







University of Massachusetts Annual Financial Report 2022





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University Administration

As of November 2022

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Letter from the President

Dear Friends.

I am pleased to present the annual financial report of the University of Massachusetts, which details the university's financial position and activities over the past year and highlights our steadfast commitment to active fiscal management and accountability.

Over the last two plus years, we have continued to adapt to pressing challenges that the COVID-19 pandemic created. In fiscal year 2022, we experienced a return to relatively normal operations and the transition of students back to our campuses.

Despite the challenging economic environment of the last few years, we have maintained strong enrollment of over 74,000 students and graduated the Class of 2022 with roughly 18,000 students earning degrees. Our research portfolio rose to a record \$752 million behind only Harvard and MIT in the state — with research concentrated in areas critical to the Commonwealth's innovation economy. UMass was also recognized as the number one public university in New England by Times Higher Education.

Our Amherst, Boston, Dartmouth, and Lowell campuses continued to be nationally ranked top-tier institutions by the U.S. News & World Report, and UMass Chan Medical School was ranked among the best in the country.

We have continued to focus on affordability and accessibility of our programs. During fiscal year 2022, we froze tuition for in-state students and increased institutional financial aid available to students while maintaining the outstanding academic quality that ensures student success.

These efforts have distinguished UMass as a well-managed university, and external evaluators have taken notice. This past March, Moody's reaffirmed the University's Aa2 credit rating with a stable outlook, citing strong management, excellent strategic positions, and disciplined fiscal oversight.

I am proud of what our administration, faculty and staff have achieved this past fiscal year, and I'm confident that our university community is prepared to face the opportunities and challenges that lie ahead. Together, we will ensure UMass continues to fulfill its critical mission to "provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world."

Sincerely,

Martin T. Meehan

President

Report of Independent Auditors



KPMG LLP Two Financial Center 60 South Street Boston, MA 02111

Independent Auditors' Report

Board of Trustees of the University of Massachusetts:

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and the aggregate discretely presented component units of the University of Massachusetts (the University), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the University's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the University, as of June 30, 2022 and 2021, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions. The financial statements of the University of Massachusetts Foundation, Inc. were not audited in accordance with *Government Auditing Standards*.

Emphasis of Matters

Reporting Entity

As discussed in Note 1, the financial statements of the University are intended to present the financial position, the changes in financial position, and, where applicable, cash flows of only that portion of the business-type activities, each major fund, and the aggregate discretely presented component units of the Commonwealth of Massachusetts that is attributable to the transactions of the University. They do not purport to, and do not, present fairly the financial position of the Commonwealth of Massachusetts as of June 30, 2022 and 2021, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles. Our opinions are not modified with respect to this matter.

Adoption of New Accounting Pronouncements

As discussed in note 1, in 2022, the University adopted Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, and GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. Our opinions are not modified with respect to this matter.

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Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and Government Auditing Standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and required supplementary information as listed in the accompanying table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.



Other Information

Management is responsible for the other information included in the annual financial report. The other information comprises the University administration and letter from the president but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 15, 2022 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the University's internal control over financial reporting and compliance.

KPMG LLP

Boston, Massachusetts December 15, 2022



Management's Discussion and Analysis (unaudited)

June 30, 2022

Introduction

This Management's Discussion and Analysis (MD&A) provides an overview of the financial position and activities of the University of Massachusetts (the University or UMass) for the fiscal years ended June 30, 2022 and 2021, and should be read in conjunction with the accompanying financial statements and notes. The financial statements, notes and this discussion are the responsibility of management.

The University of Massachusetts was established in 1863 as the Massachusetts Agricultural College, located in Amherst. Since then it has grown into a system that is nationally and internationally known for the quality of its academic programs and the scope and excellence of its faculty research. From Nobel Prize-winning research in gene-silencing to research in critical areas such as renewable energy, nanotechnology, cybersecurity, life sciences and marine science, the University of Massachusetts is expanding the boundaries of knowledge and opening doors of discovery that benefit the Commonwealth of Massachusetts (Commonwealth), the nation and the world. UMass consistently ranks as one of the best, most innovative universities in the world.

UMass Amherst is the flagship campus of the University. True to its land-grant roots, UMass Amherst is engaged in research and creative work in all fields and is classified by the Carnegie Foundation for the Advancement of Teaching as a doctoral university with the "highest research activity". Major areas of emphasis include climate science, food science, alternative energy, nano manufacturing, polymer science, computer science and linguistics. Consistently rated as a "Top Producer of Fulbright Students," UMass Amherst is ranked 26th among the nation's top public schools in the 2022 U.S. News & World Report.

UMass Boston is nationally recognized as a model of excellence for urban public research universities. Located on Boston Harbor, it is the metropolitan area's only public research university. UMass Boston's distinguished intellectual contributions span the social sciences, education, health

and wellness. With a student population that represents 136 countries, UMass Boston is committed to educating people from modest-income backgrounds, first-generation college students and those from urban areas here and abroad.

UMass Dartmouth distinguishes itself as a vibrant university dedicated to engaged learning and innovative research resulting in personal and lifelong student success. Located on 710 acres on the south coast of Massachusetts, UMass Dartmouth offers students high-quality academic programs through undergraduate majors and professional and doctoral programs, including the state's only public law school.

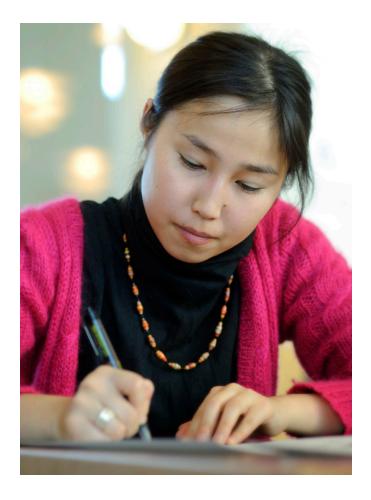
UMass Law, which is part of UMass Dartmouth and the only public law school in Massachusetts, is committed to providing an excellent, affordable, and accessible legal education that balances legal theory, doctrine, skills, experience, and professionalism. UMass Law prepares students to thrive in a changing profession and advances justice through research, writing, teaching, learning, and practice. UMass Law's February 2022 Massachusetts first-time bar passage rate was 82%, the fourth highest passage rate of the Massachusetts law schools.

UMass Lowell is ranked 87th among the nation's top public schools within the 2022 U.S. News & World Report, with programs supporting workforce and economic development through innovation, entrepreneurship and public-private partnerships. UMass Lowell prepares students emphasizing experiential learning through cooperative education, service and research.

UMass Chan Medical School founded in 1962 and situated in Worcester, is the Commonwealth's only public medical school and the University's Nobel-prize winning health sciences education and research campus. In September of 2021, the Medical School received an endowment gift of \$175 million from The Morningside Foundation with annual distributions from the fund to be used for unrestricted purposes by the Medical School. In recognition of this transformational gift, the Medical School was renamed to the UMass Chan Medical School (UMass Chan). UMass Chan's three graduate schools were also renamed

in recognition of this gift: the T.H. Chan School of Medicine, the Morningside Graduate School of Biomedical Sciences, and the Tan Chingfen Graduate School of Nursing. Consistently ranked by U.S. News & World Report in the top 10 percent of medical schools in the U.S. for primary care training, UMass Chan has remained true to its founding mission while also becoming globally recognized in biomedical research. Unique among medical schools, UMass Chan is also home to Commonwealth Medicine, a health care consulting division that partners with states and the federal government in delivering health services to vulnerable populations; and MassBiologics, the only nonprofit, FDA-licensed manufacturer of vaccines and biologics in the nation.

UMass Global, in September of 2021, the University acquired Brandman University to expand educational opportunities for adult learners. This agreement officially launched UMass Global, a nonprofit blended component unit of UMass that delivers expanded online educational opportunities to adult learners in Massachusetts, across the nation and around the globe through a strengthened technology platform and tailored student support services. In addition to providing new educational opportunities, UMass Global will also streamline efforts to build workforce development partnerships with local and national employers, community colleges, other educational partners, non-profits, government agencies, and the U.S. military.



Financial Management

Accountability Framework

The University has strengthened its long-term fiscal outlook by adopting a framework for financial accountability. The framework is based on four key tenets:

- Oversight: independent and objective assurance that analyzes data, processes, policies and controls
- Internal Controls: standard processes designed to provide reasonable assurance regarding the achievement of objectives
- Transparency: reliable, timely information that is accessible and understandable
- · Risk Management: systematic approach to identifying, assessing and managing risks across the organization.

FIGURE 1 - UMass Financial Accountability Framework



Through the accountability framework, the University has made consistent improvement in its financial management in a number of areas.

- Identifying and assessing systemwide risk mitigation strategies focused on University's Top 10 risks;
- Developing and evaluating multi-year financial forecasts to guide policy and programmatic decisions;
- Reporting of complete and accurate financial results through a quarterly close process;
- Developing and evaluating quarterly projections to monitor performance and make resulting operational adjustments;
- Tracking student enrollment data in real time to quickly observe trends that may impact campus projections;
- Implementing and tracking creative, high-impact cost containment strategies across its campuses, including expanding the University's shared services initiative;

- Building out UM-Plan, the University's budgeting application, to utilize tool's built-in best practices to develop more accurate projections and scenario planning;
- Addressing deferred maintenance by developing targets and utilizing dashboards to track progress;
- Creating a reserve policy to mitigate unforeseen events, advance University priorities, and maintain strong credit ratings;
- Tracking several key financial ratios: operating margin, operating cash flow margin, debt service and financial leverage ratios, to evaluate the University's fiscal health and performance against peer institutions; and
- Monitoring available cash and short-term investments available to support daily operations: operating liquidity.

Using this framework, the University continues to work towards strategic goals to ensure financial sustainability, mitigate risk, deliver efficient operations, and to ensure access and affordability to students while improving our capacity to deliver quality service to our customers.

COVID-19 Response

The University engaged all four quadrants of the accountability framework in FY2022, FY2021 and FY2020 to ensure the University could evaluate real-world impacts, forecast potential impacts, and withstand the harsh financial reality the COVID-19 pandemic created. Activities included:



- Leveraging the University system-wide Enterprise Risk Management program to coordinate COVID-19 response and mitigation activities across the University system, including actively tracking and sharing data, facilitating access to testing and personal protective equipment, sharing near real-time information on COVID-19 updates and requirements placed on higher education, and facilitating information-sharing to support bringing full student populations back on our campuses (Risk Management, Transparency);
- Conducting sensitivity analysis to account for the various revenue and expense impacts related to the implementation of COVID-19 response and mitigation plans (*Oversight*);
- Adding a new metric, operating liquidity, to the suite of key financial ratios tracked regularly (Oversight, Transparency);
- Developing a cash-flow forecasting model, with flexibility to forecast based on varying scenarios (*Internal Controls*, *Oversight*, *Transparency*);
- Restructuring cash management planning, including executing a line of credit in May 2021 and renewing line of credit in May 2022 (Internal Controls, Oversight, Transparency);
- Increasing level of proactive resource demand management, contract re-negotiation and sourcing efforts to limit cost exposures to the campuses (Risk Management, Oversight); and
- With guidance from the Advisory Working Group on Financial Planning, developing and launching a new dashboard using real-time information to provide campuses access to key financial information on academic programs and assist them in their planning (Oversight, Transparency).

Shared Services Initiatives

At a time of financial challenge for public higher education, the University must continuously push itself to find more efficient ways of doing business. In that spirit, in 2019 President Meehan called for the development and implementation of a shared services model of delivering administration and finance services to the campuses. The resulting plan, developed by a team of subject matter experts that included representatives from each campus, delineated the application of a shared services model for accounts payable and procurement. This effort also laid the foundation for the exploration of future efficiencies.

To implement this plan, the University formally kicked off its Unified Procurement Services Team (UPST) in January 2020, led by a new University Chief Procurement Officer. Comprised of a team of procurement professionals from across the UMass system, they were tasked with providing high-quality services while driving transaction efficiency. The UPST supports the campuses in cost optimization through proactive commodity sourcing and contracting with innovative suppliers and partners that support the UPST in delivering on its "better, faster, and cheaper" mission. The team manages approximately \$1 billion in



third-party spend annually and approximately 30,000 suppliers and partners. The UPST manages this through leveraging optimized technology, data-driven business intelligence, training, and enhanced operational processes.

Since its inception through June 2022, the UPST has achieved \$87.1 million in annualized cost benefits. This was achieved through more than 280 initiatives across all campuses and the UMass President's Office. The resulting system benefits reached five times the target savings of \$16.5 million and 5 times the return on investment to date of \$16.1 million.

To continue 'better, faster, cheaper' services, a robust pipeline of process improvement, cost benefit and recovery projects has been developed. The UPST has identified dozens of additional projects to optimize services over the coming 18-24 months which are expected to result in continued savings, efficiencies, and process improvements for the University. Included in these projects is a system-wide effort to automate and integrate travel and expense technology, drive UMass-wide proactive sourcing practices and contracts adoption, and deployment of updated vendor performance guidelines that continue to help UMass manage risk while optimizing cost benefits to the system. Programs to increase supplier diversity and environmental sustainability considerations across the vendor portfolio are rolling out to match the values of the University System.

Based on the success of the UPST, the University began its second shared service initiative in FY2022 with a focus on payroll services. The University has created a roadmap, identified campus priorities, and drafted a preliminary design of future

processes. To deliver on these initiatives, the UMPO Employee Services Team (EST) was established in October 2021, and a system-wide payroll director was hired. The EST will be working in FY2023 to improve delivery of system-wide employee services including payroll services, HR application management, and customer service.

Using the Annual Financial Report

The University's financial statements are prepared in accordance with U.S. generally accepted accounting principles as prescribed by the Government Accounting Standards Board (GASB), which establishes financial reporting standards for public colleges and universities. The University's significant accounting policies are summarized in Note 1 of the accompanying financial statements, including further information on the financial reporting entity.

This report includes the University's Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, and the Statements of Cash Flows for the fiscal years ended June 30, 2022 and 2021, as well as certain required supplementary information. The University's net position (the difference between assets, deferred outflows, deferred inflows, and liabilities) is one indicator of the University's financial health. Over time, increases or decreases in net position are indicators of the improvement in or erosion of an institution's financial health when considered together with non-financial factors such as enrollment levels and the condition of facilities.

Statements of Net Position include all assets and liabilities, as well as deferred inflows and outflows of resources of the University. Net position is further broken down into three categories: net investment in capital assets, restricted and unrestricted. Amounts reported in net investment in capital assets represent the historical cost of property and equipment, reduced by the balance of related debt outstanding and depreciation expense charged over the years. Net position is reported as restricted when constraints are imposed by third parties, such as donors or enabling legislation. Restricted net position is either non-expendable, as in the case of endowment gifts to be held in perpetuity, or expendable, as in the case of funds to be spent on scholarships and research. All other assets are unrestricted; however, they may be committed for use under contract or designation by the Board of Trustees (the Board). Note 17 to the accompanying financial statements depicts the designations of unrestricted net position at June 30, 2022 and 2021, respectively.

Statements of Revenues, Expenses and Changes in Net **Position** present the revenues earned and expenses incurred during the year. Activities are reported as either operating or non-operating, as prescribed by GASB. According to the GASB definitions, operating revenues and expenses include tuition and fees, grant and contract activity, auxiliary enterprises and activity for the general operations of the institution not including appropriations from state and federal sources. Non-operating

revenues include appropriations, capital grants and contracts, gifts, investment income, and non-operating federal grants (such as Pell grants, and COVID-19 related Higher Education Emergency Relief Fund grants). With a public university's dependency on support from the state, Pell grants, and gifts, it is common for institutions to have operating expenses exceed operating revenues. This is because the financial reporting model prescribed by GASB classifies state and federal appropriations, Pell grants, and gifts as non-operating revenues. Due to the materiality of the state appropriations upon which the University relies, these appropriation amounts are included in certain analyses throughout this MD&A as operating revenue. The utilization of capital assets is reflected in the financial statements as depreciation expense, which amortizes the cost of a capital asset over its expected useful life. Depreciation expense is considered an operating expense.

Statements of Cash Flows present cash receipts and payments of the University. The purpose of these statements is to present the sources of cash coming into the University, how that cash was expended, and the change in the total cash balance during the year.

Notes to the Financial Statements present additional information to support the financial statements. Their purpose is to clarify and expand on the information in the financial statements.



Required Supplementary Information (RSI) presents additional information that differs from the basic financial statements in that the auditor applies certain limited procedures in reviewing the information. In this report, RSI includes schedules of the University's proportionate share of the Massachusetts State Employees' Retirement System (MSERS) pension liability and other postemployment benefits (OPEB) liability, contributions to the MSERS pension and OPEB plans and related ratios, and this MD&A.

Reporting Entity

The financial statements of the University include financial activities of the following blended component units: the University of Massachusetts Building Authority (Building Authority), Worcester City Campus Corporation and Subsidiary (WCCC), the University of Massachusetts Global (UMG), the University of Massachusetts Medical School Foundation, the University of Massachusetts Amherst Foundation and the University of Massachusetts Lowell Applied Research Corporation (UMLARC). The individual financial statements of the Building Authority can be obtained by contacting the Building Authority directly: www.umassba.net. The individual financial statements of UMG can be obtained on www.guidestar.org.

Separate Statements of Financial Position and Statements of Activities are presented in this report for the University's discretely presented component units, the University of Massachusetts Foundation, Inc. (UMF), and the University of Massachusetts Dartmouth Foundation, Inc. (UMDF). The statements for these entities are presented in accordance with Financial Accounting Standards Board (FASB) standards, which differ from GASB standards in certain areas such as reporting of pledges to endowment and net position. The individual financial statements of each foundation can be obtained by contacting the foundations directly: www.umassfoundation.org for UMF and giving@umassd.edu for UMDF.

University of Massachusetts Foundation, Inc.

UMF was established in 1950 to foster and promote the growth, progress and general welfare of the University, and to solicit, receive and administer gifts and donations for such purposes. UMF maintains a portion of the University's investment portfolio, predominantly the endowment, quasi-endowment investments, and certain other investments. The total investments held at UMF on behalf of the University at June 30, 2022, 2021 and 2020 were \$915.0 million, \$1.1 billion and \$923.7 million, respectively.

University of Massachusetts Dartmouth Foundation, Inc.

UMDF was established in 1973 to raise funds for the development and improvement of the academic and educational environment for students at the Dartmouth campus and the continued engagement of its alumni. In addition to holding investments for the University, UMF holds a significant portion of the UMDF investments. The total investments of UMDF at June 30, 2022, 2021 and 2020 were \$61.6 million, \$76.1 million and \$57.8 million, respectively, of which \$61.2 million, \$74.4 million and \$56.0 million is invested with UMF, respectively.

Financial Highlights

In March 2020, the World Health Organization declared a pandemic as a result of the novel coronavirus (COVID-19). As cases began to increase in the country and in Massachusetts, the University suspended in-person education and other campus-based activities and provided refunds to students for a portion of their residence and dining fees during FY2020. The University took significant budget actions across all campuses to address the resulting loss of revenue. These actions included salary freezes, furloughs, and targeted operating and personnel reductions as well as multiple nonpersonnel strategies including halting or delaying capital projects. Due to the ongoing pandemic, campus operations in FY2021 continued predominantly online and classes were held remotely. Some campus operations resumed in a limited fashion during the second half of FY2021, in accordance with CDC and Massachusetts guidelines. Beginning with the Fall semester of FY2022, all campuses resumed full campus operations.

The University was awarded \$255.6 million under the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan of 2021 (ARPA), collectively provided under the Higher Education Emergency Relief Fund (HEERF). An additional \$3.0 million was awarded under the Governor's Emergency Education Relief Funds. The total funding is split into awards specifically for students and others specifically for use by the University to cover costs related to significant changes to the delivery of instruction due to the coronavirus, partial recovery of lost revenue, and can also be used to provide additional aid to students. The University provided emergency financial aid grants to students of \$72.3 million and \$27.1 million and 14.7 million in FY2022, FY2021 and FY2020, respectively. An additional \$70.4 million, \$54.9 million and \$13.9 million was used to recover a portion of lost revenue and additional financial aid to students in FY2022, FY2021 and FY2020, respectively. The remaining unspent funds are expected to be used, and corresponding revenue recognized, in FY2023.

In Fall 2021, the University acquired Brandman University in exchange for \$139.3 million. As part of the transaction, the University launched UMass Global (UMG), a private, nonprofit institution, provides online degree and certificate programs in a wide range of disciplines, serving adult learners. UMG maintains a robust and scalable service and technology platform, allowing for the delivery of a wide variety of primarily online certificate and degree programs, including employer-funded degree programs and competency-based education (CBE). UMG offers over 90 undergraduate, graduate (including two professional doctoral programs), credential, certificate, and non-degree credit programs in the fields of education, arts and sciences,

business and professional studies, and nursing. These programs are offered through fully online and hybrid (online and face-toface) modalities at the UMG campus in Irvine, California and at 24 satellite campuses located in California and Washington (including six United States military bases).

Selected financial highlights for the fiscal year ended June 30, 2022 include:

- · Postemployment benefit expenses related to GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75) and GASB 68, Accounting and Reporting for Pensions (GASB 68) have a significant impact on the operating margin results. Gains and losses from these GASB standards are heavily impacted by economic conditions and actuarial assumptions outside of the University's control. The University's FY2022 income before other revenues, expenses, gains, and losses was \$187.6 million for FY2022, including a gain of \$107.5M from GASB 68 and GASB 75. Excluding the impact of these GASB standards the University's income before other revenues, expenses, gains, and losses was a \$80.1 million.
- From FY2021 to FY2022, the University's operating revenues increased by \$418.0 million, largely due to auxiliary services returning to normal operations during FY2022. Operating expenses increased by \$221.7 million primarily driven by the return of campus operations to prepandemic levels. Non-operating revenues increased \$37.7 million primarily attributed to continued funding received under HEERF

- and an increase in state appropriations. As a result, the University's net position increased \$160.8 million from \$2.6 billion in FY2021 to \$2.7 billion in FY2022.
- · During FY2022, the University adopted the requirements of GASB 87 effective July 1, 2021 and has applied the provisions of this standard to the beginning of the earliest comparative period presented on the financial statements. As a result of recording lease assets and related lease liabilities as well as lease receivables and related deferred inflows of resources, the beginning net position in fiscal year 2021 was reduced by \$1.9 million.

