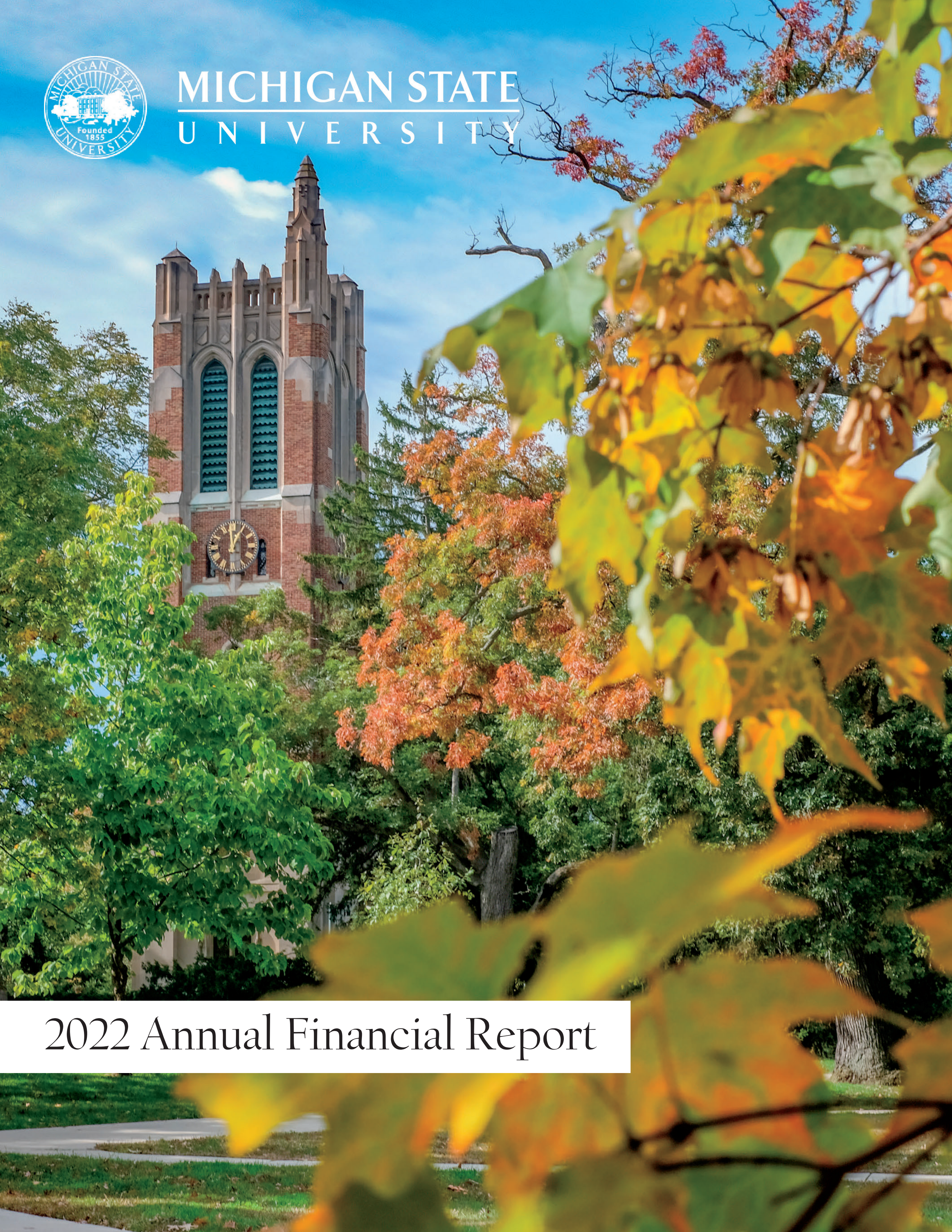

MICHIGAN STATE UNIVERSITY

2022 Annual Financial Report

TABLE OF CONTENTS

Page

MICHIGAN STATE UNIVERSITY
TRUSTEES, EXECUTIVE TEAM, AND FINANCE MANAGEMENT

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Assistant to the President

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Senior Vice President, Chief
Financial Officer, and Treasurer

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Vice President of Financial
Planning and Analysis

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Associate Vice President
and University Controller

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MBA
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Management and Insurance

Evonne Pedawi
Executive Director of
Contract and Grant
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Treasury and Financial
Management

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Associate Vice President for
Research and Sponsored
Programs Administration

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Assistant Vice President for
Financial Planning and Budget

OFFICE OF THE CONTROLLER

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Associate Vice President
and University Controller

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Associate Controller

John L. Thelen, CPA, MSA
Assistant Controller

Shea Bryant, CPA, MSA
Financial Analysis and
Reporting Manager

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Chief Accountant

Ethel J. Mason, CPA
Accounting Manager

Lynn Lee, MBA
Budget and Human
Resources Manager

Mary H. Nelson, CPA, ISA
University Financial
Services Manager

Edward Phillips, GTP
University Travel Manager

Elizabeth L. Powers
University Tax Manager

Kathryn Reasner, CPA, MSA
Receivables Manager

Laurie K. Schlenke
Student Account Services
Manager

Lindy Smith, MSA
Payroll Operations Manager

Steven J. Ueberroth
Finance Business Application
Support Functional Manager

Amanda Zhang
Finance Business Application
Support Technical Manager

MICHIGAN STATE
UNIVERSITY

October 27, 2022

We are pleased to present Michigan State University's financial report for the fiscal years ending June 30, 2022, and June 30, 2021. The financial report was prepared in accordance with generally accepted accounting principles for public colleges and universities as defined by the Governmental Accounting Standards Board (GASB). The Board of Trustees adopted the report as part of MSU's commitment to report annually on its fiscal affairs. Plante & Moran, PLLC, certified public accountants, audited these financial statements. The information reported fairly represents the University's financial position.

Financial Report Highlights for the fiscal year ending June 30, 2022:

- The University's financial assets totaled $8.5 billion.
- Revenues totaled $2.7 billion while expenses totaled $2.9 billion.
- To date, the University has been awarded $158 million in federal Higher Education Emergency Relief Funds through various legislation. All of these funds have been expended for eligible purposes, including $79 million in fiscal year 2022.
- Auxiliary and departmental activities revenue totaled $741 million as many COVID-19 pandemic restrictions were lifted, allowing for a more standard operating year.
- MSU's net position was $5.2 billion.

