Non-operating Income | 1,046 | 2,927 | 1,540 | 17,085 | 1,118 |
| <i>Net Non-operating Revenues</i> | \$695,807 | \$678,918 | \$737,485 | \$808,648 | \$834,383 |
| <i>Income/(Loss) Before Other Revenues, Expenses, Gains and Losses</i> | \$95,186 | \$9,405 | \$228 | \$90,284 | \$2,805 |
| Capital Appropriations | \$112,132 | \$62,582 | \$121,298 | \$121,380 | \$67,437 |
| Capital Grants and Contracts | 21,987 | 55,823 | 51,259 | 29,080 | 8,732 |
| Endowment Return, net of amount used for operations | | (13,086) | (28,958) | 21,278 | 8,166 |
| University Related Organization Transactions | | | | | |
| Capital Contribution | 250 | 0 | 2,985 | 0 | 0 |
| Disposal of Plant Facilities | (6,198) | (12,120) | (10,462) | (4,274) | (6,695) |
| Other Additions/Deductions | (19,418) | (15,565) | (3,605) | (3,561) | (2,859) |
| Additions to Permanent Endowments | | 920 | | | |
| <i>Total Other Revenues, Expenses, Gains and Losses</i> | \$108,753 | \$78,554 | \$132,517 | \$163,903 | \$74,781 |
| <i>Total Increase in Net Position</i> | \$203,939 | \$87,959 | \$132,745 | \$254,187 | \$77,586 |
| NET POSITION | | | | | |
| Net Position at Beginning of Year | \$2,614,356 | \$2,818,295 | \$2,667,348 | \$2,800,093 | \$3,054,280 |
| Cumulative effect of adoption of GASB 68 | | (238,906) | | | |
| Cumulative effect of adoption of GASB 75 | | | | | (742,982) |
| Net Position at Beginning of Year, Adjusted | \$2,614,356 | \$2,579,389 | \$2,667,348 | \$2,800,093 | \$2,311,298 |
| <i>Net Position at End of Year</i> | \$2,818,295 | \$2,667,348 | \$2,800,093 | \$3,050,280 | \$2,388,884 |

SUMMARY OF FINANCIAL RESULTS, FISCAL YEARS 2016 THROUGH 2018

The following is a summary of the University's financial results for fiscal years 2016 through 2018.

Fiscal Year 2018

Financial Highlights

The University's net position (not including University Related Organizations) decreased approximately \$665.4 million from \$3.1 billion in fiscal year 2017 to \$2.4 billion in fiscal year 2018.

The University expended approximately \$255.8 million on operation and maintenance of capital assets during fiscal year 2018.

Summary of Assets and Liabilities

At June 30, 2018, the University's total assets (not including University Related Organizations) were approximately \$7.3 billion, an increase of approximately \$284.7 million over the approximately \$7.0 billion in assets recorded in fiscal year 2017. The University's largest asset continues to be its net investment in capital assets of \$5.1 billion at June 30, 2018 (\$4.9 billion in fiscal year 2017). Other significant assets include current and noncurrent investments in cash and securities.

University liabilities (not including University Related Organizations) totaled approximately \$5.1 billion at June 30, 2018, an increase of approximately \$911.9 million compared to the approximately \$4.2 billion in liabilities in fiscal year 2017.

The University's current assets of approximately \$918.7 million in fiscal year 2018 were below the current liabilities of approximately \$934.5 million, as the current ratio was 0.98 dollars in assets to every one dollar in liabilities. In fiscal year 2017, the current ratio was 1.19 (approximately \$742.5 million in current assets and \$622.1 million in current liabilities).

The University's unrestricted and restricted expendable net assets totaled approximately \$72.3 million, which represents approximately 2% of total operating expenditures of approximately \$3.4 billion during fiscal year 2018.

In fiscal year 2018, the University's unrestricted net assets totaled approximately (\$150.1) million. Substantially all unrestricted net assets are designated to support academic, research, auxiliary enterprises or unrestricted funds functioning as endowments, or are committed to capital construction projects.