Net Position

Condensed schedules of net position for the University at June 30, 2022, 2021, and 2020, respectively, are presented in **Figure 2**.

Assets totaled \$8.8 billion, \$8.3 billion, and \$7.6 billion at June 30, 2022, 2021, and 2020, respectively. These balances are primarily driven by capital assets net of accumulated depreciation, which remain stable in the three years presented.

Liabilities totaled \$5.4 billion, \$5.7 billion and \$5.4 billion at June 30, 2022, 2021, and 2020, respectively. The majority of the University's long-term liabilities in all three years are long-term debt and pension and OPEB liabilities.

Net position represents the difference between total assets and total liabilities, and in addition to capital, includes cash,

FIGURE 2 - Condensed Schedule of Net Position

As of June 30, 2022, 2021, and 2020 (\$ in thousands)

Net position	2022	2021	2020*
Assets			
Current assets	\$ 1,347,213	\$ 1,172,142	\$ 1,156,836
Noncurrent assets – Capital assets, net	5,527,062	5,435,274	5,206,569
Noncurrent assets – All other noncurrent assets	1,975,000	1,712,544	1,225,544
Total assets	8,849,275	8,319,960	7,588,949
Deferred outflows of resources	433,998	551,553	531,271
Liabilities			
Current liabilities	783,441	740,806	680,069
Noncurrent liabilities	4,666,224	4,946,592	4,750,458
Total liabilities	5,449,665	5,687,398	5,430,527
Defered inflows of resources	1,085,656	596,953	256,926
Net position			
Net investment in capital assets	2,281,471	2,307,233	2,376,333
Restricted – Nonexpendable	22,515	22,378	22,252
Restricted – Expendable	262,669	232,833	223,803
Unrestricted	181,297	24,718	(189,621)
Total net position	\$ 2,747,952	\$ 2,587,162	\$ 2,432,767

^{*} Does not reflect adoption of GASB-87

liquid investments, as well as non-cash items and illiquid investments. Total net position was \$2.7 billion, \$2.6 billion and \$2.4 billion at June 30, 2022, 2021 and 2020, respectively. The largest component of net assets for the University remains the net investment in capital assets which held steady between \$2.3–\$2.4 billion for the three years presented.

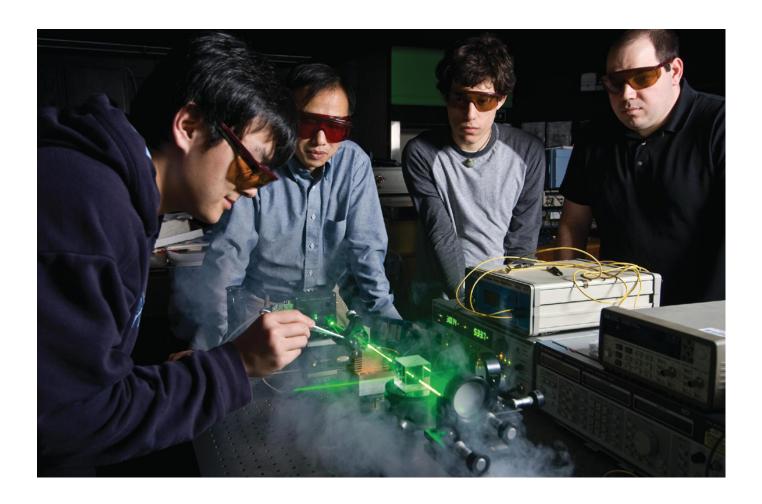
Unrestricted net position increased in both FY2022 and FY2021 due to operating cost reductions, unfilled staffing and faculty positions, and increased non-operating revenues from pandemic related federal funding received under HEERF. In FY2022, auxillary operations returned to normal offsetting some of the losses experienced during FY2021 and FY2020. FY2020 had a negative unrestricted net position, due to large employee postemployment benefits (pension and OPEB) liabilities totaling \$1.3 billion.

As of June 30, 2022, the University's endowment, held at UMF, experienced a decrease of \$165.0 million from \$1.1 billion in FY2021 to \$915.0 million in FY2022. The reduction is the result of a period of economic downturn after a year of historic returns experienced in FY2021. In FY2021, the University rebalanced its portfolio and currently splits its portfolio between long and short term horizons. Figure 3 shows the liquidation and rebalancing of the University's investments from FY2020 to FY2022.

FIGURE 3 - Investment Liquidation and Rebalancing

As of June 30, 2022, 2021, and 2020 (\$ in thousands)

Investment	2022	%	2021	%	2020	%
Short-term investments	\$ 787,356	43%	\$ 639,162	35%	\$ 620,771	45%
Long-term investments	1,052,299	57%	1,163,888	65%	748,689	55%
Total investments	\$ 1,839,655	100%	\$ 1,803,050	100%	\$ 1,369,460	100%



Revenues, Expenses, and Changes in Net Position

Condensed schedules of revenues, expenses, and changes in net position of the University for the three years ended June 30, 2022, 2021, and 2020, are presented in Figure 4.

FIGURE 4 - Condensed Schedules of Revenues, Expenses, and Changes in Net Position

For the years ended June 30, 2022, 2021, and 2020 (\$ in thousands)

Revenue and expense	2022	2021	2020*
Operating revenues			
Tuition and fees, net of scholarships	\$ 1,007,124	\$ 930,613	\$ 917,876
Grants and contracts	719,479	667,149	581,850
Auxiliary enterprises	434,129	163,821	378,314
Other operating revenues	 560,561	541,720	547,990
Total operating revenues	2,721,293	2,303,303	2,426,030
Operating expenses	3,601,764	3,380,022	3,437,442
Operating loss	(880,471)	(1,076,719)	(1,011,412)
Nonoperating revenues (expenses)			
Federal appropriations	5,588	5,953	6,774
State appropriations	880,003	845,481	810,518
Interest expense	(117,244)	(109,144)	(109,186)
Nonoperating federal grants	221,628	173,592	115,601
Other nonoperating income	78,061	114,412	99,753
Total nonoperating revenues (expenses)	1,068,036	1,030,294	923,460
Income (loss) before other revenues, expenses,			
Gains and losses	187,565	(46,425)	(87,952)
Other revenues, expenses, gains and losses			
Capital appropriations, grants and other sources	95,908	71,120	59,041
Endowment return, net of amount used for operations	(148,089)	148,514	(2,917)
Other additions (deductions)	25,406	(16,869)	(7,787)
Total other revenues, expenses, gains, and losses	(26,775)	202,765	48,337
Total increase (decrease) in net position	160,790	156,340	(39,615)
Net position			
Effect on beginning net position due to GASB-87 restatement	-	(1,945)	-
Net position at the beginning of the year, as restated	2,587,162	2,432,767	2,472,382
Net position at the end of the year	\$ 2,747,952	\$ 2,587,162	\$ 2,432,767

^{*}Does not reflect adoption of GASB-87

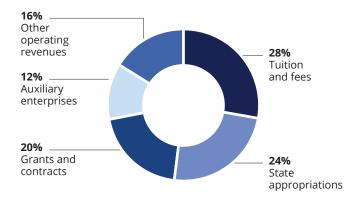
Operating Revenues and Expenses

While not classified on the financial statements as operating revenue, state appropriations serve as a primary source for funding the core mission of the University. State appropriations revenue, described in detail below, is used almost exclusively to fund payroll for University employees, and as such is considered to be operating revenue for management's planning and analysis purposes. The University's operating revenue, including state appropriations, increased by \$452.5 million to \$3.6 billion in FY2022, primarily due to auxiliary revenues returning to normal operations, increases in grants and contracts, and the addition of UMG's tuition and fee revenues. In FY2021 and FY2020 operating revenues remained essentially flat at approximately \$3.2 billion due to the impact of COVID-19 on operations, primarily on auxiliary revenues in the second half of FY2020 and all of FY2021 which was offset by an increase in grants and contracts and state appropriations from FY2020 to FY2021.

As noted in Figure 5, over 50% of the University's FY2022 operating revenues were from tuition and fees and state appropriations. Auxiliary enterprises revenue includes housing and dining revenue. These three revenue categories make up the primary revenue sources related to providing student with an academic education and combined make up 60% of the University's operating revenue.

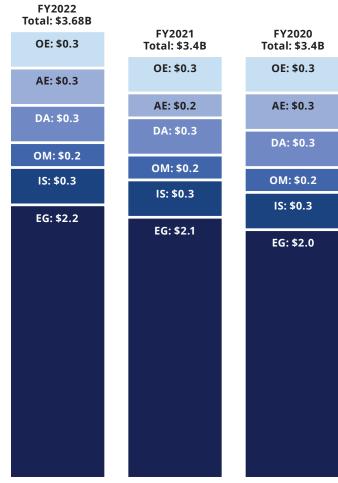
Other operating revenues include revenues generated from CWM programs. These programs provide public consulting and services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. In addition to CWM activities, other operating revenues also include revenue earned by UMass Chan for educational services it provides to its clinical affiliate UMass Memorial Health Care, Inc. (UMass Memorial) as required by the enabling legislation enacted by the Commonwealth in 1997. Grants and contracts revenue includes federal, state and privately sponsored research and other programs.

FIGURE 5 - Fiscal Year 2022 Operating Revenues (including State Appropriations)



In FY2022, operating expenses, including depreciation and amortization, totaled \$3.6 billion, as compared to \$3.4 billion in FY2021 and FY2020. Of the FY2022 total, \$2.2 billion or 61.1% was used to support the academic core activities of the University, including \$551.4 million in research. The education and general portion of the three-year operating expenses shown in Figure 6 represents expenses in the following functional categories: instruction, research, public service, academic support, student services and scholarships and fellowships. Public service activities expense, included in education and general, include payments made to the Commonwealth pursuant to requirements of legislation enacted by the Commonwealth.

FIGURE 6 - Three Year Operating Expenses by Function (\$ in billions)



Key

EG = Education and general IS Institutional support

OM = Operation and maintenance of plant DA Depreciation and amortization

ΑE Auxiliary enterprises = Other expenditures

State Appropriations

In FY2022, state appropriations represented approximately 23% of all revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriations are unrestricted revenue, nearly 100% of the state appropriations support payroll and benefits for University employees. In addition to the direct state appropriation there are several smaller appropriations that add to the total state support for the University. While these smaller line items are in support of campus-specific programs and do not support general University operations, they are included in the state appropriations line in the accompanying financial statements, and in the state appropriations line in Figure 7.

The Commonwealth pays fringe benefits for University employees paid from state appropriations. Therefore, such fringe benefit support is added to the state appropriations financial statement line item in the accompanying Statements of Revenues, Expenses and Changes in Net Position. The University pays the Commonwealth for the fringe benefit cost of the employees paid from funding sources other than state appropriations. These amounts are not included in state appropriations.

The University's state appropriations including fringe benefits increased in FY2022 by \$34.5 million from FY2021, primarily due to an increase in available state funding and increases in collective bargaining determined by the Commonwealth. The University's state appropriations including fringe benefits increased in FY2021 by \$35.0 million from FY2020 primarily due to an increase in reimbursements for costs related to increases in collective bargaining determined by the Commonwealth and the implementation of the Paid Family Medical Leave (PFML) law.

Figure 7 details the state appropriations for the fiscal years ended June 30, 2022, 2021, and 2020.

State Capital Appropriations

The University faces a financial challenge to maintain and upgrade its capital assets including its infrastructure, buildings and grounds. To have a successful capital program, the University must rely on a combination of revenue sources to fund its capital investments. In FY2022, FY2021 and FY2020, the capital support provided to the University through appropriations and grants from the Commonwealth was \$87.1 million, \$62.6 million and \$51.5 million, respectively. Beginning in FY2020, the Commonwealth established a strategic framework for approving the allocation of state funding for capital projects across higher education. The new framework provides funding in four distinct categories: major projects, critical repairs, critical infrastructure and readiness determination projects.

Grant and Contract Revenue

Among Massachusetts colleges and universities, the University ranks third in research and development expenditures, behind only the Massachusetts Institute of Technology (MIT) and Harvard University. Most research at the University is externally funded, with the federal government providing a majority of the funding through the National Institutes of Health, the National Science Foundation, and other agencies.

Collectively, UMass Amherst and UMass Chan account for approximately three-quarters of the University's total grants and contracts revenue of \$719.5 million, \$667.1 million and \$581.9 million at June 30, 2022, 2021 and 2020. Figure 8 details the University's grant and contract revenues by source for the year ended June 30, 2022.

FIGURE 8 – *Grant and Contract Revenue FY2022*

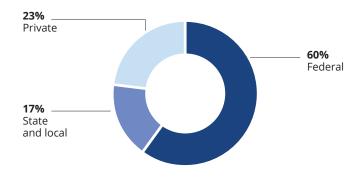


FIGURE 7 - State Appropriations

For the years ended June 30, 2022, 2021, and 2020 (\$ in thousands)

Appropriation	2022	2021	2020
State appropriations	\$ 618,245	\$ 569,081	\$ 567,612
Plus: fringe benefits	261,758	276,400	242,906
Commonwealth support	\$ 880,003	\$ 845,481	\$ 810,518

Tuition and Fees

Effective for academic year 2022–2023, in-state undergraduate tuition was raised an average of 2.5%, consistent with prepandemic trends. This follows two years of frozen tuition for in-state undergraduate programs. Due to affordability considerations and impacts of the COVID-19 pandemic, in-state undergraduate tuition was frozen for the academic years 2020-2021 and 2021–2022. This resulted in a reduction of \$43.4 million in recurring revenue due to freezing tuition during the COVID-19 period, \$29.1 million in academic year 2021-2022 and \$14.3 million in academic year 2020–2021. Affordability continues to be a priority of the University and increases in fees are considered in conjunction with Commonwealth support on an annual basis.

Enrollment

As shown in Figure 9, total enrollment in the fall of 2021 was 64,786 FTE (74,554 headcount students), a decrease of 1.9% over the fall of 2020 enrollment of 66,070 FTE (75,065 headcount students). Enrollment in the fall of 2019 was 66,010 FTE (75,065 headcount students). Although the University experienced a minor decline in the five-year enrollment of .02% from the fall of 2017 - fall of 2021, other institutions of higher education have experienced more significant declines in enrollments over this period. This is consistent with the University's efforts to increase its reach across the Commonwealth and to recruit non-resident students, and is reflective of the quality of the education provided by the University of Massachusetts. Improving student retention remains a key focus of the University's strategic goals to help offset the declining enrollment.

Admission to the University is open to residents of the Commonwealth and non-residents on a competitive basis. For the fall semester, Massachusetts residents accounted for 82.7% of the University's total undergraduate enrollment in fall 2021 and 83.4% in fall 2020, as shown in Figure 10.

FIGURE 10 - Fall 2021 Undergraduate Enrollment by Type

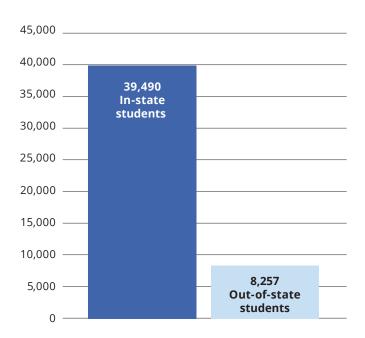
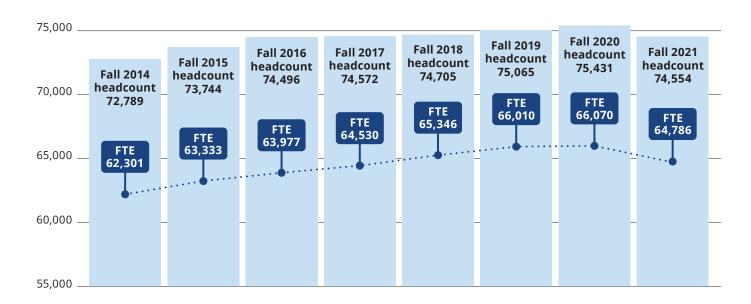


FIGURE 9 - Total Enrollment



Investments Held by UMF

As of June 30, 2022, the University's investments, held at UMF, were reduced by \$165.0 from \$1.1 billion to \$914.8 million. The change in investment value is due to investments losses of \$131.1 million (13.5% annualized return), distributions under the approved spending rule of \$34.9 million, offset by contributions of \$1.0 million. This reduction follows a year of a historic 37.1 percent fiscal year return experienced during FY2021 when the endowment grew by \$156.1 million to \$1.1 billion. Previously, the endowment generated an annualized return of 8.2 percent, exceeding UMF's long-term return objective and reflecting the strategic growth of the portfolio's exposure to global equities and strong partnerships with high caliber investment managers. This ten-year return was produced with annual investment results that ranged from a low of -3.7 percent in FY2016 to 37.1 percent in FY2021, underscoring the importance of having a long-term focus.

In FY2020, the University investments held at UMF totaled \$922.0 million and generated a return of 3.3 percent.

Long-Term Debt

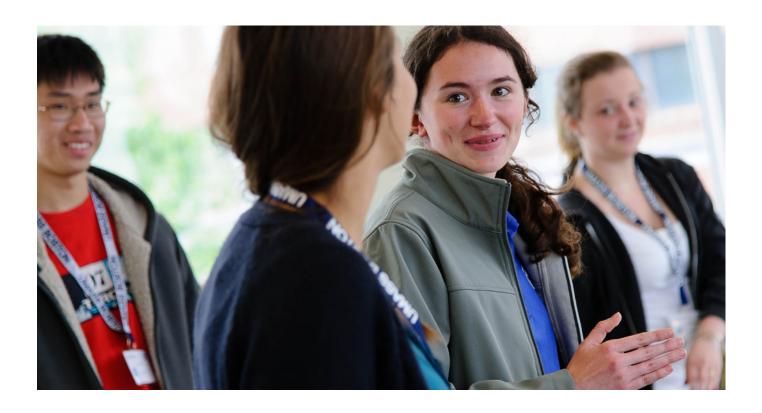
Long-term debt (including commercial paper) is the University's largest liability at June 30, 2022, 2021 and 2020. The University had outstanding long-term debt of \$3.7 billion at June 30, 2022, \$3.3 billion at June 30, 2021 and \$3.2 billion at June 30, 2020. The principal issuer of the University's debt is the Building Authority. Additional issuers utilized by the University include Massachusetts Health and Educational Facilities Authority (MHEFA), Massachusetts Development Financing Authority (MDFA), UMG and WCCC.

During FY2022, the University issued \$86.7 million in new commercial paper to finance the New Education and Research Building at the Chan Medical School campus, the Substructure Demolition & Quadrangle Development at the Boston campus, and the Science and Engineering Building at the Dartmouth campus with interest rates from .07% to 1.13%.

On March 29, 2022, the Authority issued \$215.0 million of Project Revenue Bonds, Series 2022-1 and \$211.2 million of federally taxable Project Revenue Bonds, Series 2022-2. The 2022-1 bonds included a premium of \$26.3 million. Part of bond proceeds was used to pay off commercial paper, leaving \$20M commercial paper outstanding as of June 30, 2022.

The debt financed through the Building Authority is being used for construction and renovation of residence halls and general education buildings, replacement of core infrastructure, and construction of academic, laboratory, and research facilities. The proceeds from the UMass MHEFA bonds were used to create an internal revolving loan program and to fund the construction of two new campus centers at the Boston and Lowell campuses (funded jointly with the Commonwealth).

For further details on outstanding balances with each issuer, refer to Note 11 of the accompanying financial statements.



University Bond Rating

The University relies on a carefully planned and executed debt strategy to support master and strategic planning at the campuses and for the University as a whole. Bonds issued by the University and the Building Authority are rated Aa2 by Moody's Investor Service, AA by Fitch Ratings, and AA- by Standard and Poor's Global Rating.

During FY2022, all three ratings agencies re-affirmed the University's ratings, citing the University's flagship role in public higher education in Massachusetts, strong fiscal oversight, steady enrollment, positive operating performance, growth in financial resources and solid support from the Commonwealth.

Line of Credit

During FY2021, the University entered into line of credit agreements with Bank of America and State Street Bank with a maximum loan amount of \$75.0 million each, for a total maximum loan amount of \$150.0 million. The lines of credit had a maturity date of May 10, 2022.

During FY2022, the University amended the line of credit agreement with Bank of America for a maximum loan amount of \$150.0 million and allowed the State Street Bank line of credit to expire. The line of credit has a maturity date of May 1, 2023.

As of June 30, 2022, the outstanding balance on the line of credit was \$0.

Limitations on Additional Indebtedness

The University may, without limit, issue additional indebtedness or request the Building Authority to issue additional indebtedness on behalf of the University so long as such indebtedness is payable from all available funds of the University. As noted in the Board of Trustee policy, each campus' debt service cannot exceed 8% of its total operating expenditures.

The Building Authority is authorized by its enabling act to issue bonds with the unconditional guarantee of the Commonwealth for the punctual payment of the interest and principal on the guaranteed bonds. The full faith and credit of the Commonwealth are pledged for the performance of its guarantee. The enabling act, as amended, currently limits to \$200.0 million the total principal amount of notes and bonds of the Building Authority that may be Commonwealth guaranteed and outstanding at any one time. During FY2021, the University retired its remaining Commonwealth guaranteed debt. As of June 30, 2022, the University does not have any outstanding Commonwealth guaranteed debt.