MSU has been working to advance knowledge and transform lives for more than 165 years by making its exceptional programs accessible to students from Michigan and from around the globe. MSU's strength and stature as one of the top research universities in the world is a testament to its outstanding faculty, staff, and students who amidst the challenges of the pandemic continue to find new and innovative ways to excel.

As our nation's pioneer land-grant University, MSU embraces its mission and delivers world-class instruction, research, and public service to solve the world's most pressing problems. Through the creativity, determination and hard work of its faculty, staff, students, alumni, and worldwide supporters, MSU continues to make a significant impact. Go Green!

Lisa A. Frace
Senior Vice President, Chief Financial Officer, and Treasurer

Lisa A Frace

Senior Vice President,
Chief Financial Officer,
and Treasurer

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Michigan State University (the University, or MSU) is the nation's premier land-grant university and one of the top research universities in the world. MSU is ranked 83rd among the top universities in the nation and 33rd among public universities by U.S. News & World Report. MSU features 40 programs ranked in the top 25 nationally, including eight programs rated No. 1. MSU is also a member of the prestigious Association of American Universities, which represents 65 of North America's leading research universities, and is designated an R1 research university among the Carnegie Classification of Institutions of Higher Education. The university's excellence, cultivated over a 167-year history, is rooted in the core values of its land-grant heritage in advancing knowledge, conducting research of the highest caliber, and advancing outreach, engagement and economic activities.

Managing Finances through Adversity

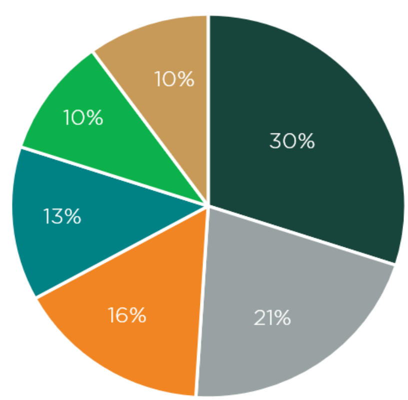
MSU remains a prudent financial steward of institutional resources as the university emerges from the challenging environment created by the global COVID-19 pandemic. From cutting costs and managing cash flows to the important support provided by Higher Education Emergency Relief Funds, MSU has maintained a strong financial foundation in support of our long-term financial health and sustainability. With assets and deferred outflows of $9 billion and liabilities and deferred inflows of $3.8 billion, the university's net position is a strong $5.2 billion as of June 30, 2022.

Revenue diversification and active cash and debt management have long been important strategies for the university. This focus has been integral in enabling the institution to be financially stable through economic cycles, adverse expenses and the COVID-19 pandemic. Throughout the 2021-22 fiscal year, MSU was able to:

- End wage reductions for faculty and academic staff after 10 months, two months earlier than initially planned.
- End retirement match reductions earlier than initially anticipated for the university's various employee groups.
- Provide a one-time payment to faculty and academic staff to compensate fora portion of the retirement match reductions during the COVID-19 pandemic.
- Recognize most regular and temporary employees with a $1,500 gratitude payment.
- Receive updated ratings from S&P Global Ratings which moved MSU's outlook to AA stable, an improvement from the prior rating of AA negative.

Sources of Net Revenue (millions):

$ 846	Tuition, net of discounts
639	Grants and contracts
454	Auxiliary activities
371	State appropriations
287	Other departmental activities
276	Private gifts, capital grants, and other
$ 2,873	Total net revenues before market value declines
(163)	Net investment loss (endowments and operating cash)
$ 2,710	Total net revenues



Additionally, MSU successfully issued $500 million in century bonds, becoming the first institution of higher education in Michigan to successfully do so. Due to ample investor demand, the bonds were more than 2.2 times oversubscribed. A century bond is an innovative security with a final maturity in 100 years offered by select and highly rated institutions. The decision to issue the century bond was based on a desire to add new capital to achieve strategic goals, add diversity to the debt portfolio and take advantage of near-historic low interest rates. The bond proceeds will enable MSU to address both near- and long-term capital needs, invest in research and health care initiatives, as well as provide a stewardship tool to invest in innovative and transformative projects now and for future Spartan generations.

Students and Academics

Total MSU undergraduate enrollment for 2021-2022 was 38,574, made up of 19,906 women and 18,668 men, with approximately 79.8% being Michigan residents. MSU saw its most diverse student body to date, with total enrollment of 11,784 students of color and 4,106 international students. The strength of MSU programs draws students from all over the state, across the country and around the world.

MSU continues to apply the lessons learned over the past few years of the global pandemic to provide the highest level of safety while supporting an engaged and connected experience for all students, faculty and staff. Demand for the high-quality education offered by MSU remains strong. The fall 2022 entering class of more than 9,600 students, reported at the start of each semester, set a new record for the university, exceeding last year's largest entering class of 9,200 students. And with new students from 82 of Michigan's 83 counties, MSU is positioned to maintain its place as a top choice of in-state students. In addition, the 2022 class is among the most diverse in recent history.

For the seventh year in a row, 2021 graduation rates for first-time, full-time students at MSU increased — this time by nearly an entire percentage point — to 82.1% from 81.3% in 2020. As part of its strategic plan, the university is working to increase the overall six-year graduation rate to 86 percent by 2030. While we are pleased that progress on the graduation rate for Black/African American students resulted in an increase of 2 percentage points to 65% and 3 percentage points for students identifying as two or more races to 77%, we know we have more work to do in eliminating gaps between student groups, and is a key focus within our strategic plan.

The graduation rate for first-generation students remained at 73%. Additionally, 94% of students who earn bachelor's degrees from MSU are immediately employed or pursue additional education and more than 75% of undergraduate students complete an internship.

MSU students received approximately $71 million in funding from the three rounds of the Higher Education Emergency Relief Fund, or HEERF. The first round of funding, HEERF I, was awarded to over 7,844 eligible MSU students. HEERF II was awarded to 14,118 students and HEERF III was awarded in fiscal 2022 to 21,299 students. Of those receiving funding, 77% were undergraduates.