Summary of Operating Revenues and Operating Expenditures

The University's total operating revenues for fiscal year 2018 were approximately \$2.5 billion. This represents an increase of approximately \$28.2 million over the approximately \$2.4 billion in operating revenues in fiscal year 2017. The most significant sources of revenue for the University are tuition and fees, grants and contracts, auxiliary services and public service activities at the Worcester Campus. Tuition and fees, grants and contracts, auxiliary services and all other operating revenue (which includes the above referenced public service activities) represent 35%, 23%, 17% and 25%, respectively, of total operating revenues.

In fiscal year 2018, University operating expenditures, including depreciation and amortization of approximately \$261.4 million, totaled approximately \$3.3 billion. Of this total, approximately \$1.8 billion or 54% was used to support the academic core activities of the University, including approximately \$471.1 million in research.

State Appropriations

In fiscal year 2018, state appropriations represented approximately 23% of all operating and non-operating revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriation is unrestricted revenue, nearly all of the state appropriation supports payroll and benefits for University employees.

In fiscal year 2018, the net state appropriation increased approximately \$31.1 million over fiscal year 2017 amounts, due to a higher level of state appropriation and related fringe benefit support.

Fiscal Year 2017

Financial Highlights

The University's net position (not including University Related Organizations) increased approximately \$250 million from \$2.8 billion in fiscal year 2016 to \$3.1 billion in fiscal year 2017.

The University expended approximately \$240.5 million on plant operations and maintenance activities during fiscal year 2017.

Summary of Assets and Liabilities

At June 30, 2017, the University's total assets (not including University Related Organizations) were approximately \$7.0 billion, an increase of approximately \$366.6 million over the approximately \$6.6 billion in assets recorded in fiscal year 2016. The University's largest asset continues to be its net investment in its physical plant of \$4.9 billion at June 30, 2017 (\$4.6 billion in fiscal year 2016). Other significant assets include current and noncurrent investments and cash and securities.

University liabilities (not including University Related Organizations) totaled approximately \$4.1 billion at June 30, 2017, an increase of approximately \$73.0 million compared to the approximately \$4.1 billion in liabilities in fiscal year 2016.

The University's current assets of approximately \$739.8 million in fiscal year 2017 were above the current liabilities of approximately \$619.3 million, as the current ratio was 1.19 dollars in assets to every one dollar in liabilities. In fiscal year 2016, the current ratio was 0.87 (approximately \$677.9 million in current assets and \$774.8 million in current liabilities).

The University's unrestricted and restricted expendable net assets totaled approximately \$818.9 million, which represents approximately 26% of total operating expenditures of approximately \$3.2 billion during fiscal year 2017.

In fiscal year 2017, the University's unrestricted net assets totaled approximately \$617.2 million. Substantially all unrestricted net assets are designated to support academic, research, auxiliary enterprises or unrestricted funds functioning as endowments, or are committed to capital construction projects.

Summary of Operating Revenues and Operating Expenditures

The University's total operating revenues for fiscal year 2017 were approximately \$2.4 billion. This represents an increase of approximately \$39.5 million over the approximately \$2.4 billion in operating revenues in fiscal year 2016. The most significant sources of revenue for the University are tuition and fees, grants and contracts, auxiliary services and public service activities at the Worcester Campus. Tuition and fees, grants and contracts, auxiliary services and all other operating revenue (which includes the above referenced public service activities) represent 35%, 23%, 16% and 26%, respectively, of total operating revenues.

In fiscal year 2017, University operating expenditures, including depreciation and amortization of approximately \$249.7 million, totaled approximately \$3.2 billion. Of this total, approximately \$1.7 billion or 53% was used to support the academic core activities of the University, including approximately \$447.4 million in research.

State Appropriations

In fiscal year 2017, state appropriations represented approximately 22% of all operating and non-operating revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriation is unrestricted revenue, nearly all of the state appropriation supports payroll and benefits for University employees.

In fiscal year 2017, the net state appropriation increased approximately \$51.1 million over fiscal year 2016 amounts, due to a higher level of state appropriation and related fringe benefit support.

Fiscal Year 2016

Financial Highlights

The University's net position (not including University related organizations) increased approximately \$132.7 million from \$2.7 billion in fiscal year 2015 to \$2.8 billion in fiscal year 2016.

The University expended approximately \$228.4 million on plant operations and maintenance activities during fiscal year 2016.