Capital Plan

A majority of the capital spending during FY2022 and FY2021 related to continued investments in deferred maintenance. In September 2021, the University's Board approved an updated five-year capital plan for FY2022-FY2026 totaling \$1.9 billion. The University's capital plan is funded through a combination of University operations, bonds issued by the Building Authority and MHEFA, Commonwealth appropriations, and private fundraising.

The University's five-year capital plan for FY2022-FY2026 includes major projects that were previously approved by the Board in prior-year capital plans. The University's capital approval process provides for a multi-step review process involving the President's Office, the Building Authority and the Board. Additional approvals have been put in place for any capital project seeking alternative funding and/or delivery options.

Factors Impacting Future Periods

There are a number of issues of University-wide importance that directly impact the financial operations of the University. A key continuing factor that continues to impact the University's financial results is the COVID-19 pandemic. Continuing into FY2023 the University continues to monitor the pandemic's impact on enrollment and auxiliary services.

Other issues, such as improving academic quality, ensuring enrollment stability, realizing strong financial results, investing in capital assets, expanding fundraising capacity, operating more efficiently, being the most effective University for students and the Commonwealth given the available resources, and measuring performance are ongoing activities of continuous importance to the Board and University leadership that impact the financial planning each year. Student enrollment, the level of state support, the impact of collectively bargained wage increases, and the ability of student-fee supported activities to meet inflationary pressures determine the limits of program expansion, new initiatives and strategic investments, as well as the ability of the University to meet its core mission and ongoing operational needs.

Contacting the University

This financial report is designed to provide the University, the Commonwealth, the public and other interested parties with an overview of the financial results of the University and an explanation of the University's financial condition. If you have any questions about this report or require additional information, please contact the University Controller's Office by email at generalacctg_inquiry@umassp.edu.

Financial Statements

Statements of Net Position

As of June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

Assets and liabilities	2022		2021
Assets			
Current assets			
Cash and cash equivalents	\$ 121,05	3 \$	74,547
Cash held by state treasurer	25,0	54	22,242
Deposits with bond trustees	11,33	26	47,075
Accounts receivable, net	336,58	39	332,324
Lease receivable	16,40	54	13,561
Short-term investments	787,3		639,162
Other current assets	49,3		43,231
Total current assets	1,347,2		1,172,142
Noncurrent assets			, ,
Cash held by state treasurer	30,1	77	23,734
Deposits with bond trustees	508,44		186,336
Accounts receivable, net	48,96		44,316
Lease receivable	317,69		277,502
Long-term investments	1,052,29		1,163,888
Other assets	17,40		16,768
Capital assets, net	5,527,00		5,435,274
Total noncurrent assets	7,502,00		7,147,818
Total assets	8,849,2		8,319,960
Deferred outflows of resources	433,9		551,553
Liabilities	433,5.	,0	331,333
Current liabilities			
Accounts payable and accrued expenses	418,60	11	422,989
Unearned revenues and advances	126,00		100,044
Lease liability, current portion	15,04		11,322
Long-term debt, current portion	121,60		105,055
Commercial paper notes	20,00		31,000
Other current liabilities	82,00		70,396
Total current liabilities	783,44		740,806
Noncurrent liabilities		F 1	740,600
Unearned revenues and advances	72.00	:0	60,559
Lease liability	73,96 185,60		189,483
Long-term debt	3,545,7		3,121,427
_			644,879
Net pension liability Net other postemployment benefits liability	276,3° 485,14		•
Other long-term liabilities			829,808
Total noncurrent liabilities	99,49		100,436
Total liabilities	4,666,22		4,946,592
Deferred inflows of resources	5,449,60		5,687,398
Net position	1,085,6	10	596,953
•	2 201 4	71	2 260 411
Net investment in capital assets	2,281,4		2,269,411
Restricted - Nonexpendable	22,5		22,378
Restricted – Expendable	262,60		232,833
Unrestricted	181,29		62,540
Total net position	\$ 2,747,95	2 \$	2,587,162

Statements of Revenues, Expenses, and Changes in Net Position For the years ended June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

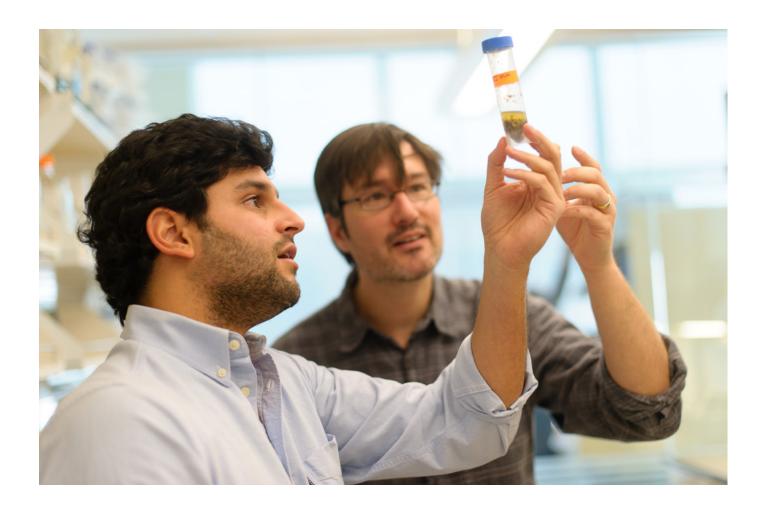
Tuition and fees (net of scholarship allowances of \$369,902 at June 30, 2022 and \$345,128 at June 30, 2021) Grants and contracts Sales and services, educational activities Auxiliary enterprises Other operating revenues: Sales and services, independent operations Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operacting expenses Operating fevenues (expenses) Federal appropriations State appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Othal other revenues, expenses, gains, and losses Total increase in net position	2022	2021
and \$345,128 at June 30, 2021) Grants and contracts Sales and services, educational activities Auxiliary enterprises Other operating revenues: Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public services Institutional support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating lampropriations State appropriations State appropriations State appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Other nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses		
Auxillary enterprises Other operating revenues: Sales and services, independent operations Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxillary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Nonoperating revenues (expenses) Federal appropriations State appropriations State appropriations State appropriations Other expenditures: Investment return, net Endowment return used for operations Interest expense Other nonoperating income (loss) Net nonoperating federal grants Other nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Gaints Endowment return, net of amount used for operations Other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	1,007,124	\$ 930,613
Auxiliary enterprises Other operating revenues: Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations Gifts Investment return, net Endowment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating frevenues, expenses, gains, and losses Other operations, capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses Other additions (deductions) Total other revenues, expenses, gains, and losses	719,479	667,149
Other operating revenues: Sales and services, independent operations Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues, expenses, gains, and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	40,907	30,253
Sales and services, independent operations Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues, expenses, gains, and losses Other revenues, expenses, gains, and losses Other return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	434,129	163,821
Sales and services, public service activities Other Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses		
Total operating revenues Departing expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and perations Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating expenses Pederal appropriations State appropriations State appropriations Gifts Investment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	66,929	50,961
Total operating revenues Operating expenses Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	321,954	334,567
Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Other additions (deductions) Total other revenues, expenses, gains, and losses	130,771	125,939
Educational and general Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations Gifts Investment return, net Endowment return used for operations Interest expense Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other additions (deductions) Total other revenues, expenses, gains, and losses	2,721,293	2,303,303
Instruction Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses		
Research Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses		
Public service Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	930,362	934,708
Academic support Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	551,367	550,593
Student services Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	71,649	88,770
Institutional support Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	194,153	199,456
Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	211,088	141,107
Operation and maintenance of capital assets Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	315,810	311,629
Depreciation and amortization Scholarships and fellowships Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	242,749	221,750
Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	330,715	318,828
Auxiliary enterprises Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	121,334	85,500
Other expenditures: Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	320,535	213,499
Independent operations Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	,	-,
Public service activities Total operating expenses Operating loss Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	58,582	53,485
Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	253,420	260,697
Nonoperating revenues (expenses) Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	3,601,764	3,380,022
Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	(880,471)	(1,076,719)
Federal appropriations State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses		
State appropriations Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	5,588	5,953
Gifts Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	880,003	845,481
Investment return, net Endowment return used for operations Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	67,948	41,262
Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	(24,164)	35,406
Interest expense Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	34,944	31,965
Nonoperating federal grants Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	(117,244)	(109,144)
Other nonoperating income (loss) Net nonoperating revenues Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	221,628	173,592
Gain/(Loss) before other revenues, expenses, gains, and losses Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	(667)	5,779
Other revenues, expenses, gains and losses Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	1,068,036	1,030,294
Capital appropriations Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	187,565	(46,425)
Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses		
Capital grants, contracts and gifts Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	87,062	62,592
Endowment return, net of amount used for operations Other additions (deductions) Total other revenues, expenses, gains, and losses	8,846	8,528
Other additions (deductions) Total other revenues, expenses, gains, and losses	(148,089)	148,514
Total other revenues, expenses, gains, and losses	25,406	(16,869)
	(26,775)	202,765
-	160,790	156,340
Net position at beginning of year, as restated	2,587,162	2,430,822
Net position at end of year \$		\$ 2,587,162

Statements of Cash Flows

For the years ended June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

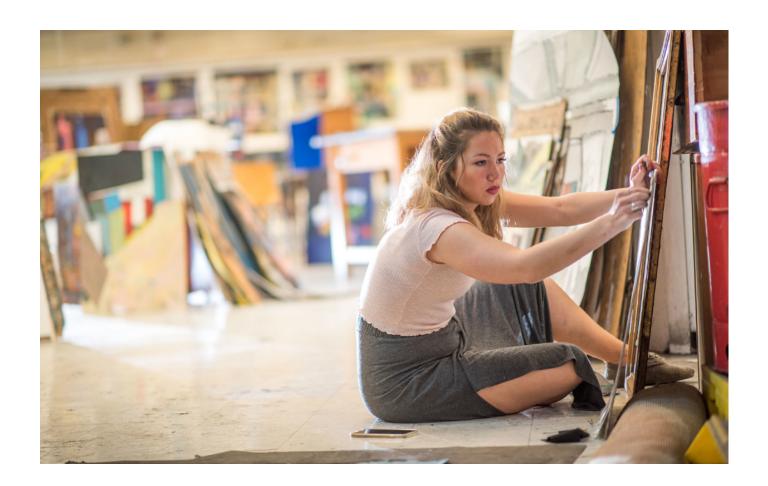
Cash flow	2022	2021
Cash flows from operating activities		
Tuition and fees	\$ 1,106,745 \$	1,025,916
Grants and contracts	724,415	650,603
Payments to suppliers	(1,055,007)	(817,593)
Payments to employees	(1,766,320)	(1,595,504)
Payments for benefits	(561,537)	(465,580)
Payments for scholarships and fellowships	(122,685)	(89,267)
Loans issued to students and employees	(10,746)	(6,433)
Collections of loans to students and employees	18,619	15,094
Auxiliary enterprises	434,311	162,954
Sales and services, educational	40,750	30,543
Sales and services, independent operations	66,929	50,961
Sales and services, public service activities	312,617	339,788
Student related fiduciary activities inflows	15,012	9,520
Student related fiduciary activities outflows	(11,583)	(6,692)
Other receipts, net	131,112	115,530
Net cash used for operating activities	(677,368)	(580,160)
Cash flows from noncapital financing activities		
Federal appropriations	5,588	5,953
State appropriations	880,003	845,481
Grants, contracts and gifts for other than capital purposes	73,268	41,377
Nonoperating federal grants	221,628	173,592
Other noncapital financing activities	(816)	-,
Net cash provided by noncapital financing activities	1,179,671	1,066,403
Cash flows from capital and other financing activities	77	.,,
Proceeds from debt issuances	486,620	721,153
Proceeds from premiums received	26,327	71,803
Bond issuance costs paid	(2,423)	(3,992)
Swap termination payments	(2,723)	(50,938)
Capital appropriations	87,062	62,592
Capital grants and contracts	3,525	8,413
Proceeds from sales of capital assets	47,586	2,668
Purchases of capital assets and construction	(378,227)	(322,341)
Lease receipts	18,200	13,805
Interest on leases	5,180	3,950
Principal paid on debt and leases	(210,816)	(722,552)
Interest paid on debt and leases	(135,125)	(156,636)
Net cash used for capital financing activities	(52,091)	(372,075)
Cash flows from investing activities	(32,031)	(372,073)
Proceeds from sales and maturities of investments	1 262 922	1 0/10 212
	1,263,822	1,048,212
Interest on investments	25,990	54,561
Purchases of investments	(1,474,851)	(1,325,603)
Cash received from acquisition of subsidiary	76,943	/222 022
Net cash used for investing activities	(108,096)	(222,830)
Net (decrease) increase in cash and cash equivalents	342,116	(108,662)
Cash and cash equivalents - beginning of the year	353,934	462,596
Cash and cash equivalents – end of the year	696,050	353,934

Cash flow	2022	2021
Reconciliation of operating loss to net cash used for operating activities		
Operating loss	(880,471)	(1,076,719)
Adjustments to reconcile loss to net cash used for operating activities:		
Depreciation and amortization expense	330,715	318,828
Changes in assets and liabilities:		
Accounts receivable, net	4,532	(5,275)
Other assets	(430)	12,659
Accounts payable and accrued expenses	(17,623)	85,044
Unearned revenues and advances	668	6,881
Other liabilities	15,352	8,788
Postemployment benefits liability, net	(107,520)	92,330
Fiduciary transactions	2,366	1,081
Changes in deferred inflows related to future revenues	(24,957)	(23,777)
Net cash used for operating activities	(677,368)	(580,160)
Supplemental disclosure of noncash activities		
Assets acquired and included in accounts payable and other liabilities	41,364	49,478
Assets acquired in exchange for lease obligation	483	-
Loss on disposal of capital assets	(10,845)	(12,083)
Donated assets	241	652



Component Unit Statements of Financial Position As of June 30, 2022 and 2021 (\$ in thousands). See accompanying notes to the financial statements.

Component units	2022	2021
Assets		
Cash	\$ 2,654	\$ 733
Pledges receivable, net	170,929	26,499
Other receivables	873	3,200
Investments of the Foundations	1,731,288	1,905,099
Prepaid expenses and other assets	6,644	3,718
Land, property, plant and equipment, net	 15,213	15,634
Total assets	1,927,601	1,954,883
Liabilities		
Accounts payable and accrued expenses	3,316	821
Deferred revenue	11,845	2,645
Obligations to beneficiaries of split-interest agreements	2,335	2,581
Assets held on behalf of others	 935,331	1,108,178
Total liabilities	952,827	1,114,225
Net assets		
Without donor restrictions	52,776	46,521
With donor restrictions	921,998	794,137
Total net assets	974,774	840,658
Total liabilities and net assets	\$ 1,927,601	\$ 1,954,883



Component Unit Statement of Activities
For the years ended June 30, 2022 and 2021 (with summarized financial information for the year ended June 30, 2020) (\$ in thousands).

Component units	Without donor restriction	With donor restriction	Total 2022	Total 2021
Support and revenue				
Gifts, bequests and grants	\$ 4,176	\$ 281,418	\$ 285,594	\$ 19,810
Other contributions	863	10,545	11,408	5,009
Total investment income, including net gains (losses) – net of fees	(148,169)	(140,965)	(289,134)	374,590
Investment management fee	12,528	-	12,528	12,309
Net assets released from restrictions	21,988	(21,988)	-	
Total support and revenue	(108,614)	129,010	20,396	411,718
Expenses				
Distributions to University	42,894	(230)	42,664	35,265
Program services	5,546	-	5,546	5,786
Fundraising support	4,706	-	4,706	7,094
Administrative and general, Foundation	2,983	1,189	4,172	2,139
Administrative and general, University	1,185		1,185	
Total expenses	57,314	959	58,273	50,284
Excess of support and revenue over expenses	(165,928)	128,051	(37,877)	361,434
Less: Fiscal year activity related to assets held on behalf of University	164,968	-	164,968	(156,127)
Less: Fiscal year activity related to assets held on behalf of Edward M. Kennedy Institute	7,879	-	7,879	(3,965)
Transfers (from) to other funds	(403)	403	-	-
Other	(261)	(593)	(854)	(343)
Change in net assets	6,255	127,861	134,116	200,999
Net assets, beginning of year	46,521	794,137	840,658	639,659
Net assets, end of year	\$ 52,776	\$ 921,998	\$ 974,774	\$ 840,658



Notes to Financial Statements

1. Summary of Significant Accounting Policies

Reporting Entity

The University of Massachusetts (University or UMass), a federal land grant institution, is governed by Massachusetts General Laws Chapter 75. Its Board of Trustees (Board or Trustees) consists of nineteen voting members and three non-voting members. The voting members consist of two full-time students, the Secretary of Education of the Commonwealth of Massachusetts (Commonwealth) and sixteen members appointed by the governor. The non-voting members consist of student representatives who may only participate in open meetings of the full Board of Trustees.

The University is a business-type activity of the Commonwealth. The financial balances and activities included in these financial statements are, therefore, also included in the Commonwealth's annual comprehensive financial report.

On September 2, 2021 the University completed the transfer of control of Brandman University to UMass. This launched the University of Massachusetts Global (UMG) that will deliver expanded online education opportunities to adult learners. For purposes of financial reporting, beginning in fiscal 2022, UMG is now presented as a blended component unit.

The financial statements of the University include the campuses of Amherst, Boston, Dartmouth, Lowell, Chan Medical School (UMass Chan), and the President's Office of the University, UMG, Worcester City Campus Corporation (WCCC), University of Massachusetts Lowell Applied Research Corporation (UMLARC), the University of Massachusetts Amherst Foundation (UMass Amherst Foundation), University of Massachusetts Medical School Foundation (UMMSF) as well as the University of Massachusetts Building Authority (Building Authority).

The Building Authority is a public instrumentality of the Commonwealth created by Chapter 773 of the Acts of 1960 (referred to as the Enabling Act), whose purpose is to provide dormitories, dining commons, and other buildings and structures for use by the University. The UMLARC is a legally separate 501(c)(3) non-profit corporation which was formed on June 24, 2020. The purpose of UMLARC is to promote efficient and effective applied research and development by entering into grants, contracts, and other contractual mechanisms for services. UMLARC also provides analytic and technology solutions to government and non-government entities to extend the impact of the University's technology enterprise. UMG was launched in September of 2021 and is a California based not-for-profit institution of higher learning. WCCC is a tax-exempt organization founded to support research and real property activities for the University. The UMass Amherst Foundation was established in 2003 to support private fundraising on behalf of the faculty and students of the Amherst campus. The UMMSF was established in 1991 to support fundraising and philanthropic activities of the UMass Chan. These component units are blended in the financial statements of the University because of the significance and exclusivity of their financial relationships with the University. Refer to Note 19 for condensed financial information for these blended component units.

The University also includes the financial information of the University's discretely presented component units, the University of Massachusetts Foundation, Inc. (UMF) and the University of Massachusetts Dartmouth Foundation, Inc. (UMDF). In these financial statements, UMF and UMDF are collectively known as the Foundations. These are related tax-exempt organizations founded to foster and promote the growth, progress and general welfare of the University.

Basis of Presentation

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB) using the economic resources measurement focus and the accrual basis of accounting. The Foundations' financial statements are prepared in accordance with accounting and reporting requirements prescribed by the Financial Accounting Standards Board (FASB). As such, certain revenue recognition criteria and presentation features are different from GASB revenue recognition criteria and presentation features. No modifications have been made to the Foundations' financial information in the University's financial reporting entity for these differences.

The University's activities are considered to be a single business-type activity and accordingly, are reported in a single column in the financial statements. Business-type activities are those that are financed in whole or in part by funds received from external parties for goods or services.

On the Statements of Revenues, Expenses and Changes in Net Position, the University's operating activities consist of tuition and fees, grants and contracts, sales and services, auxiliary enterprise and other operating revenues. Other operating revenues include sales and services provided by UMass Chan under its Commonwealth Medicine (CWM) programs, which provide consulting services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. Also included in other operating revenues are payments received by UMass Chan for educational services it provides to its clinical affiliate, UMass Memorial Medical Center (UMass Memorial).

Operating expenses include, among other items, payroll, fringe benefits, utilities, supplies and services, depreciation, and amortization. Nonoperating revenues or expenses are those in which the University receives or gives value without directly giving or receiving equal value, such as State and Federal appropriations, COVID-19 related Higher Education Emergency Relief Fund (HEERF) revenue, Federal Pell grants, private gifts, and investment income.

Revenues for exchange transactions are recognized when earned and expenses are recognized when incurred. Restricted grant revenue is recognized only when all eligibility requirements have been met. The University applies restricted net assets first when an expense or outlay is incurred for purposes for which both restricted and unrestricted net assets are available.

The University receives unconditional promises to give through private donations or pledges from corporations, foundations, alumni and other supporters of the University. Revenue is recognized when a pledge is received and all eligibility requirements, including time and purpose requirements, are met. Endowment pledges are not recorded until paid because the inherent time restriction has not been met until the funds are able to be invested in perpetuity.

Net Position

Net position is classified into the following categories:

- Net investment in capital assets: Capital assets, at historical cost or fair market value on the date of gift, net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction or improvement of those assets.
- Restricted nonexpendable: Resources subject to externally imposed stipulations that they be maintained permanently by the University.
- · Restricted expendable: Resources whose use by the University is subject to externally imposed stipulations. Such assets include restricted grants and contracts, the accumulated net gains/losses on true endowment funds, as well as restricted funds loaned to students, restricted gifts and endowment income, and other similar restricted funds.
- · Unrestricted: The net position that is not subject to externally imposed restrictions governing their use. The University's unrestricted net position may be designated for specific purposes by management or the Board of Trustees. Substantially all of the University's unrestricted net position is designated to support academic and research initiatives or programs, auxiliary enterprises, quasi-endowments, or commitments to capital construction projects. Note 17 describes these designations in more detail.