The university received $87 million in institutional funding from the three rounds of HEERF over the past two years in addition to $32 million of state appropriation substitute funding. These funds were utilized in accordance with grant requirements to offset revenue and expense impacts directly attributable to the COVID-19 pandemic. In addition, the university received $10 million in Small Business Association Shuttered Venue Operators Grants to cover lost revenue for the Wharton Center and Abrams Planetarium.

MSU raised a record $284 million in cash and gift commitments, outpacing MSU's previous fundraising record of $273 million from 2019. In all, there were 48 gifts of $1 million or more, totaling $157 million, making last fiscal year's total the largest from million-dollar commitments MSU has ever received. In a year highlighted by the opening of the Facility for Rare Isotope Beams, a new academic building for STEM teaching and learning and the expansion of partnerships in Flint, Grand Rapids and Detroit, more than 170,000 individual gifts were given to support the university's priorities to expand opportunities, advance equity, elevate excellence and strengthen the community for all Spartans.

Apple, MSU and the Gilbert Family Foundation celebrated the accomplishments of graduates from the first cohort of the Detroit Apple Developer Academy in 2022. The academy is the first of its type in the United States, launched as part of Apple's Racial Equity and Justice Initiative. The free program offers students an opportunity to become entrepreneurs and app developers by learning the fundamentals of coding, design, marketing and project management — with an emphasis on inclusivity and making a positive impact in local communities.

The university officially introduced the new STEM Teaching and Learning Facility on the East Lansing campus to the community with a ribbon-cutting ceremony during the fall of 2021. The building represents the first time in nearly 50 years that MSU has built a new academic building with state funding. The classroom and laboratory spaces were built around the structure of the Shaw Lane Power Plant, which was decommissioned in the 1960s. Much of the power plant's original equipment was cleaned and kept as part of the building's aesthetic, including portions of the original boiler.

Research

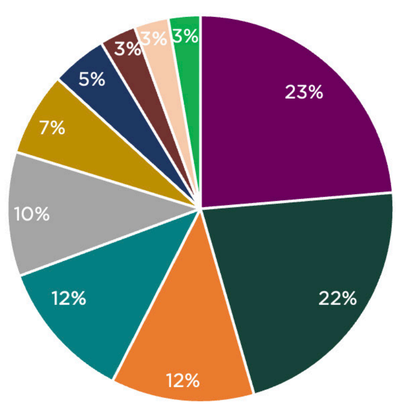
MSU recognizes that research is central to the university's mission and to building a mid-Michigan talent center through learning opportunities that take place in and outside of the classroom and which employ progressive pedagogy. MSU is working to provide state-of-the-art facilities and infrastructure that will help attract and retain top-quality students, faculty and researchers. This is vital to remaining competitive in key fields, both nationally and internationally. Examples of facilities and innovations that are attracting researchers, students and professionals include:

- MSU's Facility for Rare Isotope Beams, or FRIB, is the first accelerator-based user facility for the U.S. Department of Energy Office of Science on a university campus. It opened its doors to discovery with a ribbon-cutting ceremony on May 2, 2022. U.S. Secretary of Energy Jennifer M. Granholm and MSU President Samuel L. Stanley Jr., M.D., cut the ribbon to officially mark the start of FRIB's scientific mission. Since 1958, MSU has been known for its leadership and discovery in nuclear science, and today the university is home to the nation's No. 1 nuclear physics graduate program. FRIB is a U.S. DOE-designated Office of Science User facility. With the designation, FRIB joins the family of 27 DOE Office of Science user facilities across the country. The university operates the $730 million facility under a cooperative agreement with the DOE Office of Science, supporting the mission of the Office of Nuclear Physics. FRIB will enable scientists to make discoveries about the properties of rare isotopes (short-lived nuclei not normally found on Earth), nuclear astrophysics and fundamental interactions. These discoveries lead to applications for society, including medicine, homeland security and industry. The nearly 500,000-square-foot facility is poised to welcome more than 1,600 scientific users to conduct research at FRIB. From construction through operation, FRIB is expected to generate accumulated wages totaling $1.7 billion and add $4.4 billion to the state's economy.

- Merit Network and MSU are joint recipients of an $11 million National Telecommunications and Information Administration, or NTIA, Broadband Infrastructure Program Grant that will connect Michigan's many disparate internet pathways. This program, named the Michigan Open Optical Network — Leveraging Innovation to Get High-Speed Technology, or MOON-Light, will help address critical infrastructure gaps by enabling technologically advanced, middle-mile fiber optic infrastructure across the state. It will allow interconnecting local internet service providers to bring affordable, robust, high-speed broadband internet to homes and businesses in Michigan's underserved and unserved population areas. This project leverages funding from the National Telecommunications and Information Administration's Broadband Infrastructure Program, one of the earliest of the recent infrastructure programs. BIP was a precursor to the Infrastructure Investment and Jobs Act, which was signed into law by President Joe Biden on Nov. 15, 2021.

- The Charles Stewart Mott Foundation granted $25 million to expand the College of Human Medicine's public health presence in Flint. The grant will create an endowed fund to increase public health faculty, academic research and community health collaborations. The expansion of public health in Flint will increase the size of the division to more than 25 tenure-system faculty and approximately 70 faculty overall. Since 2014, MSU's Flint-based public health experts have implemented programs and research initiatives in the community and beyond.
- MSU was awarded a $7 million National Institutes of Health grant to build a facility to develop new imaging agents and treatments for diseases, including cancer, that afflict both humans and large animals. The heart of the facility will be a highly sophisticated imaging scanner provided by Siemens Healthineers that combines a PET scanner with an MRI. The facility will be housed in Clinical Center Building D, which will undergo extensive renovation beginning in 2023 and is expected to open in 2024.

Sources of Net Sponsored Program Revenue (millions):



$ 132	Federal US Dept. of Energy
122	Federal US Dept. of Health and Human Services
67	Federal National Science Foundation
66	Local/Private Revenue
58	Federal US Dept. of Education
39	Federal US Dept. of Agriculture
26	Federal Other
17	State Revenues
16	Federal US Dept. of Defense
15	Federal USAID
$ 558	Total net Sponsored Program revenues

In January 2022, the American Association for the Advancement of Science, or AAAS, unveiled the names of its 2021 fellows. This year's cohort includes nine Spartans, the largest number in 10 years. In fact, MSU's nine fellows in 2011 set a record that's now been tied by the 2021 class. AAAS is the world's largest general scientific society, and being elected an AAAS Fellow is among science's top distinctions. Having nine fellows selected in one year, joining the dozens of fellows elected in previous years, reflects MSU's research excellence. The 2021 fellows work in seven different research areas, representing the breadth of Spartan impact in science, technology, engineering and math, or STEM.