Summary of Assets and Liabilities

At June 30, 2016, the University's total assets (not including University Related Organizations) were approximately \$6.6 billion, an increase of approximately \$59.9 million over the approximately \$6.5 billion in assets recorded in fiscal year 2015. The University's largest asset continues to be its net investment in its physical plant of \$4.6 billion at June 30, 2016 (\$4.3 billion in fiscal year 2015). Other significant assets include current and noncurrent investments and cash and securities.

University liabilities (not including University Related Organizations) totaled approximately \$4.1 billion at June 30, 2016, an increase of approximately \$78.8 million compared to the approximately \$4.0 billion in liabilities in fiscal year 2015.

The University's current assets of approximately \$677.9 million in fiscal year 2016 were below the current liabilities of approximately \$774.8 million, as the current ratio was 0.87 dollars in assets to every one dollar in liabilities. In fiscal year 2015, the current ratio was 0.81 (approximately \$692.7 million in current assets and \$856.5 million in current liabilities).

The University's unrestricted and restricted expendable net assets totaled approximately \$767.7 million, which represents approximately 25% of total operating expenditures of approximately \$3.1 billion during fiscal year 2016.

In fiscal year 2016, the University's unrestricted net assets totaled approximately \$549.5 million. Substantially all unrestricted net assets are designated to support academic, research, auxiliary enterprises or unrestricted funds functioning as endowments, or are committed to capital construction projects.

Summary of Operating Revenues and Operating Expenditures

The University's total operating revenues for fiscal year 2016 were approximately \$2.4 billion. This represents an increase of approximately \$290.7 million over the approximately \$2.1 billion in operating revenues in fiscal year 2015. The most significant sources of revenue for the University are tuition and fees, grants and contracts, auxiliary services and public service activities at the Worcester Campus. Tuition and fees, grants and contracts, auxiliary services and all other operating revenue (which includes the above referenced public service activities) represent 34%, 22%, 16% and 28%, respectively, of total operating revenues.

In fiscal year 2016, University operating expenditures, including depreciation and amortization of approximately \$240.9 million, totaled approximately \$3.1 billion. Of this total, approximately \$1.6 billion or 52% was used to support the academic core activities of the University, including approximately \$434.2 million in research.

State Appropriations

In fiscal year 2016, state appropriations represented approximately 21% of all operating and non-operating revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriation is unrestricted revenue, nearly all of the state appropriation supports payroll and benefits for University employees.

In fiscal year 2016, the net state appropriation increased approximately \$48.6 million over fiscal year 2015 amounts, due to a higher level of state appropriation and related fringe benefit support.

Endowment and Fundraising

The combined University and Foundation endowment assets have increased to approximately \$842.9 million at June 30, 2018 from approximately \$792.3 million at June 30, 2017. The University raised approximately \$120.7 million in cash, pledges, gifts-in-kind and private research grants in fiscal year 2018. The number of endowed chairs has grown from four in 1995 to approximately 109 in 2018, enhancing the University’s academic reputation.

The total investment return for fiscal year 2018, including realized and unrealized activity was a net gain of approximately \$47.8 million. The endowment funds for all five of the University’s campuses are commingled into a pooled investment fund and are tracked by the Foundation using unit value accounting. The Foundation employs a market value unit method of accounting, whereby participating endowment funds enter and withdraw from the pooled investment fund based on monthly unit values. Changes in market value and monthly income are allocated proportionately to each endowment fund participant. The effective spending rate for Foundation endowment funds was 3.3% for fiscal year 2018, which represents approximately 1.0% of the University’s total operating and non-operating revenues.

The following details the University and Foundation endowment assets at June 30:

University and Foundation Endowment Assets (\$ thousands)

| <u>2014*</u> | <u>2015*</u> | <u>2016*</u> | <u>2017*</u> | <u>2018*</u> |
|--------------|--------------|--------------|--------------|--------------|
| \$743,710 | \$739,606 | \$707,246 | \$792,278 | \$842,858 |

*The Kennedy Institute quasi-endowment has been removed from the University and Foundation Endowment Assets presented here. The Kennedy Institute invested approximately \$10 million in the Foundation’s pooled Endowment in December 2009 and \$15 million in July 2014. The Kennedy Institute quasi-endowment is recorded by the Foundation on an agency basis.