Cash and Cash Equivalents

Cash and cash equivalents include cash balances maintained in checking accounts, overnight repurchase agreements and amounts held in permitted money market mutual funds with an original maturity date of three months or less.

Massachusetts Municipal Depository Trust

The University is authorized to invest in the Massachusetts Municipal Depository Trust ("MMDT"), a pooled money market-like fund, established under Massachusetts General Laws, Chapter 29, Section 38A. MMDT is an external investment pool that meets the criteria to report its holdings at amortized cost. As such, the University reports its position in MMDT at amortized cost which approximates the net asset value of \$1.00 (one dollar) per share. MMDT has a maturity of less than one year and is not rated.

Accounts Receivable, Net

Accounts receivable consist of receivables for tuition and fees, grants and contracts, student loans, pledges and CWM related activities. The University establishes an allowance for accounts receivable based on management's expectation regarding the collection of the receivables and the University's historical experience for collections.

Investments

Investments are reported at fair value. Short-term investments consist of deposits with original maturities of less than one year and are available for current use. Securities received as gifts are recorded at estimated fair value at the date of the gift. Investment income includes dividends and interest income and is recognized on the accrual basis. In computing realized gains and losses, cost is determined on a specific identification basis.

Endowment

UMF maintains and administers the University's endowment assets and other long-term investments. UMF utilizes the pooled investment concept whereby all invested funds are included in one investment pool, unless otherwise required by the donor.

Pooled investment funds will receive an annual distribution, based on the endowment fund's average market value for the preceding twelve quarters on a one-year lag. Only quarters with funds on deposit are included in the average. In addition, a prudence rule is utilized, limiting spending from a particular endowment fund to be no lower than 93% of its carrying value. The spending rate approved for the years ended June 30, 2022 and 2021 was 4%.



Capital Assets

Capital assets (excluding intangible right-to-use lease assets) are stated at cost on the date of acquisition or, in the case of gifts, fair value upon date of donation. Construction in progress is stated at cost, which includes direct construction costs and other expenditures related to construction including capitalized interest, if any. All construction costs related to projects which are not yet completed are charged to construction in progress until such time as the projects are completed and placed in operation. Repairs and maintenance costs are expensed as incurred, whereas major improvements that extend the estimated useful lives of the assets are capitalized as additions to capital assets. The University does not capitalize works of art, historical treasures or library books.

The University capitalizes assets with useful lives greater than one year and acquisition costs greater than or equal to \$5,000. The University computes depreciation using the straight-line method over the asset's useful life and applies a half year convention in the year the asset is acquired or placed in service. Land is not depreciated.

Table 1 presents the range of useful lives for the University's depreciable assets:

TABLE 1 - Depreciable Assets

Depreciable asset category	Useful life
Land improvements	20 years
Buildings	12–50 years
Infrastructure	50 years
Building improvements	3–20 years
Equipment, furniture and IT infrastructure	3–15 years
Software	5 years

Newly implemented accounting standards

i) In June 2017, the Governmental Accounting Standards Board (GASB) issued GASB Statement No. 87, Leases. This standard requires the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and as inflows of resources or outflows of resources recognized based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right-to-use an underlying asset. Under this standard, a lessee is required to recognize a lease liability and an intangible right-to use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources.

The University adopted GASB 87 effective July 1, 2020, which resulted in adjustment to its previously reported net position as shown in **Table 2** (\$ in thousands):

TABLE 2 - Adjustment to previously reported net position

(\$ in thousands)

Net position	А	Adjustment		
Net postion as of July 1, 2020 as previously reported	\$	2,432,767		
Plus implementation of GASB Statement No. 87		(1,945)		
Net position as of July 1, 2020, as restated	\$	2,430,822		

In addition to the impact on net position as of July 1, 2020, the adoption of GASB 87 also resulted in immaterial reclassifications to previously reported 2021 amounts including capital assets as well as various other net position balances and corresponding revenues and expenses.

ii) The University adopted GASB Statement 89, Accounting for Interest Cost Incurred before the End of a Construction Period as of July 1, 2021. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. Prior to the adoption of GASB 89, during the year ended June 30, 2021, the University capitalized approximately \$7.4 million, net of interest income.

Leasing

The University determines if an arrangement is a lease at inception. The University has leases under which it is obligated as a lessee and leases for which it is a lessor. The University is a lessee for various noncancellable real estate. In addition, the University is a lessor of various leases of buildings, office space and ground leases.

Short-term Leases — For lease arrangements with a maximum possible term of 12 months or less at commencement, the University recognizes expense based on the provisions of the lease contract.

Lease Arrangements Other Than Short-Term — For all other leases (i.e. those that are not short-term), the University recognizes a lease liability, and an intangible right-to-use lease asset.

For leases, where the University is a lessor, the University recognizes a lease receivable and a deferred inflow of resources.

Measurement of Lease Amounts —

- Lessee: At lease commencement, the University initially measures the lease liability at the present value of payments expected to be made during the lease term.
- Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straightline basis over the shorter of the lease term or the useful life of the underlying asset. If the University is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the underlying asset.
- · Lessor: At lease commencement, the University initially measures the lease receivable at the present value of payments expected to be received during the lease term.
 - Subsequently, the lease receivable is reduced by the principal portion of lease payments made. The deferred inflows of resources are initially measured as the initial amount of the lease receivable plus any payments received at or before the commencement of the lease term that relate to future periods. Subsequently, the deferred inflows of resources are amortized into lease revenue on a straight-line basis over the shorter of the lease term or the useful life of the underlying lease receivable.

Key Estimates and Judgments — Key estimates and judgments include how the University determines (1) the discount rate it uses to calculate the present value of the expected lease and subscription payments, (2) lease and subscription term, and (3) lease and subscription payments.

When available, the University will use the interest rate explicitly or implicitly stated in the lease contract. If the rate is not provided within the contract, the University will use its incremental borrowing rate (IBR), based on the University's applicable bond rates. The University's IBR for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments, under similar terms, as of the lease commencement or amendment dates.

The lease includes the noncancellable period of the lease plus any additional periods covered by either a University or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the University and the lessor/vendor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.

Payments are evaluated by the University to determine if they should be included in the measurement of the lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as purchase options, payments for termination penalties, and other payments.

Remeasurement of Lease Amounts — The University monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease liability or lease receivable, the liability or receivable is remeasured, and a corresponding adjustment is made to the lease asset (for lessee arrangements) or deferred inflows of resources (for lessor arrangements).

Presentation in Statement of Net Position — Lease assets are reported with capital assets and lease liabilities are reported within current and non-current liabilities in the Statement of Net Position. Lease receivables are reported with current and noncurrent assets and deferred inflows of resources in the Statements of Net Position.

Deferred Outflows and Inflows of Resources

The University accounts for certain transactions that result in the consumption or acquisition in one period that are applicable to future periods as deferred outflows and deferred inflows, respectively, to distinguish them from assets and liabilities. Deferred outflows of resources increase net position, similar to assets and deferred inflows of resources decrease net position, similar to liabilities.

The components of deferred outflows and inflows of resources as of June 30, 2022 and 2021 (\$ in thousands) are presented in Tables 3 and 4:

TABLE 3 - Deferred Outflows of Resources

As of June 30, 2022 and 2021 (\$ in thousands)

Deferred outflow	2022	2021		
Debt refunding	\$ 115,519	\$	125,201	
Certain asset retirement obligations	1,159		1,158	
Excess consideration provided for acquisition*	45,435		-	
Impact of changes in assumptions and investment value:				
Pension liability	115,027		185,335	
Other postemployment benefits liability	156,858		239,859	
Total deferred outflows of resources	\$ 433,998	\$	551,553	

^{*}Deferred outflow resulting from the acquisition of Brandman University during FY2022. See Note 8 for further detail.

TABLE 4 - Deferred Inflows of Resources

As of June 30, 2022 and 2021 (\$ in thousands)

Deferred inflow	2022	2021		
Future lease revenues	\$ 232,271	\$	185,502	
Sale of future revenues	44,451		54,921	
Experience gains for:				
Pension liability	266,206		18,297	
Other postemployment benefits liability	542,728		338,233	
Total deferred inflows of resources	\$ 1,085,656	\$	596,953	

Compensated Absences

Employees earn the right to be compensated during absences for annual vacation leave and sick leave. Upon retirement, termination, or death, certain employees are compensated for unused sick and vacation leave, subject to certain limitations, at their current rate of pay. Within the Statements of Net Position, a liability is recorded for vacation and sick leave benefits earned as of the fiscal year-end. The recorded liability is classified as current and noncurrent on the Statements of Net Position based on the amount estimated to be paid to eligible employees in one year and beyond one year, respectively.

Unearned Revenue and Advances

Unearned revenue consists of amounts billed or received in advance of the University providing goods or services. Unearned revenue is subsequently earned as qualifying expenses are incurred.

Advances include funds advanced to the University by the U.S. government under the Federal Perkins Loan Program (the Program). Under federal law, the authority for colleges and universities to make new loans under the Program ended on September 30, 2017, and final distributions were permitted through June 30, 2019. The University's Statements of Net Position include both the notes receivable from students and the related refundable loan liability to the Federal government.

Bond Issuance Costs

The University incurs certain costs associated with bond issuances. For the years ended June 30, 2022 and 2021, bond issuance costs amounted to \$2.4 million and \$4.0 million, respectively, and were expensed in accordance with the provisions of GASB Statement No. 65, Items Previously Reported as Assets and Liabilities.

Tuition and Fees, Net of Scholarship Allowances

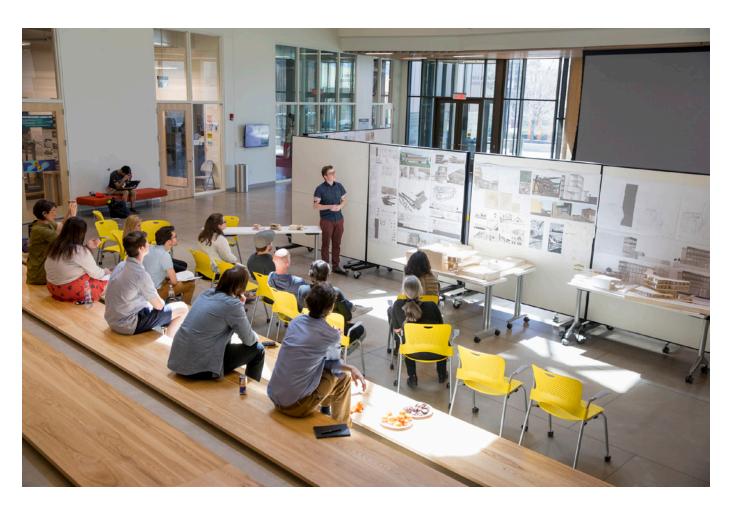
Student tuition and fees, housing, dining, and other similar auxiliary revenues are reported net of any related scholarships and fellowships applied to student accounts. However, scholarships and fellowships paid directly to students are separately reported as scholarships and fellowships expense.

Grants and Contracts

The University receives grants and contracts for research and other activities including medical service reimbursements from federal and state government agencies. The University records revenue at the point all eligibility requirements (e.g. allowable costs are incurred) are met.

The University records the recovery of indirect costs applicable to research programs and other activities which provide for the full or partial reimbursement of such costs, as revenue. Recovery of indirect costs for the years ended June 30, 2022 and 2021 was \$173.4 million and \$141.4 million, respectively, and is a component of grants and contracts revenue on the Statements of Revenues, Expenses, and Changes in Net Position.

As a result of the COVID-19 pandemic, the University was awarded \$255.6 million of COVID-19 assistance, collectively provided under the Higher Education Emergency Relief Fund (HEERF), of which \$253.3 million has been recognized to date. An additional \$3.0 million was awarded under the Governor's Emergency Education Relief Funds. Under Section 18004(a)(1) of the CARES Act, Section 314(a)(1)



of CRRSAA and ARPA, the University provided emergency financial aid grants to students of \$72.3 million and \$27.1 million for the years ended June 30, 2022 and 2021, respectively. These funds were recognized as revenue under nonoperating federal grants. An additional, \$70.4 million and \$54.9 million for the years ended June 30, 2022 and 2021, respectively, was used to recover a portion of lost revenue and additional financial aid to students. These funds were also recorded under nonoperating federal grant revenue.

Auxiliary Enterprises

An auxiliary enterprise is an activity that exists to furnish a service to students, faculty or staff acting in a personal capacity, and that charges a fee for the use of goods and services.

Fringe Benefits for Current Employees and Postemployment Obligations

The University participates in the Commonwealth's fringe benefit programs, including active employee and postemployment health insurance, unemployment compensation, pension, and workers' compensation benefits. Health insurance and pension costs for active employees and retirees are paid through a fringe benefit rate charged to the University by the Commonwealth. Workers' compensation costs are assessed separately based on actual University experience.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from these estimates. The most significant areas that require management estimates relate to valuation of certain investments and derivative instruments, useful lives and related depreciation of capital assets, and accruals for pension and other postemployment related benefits.

Income Tax Status

The University is exempt from Federal and state income tax under the doctrine of intergovernmental tax immunity. The University qualifies as a public charity eligible to receive charitable contributions under Section 170(b)(1)(A)(v) of the Internal Revenue Code, as amended (the Code).

The University and its component units are required to assess uncertain tax positions and have determined that there were no such positions that are material to the financial statements as of June 30, 2022 and 2021, respectively.

Reclassifications

Certain reclassifications were made in the prior year to conform to current year presentation.

2. Cash Held by State Treasurer

Accounts payable, accrued salaries and outlays for future capital projects to be funded from state-appropriated funds totaled \$55.2 million and \$46.0 million at June 30, 2022 and June 30, 2021. The University has recorded a comparable amount of cash held by the State Treasurer for the benefit of the University, which will be subsequently utilized to pay for allowable expenditures. The cash is held in the State Treasurer's pooled cash account. The Commonwealth requires all bank deposits in excess of insurance coverage by the FDIC to be collateralized with a perfected pledge of eligible collateral. Eligible collateral must be pledged in an amount equal to 102% of the amount of the deposits that exceed FDIC insurance. Sufficient collateral to cover total Commonwealth deposits in excess of the FDIC insured amount must be pledged and held in safekeeping by a custodian that is approved by and under the control of the Commonwealth Treasurer and Receiver - General.

3. Deposits with Bond Trustees

Deposits with bond trustees primarily consist of unspent bond proceeds, amounts held for the future payment of debt service on such borrowings and designated funds from the University's pool loan program.

At June 30, 2022 and 2021, deposits with bond trustees are presented in Table 5 (\$ in thousands):

TABLE 5 - Deposits with Bond Trustees

As of June 30, 2022 and 2021 (\$ in thousands)

Deposits	2022	2021
Cash	\$ 27,042	\$ 23,904
MMDT	297,003	206,695
Permitted Money Market Accounts	-	2,812
U.S Treasury Securities	195,721	-
Total deposits with bond trustees	\$ 519,766	\$ 233,411

At June 30, 2022, amounts restricted by bond trust agreements for capital projects and other purposes were \$501.5 million and \$18.3 million, respectively.

Custodial Credit Risk — The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. As of June 30, 2022 and 2021, the bank balances of uninsured deposits totaled \$8.5 million and \$7.7 million, respectively.

Interest Rate Risk — Interest rate risk is the extent that changes in interest rates of debt investments will adversely affect the fair value of an investment. These investments include certain short-term cash equivalents, various long-term items and restricted assets by maturity in years. The University minimizes the risk of the fair value of securities falling due to changes in interest rates by ensuring securities have effective maturities of less than a year. MMDT and permitted money market accounts have effective maturities of less than one year, thereby limiting the interest rate risk.

Credit Risk — Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. The risk is measured by the assignment of a rating by a nationally recognized statistical rating organization. MMDT and permitted money market accounts are not rated.

4. Investments

The investment portfolio of the University reflected on the Statements of Net Position for the years ended June 30, 2022 and 2021, respectively, are shown in **Tables 6** and **7** (\$ in thousands):

TABLE 6 - Investment Portfolio

As of June 30, 2022 and 2021 (\$ in thousands)

Investment type	2022	2021		
Short-term investments	\$ 787,356	\$	639,162	
Long-term investments	1,052,299		1,163,888	
Total	\$ 1,839,655	\$	1,803,050	

Investment policies are established by the Board. The goals of these policies are to preserve capital, provide liquidity, and generate investment income. The University has statutory authority under Massachusetts General Laws, Chapter 75 to collect, manage, and disburse its trust funds. UMF holds certain investments on behalf of the University, referred to as foundation agency funds.

The investment holdings of the University, including foundation agency funds, as of June 30, 2022 and 2021, respectively are summarized in **Table 7** (\$ in thousands):

TABLE 7 - Investment holdings of the University

As of June 30, 2022 and 2021 (\$ in thousands)

University investment holdings	2022	2021
University managed funds		
Cash and cash equivalents	\$ 54,009	\$ 65,009
Money market and other investments	333,002	332,568
MMDT	262,000	117,000
Fixed income investments	269,203	192,738
Commercial ventures and intellectual property	2,564	5,950
Annuity life income funds	 4,041	9,980
Total non-agency funds	924,819	723,245
Foundation agency funds		
Pooled investments – Fund I	777,573	920,212
Pooled investments – Fund II	-	9,419
Short term pool	 137,263	150,174
Total Foundation agency funds	914,836	1,079,805
Total investments	\$ 1,839,655	\$ 1,803,050

Fund I — represents the endowment funds and University operating cash held at UMF. The endowment funds include both donorrestricted endowments and quasi-endowments. The investment horizon for this portfolio is 5 to 10 years.

Fund II — represents a portion of the operating cash balances of the University that were transferred to UMF for investment purposes only. This portfolio was previously used by the University as an intermediate term investment vehicle. As part of the University's changing investment strategy, Fund II was liquidated as of June 30, 2022.

Short-Term Pool — represents a portion of the operating cash balances of the University that have been transferred to UMF for investment purposes only. This portfolio has a high degree of liquidity. The asset allocation is 25% U.S. equities and 75% shortterm corporate bonds. The University Treasurer has the authority to request the return of funds at any time to meet the operating needs of the University.

In addition to foundation agency funds, the Foundations' assets also include investments not reported within the University's Statements of Net Position. Total investments of the Foundations as of June 30, 2022 and 2021, respectively, are summarized in **Table 8** (\$ in thousands):

TABLE 8 - Investment holdings of the Foundations

As of June 30, 2022 and 2021 (\$ in thousands)

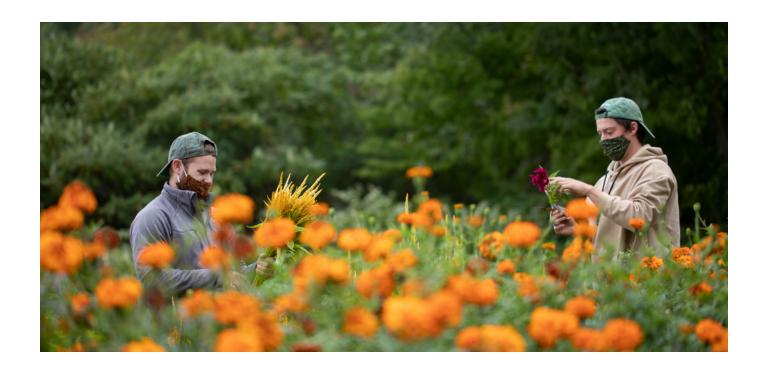
Fund	2022	2021		
Investments of the Foundations				
Cash and cash equivalents	\$ 40,544	\$	35,055	
Money market and other investments	9,195		6,211	
Fixed income investments	384		1,579	
Pooled investments – Fund I	762,925		778,979	
Annuity life income funds	3,404		3,470	
Total non-agency funds	816,452		825,294	
Foundation agency funds (Detailed in Table 7)	914,836		1,079,805	
Total Foundations investments	\$ 1,731,288	\$	1,905,099	

Custodial Credit Risk — Investment securities are exposed to custodial credit risk if they are uninsured or not registered in the name of the University and are held by either the counterparty or the counterparty's trust department or agent but not in the University's name.

The carrying amounts of cash balances with uninsured or uncollateralized deposits were \$109.6 million and \$113.0 million, at June 30, 2022 and 2021, respectively.

The University held non-money market investments with a fair market value of \$1.1 billion and \$1.0 billion at June 30, 2022 and 2021, respectively. In the event of negligence due to the University's custodian and/or investment manager(s), it is expected that the investment balances would be fully recovered. However, these amounts are subject to both interest rate risk and credit risk.

Concentration of Credit Risk — As of June 30, 2022 and 2021, there is no concentration of investments from one issuer equal to or greater than 5% of the portfolio. Investments issued or guaranteed by the U.S. government, as well as investments in mutual funds and other pooled investments are excluded from consideration when evaluating concentration risk.



Credit Risk — The University's Investment Policy and Guidelines Statement allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager. Nationally recognized statistical rating organizations, such as Standard & Poor's (S&P) assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors.