MSU is a leader in creating knowledge for the 21st century, routinely expending more than $500 million in sponsored awards annually from the health sciences to the environment, including food, water and energy. The university is No. 1 in the Big Ten and No. 1 nationally for DOE expenditures; No. 1 in the Big Ten and No. 2 nationally for U.S. Agency for International Development expenditures; and No. 4 in the Big Ten and No. 9 nationally for National Science Foundation expenditures. MSU continues to focus on cutting-edge research growth, providing an impetus for economic development while creating a culture of innovation and creativity that enhances the university's international competitiveness and reputation.

Community Health Care

McLaren Health Care and MSU held a ribbon cutting to mark the opening of a $600 million McLaren health campus within the University Health Park in February 2022. The project includes a 240-bed hospital, a multi-specialty outpatient care center and a Karmanos Cancer Institute in partnership with MSU Health Care. MSU's collaboration with McLaren Greater Lansing will expand access to quality care for mid-Michigan residents, improve health outcomes and expand access to new life-changing therapies and treatments through shared research and discovery.

A new medical office building that will house Spartan Radiology, a joint venture between MSU Health Care, Inc. and McLaren Greater Lansing Medical Services Building is also under construction within the University Health Park. The center will include a full suite of imaging capabilities featuring all-new equipment in the more than 20,000-square-foot space. This partnership will also include initiatives in collaboration with MSU to advance the university's academic, research and clinical care missions.

The facility is expected to open in 2023.

In its first year of a 30-year partnership, MSU and Henry Ford Health, two of the state's leading education, research and health care organizations, reached several milestones across shared goals, culminating in the public launch of their new, unified brand last fall. Plans for 2023 include investing in emerging joint cancer care and research; advancing diversity, equity, inclusion and justice; and commencing construction on an MSU health education campus near Henry Ford Hospital.

Spartans Will

MSU's 2030 strategic plan prioritizes the long-term sustainability of the institution and articulates a vision that remains true to MSU's land-grant mission, enables Spartans to advance the common good with an uncommon will and preserves the academic opportunities our land-grant heritage has afforded not only to the MSU community but to the state of Michigan and the world. We are devoted to fulfilling MSU's mission in new and innovative ways through the integration of technology and teaching, closing graduation gaps where they exist, enhancing interdisciplinary study and driving innovation in health care delivery and research. Our programmatic investments pursue cutting-edge approaches in support of student success, research and public service.

Our financial team is dedicated to the support of the university's mission and proudly embraces the fiscal integrity that is foundational to empowering and advancing the university's success.

Together, the collective will of our stakeholders, including students, faculty, staff, donors, partners and the communities we serve, will shape our world to be a better place and inspire the next generation of Spartans to greatness.

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Independent Auditor's Report

To the Board of Trustees
Michigan State University

Report on the Audits of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and discretely presented component unit of Michigan State University (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, as listed in the table of contents.

In our opinion, based on our audits and the report of other auditors, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and discretely presented component unit of the University and as of June 30, 2022 and 2021 and the respective changes in its financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

We did not audit the financial statements of the Michigan State University Foundation (the "Foundation"), which represents 6 percent, 9 percent and (0.2) percent of the assets, net position, and revenue, respectively, of the University. Those financial statements were audited by other auditors, whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Foundation, is based solely on the report of the other auditors. The financial statements of the Foundation were not audited under *Government Auditing Standards*.

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 *Auditor's Responsibilities for the Audits 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 Foundation were not audited under *Government Auditing Standards*.

Emphasis of Matter

As described in Note 1 to the financial statements, the University adopted the provisions of GASB 87, *Leases*, as of June 30, 2022. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

To the Board of Trustees
Michigan State University

Auditor's Responsibilities for the Audits 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 auditor's 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 audits 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 audits in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.

- 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 audits 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.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

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

Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedule of changes in the University's total OPEB liability and related ratios 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, which 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 supplemental information in accordance with auditing standards generally accepted in the United States of America, 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 listing of trustees, officers, and finance management; the report from the senior vice president, chief financial officer, and treasurer; and the transmittal letter. 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.

To the Board of Trustees
Michigan State University

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 whether 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 October 27, 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, 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.

Plante & Moran, PLLC

October 27, 2022

Introduction

The following discussion provides an overview of the financial position of Michigan State University (the "University") for the fiscal years ended June 30, 2022 and 2021.

Included is an analysis of the University's Statement of Net Position, which presents the assets, deferred outflows, liabilities, deferred inflows, and net position of the University. All are measured as of the fiscal year end. The Statement of Revenues, Expenses, and Changes in Net Position reflects revenues and expenses recognized during the fiscal year. These financial statements are prepared in accordance with Governmental Accounting Standards Board (GASB) principles.

The Michigan State University Foundation (the "Foundation") is a legally separate entity that meets the criteria set forth for component units under GASB regulations. The Foundation provides financial support for the objectives, purposes, and programs of the University. Although the University does not control the timing, purpose, or amount of its receipts from the Foundation, the resources (and income thereon) the Foundation holds and invests are solely for the benefit of the University. Because the Foundation's resources are solely for the benefit of the University, the Foundation is considered a component unit of the University and is discretely presented in the University's financial statements. The Foundation is a private organization that reports under Financial Accounting Standards Board (FASB) standards. As such, certain revenue recognition criteria and presentation features are sometimes different from GASB. No modifications have been made to the Foundation financial information included in the University's financial report to account for these differences.

MSU Health Care, Inc. and Lysander Series of Aesir Series, LLC ("Lysander") are additional legally separate entities that meet the criteria set forth for component units under GASB regulations. MSU Health Care, Inc. is a multi-specialty medical practice that operates the University's primary care, sports medicine, diagnostics, testing, and other services. The University is the sole corporate member of MSU Health Care, Inc., which is reported as a blended component unit. Lysander is a cell captive insurance company used by the University to gain access to global reinsurers for purposes of obtaining general liability insurance and automobile liability insurance. Lysander exclusively benefits the University, and the University has full control of Lysander, which is also reported as a blended component unit.