CURRENT AND FUTURE CAPITAL PLANS

The University Trustees reviewed and approved a five-year capital plan for fiscal years 2019-2023 in September 2018, including projects already in process with prior approval of the University Trustees. The University generally has funded its capital plans through a combination of funds received from University operations, bonds issued by UMBA, bonds issued by MDFA, Commonwealth appropriations and private fund raising.

The University must follow certain procedures for state capital spending as defined by the Commonwealth’s Executive Office for Administration and Finance (“EOAF”). Such spending may be financed through the issuance of Commonwealth general or special obligation bonds or other designated revenue, including transfers from budgeted funds. The Commonwealth’s Division of Capital Asset Management and Maintenance (“DCAMM”) manages a five-year capital-spending plan, which is approved by the Commonwealth’s Secretary of Administration and Finance. The University works closely with DCAMM to ensure that the priorities of the University are included in the five-year capital plan for state funding.

The University Trustees, University administration, and campus leadership have identified capital issues as instrumental to the University’s goal of continuing to improve educational quality at all five campuses by enhancing academic achievement and student experience. Following a period of limited investment in the University’s capital assets in the 1980s and 1990s, the University has invested more than \$4 billion in capital projects between fiscal years 2005 and 2018. Given the average age of the University’s campus buildings, a significant need to maintain and upgrade capital assets is expected over the next decade. The University’s administration works closely with each of the campuses in developing the capital plan to reflect the needs and goals of each of the campuses. To further improve project planning and implementation across the University, the University administration and UMBA have

collaborated with campus leadership to design an integrated project assessment and tracking process. Furthermore, within budgetary limitations and programmatic requirements, the University is making a concerted effort to incorporate the principles of energy efficiency and sustainability in all its capital projects.

In 2016, the Baker Administration launched a multi-phased strategic planning effort with multiple work groups including Economic Development, Workforce Development, and Higher Education. The focus of the Higher Education work group was to develop a strategic framework for Higher Education Capital Planning. The work group conducted multiple regional planning workshops to develop a shared understanding of state-wide issues and to solicit input around criteria, principles, and metrics for future capital investment. The resulting methodology places a high priority on deferred maintenance and the repair and renovation of existing space. Higher Education institutions are required to submit project proposals which undergo a multi-step review process and must align to Commonwealth priorities. The new methodology for project selection was utilized to develop the fiscal year 2019 state capital plan that was released in May 2018. The plan included funding for four key areas of capital investment, including critical repairs, critical infrastructure, new major projects, and readiness determination projects. The Science and Engineering Building Renovation project at UMass Dartmouth was chosen for \$25 million of funding as a new major project. The Commonwealth also committed to a total of \$76 million in critical repair funding for the University over the next five years, which will aid in addressing the University’s deferred maintenance needs.

Addressing deferred maintenance remains a priority within the University’s 2019-2023 capital plan. In 2015, the University hired Sightlines to conduct a Building Portfolio Solutions analysis in order to ensure that deferred maintenance was being consistently reported across all campuses and to develop a strategy for addressing deferred maintenance at the University. This analysis, now complete, will be the basis for recommending projects as part of the University capital planning process outlined in the University Trustee policy.

The projects within the capital plan are organized by approval status, per University Trustee policy:

Approval of the Preliminary Campus Estimate – Preliminary approval is granted to a project that meets established criteria. Preliminary approval is one of two required Board votes and allows a campus to proceed with a project. The campus will work with UMBA and other professionals to complete all the necessary studies and designs and develop a more complete project scope and cost estimate.

Full Project Approval – Full Project Approval is granted to a project that has completed the UMBA review process and has a confirmed project cost estimated. Once a project has reached the study phase or has completed the UMBA project review, it is eligible for Full Project Approval by the President and or the Board. A project cannot proceed to the design phase unless it has secured the Full Project Approval.

The following table summarizes the most recent quarterly update to the 2019-2023 five-year capital plan, by approval status:

| University Campus | Preliminary Approval | Full Project Approval | Total Approved |
|--------------------------|-----------------------------|------------------------------|------------------------|
| Amherst | \$386,050,000 | \$508,800,000 | \$894,850,000 |
| Boston | \$0 | \$635,212,693 | \$635,212,693 |
| Dartmouth | \$54,436,421 | \$216,078,138 | \$270,514,559 |
| Lowell | \$18,500,000 | \$151,400,000 | \$169,900,000 |
| Worcester | \$26,340,000 | \$112,000,000 | \$138,340,000 |
| Total | \$485,326,421 | \$1,623,490,831 | \$2,108,817,252 |

Source: Quarterly Approved Project List update to the Five-Year Capital Plan as of November 2018.