Table 9 presents the rated debt investments, excluding U.S. Treasury funds, at fair value by credit quality of the University's investment portfolio as of June 30, 2022 (\$ in thousands):

TABLE 9 - S&P Quality Ratings FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	AAA	AA	Α	ВВВ	ВВ	Unrated	Total
Government agency bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,929	\$ 6,929
Asset backed securities	20,697	1,258	3,869	3,366	-	679	29,869
Commercial mortgage-backed securities	23,103	-	-	1,432	-	2,019	26,554
Government mortgage-backed securities	-	-	-	-	-	16,354	16,354
Non-government backed collateralized mortgage obligations	3,304	-	-	-	-	99	3,403
Corporate bonds	1,312	2,273	41,162	70,506	379	376	116,008
Municipal and provincial bonds	235	4,061	1,549	356	-	351	6,552
Index linked government bonds	-	-	-	-	-	522	522
Bond funds, including exchange traded funds	20	904	603	-	-	103,635	105,162
Total debt securities	\$ 48,671	\$ 8,496	\$ 47,183	\$ 75,660	\$ 379	\$ 130,964	\$ 311,353

Table 10 presents the rated debt investments, excluding U.S. Treasury funds, at fair value by credit quality of the University's investment portfolio as of June 30, 2021 (\$ in thousands):

TABLE 10 - S&P Quality Ratings FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	AAA	AA	Α	ВВВ	ВВ	Unrated	Total
Government agency bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 869	\$ 869
Asset backed securities	16,130	351	2,211	1,921	-	1,220	21,833
Commercial mortgage-backed securities	14,768	-	-	767	-	2,999	18,534
Government mortgage-backed securities	-	-	-	-	-	11,033	11,033
Non-government backed collateralized mortgage obligations	3,124	365	-	-	-	168	3,657
Corporate bonds	-	1,507	28,490	53,912	615	42	84,566
Municipal and provincial bonds	-	1,424	1,114	379	-	-	2,917
Index linked government bonds	-	-	-	-	-	977	977
Bond funds, including exchange traded funds	-	25	34	1,781	752	112,538	115,130
Total debt securities	\$ 34,022	\$ 3,672	\$ 31,849	\$ 58,760	\$ 1,367	\$ 129,846	\$ 259,516

Interest Rate Risk — The University's Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by limiting investments through targeted allocations to different asset classes.

Table 11 presents the fair value of the rated debt investments component of the University's investment portfolio by investment maturity as of June 30, 2022 (\$ in thousands):

TABLE 11 - Investment Maturity (in years), FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	Less than 1	1 to 5	6 to 10	More than 10	Total
U.S. Treasury securities	\$ -	\$ 89,244	\$ 29,756	\$ 4,515	\$ 123,515
Government agency bonds	-	440	978	5,511	6,929
Asset backed securities	6,369	20,351	3,149	-	29,869
Commercial mortgage-backed securities	5,617	19,135	1,802	-	26,554
Government mortgage-backed securities	2,760	4,908	8,686	-	16,354
Non-government backed collateralized mortgage obligations	-	3,403	-	-	3,403
Corporate bonds	16,126	88,470	11,033	379	116,008
Municipal and provincial bonds	3,627	2,574	351	-	6,552
Index linked government bonds	-	522	-	-	522
Bond funds, including exchange traded funds		104,023	1,119	20	105,162
Total debt securities	\$ 34,499	\$ 333,070	\$ 56,874	\$ 10,425	\$ 434,868

Table 12 presents the fair value of the rated debt investments component of the University's investment portfolio by investment maturity as of June 30, 2021 (\$ in thousands):

TABLE 12 - Investment Maturity (in years), FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	Less than 1	1 to 5	6 to 10	More than 10	Total
U.S. Treasury securities	\$ -	\$ 77,241	\$ 7,314	\$ -	\$ 84,555
Government agency bonds	-	302	567	-	869
Asset backed securities	4,448	14,568	2,817	-	21,833
Commercial mortgage-backed securities	5,304	12,272	958	-	18,534
Government mortgage-backed securities	169	8,824	1,236	804	11,033
Non-government backed collateralized mortgage obligations	932	2,725	-	-	3,657
Corporate bonds	10,269	64,333	9,566	398	84,566
Municipal and provincial bonds	1,137	1,780	-	-	2,917
Index linked government bonds	-	977	-	-	977
Bond funds, including exchange traded funds	-	113,676	1,429	25	115,130
Total debt securities	\$ 22,259	\$ 296,698	\$ 23,887	\$ 1,227	\$ 344,071

Fair Value Measurement — Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The University categorizes these assets and liabilities measured at fair value using a three-tiered hierarchy based on the valuation methodologies employed. The hierarchy is defined as follows:

Level 1 — Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that are available at the measurement date.

Level 2 — Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 — Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Unobservable inputs reflect the University's own assumptions about the inputs market participants would use in pricing the asset or liability (including assumption about risk). Unobservable inputs are developed based on the best information available in the circumstances and may include the University's own data.

When available, quoted prices are used to determine fair value. When quoted prices in active markets are available, investments are classified within Level 1 of the fair value hierarchy. The University's Level 1 investments primarily consist of investments in U.S. Treasury obligations, equity securities, and mutual funds. When quoted prices in active markets are not available, fair values are based on evaluated prices received from the University's investment custodian in conjunction with a third-party service provider and are reported within Level 2 of the fair value hierarchy. The inputs for Level 2 include, but are not limited to, pricing models such as benchmarking yields, reported trades, broker-dealer quotes, issuer spreads and benchmarking securities, among others. The University's Level 2 investments primarily consist of investments in U.S. government and agency obligations, asset-backed securities, and corporate debt securities that did not trade on the University's fiscal year end date.

As a practical expedient to estimate the fair value of the University's interests, certain investments in commingled funds and limited partnerships are reported at the net asset value (NAV) determined by the fund managers. Because these investments are not readily marketable, their estimated fair values may differ from the values that would have been assigned had a ready market for such investments existed, and such differences could be material. As of June 30, 2022 and 2021, the University had no plans or intentions to sell such investments at amounts different from NAV.



Table 13 summarizes the fair value of the University's investments by type as of June 30, 2022 (\$ in thousands):

TABLE 13 – Fair Value Hierarchy of Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Investment	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	\$ 424,859	\$ -	\$ -	\$ 424,859
Debt securities					
U.S. Treasury securities	-	123,515	-	-	123,515
Government agency bonds	-	-	6,929	-	6,929
Asset backed securities	-	-	29,869	-	29,869
Commercial mortgage-backed securities	-	-	26,554	-	26,554
Government mortgage-backed securities	-	-	16,354	-	16,354
Non-government backed collateralized mortgage obligations	-	-	3,403	-	3,403
Corporate bonds	-	-	115,966	42	116,008
Municipal and provincial bonds	-	-	6,552	-	6,552
Index linked government Bonds	-	-	522	-	522
Bond funds, including exchange traded funds		105,162	-	_	105,162
Total debt securities	-	228,677	206,149	42	434,868
Equity securities					
Domestic equities	-	93,934	-	1,635	95,569
International equities	-	29,611	-	-	29,611
Total equity securities	-	123,545	-	1,635	125,180
Alternative investments					
Multi-strategy hedge funds					
Equity	218,694	-	-	-	218,694
Long/short	150,695	-	-	-	150,695
Fixed income	31,424	-	-	-	31,424
Absolute return	34,678	-	-	-	34,678
Real assets	6,508	-	-	-	6,508
Private equity and venture capital	74,198	-	-	-	74,198
Private debt	14,521	-	-	-	14,521
Private real estate	8,021	-	-	-	8,021
Total alternative investments	538,739	-	-	-	538,739
Total investments at fair value	538,739	777,081	206,149	1,677	1,523,646
Cash and cash equivalents	-	-	-	-	54,009
MMDT	-	-	-	-	262,000
Total investments at cost	-	-	-	-	316,009
Total investments	\$ 538,739	\$ 777,081	\$ 206,149	\$ 1,677	\$ 1,839,655

Table 14 presents unfunded commitments, redemption terms, restrictions, and notice period for investments that have been valued using NAV as a practical expedient as of June 30, 2022 (\$ in thousands):

TABLE 14 - Alternative Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds	•		•	•	
Equity	\$ 218,694	\$ -	Daily to annual	1–90 days	Lock-up provisions range from none to 2 years.
Long/short	150,695	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 2 years.
Fixed income	31,424	-	Quarterly to semi- annual	60-90 days	No lock-up restrictions
Absolute return	34,678	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	6,508	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	74,198	20,191	Closed end funds	(1)	Not redeemable
Private debt	14,521	9,515	Closed end funds	(1)	Not redeemable
Private real estate	8,021	1,411	Closed end funds	(1)	Not redeemable
Total	\$538,739	\$ 31,117			

⁽¹⁾ The University has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1–5 years. Liquidity is expected to be received in the next 1–9 years.

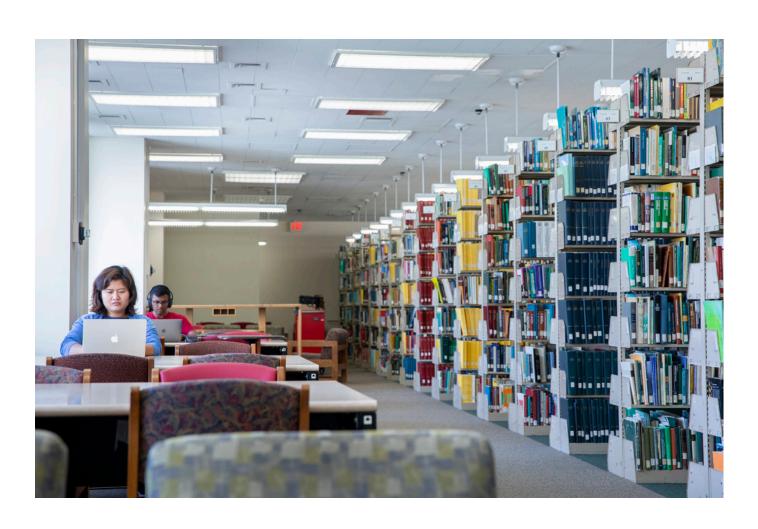


Table 15 summarizes the fair value of the University's investments by type as of June 30, 2021 (\$ in thousands):

TABLE 15 - Fair Value Hierarchy of Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Investment	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	\$ 621,839	\$ -	\$ -	\$ 621,839
Debt securities					
U.S. Treasury securities	-	84,555	-	-	84,555
Government agency bonds	-	-	869	-	869
Asset backed securities	-	-	21,833	-	21,833
Commercial mortgage-backed securities	-	-	18,534	-	18,534
Government mortgage-backed securities	-	-	11,033	-	11,033
Non-government backed collateralized mortgage obligations	-	-	3,657	-	3,657
Corporate bonds	-	-	84,524	42	84,566
Municipal and provincial bonds	-	-	2,917	-	2,917
Index linked government Bonds	-	-	977	-	977
Bond funds, including exchange traded funds		115,130			115,130
Total debt securities	-	199,685	144,344	42	344,071
Equity securities					
Domestic equities	-	117,864	-	1,635	119,499
International equities	-	27,914	-	-	27,914
Total equity securities	-	145,778	-	1,635	147,413
Alternative investments					
Multi-strategy hedge funds					
Equity	219,855	-	-	-	219,855
Long/short	144,898	-	-	-	144,898
Fixed income	31,261	-	-	-	31,261
Absolute return	15,115	-	-	-	15,115
Real assets	7,405	-	-	-	7,405
Private equity and venture capital	63,243	-	-	-	63,243
Private debt	16,017	-	-	-	16,017
Private real estate	7,355	-	-	-	7,355
Total alternative investments	505,149	-	-	-	505,149
Total investments at fair value	505,149	967,302	144,344	1,677	1,618,472
Cash and cash equivalents	-	-	-	-	67,578
MMDT	-	-	-	-	117,000
Total investments at cost	-	-	-	-	184,578
Total investments	\$ 505,149	\$ 967,302	\$ 144,344	\$ 1,677	\$ 1,803,050

Table 16 presents unfunded commitments, redemption terms, restrictions, and notice period for investments that have been valued using NAV as a practical expedient as of June 30, 2021 (\$ in thousands):

TABLE 16 - Alternative Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds					
Equity	\$ 219,855	\$ -	Daily to quarterly	1–90 days	Lock-up provisions range from none to 2 years.
Long/short	144,898	-	Quarterly to annual	45-90 days	Lock-up provisions range from none to 3 years.
Fixed income	31,261	-	Quarterly to semi- annual	60-90 days	Lock-up provisions range from none to 1 year.
Absolute return	15,115	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	7,405	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	63,243	12,460	Closed end funds	(1)	Not redeemable
Private debt	16,017	10,125	Closed end funds	(1)	Not redeemable
Private real estate	7,355	1,475	Closed end funds	(1)	Not redeemable
Total	\$505,149	\$ 24,060			

⁽¹⁾ The University has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1–5 years. Liquidity is expected to be received in the next 1–9 years.

5. Accounts Receivable, Net

Accounts receivable as of June 30, 2022 and 2021 are presented in **Table 17** (\$ in thousands):

TABLE 17 - Accounts Receivable, Net

As of June 30, 2022 and 2021 (\$ in thousands)

Accounts receivable	2022	2021
Student tuition and fees	\$ 68,216	\$ 60,329
Student loans	26,731	36,014
Pledges	50,458	30,718
Grants and contracts	129,634	116,980
CWM program	75,374	65,269
UMass Memorial	9,791	17,028
Other	57,239	85,770
Total	417,443	412,108
Less: allowance for doubtful accounts and discount to present value for pledges	(31,886)	(34,513)
Accounts receivable, net	\$ 385,557	\$ 377,595

6. UMass Memorial Medical Center

In 1998, the University entered into an Amended and Restated Definitive Agreement (Definitive Agreement) with certain unaffiliated parties whereby the University separated its clinical health care operations from its ongoing academic operations. As part of the Definitive Agreement, the University entered into a 99-year Academic Affiliation and Support Agreement (Affiliation Agreement), expiring on June 30, 2097, with UMass Memorial (successor to the clinical operations) whereby UMass Memorial is required to make annual inflation adjusted payments to the University, for the remainder of the agreement term provided the University continues to operate a medical school. For the years ending June 30, 2022 and 2021, the inflation adjusted income recognized totaled approximately \$20.4 million and \$19.9 million and was recorded as other operating revenue in the accompanying financial statements.

Other provisions of the Definitive agreement include the University being reimbursed by, and reimbursing UMass Memorial, for shared services, cross-funded employees, and other agreed upon activities provided and purchased. For the years ended June 30, 2022 and 2021, the reimbursements received for services provided to UMass Memorial and recorded as other revenue were \$174.8 million and \$161.6 million, respectively. Included in these amounts are payroll paid by the University on behalf of UMass Memorial in an agency capacity, recorded as an offset to operating expenses, in the amount of \$109.9 million and \$100.3 million for the years ended June 30, 2022 and 2021, respectively.

As of June 30, 2022 and 2021, the University has recorded a receivable in the amount of \$9.8 million and \$17.0 million, respectively from UMass Memorial which includes \$1.7 million and \$10.0 million, respectively, in payroll and related fringe charges. The University has recorded a payable of \$4.8 million and \$6.4 million at June 30, 2022 and 2021, respectively, primarily for cross-funded payroll.

7. Capital Assets

Table 18 represents the University's capital assets activity for the years ended June 30, 2022 and 2021 (\$ in thousands):

TABLE 18 - Capital Assets Activity

For the years ended June 30 (\$ in thousands)

Asset	As of 2020	Additions	Retirements / adjustments	As of 2021	Additions*	Retirements / adjustments	As of 2022
Land	\$ 166,024	\$ 4,015	\$ (52)	\$ 169,987	\$ 19,288	\$ (801)	\$ 188,474
Buildings and improvements	7,357,104	376,699	(54,255)	7,679,548	210,606	(23,447)	7,866,707
Software	120,001	6,284	(217)	126,068	2,439	-	128,507
Equipment and furniture	712,513	43,560	(69,414)	686,659	73,091	(42,942)	716,808
Library books	39,618	-	(6,995)	32,623	-	(6,983)	25,640
Right of use assets (note 10)	186,543	968	25,423	212,934	18,780	3,658	235,372
Total	8,581,803	431,526	(105,510)	8,907,819	324,204	(70,515)	9,161,508
Accumulated depreciation/amortization	(3,547,761)	(320,126)	116,404	(3,751,483)	(358,831)	65,251	(4,045,063)
Total	5,034,042	111,400	10,894	5,156,336	(34,627)	(5,264)	5,116,445
Construction in progress	359,070	287,957	(368,089)	278,938	306,844	(175,165)	410,617
Total capital assets, net	\$ 5,393,112	\$ 399,357	\$ (357,195)	\$5,435,274	\$ 272,217	\$ (180,429)	\$5,527,062

^{*}Includes assets of \$53.3 million from acquisition of Brandman University

8. Business Acquisition

Effective September 1, 2021 the University acquired Brandman University in exchange for \$139.3 million and the assumption of all Brandman's existing liabilities totaling \$59.2 million. The acquisition included all of the assets of Brandman University totaling \$150.7 million.

The transaction resulted in deferred outflows of resources of \$47.8 million as of the acquisition date. The deferred outflows of resources are being amortized over a 10 year period. As of June 30, 2022 there were \$45.4 million of deferred outflows of resources remaining associated with the acquisition.

9. Public Private Partnerships (PPP)

On November 8, 2016, the University entered into an agreement whereby the Building Authority sub-leased land on the Boston campus to Provident Commonwealth Educational Resources, Inc. (PCER), a Massachusetts not-for-profit corporation, for a term of 40 years (2056). The land is ground-leased to the Building Authority by the Commonwealth. PCER engaged a contractor to construct a 1,082-bed student housing facility on the site (the Boston Project). The Boston Project reverts to the Building Authority when the lease terminates. Commencing January 1, 2019, the annual rental amount payable to the Building Authority under the ground lease is \$1.0 million.

The Boston Project was financed with \$130.1 million of revenue bonds issued on October 26, 2016 (Series 2016 Bonds) by the Massachusetts Development Finance Agency (MassDevelopment) pursuant to a Loan and Trust Agreement between MassDevelopment and PCER. Neither the Building Authority, University nor Boston campus have pledged revenues to secure the payment of the Series 2016 bonds or have any obligation with respect to payment of the Series 2016 bonds.

Pursuant to the Dining Facility Sublease dated November 8, 2016 between PCER, as sub-lessor and the Building Authority, as sublessee, PCER leased the dining facility, located within the Boston Project, to the Building Authority and the Building Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Building Authority. This lease only relates to the operations and maintenance of the dining facility. The annual rent payable is \$1.00.

On November 14, 2018, the Building Authority entered into an agreement whereby the Building Authority sub-leased land on the University of Massachusetts Dartmouth campus to Provident Commonwealth Educational Resources II, Inc. (PCER II), a Massachusetts not-for-profit corporation, for a term of 45 years (2064). The land is ground-leased to the Building Authority by the Commonwealth. PCER II engaged a contractor to construct a 1,210-bed student housing facility on the site (the Dartmouth Project). The Dartmouth Project reverts to the Building Authority when the lease terminates. Commencing on January 1, 2021, the annual rental amount payable to the Building Authority under the ground lease was \$625,000, increasing by 3% every five years.

The Dartmouth Project was financed with \$132.2 million of revenue bonds issued on November 14, 2018 (Series 2018 Bonds) by the Massachusetts Development Finance Agency (MassDevelopment) pursuant to a Loan and Trust Agreement between MassDevelopment and PCER II. The Building Authority, University nor Dartmouth campus have pledged revenues to secure the payment of the Series 2018 bonds or have any obligation with respect to payment of the Series 2018 bonds.

Pursuant to the Dining Facility sublease dated November 13, 2018, between PCER II, as sub-lessor and the Building Authority, as sub-lessee, PCER II leased the dining facility, located within the Dartmouth Project, to the Building Authority and the Building Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Building Authority. This lease only relates to the operations and maintenance of the dining facility. The annual rent payable is \$1.00.

Management evaluated the applicability of relevant GASB guidance against the underlying Boston and Dartmouth Project agreements and indentures and has concluded that the associated debt should not be recognized on the financial statements of the Building Authority.

10. Leases

Lessee Leases

The University is a lessee for various noncancellable real estate.

The University has executed long-term leases with the Commonwealth, acting by and through the Trustees, covering the land on which facilities owned by the Building Authority are located on the University's campuses. These leases call for nominal annual payments to the Commonwealth. Some of these leases renew automatically for subsequent five- or ten-year periods unless the Building Authority notifies the University that it does not wish to renew. Other leases require the Building Authority to notify the University of its desire to renew. As of June 30, 2022, all leases with the Commonwealth were in good standing and any leases requiring action by the Building Authority during the year to facilitate their renewals were properly renewed.

As provided in the Enabling Act, each of the above-referenced leases also terminates when the Building Authority no longer has any bonds outstanding, at which time all Building Authority property becomes the property of the Commonwealth.

Table 19 presents a summary of right of use asset activity during the year ended June 30:

TABLE 19 – Right of Use Asset Activity

For the years ended June 30 (\$ in thousands)

Asset	As of 2020	Additions	Remeasurements / terminations	As of 2021	Additions	Remeasurements / terminations	As of 2022
Right of use assets							
Real estate	\$ 186,543	\$ 968	\$ 25,423	\$ 212,934	\$ 18,503	\$ 3,658	\$ 235,095
Equipment		-	-	-	277	-	277
Total	186,543	968	25,423	212,934	18,780	3,658	235,372
Accumulated amortization	-	(19,181)	-	(19,181)	(30,475)	2,556	(47,100)
Total right of use assets, net	\$186,543	\$ (18,213)	\$ 25,423	\$193,753	\$ (11,695)	\$ 6,214	\$188,272

Lease Liabilities

Table 20 presents a summary of changes in the related lease liabilities during the year ended June 30, 2022 (\$ in thousands):

TABLE 20 – Lease Liabilities, FY2022

For the years ended June 30, 2022 (\$ in thousands)

Liability	Α	s of 2021	A	dditions	R	emeasurements	De	ductions	A	s of 2022	Due in ne year
Real estate	\$	200,805	\$	7,150	\$	6,223	\$	(14,341)	\$	199,837	\$ 12,911
Equipment		-		119		755		(55)		819	2,136
Total	\$	200,805	\$	7,269	\$	6,978	\$	(14,396)	\$	200,656	\$ 15,047

Table 21 presents a summary of changes in the related lease liabilities during the year ended June 30, 2021 (\$ in thousands):

TABLE 21 - Lease Liabilities, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Liability	As	of 2020	Additions		Remeasurements		Deductions		As of 2021		ue in e year
Real estate	\$	188,900	\$	968	\$	25,423	\$	(14,486)	\$	200,805	\$ 11,322

Future annual lease payments are presented in **Table 22** (\$ in thousands):

TABLE 22 - Future Annual Lease Payments

As of June 30, 2022 (\$ in thousands)

Fiscal year	Principal	Interest	Total
2023	\$ 15,047	\$ 4,561	\$ 19,608
2024	14,327	4,260	18,587
2025	13,831	3,961	17,792
2026	12,977	3,678	16,655
2027	12,996	3,400	16,396
2028-2032	62,874	12,543	75,417
2033-2037	48,872	5,869	54,741
2038-2042	15,506	1,091	16,597
2043-2047	4,226	171	4,397
Total	\$ 200,656	\$ 39,534	\$ 240,190

For the years ended June 30, 2022 and 2021, the University recognized \$4.7 million and \$3.7 million, respectively, of interest expense related to its operating leases.