Effective for the fiscal year ended June 30, 2022, the University adopted GASB Statement No. 87, *Leases* ("GASB 87"). This statement supersedes GASB Statement No. 62 and establishes new requirements for calculating and reporting the University's lease activities. The University recognized lease assets and related lease payables at the present value of expected future payments for lease agreements in which the University is the lessee. The University recognized lease receivables and related deferred inflows of resources at the present value of expected future receipts for lease agreements in which the University is the lessor. The impacts to the Statement of Revenues, Expenses, and Changes in Net Position include reclassifying certain lease payments from operating revenues and expenses to nonoperating revenues and expenses and recognizing annual amortization of lease assets and deferred inflows of resources over the term of the lease. The adoption of GASB 87 has been reflected as of July 1, 2019. The financial statements for the year ended June 30, 2021, and 2020, have been restated to present the impact of GASB 87. See footnote 1 for more details.

The University's financial statements, related footnote disclosures, and required supplementary information (RSI), including management's discussion and analysis, have been prepared by management. GASB required supplementary information is not audited and should be read in conjunction with the financial statements and footnotes.

Novel Coronavirus (COVID-19) Pandemic

In December 2019, the Novel Coronavirus (COVID-19) was first reported and subsequently emerged as the cause of a global pandemic. The world-wide response to managing the COVID-19 pandemic has included extraordinary measures designed to reduce physical human interaction, including the temporary suspension of community events and other activities, broad travel restrictions, and the temporary closing of many businesses. Likewise, the pandemic had a significant effect on the University for the year ended June 30, 2021, including transitioning instruction to remote learning to the fullest extent possible, limiting on-campus residency, eliminating all non-essential travel, and cancelling or postponing athletic and performing arts events. The year ended June 30, 2022, saw many of these restrictions lifted as vaccines became readily available, and reflects a more standard operating year. The following sections will discuss further the specific impacts reflected in the financial statements for the years ending June 30, 2022 and 2021.

Statement of Net Position

The Statement of Net Position includes all assets, deferred outflows, liabilities, and deferred inflows. It is prepared under the accrual basis of accounting, whereby revenues and assets are recognized when services are provided and expenses and liabilities are recognized when others provide the services, regardless of when cash is exchanged. Deferred outflows and deferred inflows of resources are recognized through the consumption or acquisition of resources by the University that is applicable to a future reporting period. Assets, deferred outflows, liabilities, and deferred inflows are generally measured using current values. One exception is capital assets, which are stated at historical cost less an allowance for depreciation rather than current market values.

Below is a summarized comparison of the University's assets, deferred outflows, liabilities, deferred inflows, and net position at June 30, 2022, 2021, and 2020 adjusted to illustrate the impact of postemployment benefit obligations.

(in millions)	2022	OPEB Adjustment	2022 Net of OPEB	2021 (as restated)	OPEB Adjustment	2021 Net of OPEB	2020 (as restated)	OPEB Adjustment	2020 Net of OPEB
Current assets	$ 1,615	-	$ 1,615	$ 1,137	-	$ 1,137	$ 826	-	$ 826
Noncurrent assets:									
Restricted cash and cash equivalents and restricted investments	-	-	-	-	-	-	14	-	14
Endowment and other investments	3,736	-	3,736	3,862	-	3,862	3,080	-	3,080
Capital assets, net	2,948	-	2,948	2,955	-	2,955	2,961	-	2,961
Other	170	-	170	155	-	155	122	-	122
Total assets	8,469	-	8,469	8,109	-	8,109	7,003	-	7,003
Deferred outflows of resources	567	(543)	24	622	(578)	44	548	(490)	58
Current liabilities	684	(26)	658	650	(22)	628	748	(51)	697
Noncurrent liabilities	2,837	(622)	2,215	2,387	(608)	1,779	3,934	(2,090)	1,844
Total liabilities	3,521	(648)	2,873	3,037	(630)	2,407	4,682	(2,141)	2,541
Deferred inflows of resources	357	(303)	54	377	(325)	52	405	(362)	43
Net Investment in Capital Assets	1,497	-	1,497	1,489	-	1,489	1,485	-	1,485
Restricted:									
Nonexpendable	1,001	-	1,001	884	-	884	817	-	817
Expendable	1,412	-	1,412	1,523	-	1,523	852	-	852
Unrestricted	1,248	408	1,656	1,421	377	1,798	(690)	2,013	1,323
Net position	$ 5,158	$ 408	$ 5,566	$ 5,317	$ 377	$ 5,694	$ 2,464	$ 2,013	$ 4,477

For more detailed information see the accompanying Statements of Net Position.

Current assets:

Current assets consist of cash and cash equivalents, investments, net accounts and interest receivable, and other assets. During 2022, cash and cash equivalents increased $22 million. The increase is a function of the University's operating, financing, and investing activities as reported in the statement of cash flows. Investments increased $428 million, primarily due to increases in short-term investment reserves, which includes the proceeds from the Series 2022A taxable bonds issued during the year. Net receivables increased $23 million, primarily due to a $10 million increase in student receivables, a $4 million increase in sponsored programs receivable, and a $3 million increase in interest receivable.

During 2021, cash and cash equivalents increased $172 million. The increase is a function of the University's operating, financing, and investing activities as reported in the statement of cash flows. Investments increased $175 million, primarily due to increases in short-term investment reserves. Net receivables decreased $36 million, primarily due to a $90 million decrease in insurance recovery receivables that were recognized during the year ended June 30, 2020, offset by a $32 million increase in state appropriations receivable, and a $31 million increase in receivables related to state sponsored medical programs. State sponsored medical program accounts receivable balances generally reflect timing differences between delivery of service and payment by the state.

Noncurrent assets:

Endowment and other investments

At June 30, 2022 and 2021, the University's endowment investments totaled $3,469 million (a decrease of $111 million) and $3,580 million (an increase of $780 million), respectively. During the years ended June 30, 2022, 2021, and 2020, the University's endowment activity was as follows:

	2022	2021 *(in millions)*	2020
Beginning balance	$ 3,580	$ 2,800	$ 2,878
College of Law merged investments	-	11	-
Gifts and University additions	110	51	50
Reinvested earnings	18	17	15
Investment earnings net of transfers	(523)	786	(58)
Reallocation (to)/from operating funds	284	(85)	(85)
Ending balance	$ 3,469	$ 3,580	$ 2,800

Other investments consisted primarily of retirement and postemployment benefit reserves, which totaled $125 million and $128 million at June 30, 2022 and 2021, respectively. Also included in other investments was the Liquidity Reserve Pool component of the University's Operating Cash Pool ($107 million in 2022 and 2021).