INDEBTEDNESS OF THE UNIVERSITY

The University is obligated, under various contractual arrangements, to make payments on indebtedness issued on its behalf, including indebtedness issued by UMBA and MDFA, as described below.

Bonds Issued by UMBA

UMBA was created as a body politic and corporate and a public instrumentality of the Commonwealth for the general purpose of aiding and contributing to the performance of the educational and other purposes of the University by providing dormitories, dining commons and other buildings and structures for the use of the University, its students, staff and their dependents and for lease to certain other entities related to the University, all in accordance with UMBA's enabling legislation.

As of June 30, 2018, UMBA had outstanding bonds of approximately \$2.8 billion for which the University is contractually obligated to provide for the payment of debt service or act as UMBA's agent to collect rates, rents, fees and other charges. UMBA's bonds are secured by and payable from, in addition to other moneys, all available funds of the University, including trust funds and other funds administered by the University as gifts, grants or trusts, or as provided in the University enabling act. Further, the University is obligated to UMBA to cause to be available in its Unrestricted Net Assets at all times amounts sufficient to pay such costs.

Interest Rate Swap Agreements

UMBA has entered into three separate interest rate swap agreements (the "Swaps") under which UMBA pays a fixed rate and receives a floating rate. The Swaps hedge four series of outstanding variable rate bonds of UMBA, the Project Revenue Bonds, Senior Series 2008-1 (the "Series 2008-1 Bonds"), Facilities Revenue Bonds, Senior Series 2008-A (the "Series 2008-A Bonds"), Project Revenue Bonds, Senior Series 2011-1 (the "Series 2011-1 Bonds") and Project Revenue Bonds, Senior Series 2011-2 (the "Series 2011-2 Bonds" and collectively with the Series 2011-1 Bonds, the "Series 2011 Bonds"). The Swap for the Series 2008-1 Bonds is with UBS AG, and UMBA pays an amount equal to 3.4% per annum of the notional amount and receives the floating rate based on 70% of one-month LIBOR. The Swap for the Series 2008-A Bonds is with Deutsche Bank AG and UMBA pays an amount equal to 3.4% per annum of the notional amount and receives a floating rate based on 70% of one-month LIBOR. The Swap for the Series 2011 Bonds is with Citibank, N.A. and UMBA pays an amount equal to 3.5% per annum of the notional amount and receives the floating rate based on 60% of one-month LIBOR plus 0.2%.

The Swaps are subject to periodic "mark-to-market" valuations and may have a negative impact on the financial statements of UMBA and the University. In addition, the counterparty to each Swap may be able to terminate its respective Swap upon certain events of default under such Swap, in which case UMBA could be required to make a material termination payment to the counterparty, which payment is a contractual obligation of the University to UMBA. In addition, UMBA and the University may be exposed to basis risk (imperfect correlation between the floating rates paid on the applicable bonds and received under the related swap). With respect to the Swap for the Series 2011 Bonds, UMBA and the University would be required to post collateral in certain market situations if the ratings on the Series 2011 Bonds fell to "A2" or below by Moody's or "A" or below by S&P.

Letters of Credit and Liquidity Facilities

The Series 2008-A Bonds, the Series 2008-1 Bonds and the Series 2011-1 Bonds are variable rate demand obligations subject to put by the holders thereof and are supported by standby bond purchase agreements. The standby bond purchase agreements with Barclays Bank PLC supporting the 2008-A and 2008-1 bonds are set to expire on April 15, 2019 and April 22, 2019. The standby bond purchase agreement with Wells Fargo Bank, N.A. that supports the Series 2011-1 Bonds expires on July 9, 2019.