Lessor Leases

The University is a lessor of various leases of buildings, office space and ground leases.

Lease Receivables

Table 23 presents a summary of changes in the related lease receivable during the year ended June 30, 2022 (\$ in thousands):

TABLE 23 - Lease Receivables, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Receivable	A	s of 2021	A	dditions	Remeasurements		Deductions		A	s of 2022	Due in one year		
Real estate	\$	189,368	\$	59,546	\$	1,710	\$	(13,127)	\$	237,497	\$	11,391	
Direct financing arrangement		101,694		-		-		(5,072)		96,622		5,073	
Total lease receivable	\$	291,062	\$	59,546	\$	1,710	\$	(18,199)	\$	334,119	\$	16,464	

Table 24 presents a summary of changes in the related lease receivable during the year ended June 30, 2021 (\$ in thousands):

TABLE 24 - Lease Receivables, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Receivable	A	s of 2020	Α	dditions	R	emeasurements	D	eductions	А	s of 2021	(Due in one year
Real estate	\$	195,941	\$	2,160	\$	-	\$	(8,733)	\$	189,368	\$	8,489
Direct financing arrangement		106,760		-		-		(5,066)		101,694		5,072
Total lease receivable	\$	302,701	\$	2,160	\$		\$	(13,799)	\$	291,062	\$	13,561

For the years ended June 30, 2022 and 2021, the University recognized \$20.7 million and \$18.0 million, respectively, of revenue related to its lessor operating leases, which is included in auxiliary enterprise revenue, other operating revenue and other nonoperating income in the accompanying financial statements.

Direct Financing Arrangement

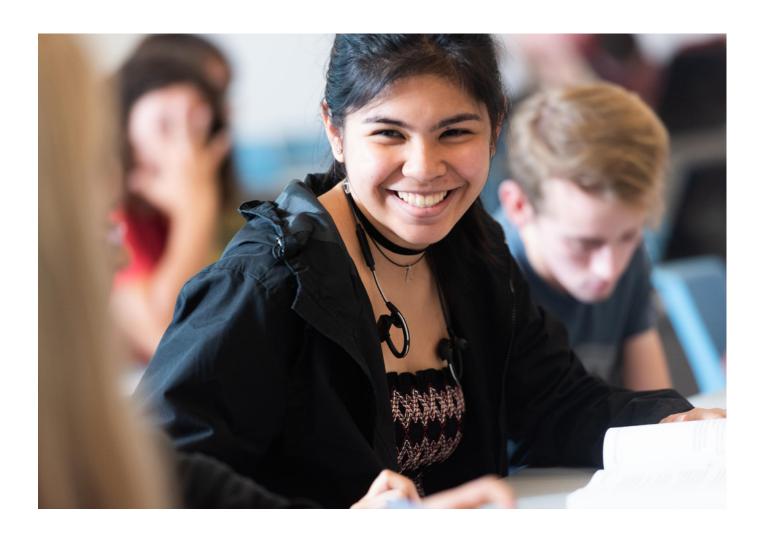
In accordance with the GASB 87 transition guidance, the Building Authority has not restated the underlying assets nor the existing unearned interest income related to its direct financing arrangement.

On October 27, 2009, the Building Authority entered into an agreement to lease its facility located on Morrissey Boulevard in Dorchester, Massachusetts to the Edward M. Kennedy Institute for the United States Senate (EMKI), a charitable corporation registered in the District of Columbia. The lease agreement provides for an initial term of ninety-nine years commencing in October 2009, and thereafter, at the option of EMKI, may be extended for two additional, ninety-nine periods.

EMKI has an option to purchase the Facility for one dollar at any time after the earlier of: (i) payment of no less than fifty-one percent (51%) or defeasement of the original amount of the associated revenue bonds. The University has right of first refusal in the event EMKI decides to sell or otherwise dispose of the ownership of the Facility.

The project was financed with \$74.4 million of revenue bonds. Rent is equal to the debt service on the outstanding bonds and payable semi-annually through fiscal year 2043.

At June 30, 2022 and 2021, the University recorded gross lease receivable of approximately \$96.6 million and \$101.7 million, respectively, related to the EMKI lease. Also, at June 30, 2022 and 2021, the University recorded unearned interest income of approximately \$25.9 million and \$28.2 million, respectively related to the EMKI lease. The University presents the unearned interest income associated with the EMKI lease as other current liabilities of approximately \$2.2 million and \$2.3 million and other noncurrent liabilities of approximately \$23.7 million and \$25.9 million as of June 30, 2022 and 2021, respectively.



11. Long-Term Debt

Table 25 represents the outstanding long-term debt as of June 30, 2022, and the related activity during the fiscal year (\$ in thousands):

TABLE 25 - Long-Term Debt, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Debt	Original borrowing	Maturity date	Interest rate	As of 2021	Additions	Reductions	As of 2022
Building Authority							
Series 2009-2	\$ 271,855	2039	6.4-6.6%	\$ 16,945	\$ -	\$ -	\$ 16,945
Series 2009-2	28,570	2039	5.8-6.2%	23,135	φ -	(735)	22,400
Series 2010-2	430,320	2040	3.8-5.5%	430,320	-	(16,710)	413,610
Series 2010-2 Series 2010-3	3,005	2040	5.8-5.5% 6%	2,490	-	(70)	2,420
	212,585				-		
Series 2013-1	•	2043	2.0-5.0%	13,735	-	(5,325)	8,410
Series 2013-2	71,970	2043	0.4-4.3%	32,010	-	(2,420)	29,590
Series 2013-3	24,640	2043	4.0-5.0%	945	-	(460)	485
Series 2014-1	293,890	2044	3.0-5.0%	66,825	-	(3,890)	62,935
Series 2014-3	67,635	2029	2.0-5.0%	28,635	-	(4,290)	24,345
Series 2014-4	157,855	2025	0.2-3.4%	13,865	-	(5,165)	8,700
Series 2015-1	298,795	2045	4.0-5.0%	266,880	-	-	266,880
Series 2015-2	191,825	2036	3.0-5.0%	157,765	-	(24,435)	133,330
Series 2017-1	165,130	2047	4.0-5.3%	165,130	-	-	165,130
Series 2017-2	19,510	2027	1.6-3.4%	15,100	-	(1,530)	13,570
Series 2017-3	187,680	2038	3.0-5.0%	155,630	-	(3,480)	152,150
Series 2018-1	37,650	2043	2.0-2.9%	37,650	-	-	37,650
Series 2019-1	208,725	2039	5%	208,725	-	-	208,725
Series 2020-1	200,840	2050	5%	200,840	-	-	200,840
Series 2020-2	129,830	2050	1.8-3.5%	129,830	-	(1,985)	127,845
Series 2020-3	319,345	2044	1.7–3.5%	317,795	-	(2,130)	315,665
Series 2020-4	329,930	2043	0.4%-3.0%	329,930	-	-	329,930
Series 2021-1	312,330	2037	5.0%	302,270	-	(10,520)	291,750
Series 2021-2	46,585	2036	0.2%	46,585	-	(15,750)	30,835
Series 2022-1	188,650	2052	5.0%	-	188,650	-	188,650
Series 2022-2	211,270	2045	2.2-4.3%	-	211,270	-	211,270
Unamortized bond premium				242,430	26,327	(27,149)	241,608
Total Building Authority				3,205,465	426,247	(126,044)	3,505,668
MHEFA/MDFA							
Series A	20,000	2030	variable	20,000	-	-	20,000
Total MHEFA/MDFA				20,000	-	-	20,000
WCCC MHEFA/MDFA							
Series 2005-D	99,325	2029	5.0-5.3%	425	-	-	425
Unamortized bond premium				20	_	(5)	15
WCCC MHEFA/MDFA				445	-	(5)	440
MDFA							
Clean renewable energy bonds	1,625	2027	3.50%	572	_	(94)	478
Total bonds payable				3,226,482	426,247	(126,143)	3,526,586
UMG*							
Working capital note	21,100	2025	2.2%	-	21,100	-	21,100
Building note	37,000	2027	2.2%	-	37,000	-	37,000
Change in control note	96,000	2031	0.0%	-	96,000	-	96,000
Unamortized discount					(14,814)	1,501	(13,313)
Total notes payable				-	139,286	1,501	140,787
Total long-term debt				\$ 3,226,482	\$ 565,533	\$ (124,642)	\$ 3,667,373

^{*} Includes debt incurred through Brandman University acquisition

Table 26 represents the outstanding long-term debt as of June 30, 2021, and the related activity during the fiscal year (\$ in thousands):

TABLE 26 - Long-Term Debt, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Debt	Original borrowing	Maturity date	Interest rate	As of 2020	Additions	Reductions	As of 2021
Building Authority							
Series 2008-1	\$ 232,545	2038	Variable	\$ 145,515	\$ -	\$ (145,515)	\$ -
Series 2008-A	26,580	2038	Variable	16,050	Ψ - -	(16,050)	Ψ - -
Series 2009-2	271,855	2039	6.4-6.6%	16,945	_	(10,030)	16,945
Series 2009-3	28,570	2039	5.8-6.2%	23,825	_	(690)	23,135
Series 2010-1	118,985	2020	5.0%	15,900	_	(15,900)	25,155
Series 2010-2	430,320	2040	3.8-5.5%	430,320	_	(13,300)	430,320
Series 2010-3	3,005	2040	6%	2,555	_	(65)	2,490
Series 2011-1	135,040	2034	Variable	122,010	_	(122,010)	_,.50
Series 2011-2	101,700	2034	Variable	92,800	_	(92,800)	-
Series 2013-1	212,585	2043	2.0-5.0%	95,170	_	(81,435)	13,735
Series 2013-2	71,970	2043	0.4-4.3%	58,200	-	(26,190)	32,010
Series 2013-3	24,640	2043	4.0-5.0%	1,380	-	(435)	945
Series 2014-1	293,890	2044	3.0-5.0%	147,675	_	(80,850)	66,825
Series 2014-3	67,635	2029	2.0-5.0%	50,680	-	(22,045)	28,635
Series 2014-4	157,855	2025	0.2-3.4%	30,540	_	(16,675)	13,865
Series 2015-1	298,795	2045	4.0-5.0%	298,795	-	(31,915)	266,880
Series 2015-2	191,825	2036	3.0-5.0%	179,805	-	(22,040)	157,765
Series 2017-1	165,130	2047	4.0-5.3%	165,130	-	-	165,130
Series 2017-2	19,510	2027	1.6-3.4%	16,595	-	(1,495)	15,100
Series 2017-3	187,680	2038	3.0-5.0%	160,015	-	(4,385)	155,630
Series 2018-1	37,650	2043	2.0-2.9%	37,650	-	-	37,650
Series 2019-1	208,725	2039	5%	208,725	-	-	208,725
Series 2020-1	200,840	2050	5%	200,840	-	-	200,840
Series 2020-2	129,830	2050	1.8-3.5%	129,830	-	-	129,830
Series 2020-3	319,345	2044	1.7-3.5%	319,345	-	(1,550)	317,795
Series 2020-4	329,930	2043	0.4%-3.0%	-	329,930	-	329,930
Series 2021-1	312,330	2037	5.0%	-	312,330	(10,060)	302,270
Series 2021-2	46,585	2036	0.2%	-	46,585	-	46,585
Unamortized bond premium				205,039	71,803	(34,412)	242,430
Total Building Authority				3,171,334	760,648	(726,517)	3,205,465
MHEFA/MDFA							
Series A	20,000	2030	Variable	20,000	-	-	20,000
Total MHEFA/MDFA				20,000	-	-	20,000
WCCC MHEFA/MDFA							
Series 2005-D	99,325	2029	5.0-5.3%	475	-	(50)	425
Unamortized bond premium				25	-	(5)	20
Total WCCC MHEFA/MDFA				500	-	(55)	445
MDFA							
Clean renewable energy bonds	1,625	2027	3.50%	669	_	(97)	572
Total bonds payable	, -			3,192,503	760,648	(726,669)	3,226,482
Notes payable				1,486	<u> </u>	(1,486)	- · · -
Total long-term debt				\$3,193,989	\$ 760,648	\$ (728,155)	\$3,226,482

Pledged Revenues

The University is obligated under its contracts for financial assistance, management and services with the Building Authority to collect rates, rents, fees and other charges with respect to such facilities sufficient to pay principal and interest on the Building Authority's bonds and certain other costs such as insurance on such facilities.

The University's spendable cash and investments secures the obligations of the University with respect to the MHEFA/MDFA Series A Bonds. The University is required to certify annually that there are sufficient funds in spendable cash and investments to cover the debt service on the Series A Bonds.

Principal and Interest

Principal and interest, which is estimated using rates in effect at June 30, 2022, on bonds and notes payable for the next five fiscal years and in subsequent five-year periods are presented in Table 27 (\$ in thousands):

TABLE 27 - Principal and Interest on Long-term Debt

(\$ in thousands)

Fiscal year	Bonds – principal	Bonds – interest	Bonds – interest subsidy*	Direct placement bonds – principal	Direct placement bonds – interest	Notes payable – principal	Notes payable – interest	Total
2023	\$ 112,180	\$ 139,501	\$ (7,224)	\$ -	\$ 763	\$ 5,000	\$ 2,302	\$ 252,522
2024	123,166	133,162	(6,993)	-	754	10,000	1,086	261,175
2025	121,066	128,515	(6,729)	1,655	718	15,000	824	261,049
2026	117,306	123,556	(6,445)	1,690	684	20,000	453	257,244
2027	120,391	118,345	(6,153)	1,725	649	20,100	111	255,168
2028-2032	666,340	507,601	(25,992)	1,760	3,695	84,000	-	1,237,404
2033-2037	670,425	361,359	(15,989)	8,355	2,709	-	-	1,026,859
2038-2042	661,135	206,094	(4,110)	20,110	1,225	-	-	884,454
2043-2047	427,085	90,157	-	2,355	47	-	-	519,644
2048-2052	204,550	27,327	-	-	-	-	-	231,877
2053-2057	23,669	592	-	-	-	-	-	24,261
Total	\$3,247,313	\$1,836,209	\$ (79,635)	\$ 37,650	\$ 11,244	\$ 154,100	\$ 4,776	\$5,211,657

These interest rate subsidies are provided by the United States Government related to the Authority's issuance of bonds under the Build America Bond ("BAB") program. Under the BAB program, the Government provides a direct subsidy of the interest rate paid to bondholders up to 35%. The University's November 1, 2021, and May 1, 2022 subsidy payments related to the Senior Series 2009-2 Project Revenue Build America Bonds and the Senior Series 2010-2 Project Revenue Build America Bonds were 32.94% and 33.00%, respectively. For fiscal year 2023 through fiscal year 2043, the estimated subsidy reflected in the table above is 33.00%.

Bond Activity

In FY2022, the University issued \$188.7 million of Senior Series 2022-1 Project Revenue Bonds and \$211.3 million of Senior Series 2022-2 Project Revenue Bonds.

In FY2021, the University issued \$312.3 million of Refunding Revenue Bonds, Series 2021-1 and \$376.5 million of federally taxable Refunding Revenue Bonds, Series 2020-4 and 2021-2. The refunding bonds refunded the 2008-1, 2008-A, 2011-1 and the 2011-2 bonds in the amount of \$358.4 million, the 2013-2 and 2014-1 bonds in the amount of \$26.8 million, and the 2013-1, 2013-2, 2014-1, 2014-3 and 2015-1 bonds in the amount of \$200.1 million. The University escrowed funds sufficient to provide for all future debt service payments on the refunded bonds until the bonds are called. These advanced refunded bonds are considered defeased and, accordingly, the liability for the bonds payable and the assets held to repay the debt are not recorded in the University's financial statements.

In FY2021, the University defeased approximately \$619.0 million of bonds outstanding from refunding activities.

Bond Premium (Discount)

The University amortizes the premiums received as a reduction of interest expense over the life of the respective bond issue. In FY2022 and FY2021, the University received premiums at issuance totaling \$26.3 million and \$71.8 million, respectively.

The \$96.0 million note payable does not have a stated interest rate. As a result, this note has imputed an interest rate, which resulted in a discount of \$14.8 million to be amortized over the life of the note payable.

Interest Rate Swaps

During fiscal year 2021, the University terminated all interest rate swaps. For the year ended June 30, 2021, the Building Authority incurred fees related to its variable rate debt program totaling approximately \$582.0 thousand dollars.

Notes Payable

In FY2022, the University entered into three notes payable as part of the Brandman University acquisition agreement. A working capital note payable of \$21.1 million, a building note payable for \$37.0 million and a change in control note payable of \$96.0 million.

Commercial Paper

The maximum aggregate principal amount of commercial paper which may be outstanding at one time is \$200.0 million. The Commercial Paper Series 2013-A2 are secured by a standby liquidity facility agreement that expired on August 12, 2022 and subsequently rolled with maturity dates through January 26, 2023.

TABLE 28 - Commercial Paper

As of June 30 (\$ in thousands)

Commercial paper	As of June 30, 2020	А	dditions	Reduc	tions	As of June 30, 2021	Ac	lditions	Re	ductions	As of une 30, 2022
Commercial paper	\$ -	\$	31,000	\$	-	\$ 31,000	\$	86,700	\$	(97,700)	\$ 20,000

The University incurred total fees of \$0.7 million in FY2022 and FY2021, respectively, associated with the use of commercial paper.

Line of Credit

During fiscal 2022, the University entered into line of credit agreements with Bank of America and State Street Bank with a maximum loan amount of \$75.0 million each, for a total maximum loan amount of \$150.0 million. The agreements had a maturity date of May 10, 2022.

During FY2022, the University amended the line of credit agreement with Bank of America for a maximum loan amount of \$150.0 million and allowed the State Street Bank line of credit to expire. The line of credit has a maturity date of May 1, 2023.

As of June 30, 2022, the outstanding balance on the line of credit was \$0.

12. Other Liabilities

Table 29 shows current and long-term portions of other liabilities as recorded in the Statements of Net Position (\$ in thousands):

TABLE 29 - Current Portion and Total Other Liabilities

As of June 30 (\$ in thousands)

Liabilities	As of J	une 30, 2021	Current portion as of June 30, 2021	As of June 30, 2022	(Current portion as of June 30, 2022
Compensated absences*	\$	121,440	\$ 97,562	\$ 129,152	\$	104,112
Workers' compensation*		18,538	2,541	19,656		3,544
Unearned revenues		142,951	96,685	180,763		120,833
Advances and deposits		19,734	5,441	19,262		5,232
Other liabilities		136,675	70,396	139,995		82,066

The University includes compensated absences and workers' compensation short-term liabilities within accounts payable and accrued expenses on the Statements of Net Position.

13. Fringe Benefits

During the years ended June 30, 2022 and 2021, the Commonwealth paid \$430.9 million and \$364.9 million, respectively, for the University's portion of fringe benefit costs which includes pension expense, health insurance for active employees and retirees, and terminal leave. Of this amount, the University reimbursed the Commonwealth \$158.0 million and \$119.3 million during the years ended June 30, 2022 and 2021, respectively. The remaining portion is included in revenue as state appropriations.



14. Benefit Plans

Defined Benefit Plan

The Massachusetts State Employees' Retirement System (MSERS) is a public employee retirement system (PERS) that administers a cost-sharing multi-employer defined benefit plan covering substantially all employees of the Commonwealth including University employees.

MSERS provides retirement, disability, survivor and death benefits to members and their beneficiaries. Massachusetts General Laws (MGL) establishes uniform benefit and contribution requirements for all contributory PERS. These requirements provide for superannuation retirement allowance benefits up to a maximum of 80% of a member's highest three-year to five-year average annual rate of regular compensation depending on the date of hire. Benefit payments are based upon a member's age, length of creditable service, and group creditable service, and group classification. The authority for amending these provisions rests with the Legislature.

The MSERS' funding policies were established by Chapter 32 of MGL. The Legislature has the authority to amend these policies. The annuity portion of the MSERS retirement allowance is funded by employees, who contribute a percentage of their regular compensation. Costs of administering the plan are funded out of plan assets.

Member contributions for MSERS vary depending on the most recent date of membership are presented in Table 30:

TABLE 30 - Membership Contributions

Hire Date	% of Compensation		
Prior to 1975	5% of regular compensation		
1975 - 1983	7% of regular compensation		
1984 - 6/30/1996	8% of regular compensation		
7/1/1996 – present	9% of regular compensation except for State Police which is 12% of regular compensation		
1979 – present	An additional 2% of regular compensation in excess of \$30,000		

In addition, members within this group who join the system on or after April 2, 2012 will have their withholding rate reduced to 6% after achieving 30 years of creditable service.