Capital assets

The University continues to implement its long-range plan to modernize and renew its teaching, research, and residential life facilities in support of its mission.

At June 30, 2022, 2021, and 2020, the University's investments in capital assets were as follows:

	2022	2021	2020
		(in millions)	
Land	$ 49	$ 49	$ 49
Buildings and site improvements	4,464	4,169	3,969
Construction in progress	153	345	440
Software and other intangibles	154	147	120
Equipment and other	1,034	1,022	993
Museum collections	29	27	24
Lease assets	62	28	26
Less: accumulated depreciation and amortization	(2,997)	(2,832)	(2,660)
	$ 2,948	$ 2,955	$ 2,961

Additions to buildings and site improvements during 2022 and 2021 included:

	2022	2021
	(in millions)	
Facility for Rare Isotope Beams specialized equipment	$ 254	$ -
Munn Ice Arena	8	16
Facility for Rare Isotope Beams harvest vault	-	24
Student information system	-	29
Science, Technology, Engineering, and Mathematics building	-	99
Other	33	32
Total	$ 295	$ 200

Construction in progress reflects multi-year projects which, once completed and placed into service, are generally categorized as buildings and site improvements. Balances at June 30, 2022 and 2021 included:

	2022	2021
	(in millions)	
TB Simon Power Plant upgrades	$ 57	$ 42
Veterinary Medical Center - HVAC	8	-
Service Road field - artificial turf and support building	8	-
Grand Rapids Innovation Park - radiopharmacy	8	7
Data Center migration - network	7	-
Facility for Rare Isotope Beams specialized equipment	-	248
Other	65	48
Total construction in process	$ 153	$ 345

As of June 30, 2022, the University had initiated plans and incurred certain contractual commitments related to the construction and renovation of various facilities. The costs to complete the projects are estimated to be $88 million and are to be funded over multiple years from debt proceeds, capital grants, private gifts, and other University funds.

Deferred outflows of resources:

At June 30, 2022 and 2021, deferred outflows of resources totaled $567 million (a decrease of $55 million) and $622 million (an increase of $74 million), respectively. In 2022, deferred amounts related to changes in assumptions used to calculate the valuation of other postemployment benefits and related contributions made subsequent to the measurement date (in accordance with GASB No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* ("GASB 75")) decreased by $35 million. Adding to this decrease was a decrease of $19 million in the fair value of hedging derivative instruments and a $1 million decrease in deferred losses on refunding debt in 2010.

Current liabilities:

Current liabilities consist primarily of trade accounts and interest payable, accrued compensation and other personnel costs, unearned revenues, and other liabilities payable within one year or less. The net increase in 2022 was due primarily to increases in accrued personnel costs of $28 million and unearned revenues of $8 million, offset by decreases of $22 million in payroll taxes and other payroll deductions and the current portion of long-term debt and other obligations of $7 million. Accrued personnel costs increased primarily due to an accrual for a one-time payment to be made to faculty, academic staff, and executive management, who are currently employed, to offset some of the financial implications of lost retirement contributions incurred during the COVID-19 pandemic totaling $26 million. No such payable existed at June 30, 2021. Payroll taxes and other payroll deductions decreased due to the last payroll tax payments of the year being made on June 30, 2022, while in the prior year they were made early in July and thus accrued at year-end.

The net decrease in 2021 was due primarily to decreases in accounts payable of $29 million, deposits held for others of $14 million, and the current portion of long-term debt and other obligations of $50 million. Accounts payable decreased primarily due to amounts owed to third parties that aided in 2020 insurance recoveries being payable at June 30, 2020. No such payable existed at June 30, 2021. Deposits held for others decreased due to the merger of the College of Law during the year ended June 30, 2021. Investments held on behalf of the College of Law were previously reported as deposits held for others. The decrease in the current portion of long-term debt and other obligations relates to refunding of existing Series 2018A debt in 2021 using insurance recovery proceeds accrued in 2020 (see note 10) and Series 2020A debt. Accrued payroll taxes and other payroll deductions increased by $24 million, primarily driven by the deferral of employment tax payments authorized by the CARES Act, which was offset by a $29 million decrease in other postemployment benefit obligations due to benefit plan changes described below in the noncurrent liabilities section.

Noncurrent liabilities, primarily debt and net postemployment benefit obligations:

At June 30, 2022, the University had noncurrent debt and other obligations outstanding of $2,120 million compared with $1,642 million at June 30, 2021. During the year ended June 30, 2022, the University issued Series 2022A ($500 million) taxable bonds which are “century bonds” due in one lump payment in 2123. The proceeds may be expended at the University's discretion and will be used as a revolving fund for a variety of projects aligned with the strategic initiatives of the University. During the year ended June 30, 2021, the University issued Series 2020A ($91 million) bonds which were used to refund Series 2018A bonds and a portion of Series 2015A bonds. The University has outstanding General Revenue Bonds of $2,097 million and $1,638 million in 2022 and 2021, respectively (including $105 million and $109 million in 2022 and 2021, respectively, of related original issue premiums). The University periodically reviews its debt capacity and related capital asset needs to optimize the use of its long-term resources. As of June 30, 2022, the University's outstanding General Revenue debt carried an investment grade credit rating from Moody's and Standard & Poor's of Aa2 and AA, respectively.

At June 30, 2022 and 2021, the noncurrent portion of the University's net postemployment benefit obligations (OPEB) totaled $623 million (an increase of $15 million) and $608 million (a decrease of $1,482 million), respectively. Effective January 2021, the University transitioned to a Medicare Advantage Program to deliver medical benefits to eligible retired employees and qualified spouses/beneficiaries. While the change in the plan will result in monetary savings to the University, the majority of the reduction in the liability was due to the accounting provisions of GASB 75 where benefits provided as a conduit for the federal government are not part of the substantive OPEB plan offered by the employer because the federal government is primarily responsible for and has assumed the risks associated with providing the benefits.