Commercial Paper

In August 2013, UMBA established a commercial paper program, consisting of its \$125 million Commercial Paper Notes, Series 2013 A (the "Series 2013A Notes"), supported by an irrevocable letter of credit provided by State Street Bank and Trust Company, which expired on August 12, 2016, and its \$75 million Commercial Paper Notes, Series 2013 B (the "Series 2013B Notes") secured by a standby liquidity facility provided by U.S. Bank N.A., which expired on August 12, 2016. The letter of credit was replaced with a standby liquidity facility agreement that expires in August 12, 2019. The standby liquidity facility provided by U.S. Bank N.A. was extended in fiscal year 2016 and

now expires on August 12, 2019. UMBA may issue notes under either series on a taxable or tax-exempt basis to further UMBA's and the University's efforts to establish a "just in time" borrowing program to fund the University's capital plan as needed during construction periods. Such notes are secured under the Trust Agreement dated as of November 1, 2000, between UMBA and U.S. Bank N.A., as successor trustee, and a contract with the University and are repayable from the proceeds of rollover commercial paper notes, funds advanced under the liquidity facilities, bonds to be issued by UMBA in the future or available funds of the University. As of June 30, 2018, UMBA had \$64,535,000 of commercial paper outstanding.

Bonds Issued by the Massachusetts Development Finance Agency

As of June 30, 2018, MDFA has outstanding bonds of approximately \$52.2 million, for which the University is contractually obligated to pay debt service.

Annual Debt Service on UMBA and MDFA Bonds

The table on the following page sets forth the principal and interest due on bonds issued by UMBA and the MDFA on behalf of the University as of June 30, 2018, on a fiscal year basis.

Annual Debt Service on UMBA and MDFA Bonds as of June 30, 2018

| Fiscal Year | Outstanding | Outstanding | Total⁽¹⁾⁽²⁾ |
|--------------------|---------------------------------|--------------------|-------------------------------|
| Ending | UMBA Bonds⁽¹⁾ | MDFA Bonds | |
| June 30 | | | |
| 2019 | \$228,172,451 | \$3,620,945 | \$231,793,396 |
| 2020 | 228,049,125 | 3,982,242 | 232,031,367 |
| 2021 | 227,947,373 | 4,005,795 | 231,953,168 |
| 2022 | 216,373,187 | 3,950,203 | 220,323,389 |
| 2023 | 216,544,485 | 3,941,785 | 220,486,271 |
| 2024 | 218,361,580 | 3,931,980 | 222,293,560 |
| 2025 | 202,916,913 | 2,930,800 | 205,847,714 |
| 2026 | 205,685,950 | 3,140,395 | 208,826,346 |
| 2027 | 201,321,838 | 2,803,591 | 204,125,429 |
| 2028 | 199,973,841 | 2,696,400 | 202,670,241 |
| 2029 | 193,148,918 | 2,700,900 | 195,849,818 |
| 2030 | 181,674,605 | 2,697,900 | 184,372,505 |
| 2031 | 164,904,255 | 22,347,400 | 187,251,655 |
| 2032 | 165,303,579 | 1,994,300 | 167,297,879 |
| 2033 | 156,877,222 | 1,988,600 | 158,865,822 |
| 2034 | 140,883,314 | 1,985,200 | 142,868,514 |
| 2035 | 155,591,488 | 1,983,900 | 157,575,388 |
| 2036 | 168,972,573 | - | 168,972,573 |
| 2037 | 168,038,916 | - | 168,038,916 |
| 2038 | 160,159,110 | - | 160,159,110 |
| 2039 | 165,950,351 | - | 165,950,351 |
| 2040 | 139,101,906 | - | 139,101,906 |
| 2041 | 137,625,372 | - | 137,625,372 |
| 2042 | 107,751,514 | - | 107,751,514 |
| 2043 | 107,756,457 | - | 107,756,457 |
| 2044 | 102,330,239 | - | 102,330,239 |
| 2045 | 77,185,003 | - | 77,185,003 |
| 2046 | 42,818,581 | - | 42,818,581 |
| 2047 | 20,939,200 | - | 20,939,200 |
| 2048 | 20,935,500 | - | 20,935,500 |

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- (1) Assumes the fixed rate payable under the Swaps with respect to UMBA's outstanding variable rate bonds and excludes the subsidy amount expected to be received in connection with UMBA's outstanding "Build America Bonds" issued under ARRA. See "Bonds Issued by UMBA – Interest Rate Swap Agreements" herein for a description of the Swaps.
- (2) Totals may not add due to rounding.