The University makes contributions on behalf of the employees through a fringe benefit charge assessed by the Commonwealth. The fringe benefit charge amounted to \$178.9 million and \$141.7 million for the years ended June 30, 2022 and 2021, respectively. Annual covered payroll was 76.9% and 78.3% of annual total payroll for the University for the years ended June 30, 2022 and 2021, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The net pension liability as of June 30, 2022 was determined based on a measurement date of June 30, 2021 from an actuarial valuation as of January 1, 2021 rolled forward to June 30, 2021. The net pension liability measured as of June 30, 2021 was determined based on a measurement date of June 30, 2020 from an actuarial valuation as of January 1, 2020 rolled forward to June 30, 2020. There are no significant changes known which would impact the total pension liability between the measurement date and the reporting date, other than typical plan experience.

At June 30, 2022 and 2021, the University reported a liability of \$276.3 million and \$644.9 million, respectively, for its proportionate share of MSERS net pension liability, respectively. The University's proportion of the net pension liability was based on a projection of the University's long-term share of contributions to the pension plan relative to the total projected contributions of all participating entities, actuarially determined. The University's proportion of the pension plan at measurement dates of June 30, 2021 and 2020 was 2.65% and 3.76%, respectively.

For the fiscal years ended June 30, 2022 and 2021, the University recognized a net pension benefit of \$5.3 million and net pension expense of \$100.9 million, respectively.

The University reported its proportionate share of MSERS's deferred outflows of resources and deferred inflows of resources related to pensions from the following sources as of June 30, 2022 and 2021 as presented in Tables 31 and 32 (\$ in thousands):

TABLE 31 - University's Proportionate Share of MSERS, FY2022

As of June 30, 2022 (\$ in thousands)

Pension resource	red outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 18,837	\$ -
Changes in proportion due to internal allocation	41,536	136,997
Employer contributions after measurement date	45,010	-
Differences between expected and actual experience	9,534	20,005
Net difference between projected and actual investment earnings on pension plan investments	-	108,331
Changes in proportion from Commonwealth	110	873
Total	\$ 115,027	\$ 266,206

TABLE 32 - University's Proportionate Share of MSERS, FY2021

As of June 30, 2021 (\$ in thousands)

Pension resource	red outflows of resources	Deferred inflows of resources
Changes of assumptions	\$ 36,564	\$ -
Changes in proportion due to internal allocation	60,820	12,552
Employer contributions after measurement date	31,495	-
Differences between expected and actual experience	20,519	4,173
Net difference between projected and actual investment earnings on pension plan investments	35,450	-
Changes in proportion from Commonwealth	487	1,572
Total	\$ 185,335	\$ 18,297

Amounts reported as deferred outflows of resources relating to pension resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction to pension expense (benefit) in the next fiscal year. The remaining difference between the University's balances of deferred outflows and inflows of resources will be recognized in pension expense (benefit) as presented in **Table 33**:

TABLE 33 - Amortization of Pension Expense in Future Years

(\$ in thousands)

Year ended June 30	Pension
2023	\$ (43,520)
2024	(42,752)
2025	(49,171)
2026	(60,746)
Total	\$ (196,189)

Actuarial Assumptions

Significant actuarial assumptions used at each respective measurement date are presented in Table 34:

TABLE 34 - Actuarial Assumptions

Assumption	June 30, 2021	June 30, 2020
Investment rate of return	7.00%	7.15%
Interest rate credited to the annuity savings fund	3.50%	3.50%
Cost of living increases on the first\$13,000 per year	3.00%	3.00%
Salary increases*	4.0% to 9.0%	4.0% to 9.0%
Mortality rates:		
Pre-retirement	RP-2014 Blue Collar Employees Scale MP-2020 **	RP-2014 Blue Collar Employees Scale MP-2016 **
Post-retirement	RP-2014 Blue Collar Healthy Annuitant Scale MP-2020 **	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **
Disability	RP-2014 Blue Collar Healthy Annuitant Scale MP-2020 ***	RP-2014 Blue Collar Healthy Annuitant Scale MP-2016 **

Salary increases were based on analysis of past experiences depending on group and length of service

Investment Allocation

Investment assets of MSERS are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2021 and 2020 are summarized in **Tables 35** and **36**:

TABLE 35 - Target Asset Allocation as of June 30, 2021

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.30%
Private equity	13.00%	7.80%
Portfolio completion strategies	11.00%	2.90%
Real estate	10.00%	3.70%
Value added fixed income	8.00%	3.90%
Timber / natural resources	4.00%	4.30%
Total	100.00%	

^{**} Set forward one year for females.

^{***} Set forward one year

TABLE 36 - Target Asset Allocation as of June 30, 2020

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.70%
Private equity	13.00%	8.20%
Portfolio completion strategies	11.00%	3.20%
Real estate	10.00%	3.50%
Value added fixed income	8.00%	4.20%
Timber / natural resources	4.00%	4.10%
Total	100.00%	

Discount Rate

The discount rate used to measure the total pension liability was 7.00% and 7.15% at June 30, 2021 and 2020, respectively. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Commonwealth's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity Analysis

Table 37 illustrates the impact of a 1% change in the discount rate for the net pension liability at June 30, 2022 and 2021 (\$ in thousands):

TABLE 37 - Sensitivity Analysis of Discount

As of June 30, 2022 and 2021 (\$ in thousands)

Fiscal year ended	1% Decrease	Current discount rate	1% Increase
June 30, 2022	\$ 422,938	\$ 276,313	\$ 155,799
June 30, 2021	849,667	644,879	476,558

Defined Contribution Plan

Non-vested faculty and certain other employees of the University can opt out of MSERS and participate in a defined contribution plan, the Optional Retirement Plan (ORP), administered by the Commonwealth's Department of Higher Education. As of June 30, 2022 and 2021, there were 2,191 and 2,057 participants in the ORP, respectively. Employees contribute at the same rate as members in MSERS and the Commonwealth matches 5% of employee contributions. The Commonwealth contributed \$8.9 million and \$8.5 million in 2022 and 2021, respectively. University employees contributed \$21.3 million and \$19.6 million in 2022 and 2021, respectively.

The MSERS and ORP retirement contributions of employees who become members of MSERS or ORP after January 1, 2011 are subject to a state compensation limit. Effective January 1, 2011, the University established a defined contribution plan, the University of Massachusetts 401(a) Retirement Gap Plan (Gap Plan). Employees with MSERS or ORP membership dates after January 1, 2011 are eligible to participate in the Gap Plan. Eligible employees begin participation in the Gap Plan when their regular compensation exceeds the state compensation limit in effect for the plan year, at which point their contributions to MSERS or ORP are required to stop for the remainder of the plan year. Employee contributions to the Gap Plan are mandatory and at the same rate as MSERS and ORP; the University contributes 5%. As of June 30, 2022 and 2021, the plan assets of the Gap Plan were \$8.8 million and \$9.4 million, respectively.

In addition, UMG offers a defined contribution retirement plan. Employees working at least 20 hours a week are eligible to participate in the plan after 90 days of employment. UMG contributes 3% of each employee's eligible annual salary, as defined by the plan.

Eligible employees may contribute up to 6% of their eligible salary and the University matches their contributions. UMG's total contribution to the plan was \$2.8 million for the period from September 1, 2022 to June 30, 2022.

Other component units may opt to offer defined contribution retirement plans. These are not material in relation to the University as a whole and detailed plan information is therefore not presented.

15. Other Postemployment Benefits

The Commonwealth administers the State Retirees' Benefit Trust, a single employer defined Postemployment Benefits Other Than Pensions (OPEB) Plan (the Plan). Benefits are managed by the Group Insurance Commission (GIC) and investments are managed by the Pension Reserves Investment Management Board (PRIM).

Benefits Provided

Under Chapter 32A of the MGL the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth. Substantially all of the Commonwealth's employees may become eligible for these benefits if they reach retirement age while working for the Commonwealth. Eligible retirees are required to contribute a specified percentage of the health care/benefit costs, which are comparable to contributions required from employees.

Employer and employee contribution rates are set in MGL. The Commonwealth recognizes its share of the costs on an actuarial basis. As of June 30, 2022 and 2021, the retirees' share of premium costs is between 10% - 20%, depending on the date of hire.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

The total OPEB liability as of June 30, 2022 was determined based on a measurement date of June 30, 2021 from an actuarial valuation as of January 1, 2021 rolled forward to June 30, 2021. The total OPEB liability as of June 30, 2021 was determined based on a measurement date of June 30, 2020 from an actuarial valuation as of January 1, 2020 rolled forward to June 30, 2020. There are no significant changes known which would impact the total OPEB liability between the measurement date and the reporting date, other than typical plan experience.

As of June 30, 2022 and 2021, the University reported a liability of \$485.1 million and \$829.8 million, respectively, for its proportionate share of the OPEB liability. The University's proportion of the OPEB liability was based on a projection of the University's longterm share of contributions to the OPEB plan relative to the total projected contributions of all participating entities, actuarially determined. The University's proportion of the OPEB plan at measurement dates of June 30, 2021 and 2020 was 3.03% and 4.01%, respectively.

For the fiscal years ended June 30, 2022 and 2021, the University recognized a net OPEB benefit of \$35.3 million and a net OPEB expense of \$40.5 million, respectively.

The University reported its proportionate share of deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources as of June 30, 2022, as shown in **Tables 38** and **39** (\$ in thousands):

TABLE 38 - University's Proportionate Share of OPEB, FY2022

As of June 30, 2022 (\$ in thousands)

OPEB resources	ed outflows esources	eferred inflows of resources
Changes of assumptions	\$ 40,744	\$ 95,435
Changes in proportion due to internal allocation	82,095	353,890
Employer contributions after measurement date	21,091	-
Differences between expected and actual experience	12,384	85,400
Net difference between projected and actual investment earnings on OPEB plan investments	-	5,896
Changes in proportion from Commonwealth	544	2,107
Total	\$ 156,858	\$ 542,728

TABLE 39 - University's Proportionate Share of OPEB, FY2021

As of June 30, 2021 (\$ in thousands)

OPEB resources	red outflows resources	D	eferred inflows of resources
Changes of assumptions	\$ 68,336	\$	80,198
Changes in proportion due to internal allocation	128,426		234,735
Employer contributions after measurement date	16,539		-
Differences between expected and actual experience	22,901		20,482
Net difference between projected and actual investment earnings on OPEB plan investments	2,399		-
Changes in proportion from Commonwealth	1,258		2,818
Total	\$ 239,859	\$	338,233

Amounts reported as deferred outflows of resources relating to OPEB resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction to OPEB expense (benefit) in the next fiscal year. The remaining difference between the University's balances of deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense (benefit) as shown in Table 40:

TABLE 40 - Amortization of OPEB Expense in Future Years

(\$ in thousands)

Year ended June 30	Pension
2023	\$ (91,194)
2024	(81,254)
2025	(80,638)
2026	(78,302)
2027	(75,573)
Total	\$ (406,961)

Actuarial Assumptions

Significant actuarial assumptions used at the 2021 measurement date are as follows:

Long-term rate of return on investment: 7.00%

Annual healthcare cost trend rates:

Developed based on the most recent published SAO-Getzen trend rate model, version 2021 b.

Short-term: Based on review of the plan's historical trend rates during fiscal years 2020 and 2021, along with industry surveys, separately for non-Medicare and Medicare benefits. The industry surveys were used to predict short-term future per capita cost increases.

Long-term: Based on the most recent published SAO-Getzen model for trend rates beginning in 2022 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy. See **Table 41** for annual healthcare cost trend rates.

TABLE 41 - Annual Healthcare Cost Trend Rates

Year	Medicare benefits	Non-Medicare benefits
2021	4.40%	7.30%
2022	4.49%	7.06%
2023	4.57%	6.83%
2024	4.66%	6.59%
2025	4.75%	6.36%
2030	5.18%	5.18%
2040	5.18%	5.18%
2050	5.18%	5.18%
2060	4.83%	4.83%
2070	4.38%	4.38%
2075+	4.04%	4.04%

Getzen long run growth factors:

• Inflation: 2.50%

· Real GDP Growth: 1.50% Excess Medical Growth: 1.10%

Mortality rates:

RP-2014 Blue Collar Employees projected with Scale MP-2020 from the central year, with females set forward one year

Participation rates:

- 100% of employees currently electing healthcare coverage are assumed to elect coverage at retirement.
- 35% of employees currently opting out of active health coverage are assumed to elect to enroll in retiree coverages.
- 85% of current and future vested terminated participants will elect health care benefits at age 55 or if later, the participant's current age.
- · Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.
- 100% of spouses are assumed to elect to continue coverage after retiree's death.
- · Current non-Medicare eligible retirees and spouses (if covered) under age 65 who are in a POS/PPO plan are assumed to move to an Indemnity plan if they are Medicare eligible at 65. All others are assumed to remain in their currently elected product type (Indemnity/POS/PPO/HMO).
- Future retirees are assumed to enroll in the existing plan in the same proportion as the current retiree mix, as shown in Table 42. These proportions are established separately for non-Medicare and Medicare coverage for each product type.

TABLE 42 - Future Enrollment Proportions

Plan	Retirement age under 65	Retirement age over 65
Indemnity	28.0%	96.0%
POS/PPO	60.0%	0.0%
НМО	12.0%	4.0%

Significant actuarial assumptions used at the 2020 measurement date are as follows:

Long-term rate of return on investment: 7.15%

Annual healthcare cost trend rates:

Developed based on the most recent published GAO-Getzen trend rate model, version 2020_b.

Short-term: Based on review of the plan's historical trend rates during fiscal years 2019 and 2020, along with industry surveys, separately for non-Medicare and Medicare benefits. Surveys were used to predict short-term future per capita cost increases.

Long-term: Based on the most recent published SAO-Getzen model for trend rates beginning in 2024 and thereafter, based on the plan's long-term inflation assumption and reasonable macro-economic assumptions for the growth of health care expenditures during this period relative to the general economy. See **Table 43** for annual healthcare cost trend rates.

TABLE 43 - Annual Healthcare Cost Trend Rates

Year	Medicare benefits	Non-Medicare benefits
2020	4.90%	6.70%
2021	4.80%	6.60%
2022	4.70%	6.50%
2023	4.60%	6.40%
2024	4.70%	6.20%
2030	5.18%	5.18%
2040	5.18%	5.18%
2050	5.18%	5.18%
2060	4.84%	4.84%
2070	4.38%	4.38%
2075+	4.04%	4.04%

Getzen long run growth factors:

Inflation: 2.50%

• Real GDP Growth: 1.50%

• Excess Medical Growth: 1.10%

Mortality rates:

RP-2014 Blue Collar Employees projected with Scale MP-2016 with females set forward one year

Participation rates:

- 100% of employees currently electing healthcare coverage are assumed to elect coverage at retirement.
- 35% of employees currently opting out of active health coverage are assumed to elect to enroll in retiree coverages.
- 85% of current and future vested terminated participants will elect health care benefits at age 55 or later.
- · Retirees who currently elect to waive their coverage are assumed to remain uncovered in the future.
- 100% of spouses are assumed to elect to continue coverage after retiree's death.

- · Current non-Medicare eligible retirees and spouses (if covered) under age 65 who are in a POS/PPO plan are assumed to move to an Indemnity plan if they are Medicare eligible at 65. All others are assumed to remain in their currently elected product type.
- Future retirees are assumed to enroll in the existing plan in the same proportion as the current retiree mix, as shown in Table 44. These proportions are established separately for non-Medicare and Medicare coverage for each product type.

TABLE 44 - Future Participation Rates

Plan	Retirement age under 65	Retirement age over 65
Indemnity	28.0%	96.0%
POS/PPO	60.0%	0.0%
НМО	12.0%	4.0%

Investment Allocation

Investment assets of the Plan are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2021 and 2020 are summarized in **Tables 45** and **46**:

TABLE 45 - Target Asset Allocation as of June 30, 2021

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.30%
Private equity	13.00%	7.80%
Portfolio completion strategies	11.00%	2.90%
Real estate	10.00%	3.70%
Value added fixed income	8.00%	3.90%
Timber / natural resources	4.00%	4.30%
Total	100.00%	

TABLE 46 - Target Asset Allocation as of June 30, 2020

Asset class	Target allocation	Long-term expected real rate of return
Global equity	39.00%	4.80%
Core fixed income	15.00%	0.70%
Private equity	13.00%	8.20%
Portfolio completion strategies	11.00%	3.20%
Real estate	10.00%	3.50%
Value added fixed income	8.00%	4.20%
Timber / natural resources	4.00%	4.10%
Total	100.00%	

Discount Rate

The discount rates used to measure the total OPEB liability as of June 30, 2021 and 2020 were 2.77% and 2.28%, respectively. These rates were based on a blend of the Bond Buyer Index rates of 2.16% and 2.21%, respectively, as of the measurement dates June 30, 2021 and 2020 and the long term rate of return on Plan investments of 7.00% and 7.15%, respectively. The Plan's fiduciary net position was not projected to be available to make all projected future benefit payments for current plan members. The projected "depletion date" when projected benefits are not covered by projected assets is 2041. Therefore, the long-term expected rate of return on plan investments was not applied to all periods of projected benefit payments to determine the total OPEB liability as of June 30, 2021 and 2020.

Sensitivity Analysis of Discount

Table 47 presents the net OPEB liability of the Commonwealth calculated using the discount rate, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1- percentage-point lower or 1-percentage-point higher than the current rate (\$ in thousands):

TABLE 47 - Sensitivity Analysis of Discount

As of June 30, 2021 and 2020 (\$ in thousands)

Fiscal year ended	1% Decrease		Current discount rate	1% Increase			
June 30, 2021	\$ 576,343	\$	485,141	\$	411,679		
June 30, 2020	934,562		829,808		697,550		

Sensitivity Analysis of Healthcare Cost Trend Rate

Table 48 presents the net OPEB liability of the Commonwealth, as well as what the net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate (\$ in thousands):

TABLE 48 - Sensitivity Analysis of Healthcare Cost Trend Rate

As of June 30, 2021 and 2020 (\$ in thousands)

Fiscal year ended	1% Decrease		Current discount rate	1% Increase
June 30, 2021	\$ 397,231	\$	485,141	\$ 599,717
June 30, 2020	673,996		829,808	1,036,817



16. Operating Expenses and Interest

Table 49 summarizes the University's operating and interest expenses by natural and functional classification for the year ended June 30, 2022 (\$ in thousands):

TABLE 49 - Operating Expenses and Interest, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Expense / interest	mpensation nd benefits	Supplies and services	olarships and lowships	eciation and tization	Int	erest	Total
Educational and general							
Instruction	\$ 814,334	\$ 116,028	\$ -	\$ -	\$	-	\$ 930,362
Research	320,970	230,397	-	-		-	551,367
Public service	53,090	18,559	-	-		-	71,649
Academic support	134,984	59,169	-	-		-	194,153
Student services	137,545	73,543	-	-		-	211,088
Institutional support	234,661	81,149	-	-		-	315,810
Operation and maintenance of plant	109,063	133,686	-	-		-	242,749
Depreciation and amortization	-	-	-	330,715		-	330,715
Scholarships and fellowships	-	-	121,334	-		-	121,334
Auxiliary enterprises	141,473	179,062	-	-		-	320,535
Other expenditures							
Independent operations	23,860	34,722	-	-		-	58,582
Public service activities	 105,589	147,831	-	-		-	253,420
Total operating expenses	\$ 2,075,569	\$ 1,074,146	\$ 121,334	\$ 330,715	\$	-	\$ 3,601,764
Interest expense	-	-	-	-	1	17,244	117,244
Total operating expenses and interest	\$ 2,075,569	\$ 1,074,146	\$ 121,334	\$ 330,715	\$ 1 1	7,244	\$ 3,719,008



Table 50 summarizes the University's operating expenses and interest by natural and functional classification for the year ended June 30, 2021 (\$ in thousands):

TABLE 50 - Operating Expenses and Interest, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Expense / interest	mpensation id benefits	Supplies and Services	Scholarships and fellowships	reciation and ortization	Interest	Total
Educational and general						
Instruction	\$ 837,583	\$ 97,125	\$ -	\$ -	\$ -	\$ 934,708
Research	325,462	225,131	-	-	-	550,593
Public service	70,992	17,778	-	-	-	88,770
Academic support	147,941	51,515	-	-	-	199,456
Student services	118,152	22,955	-	-	-	141,107
Institutional support	199,746	111,883	-	-	-	311,629
Operation and maintenance of plant	115,842	105,908	-	-	-	221,750
Depreciation and amortization	-	-	-	318,828	-	318,828
Scholarships and fellowships	-	-	85,500	-	-	85,500
Auxiliary enterprises	120,690	92,809	-	-	-	213,499
Other expenditures						
Independent operations	24,101	29,384	-	-	-	53,485
Public service activities	95,425	165,272	-	-	-	260,697
Total operating expenses	\$ 2,055,934	\$ 919,760	\$ 85,500	\$ 318,828	\$ -	\$ 3,380,022
Interest expense	-	-	-	-	109,144	109,144
Total operating expenses and interest	\$ 2,055,934	\$ 919,760	\$ 85,500	\$ 318,828	\$ 109,144	\$ 3,489,166

17. Unrestricted Net Position

According to the University's reserve policy, unrestricted net position is designated for certain purposes. Below are the designations used by the University, as described in the University's policy:

- Unexpended plant and facilities: funds designated for capital projects, equipment and the major renovations of all existing buildings including research, education and general, and auxiliary.
- Auxiliary enterprises: funds related to self-supporting activities which provide non-instructional support in the form of goods and services to students, faculty, and staff upon payment of a specific user charge or fee.
- Education and general: funds designated for operational requirements, academic initiatives, research, faculty recruitment, and University initiatives.
- Quasi-endowment: funds related to unrestricted resources invested in the Foundation's pooled endowment fund, intended to be invested for the long-term unless otherwise approved by the Board of Trustees or a designated authority.
- · Stabilization: funds designated to provide budgetary stabilization for operations due to unforeseen and/or uncontrollable circumstances to ensure responsible long-term financial stability.
- Other unrestricted: funds undesignated for a specific use or purpose.