Provisions of GASB 75 require revaluing the unfunded liability using a 20-year tax-exempt municipal rate on an annual basis. As a result, the liability estimate for financial reporting is susceptible to dramatic variation from year to year. Although the financial reporting liability will be changing, the University's approach to funding the retirement benefits continues to be on a pay-as-you-go basis. Thus, there will be no impact on the payment of the other postemployment benefits.

Deferred inflows of resources:

At June 30, 2022 and 2021, deferred inflows of resources totaled $358 million and $377 million, respectively (a decrease of $19 million). In 2022, deferred inflows of resources representing deferred amounts due to changes in assumptions used to calculate the valuation of other postemployment benefits decreased by $22 million. Deferred inflows of resources attributable to the University's investment value resulting from irrevocable split-interest agreements (primarily Charitable Remainder Trusts) at June 30, 2022 and 2021 totaled $22 million and $21 million (an increase of $1 million), respectively. In accordance with GASB 81 amounts are deferred until all provisions of the agreements are satisfied. Deferred inflows of resources of $5 million and $6 million were recognized in 2022 and 2021 (a decrease of $1 million), respectively, due to gains on bond refunding related to the refunding of the 2010C bonds. Deferred inflows of resources attributable to the lease agreements in which the University is the lessor at June 30, 2022 and 2021 totaled $28 million and $25 million (an increase of $3 million), respectively.

Net position:

Net position represents residual University assets and deferred outflows after liabilities and deferred inflows are deducted. The University's net position at June 30, 2022, 2021, and 2020 was as follows:

	2022	2021	2020
		(in millions)	
Net investment in capital assets	$ 1,497	$ 1,489	$ 1,485
Restricted:			
Nonexpendable	1,001	884	817
Expendable	1,412	1,523	852
Total restricted	2,413	2,407	1,669
Unrestricted - before OPEB	1,656	1,798	1,323
Total net position - before OPEB	5,566	5,694	4,477
OPEB (Unrestricted)	(408)	(377)	(2,013)
Total net position	$ 5,158	$ 5,317	$ 2,464

Net investment in capital assets represents the University's land, buildings, software, and equipment net of accumulated depreciation and amortization and outstanding principal balances of debt attributable to the acquisition, construction, or improvement of those assets.

Restricted nonexpendable net position is subject to externally imposed stipulations that they be maintained permanently. Such net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.

Restricted expendable net position is subject to externally imposed restrictions governing its use. Such net position includes the net appreciation of the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently, restricted quasi-endowments, restricted gifts, and federal and state sponsored programs. During 2022, expendable restricted net position decreased by $111 million. The decrease was primarily attributed to funds restricted for research projects, gifts, and term endowments as those funds were used for their restricted purposes.

Unrestricted net position is not subject to externally imposed restrictions; however, virtually all of the University's unrestricted net position is subject to internal designation to meet various specific commitments. These commitments include funding the completion of the 2022 summer semester and the first quarter of fiscal year 2023, maintaining reserves for capital projects, sustaining working capital balances for self-supporting departmental activities, and preserving unrestricted quasi and term endowments. At June 30, 2022 and 2021, the unrestricted balances related to these specific commitments totaled $1,656 million (a decrease of $142 million) and $1,798 million (an increase of $475 million), respectively. Offsetting these balances is a draw on unrestricted net position for commitments related to postemployment benefits. At June 30, 2022 and 2021, these commitments reduced unrestricted net position by $408 million and $377 million, respectively.

Statement of Revenues, Expenses, and Changes in Net Position

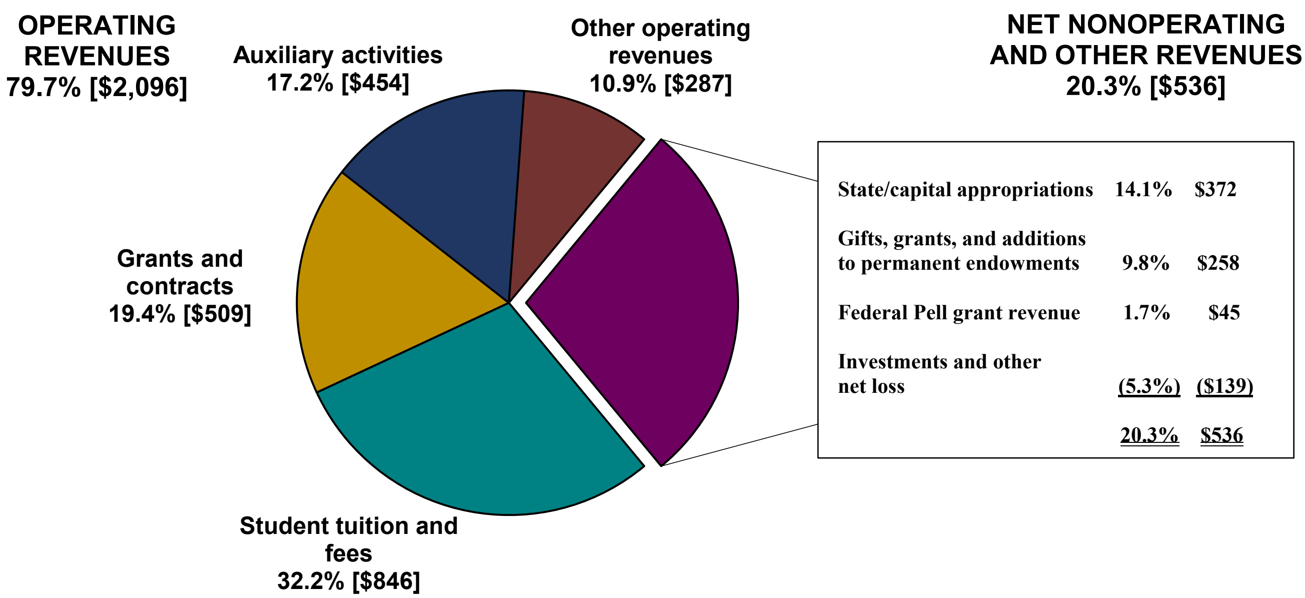
The Statement of Revenues, Expenses, and Changes in Net Position presents the operating results of the University, as well as the nonoperating revenues and expenses. Operating revenues primarily include net student tuition and fees, grants and contracts, and auxiliary activities. Given a public university's dependency on revenues such as state appropriations, gifts, and investment income, which are prescribed by GASB as nonoperating revenues, operating expenses will typically exceed operating revenues, resulting in an operating loss. Net nonoperating revenues or expenses are an integral component in determining the increase or decrease in net position.