Unrestricted Net Assets*

As of June 30, 2018, the outstanding principal amount of UMBA and MDFA debt secured by the University's unrestricted net assets was approximately \$2.9 billion. The chart below details the University's unrestricted net assets (not including University Related Organizations) in fiscal years 2014-2018.

| Fiscal Year | 2014 | 2015 ⁺ | 2016 | 2017 | 2018 ⁺⁺ |
|-------------------------|---------------|-------------------|---------------|---------------|--------------------|
| Unrestricted Net Assets | \$825,611,000 | \$591,438,000 | \$549,471,000 | \$616,757,000 | (\$150,080,000) |

* Derived from the audited financial statements for fiscal years 2014-2018. The University's financial statements include prior year comparative information. Certain prior year amounts have been reclassified to conform with the current year presentation. These reclassifications have no effect on total net assets.

⁺Adoption of GASB 68 for year ended 6/30/15.

⁺⁺Adoption of GASB 75 for year ended 6/30/18.

Additional Indebtedness

Under the terms of the trust agreements and financing agreements securing the above-referenced indebtedness issued by UMBA, the University may, without limit, issue additional indebtedness or request UMBA or MDFA to issue additional indebtedness on behalf of the University so long as such indebtedness is payable from all funds of the University permitted by law to be applied thereto. With certain exceptions described below, the University may not pledge, or permit to exist any lien on, any of its funds or revenues. The University may request UMBA to issue additional indebtedness on behalf of the University that is not payable from all funds of the University permitted by law to be applied thereto, provided: (i) the additional indebtedness is secured by (a) pledged revenues derived from the project or projects being financed, (b) new or increased student fees whether imposed by the University or UMBA, (c) existing pledged revenues, or (d) any combination of the foregoing; and (ii) the maximum annual debt service on all revenue indebtedness then outstanding, including the proposed additional indebtedness, does not exceed 10% of the amount shown in the then most recent audited financial statements of the University as total available revenues. Indebtedness of the University may not be subject to acceleration.

Capitalized Leases

At June 30, 2018, the University had \$2.3 million in outstanding capital lease obligations.

INSURANCE

The University, as an agency of the Commonwealth, is self-insured for property loss exposure, subject to appropriation from the Legislature. However, properties owned by UMBA located on a campus of the University, such as the Mullins Center, dining commons and most dormitories, are insured by UMBA. In addition, certain properties owned by other University Related Organizations and leased to the University are insured by the related organization. The University's liability for damages to third parties as a result of negligence by University employees is limited under Chapter 258 of the General Laws. The University maintains certain liability insurance policies, including Commercial General Liability, leased Automotive Liability, Directors and Officers and Comprehensive Crime policies. Employees of the University are covered for Worker's Compensation protection under Chapter 152 of the General Laws.

TECHNOLOGICAL INITIATIVES

The University campuses and the President's Office have undertaken a variety of planning and organizing activities designed to establish project structures, roles and responsibilities and collaborative plans and processes for technology improvements at the University. The University has implemented system-wide human resources/payroll, financial, e-procurement and grants management systems, which it will continue to update. It has also implemented Student Information Systems to support the processes of admissions and recruiting, maintaining student records and student financials, and awarding and processing financial aid. These systems are expected to continue to enhance business functions by further consolidating processing, streamlining operations and increasing utilization through new

features and self-service offerings. A major focus in fiscal year 2018 was adherence to accessibility standards and ADA compliance. There is continued focus on modern self-service capabilities and digital transformation, including planning for the migration of applications and data to the cloud. The University also continues to invest in data analytics to improve its understanding of areas such as financial spend and student outcomes and to enable better decision making.

The University is investing in information security initiatives to enhance the ability to protect its constituent's data and to minimize risk and liability. Cybersecurity awareness training is a current focus area as every member of the University community has a role to play in protecting information. The University is also investing in new digital integration capabilities to address current and future application and data sharing needs across the system. This capability will make it easier to securely and effectively leverage the information stored across many disparate applications across all five campuses and the President's Office while ensuring data integrity and proper data stewardship.

In 2015, the University completed the implementation of UMassnet, the next generation wide area network spanning and connecting all UMass campuses across the state. This network is a carrier class optical network spanning over 500 fiber span miles with 10gb/100gb bandwidth. This transformational project is enabling technologies at the University such as Virtual Desktop Infrastructure (VDI), video, lecture capture, unified communications, high performance computing, and campus data center optimization. The University continues to invest in maintaining this network as well as enhancing and expanding where needed.