Table 51 summarizes the University's unrestricted net position as of June 30, 2022 and 2021 (\$ in thousands):

TABLE 51 - Unrestricted Net Position

As of June 30, 2022 and 2021 (\$ in thousands)

Unrestricted resources		2022	2021
Unexpended plant and facilities	\$	418,477	\$ 264,704
Auxiliary enterprises		89,237	104,751
Education and general		410,252	394,833
Quasi-endowment		379,143	475,167
Stabilization		152,667	144,684
Other unrestricted		30,023	84,424
Subtotal		1,479,799	1,468,563
Unfunded portion of pension liabilities		(427,492)	(477,841)
Unfunded portion of postretirement benefits other than pension liabilities	_	(871,010)	 (928,182)
Total unrestricted net position	\$	181,297	\$ 62,540

18. Commitments and Contingencies

In June 2019, the University entered into an agreement to lease property located at 200 Mount Vernon Street in Dorchester, Massachusetts to an unrelated party (the Developer). The Developer plans to develop a mixed-use opportunity at the site. Under the terms of the agreement, the developer, subject to certain contingencies, may enter into a 99-year ground lease for an initial fixed rent upfront payment of up to \$235.0 million, with a minimum payment of \$192.5 million.

As of June 30, 2022, pursuant to the agreement, the Developer has made deposits totaling \$11.0 million into an escrow account that will be applied to the initial fixed rent payment at closing. As of June 30, 2022, the \$11.0 million in funds would only be returned to the Developer if the University failed to perform at closing.

In October 2022, the \$11.0 million became a fully non-refundable deposit that has been withdrawn from escrow and released to the University without conditions. Additionally, the University has the ability to terminate the agreement at any time subject to the terms of the agreement.

The University has outstanding purchase commitments with contractors for the construction of certain facilities as of June 30, 2022 and 2021 of \$181.5 million and \$162.8 million, respectively. The University has entered an energy performance contract that is being managed by the Commonwealth's Division of Capital Asset Management and Maintenance (DCAMM) under its Clean Energy Investment Program. This project includes 32 energy conservation measures. The University has a commitment to the Commonwealth for Clean Energy Investment Program funds used through June 30, 2022 and 2021 of \$36.4 million and \$41.2 million, respectively.

From time to time, the University is involved in routine litigation that arises in the ordinary course of business. There are no significant legal proceedings to which the University is a party for which management believes the ultimate outcome would have a material adverse effect on the University's financial position.

19. Blended Component Units

Condensed information for the University's blended component units, the Building Authority, WCCC and UMG as of June 30, 2022 is presented in **Tables 52**, **53** and **54** (\$ in thousands):

TABLE 52 - Condensed Information from the Statements of Net Position, FY2022

As of June 30, 2022 (\$ in thousands)

Condensed Information from the Statements of Net Position	Building Authority	Eli	minations	wccc	Eliminations	UMG	Eliminations
Capital assets, net	\$ 3,886,205	\$	(457,933)	\$ 377,949	\$ -	\$ 50,197	\$ -
Lease receivable	161,183		(8,360)	174,211	-	-	-
Other assets	787,816		213,692	141,208	-	61,097	-
Deferred outflows	109,949		(284)	8,120	-	-	-
Total assets and deferred outflows	4,945,153		(252,885)	701,488	-	111,294	-
Debt, including commercial paper	3,525,668		(200,883)	311,871	-	140,787	-
Lease liability	30,796		(10,068)	-	-	5,671	-
Other liabilities	113,860		(13,708)	14,501	-	29,201	-
Deferred inflows	64,358		(3,189)	169,128	-	-	-
Total liabilities and deferred inflows	3,734,682		(227,848)	495,500	-	175,659	
Total net position	\$1,210,471	\$	(25,037)	\$ 205,988	\$ -	\$ (64,365)	\$ -

TABLE 53 - Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position	uilding uthority	Eliminations		wccc		Eliminations		UMG		Eliminations	
Other revenues	\$ 306,884	\$	(153,122)	\$	97,388	\$	(52,816)	\$	101,936	\$	-
Total revenues	306,884		(153,122)		97,388		(52,816)		101,936		-
Operation and maintenance of capital assets	5,743		(1,055)		26,632		(25,118)		-		-
Depreciation	164,139		(23,001)		17,771		-		4,292		-
Interest expense	114,102		(105,069)		9,717		-		2,702		-
Other expenses	9,557		(7,714)		20,455		(27,698)		111,480		(420)
Total expenses	293,541		(136,839)		74,575		(52,816)		118,474		(420)
Increase (decrease) in net position	\$ 13,343	\$	(16,283)	\$	22,813	\$	-	\$	(16,538)	\$	420

TABLE 54 - Condensed Information from the Statements of Cash Flows, FY2022

For the year ended June 30, 2022 (\$ in thousands)

Condensed Information from the Statements of Cash Flows	Building Authority Elimir		minations	ons WC		Eliminations		UMG		minations
Net cash provided by (used in) operating activities	\$ 186,174	\$	(16,283)	\$	2,948	\$ -	\$	(26,682)	\$	420
Net cash provided by (used in) investing activities	(195,862)		-		(33,474)	-		-		-
Net cash provided by noncapital financing activities	-		-		-	-		2,915		-
Net cash provided by (used in) capital and other financing activities	98,007		-		33,133	-		(2,957)		-
Change in cash and cash equivalents	\$ 88,319	\$	(16,283)	\$	2,607	\$ -	\$	(26,724)	\$	420

Condensed information for the University's blended component units, the Building Authority and WCCC as of June 30, 2021 is presented in **Tables 55**, **56** and **57** (\$ in thousands):

TABLE 55 - Condensed Information from the Statements of Net Position, FY2021

As of June 30, 2021 (\$ in thousands)

Condensed Information from the Statements of Net Position	Building Authority		Eli	iminations	wccc	Eliminations	
Capital assets, net	\$	3,817,026	\$	(450,458)	\$ 372,320	\$	-
Lease receivable		161,854		(8,926)	103,414		-
Other assets		525,874		166,039	151,604		(2,544)
Deferred outflows		119,261		(941)	8,764		-
Total assets and deferred outflows		4,624,015		(294,286)	636,102		(2,544)
Debt, including commercial paper		3,236,465		(234,002)	329,798		-
Lease liability		22,320		-	-		-
Other liabilities		109,632		(29,662)	24,981		(2,544)
Deferred inflows		58,470		(3,803)	137,648		-
Total liabilities and deferred inflows		3,426,887		(267,467)	492,427		(2,544)
Total net position	\$	1,197,128	\$	(26,819)	\$ 143,675	\$	-

TABLE 56 - Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position, FY2021 For the year ended June 30, 2021 (\$ in thousands)

Condensed Information from the Statements of Revenues, Expenses, and Changes in Net Position	Building Authority	Eliminations	wccc	El	iminations
Other revenues	\$ 226,638	\$ (121,893)	\$ 104,756	\$	(53,591)
Total revenues	226,638	(121,893)	104,756		(53,591)
Operation and maintenance of capital assets	4,711	(5,033)	25,834		(23,782)
Depreciation	158,488	(19,510)	29,195		-
Interest expense	109,213	(104,534)	6,636		-
Other expenses	10,064	(9,821)	19,619		(29,809)
Total expenses	282,476	(138,898)	81,284		(53,591)
Increase in net position	\$ (55,838)	\$ 17,005	\$ 23,472	\$	-

TABLE 57 - Condensed Information from the Statements of Cash Flows, FY2021

For the year ended June 30, 2021 (\$ in thousands)

Condensed Information from the Statements of Cash Flows	Building Authority	Е	liminations		wccc	Eliminations	
Net cash provided by (used in) operating activities	118,497	\$	17,005	\$	4,976	\$ -	
Net cash provided by (used in) investing activities	8,381		-		(51,428)	-	
Net cash provided by (used in) capital and other financing activities	(250,177)		-		47,861	-	
Change in cash and cash equivalents	\$ (123,299)	\$	17,005	\$	1,409	\$ -	

The UMass Amherst Foundation, UMass Medical School Foundation and the UMLARC are not material in relation to the other blended component units nor the University as a whole and is therefore not presented in the above condensed information.

20. Discretely Presented Component Units

As described in Note 1, UMF and UMDF are discretely presented component units. These Foundations are presented in the aggregate in the accompanying financial statements. Following is supplemental information on UMF's non-agency investments, which is not included in its entirety elsewhere in these financial statements.

This note excludes non-University agency investments in the amount of \$20.5 million and \$28.4 million as of June 30, 2022 and 2021. This note does not include investment information for UMDF assets not held by UMF given the immaterial nature of UMDF's balances and activities.

Custodial Credit Risk

UMF maintains depository, payroll, disbursement, receipt, and imprest accounts. In addition to bank account deposits, UMF held money market instruments which are classified as investments. Interest bearing and money market accounts carry Federal Deposit Insurance Corporation (FDIC) insurance up to \$250,000 per account. None of the accounts are collateralized above the FDIC insured amounts.

Concentration of Credit Risk — As of June 30, 2022 and 2021, there is no concentration of investments from one issuer equal or greater than 5% of the portfolio. Investments issued or guaranteed by the U.S. government, as well as investments in mutual funds and other pooled investments are excluded from consideration when evaluating concentration risk.

Credit Risk — UMF's investment policy allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager. Nationally recognized statistical rating organizations, such as Standard & Poor's (S&P) assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors.

Table 58 presents the unrated debt investments at fair value by credit quality of UMF's non-agency investment portfolio as of June 30, 2022 (\$ in thousands):

TABLE 58 - Debt Investments by Credit Quality, FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	2022	S&P rating
U.S. Treasury securities	\$ 67,367	AAA
Bond funds, including exchange traded funds	2,046	Not Rated
Total debt securities	\$ 69,413	

Table 59 presents the unrated debt investments at fair value by credit quality of UMF's non-agency investment portfolio as of June 30, 2021 (\$ in thousands):

TABLE 59 - Debt Investments by Credit Quality, FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	2021	S&P rating
U.S. Treasury securities	\$ 47,550	AAA
Total debt securities	\$ 47,550	

Interest Rate Risk — UMF's Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by asset class by limiting investments through targeted allocations to different asset classes.

Table 60 presents the fair value by investment maturity of the unrated debt investments of UMF's non-agency investment portfolio as of June 30, 2022 (\$ in thousands):

TABLE 60 - Debt Investments by Maturity, FY2022

As of June 30, 2022 (\$ in thousands)

Debt securities	Le	ss than 1 year	1 to 5 years		6 to 10 years		ore than 10 years	Total
U.S. Treasury securities	\$	-	\$	41,264	\$	21,381	\$ 4,722	\$ 67,367
Bond funds, including exchange traded funds		40		2,006		-	-	2,046
Total debt securities	\$	40	\$	43,270	\$	21,381	\$ 4,722	\$ 69,413

Table 61 presents the fair value by investment maturity of the unrated debt investments of UMF's non-agency investment portfolio as of June 30, 2021 (\$ in thousands):

TABLE 61 - Debt Investments by Maturity, FY2021

As of June 30, 2021 (\$ in thousands)

Debt securities	2021	Investment maturity
U.S. Treasury securities	\$ 47,550	1 to 5 years
Total debt securities	\$ 47,550	



Fair Value Measurement — UMF's fair value measurement disclosure is captured in Note 4. Additional disclosure related to UMF's non-agency investments is as noted below.

Table 62 summarizes the fair value of UMF's non-agency investments by type as of June 30, 2022 (\$ in thousands):

TABLE 62 - Fair Value Hierarchy of Non-Agency Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Non-agency investments	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	65,637	\$ -	\$ -	\$ 65,637
Debt securities					
U.S. Treasury securities	-	67,367	-	-	67,367
Bond funds, including exchange traded funds	-	2,046	-	-	2,046
Total debt securities	-	69,413	-	-	69,413
Equity securities					
Domestic equities	-	65,685	-	-	65,685
International equities	-	29,907	-	-	29,907
Total equity securities	-	95,592	-	-	95,592
Alternative investments					
Multi-strategy hedge funds					
Equity	228,635	-	-	-	228,635
Long/short	157,063	-	-	-	157,063
Fixed income	31,830	-	-	-	31,830
Absolute return	36,059	-	-	-	36,059
Real assets	8,807	-	-	-	8,807
Private equity	76,036	-	-	-	76,036
Private debt	14,686	-	-	-	14,686
Private real estate	8,388	-	-	-	8,388
Annuity & life income pooled funds	3,404	-	-	-	3,404
Total alternative investments	564,908	-	-	-	564,908
Total investments	\$ 564,908	\$ 230,642	\$ -	\$ -	\$ 795,550

Table 63 summarizes the fair value of UMF's non-agency investments by type as of June 30, 2021 (\$ in thousands):

TABLE 63 - Fair Value Hierarchy of Non-Agency Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Non-agency investments	Investments measured at NAV	Investments classified in the fair value hierarchy Level 1	Investments classified in the fair value hierarchy Level 2	Investments classified in the fair value hierarchy Level 3	Total
Money market funds	\$ -	\$ 45,536	\$ -	\$ -	\$ 45,536
Debt securities					
U.S. Treasury securities	-	47,550	-	-	47,550
Total debt securities	-	47,550	-	-	47,550
Equity securities					
Domestic equities	-	85,997	-	554	86,551
International equities	-	30,690	-	-	30,690
Total equity securities	-	116,687	-	554	117,241
Alternative investments					
Multi-strategy hedge funds					
Equity	255,591	-	-	-	255,591
Long/short	167,262	-	-	-	167,262
Fixed income	35,282	-	-	-	35,282
Absolute return	17,588	-	-	-	17,588
Real assets	8,061	-	-	-	8,061
Private equity	71,503	-	-	-	71,503
Private debt	17,644	-	-	-	17,644
Private real estate	8,558	-	-	-	8,558
Annuity & life income pooled funds	3,470	-		-	3,470
Total alternative investments	584,959		-	-	584,959
Total investments	\$ 584,959	\$ 209,773	-	\$ 554	\$ 795,286



Table 64 presents unfunded commitments, redemption frequency and notice period for non-agency investments that have been valued using NAV as a practical expedient as of June 30, 2022 (\$ in thousands):

TABLE 64 - Alternative Non-Agency Investments, FY2022

As of June 30, 2022 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Common trust funds	\$ 3,404	\$ -	Daily		No lock-up restrictions
Multi-strategy hedge funds					
Equity	228,635	-	Daily to quarterly	1–90 days	Lock-up provisions range from none to 2 years.
Long/short	157,063	-	Quarterly to 45–90 days		Lock-up provisions range from none to 2 years.
Fixed income	31,830	-	Quarterly to semi- annual	**	No lock-up restrictions
Absolute return	36,059	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	8,807	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	76,036	21,115	Closed end funds	*	Not redeemable
Private debt	14,686	9,839	Closed end funds	*	Not redeemable
Private real estate	8,388	1,476	Closed end funds	*	Not redeemable
Total	\$564,908	\$ 32,430			

UMF has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1–5 years. Liquidity is expected to be received in the next 1–9 years.

Table 65 presents unfunded commitments, redemption frequency and notice period for non-agency investments that have been valued using NAV as a practical expedient as of June 30, 2021 (\$ in thousands):

TABLE 65 - Alternative Non-Agency Investments, FY2021

As of June 30, 2021 (\$ in thousands)

Alternative investments	NAV	Unfunded commitments	Redemption terms	Notice period	Redemption restrictions
Multi-strategy hedge funds			•	,	
Equity	\$ 255,591	\$ -	Daily to quarterly	1-90 days	Lock-up provisions range from none to 2 years.
Long/short	167,262	Quarterly to 45		45-90 days	Lock-up provisions range from none to 3 years.
Fixed income	35,282	-	- Quarterly **		Lock-up provisions range from none to 1 year.
Absolute return	17,588	-	Quarterly to annual	45-65 days	No lock-up restrictions
Real assets	8,061	-	Annual	90 days	No lock-up restrictions
Private equity and venture capital	71,503	14,498	Closed end funds	*	Not redeemable
Private debt	17,644	11,657	Closed end funds	*	Not redeemable
Private real estate	8,558	1,716	Closed end funds	*	Not redeemable
Annuity & life income pooled funds	3,470	-	Daily		No lock-up restrictions
Total	\$584,959	\$ 27,871			

UMF has made commitments to various private equity and venture debt partnerships. The University expects these funds to be called over the next 1–5 years. Liquidity is expected to be received in the next 1–9 years.

** Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days

^{**} Includes fund(s) that restrict redemptions such that redemptions are at the sole discretion of the Fund. Redemption terms require 60 to 90 days notice.

Related Party Transactions

Members of the University's Board of Trustees and Officers may, from time to time, be associated, either directly or indirectly, with companies doing business with the University. The University requires an annual disclosure of significant financial interests in, family relationships, significant management function, or substantial business with entities doing business with the University by members of the University's Board of Trustees and Officers. When such relationships exist, measures are taken to assess potential conflicts of interest to protect the best interests of the University and ensure compliance with relevant conflict of interest laws and policy. The University's conflict of interest policy also requires, among other things, that no member of the Board of Trustees or Officer may participate in any decision in which they (or an immediate family member) has a material financial interest.

Subsequent Events

On July 7, 2022, the University entered into a public-private partnership agreement with Mass Ave Housing Partners LLC, to carry out the design, construction, financing, operation, management and maintenance of a portion of the Student Housing Project consisting of approximately 600 beds of undergraduate apartment-style housing and related infrastructure, including residential dining commons and parking and approximately 200 beds of graduate student apartment-style housing and related infrastructure, including parking.

The estimated cost of construction of the Student Housing Project is \$250.0 million.

Mass Ave Housing Partners LLC will also manage, maintain, and operate the Student Housing Facilities for a term of 65-years.

For purposes of determining the effects of subsequent events on these financial statements, management has evaluated events subsequent to June 30, 2022 and through December 15, 2022, the date on which the financial statements were issued.



Required Supplementary Information (unaudited)

For the last ten years* (\$ in thousands)

*Until a full ten year trend is compiled, the University is presenting only information for the years for which information is available.

Schedule of the University's Proportionate Share of the Net Pension Liability — **Massachusetts State Employees' Retirement System**

Based on the measurement date, June 30

Liability	2021	2020	2019	2018	2017	2016	2015	2014
University's proportion of the net pension liability	2.65%	3.76%	3.60%	3.09%	3.28%	3.12%	3.59%	3.49%
University's proportionate share of the net pension liability	\$ 276,313	\$ 644,879	\$ 526,739	\$ 409,319	\$ 420,234	\$ 429,871	\$ 408,418	\$ 237,134
University's covered- employee payroll	\$1,216,914	\$1,264,971	\$1,247,098	\$1,242,525	\$1,168,661	\$1,156,082	\$1,139,719	\$1,061,132
University's proportionate share of the net pension liability as a percentage of its covered-employee payroll	22.71%	50.98%	42.24%	32.94%	35.96%	37.18%	35.83%	22.35%
Plan fiduciary net position as a percentage of total pension liability	77.54%	62.48%	66.28%	67.91%	67.21%	63.48%	67.87%	76.32%

Schedule of the University's Contributions — Massachusetts State Employees' Retirement System

For the fiscal year ended June 30

Contributions	2022		20	021		2020		2019		2018		2017		2016		2015
Contractually required contribution	\$ 45,01	0	\$ 3	31,495	\$	40,617	\$	35,843	\$	28,292	\$	25,618	\$	22,386	\$	22,386
Contributions in relation to the contractually required contribution	(45,01	0)	(3	31,495)		(40,617)		(35,843)		(28,292)		(25,618)		(22,386)		(22,386)
Contribution deficiency (excess)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
University's covered- employee payroll	\$1,318,29	8	\$1,21	16,914	\$1	,264,971	\$1	,247,098	\$1	,242,525	\$1	,168,661	\$1	,156,082	\$1	,139,719
Contributions as a percentage of covered-employee payroll	3.41	%		2.59%		3.21%		2.87%		2.28%		2.19%		1.94%		1.96%

Schedule of the University's Proportionate Share of the Net Other Postemployment Benefits (OPEB) **Liability** — State Retirees' Benefit Trust

Based on the measurement date, June 30

Liabilities	2021	2020	2019	2018 (restated)	2017
University's proportion of the net OPEB	3.03%	4.01%	5.43%	4.82%	4.67%
University's proportionate share of the net OPEB	\$ 485,141	\$ 829,808	\$ 992,991	\$ 895,669	\$ 817,357
University's covered-employee payroll	\$1,216,914	\$1,264,971	\$1,247,098	\$1,242,525	\$1,168,661
University's proportionate share of the net OPEB as a percentage of its covered-employee payroll	39.87%	65.60%	79.62%	72.08%	69.94%
Plan fiduciary net position as a percentage of total OPEB liability	10.70%	6.40%	6.96%	6.01%	4.80%

Schedule of the University's Contributions — State Retirees' Benefit Trust

For the fiscal year ended June 30

Contributions		2022		2021		2020		2019		2018
Contractually required contribution	\$	21,091	\$	16,538	\$	21,040	\$	26,137	\$	21,421
Contributions in relation to the contractually required contribution		(21,091)		(16,538)		(21,040)		(26,137)		(21,421)
Contribution deficiency (excess)	\$	-	\$	-	\$	-	\$	-	\$	-
University's covered-employee payroll	\$1	,318,298	\$1	1,216,914	\$1	,264,971	\$1	,247,098	\$1	,242,525
Contributions as a percentage of covered-employee payroll		1.60%		1.36%		1.66%		2.10%		1.72%



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