The University is a participant in a consortium of academic institutions and government and business leaders that constructed and operates the \$95 million Massachusetts Green High Performance Computing Center ("MGHPCC") in Holyoke, Massachusetts. The cutting-edge, research-oriented facility relies on hydroelectric power and is intended to encourage economic development in the region and serve as a vehicle for collaboration between key participants while establishing Massachusetts as a global leader in the application and development of next generation computing technologies. In addition to the University, academic partners include the Massachusetts Institute of Technology, Boston University, Harvard University, and Northeastern University, and key business participants include Cisco Systems and EMC Corporation.

In production for five years, the MGHPCC and the partnership model used to create it has received national recognition. The consortium has experienced continued success securing multi-institutional federal research awards. For example, the Commonwealth Computational Cloud for Data Driven Biology, funded by a grant from the Massachusetts Life Sciences Center, supports life sciences innovation, research, development and commercialization projects with near term prospects for commercialization. Within UMass, a shared high performance computing environment now supports the work of over 1,020 researchers in over 346 labs across 5 campuses. The consortium is developing plans for "Day 2" expansion as members reach capacity in existing space. The University continues to make creative use of the resource to deliver results that could not have been delivered otherwise.

UMassOnline has engaged in several technology initiatives that have resulted in immediate and long-term positive implications to the University's internal and external constituents. These include updates to the core Learning Management System (Blackboard Learn), improvements in data processing from Student Information Systems, and additional features added to Blackboard Collaborate to support synchronous and asynchronous distance learning throughout the UMassOnline Course offerings. In addition to our LMS, UMassOnline has made significant improvements to UMassOnline.net, by creating a degree finder that caters to each individual potential student, putting them in touch with the advisors that can help them complete their application process and assist in decision making to ensure that the learner is in the right program that fits their needs. UMassOnline continues to support the mission of the five-campus system by assisting in revenue-generating projects to enhance the online learner experience.

UMassOnline has continued to partner with the UMass Donahue Institute to provide Learning Management System services to several programs, including the Massachusetts Department of Housing and Community Development (DHCD) Board Member Training and Civic Initiatives, and the Office of the Attorney General among others.

LITIGATION

The University is a defendant in various lawsuits; however, University management is of the opinion that the ultimate outcome of any such litigation will not have any material effect on the financial position or financial results of the University.

EMPLOYEE RELATIONS

The University employs 17,741 full and part-time faculty, professional and clerical and maintenance support staff, of which 10,842 are covered by collective bargaining units (not including post-doctoral employees, certain contract employees, graduate employees and undergraduate resident assistants). Of those covered, 3,673 are faculty, 3,208 are professional staff, 3,780 are clerical and maintenance support staff and 181 are police officers. In total, the University currently has approximately 41 collective bargaining units (including two post-doctoral employee units, three graduate employee units and one undergraduate resident assistants unit). The University has successfully renegotiated the great majority of its bargaining agreements for a three year period which will expire on June 30, 2020. Employees covered by University collective bargaining units cannot strike under Massachusetts law.

In general, University employees are covered by a contributory Massachusetts retirement system set up by Chapter 32 of the General Laws, the State Employees' Retirement System ("SERS" or "State Retirement Plan"). The State Retirement Plan is a defined benefit plan that provides retirement benefits based upon age at retirement, years and months of service and the average of the highest three to five consecutive years of base salary. As an alternative to SERS, eligible employees have the option of participating in the Commonwealth's Optional Retirement Program (the "ORP"). The ORP is a defined contribution plan, administered by the DHE. Eligibility for participation in the ORP was expanded by Chapter 68, Section 44 of the Acts of 2011. Employees can also participate in various optional supplemental retirement programs, such as the University of Massachusetts 403(b) Elective Deferral Savings Plan and the Commonwealth's 457(b) Deferred Compensation Plan. Employees generally are eligible to participate in various fringe benefit plans such as the dependent care assistance program and the health, dental, life and disability insurance plans. The majority of these benefits are sponsored by the Commonwealth. However, the University does sponsor a smaller subset of benefits for employees of the Worcester Campus, including dental and vision plans as well as life and long-term disability plans.

Dated: February 25, 2019