A summarized comparison of the University's revenues, expenses, and changes in net position for the years ended June 30, 2022, 2021, and 2020 follows:

	2022	2021 (as restated)	2020 (as restated)
		(in millions)	
Operating revenues:			
Student tuition and fees, net of allowances	$ 846	$ 853	$ 895
Grants and contracts	509	478	475
Auxiliary activities	454	251	357
Other operating revenues	287	207	307
Total operating revenues	2,096	1,789	2,034
Operating expenses:			
Instruction and departmental research	753	685	733
Research	411	375	383
Public service	354	300	367
Academic support	130	122	126
Student services	58	57	55
Scholarships and fellowships	125	109	99
Institutional support	154	170	187
Operation and maintenance of plant	134	121	131
Auxiliary enterprises	391	265	343
Other postemployment benefits expense	63	(1,601)	120
Depreciation and amortization	214	199	189
Other operating expenses, net	4	9	4
Total operating expenses	2,791	811	2,737
Operating (loss) income	(695)	978	(703)
Nonoperating revenues (expenses):			
State operating appropriation	303	289	256
State AgBioResearch appropriation	35	35	35
State Extension appropriation	31	30	30
Federal Pell grant revenue	45	44	45
Coronavirus federal grants and aid	85	101	16
Gifts	113	119	40
Net investment (loss) income	(164)	1,196	166
Interest expense on indebtedness	(77)	(71)	(78)
Other nonoperating revenues, net	17	5	93
Net nonoperating revenues	388	1,748	603
(Loss) income before other	(307)	2,726	(100)
State capital appropriations	3	20	5
Capital grants and gifts	38	42	30
Additions to permanent endowments	107	46	47
(Decrease) increase in net position	(159)	2,834	(18)
Net position, beginning of year	5,317	2,464	2,482
Beginning net position adjustment, merger	-	19	-
Net position, beginning of year, restated	5,317	2,483	2,482
Net position, end of year	$ 5,158	$ 5,317	$ 2,464

The University is supported by a diverse stream of revenue including student tuition and fees, state appropriations, federal and state sponsored programs, private gifts and grants, and investment income. The University continues to seek revenue from all possible sources consistent with its mission and to manage the financial resources to make quality education affordable to its students.

Total net revenues by source for the year ended June 30, 2022 are presented in millions of dollars:



TOTAL NET REVENUES $2.6 BILLION

Operating revenues: The primary source of operating revenue for the University was student tuition and fees (net of scholarship allowances), totaling $846 million and $853 million in 2022 and 2021, respectively. Gross tuition and fees revenue increased $11 million, due in part to increases in tuition rates, which was offset by an increase in scholarship allowance of $18 million. Other major revenue sources in 2022 included federal grants and contracts of $416 million (an increase of $31 million), including $403 million in sponsored programs, and auxiliary activities (activities that provide services to students, faculty, staff, and the public) totaled $454 million (an increase of $203 million). The increase in auxiliary activities was driven by the easing of COVID-19 pandemic restrictions after vaccines became widely available which allowed for more standard operations for athletics, residential housing services and dining, and other auxiliary activities. In 2021, gross tuition and fees decreased by $15 million due to a $43 million decrease driven by reduced enrollment and changes in student blend due to the COVID-19 pandemic, offset with a $28 million increase from the merger of the College of Law during 2021. In 2021, federal grants and contracts increased by $12 million, and auxiliary activities decreased $105 million which was driven by the impacts of the COVID-19 pandemic on athletics, residential housing services, and other auxiliary activities.

Net nonoperating and other revenues: The primary source of net nonoperating revenue was State appropriations, which totaled $372 million in 2022, a decrease of $2 million. In 2022, the University received $303 million in funding for general operations, compared to $289 million in 2021. Michigan State University Extension and MSU AgBioResearch appropriations totaled $66 million, an increase of $1 million from 2021. In

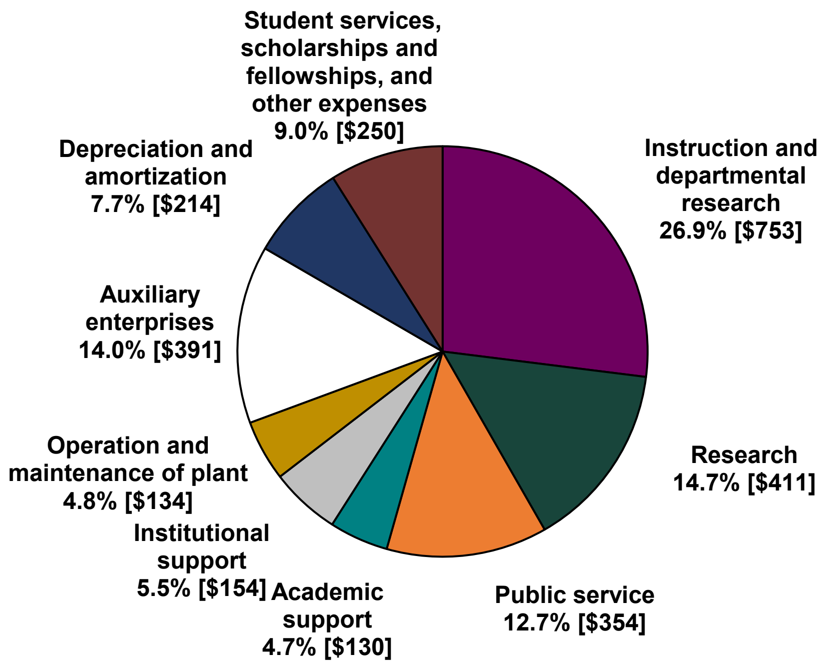
2021, the University recognized $32 million in Coronavirus federal grants and aid, which were related to the State of Michigan's revised funding for state appropriations from fiscal year 2020. In 2022, the University also recognized $3 million in state capital appropriations, compared to $20 million in 2021. In 2022, the University was awarded $2 million in federal funding through a Shuttered Venues Operating Grant. In 2021, the University was awarded $46 million in federal funding through the Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, $82 million in federal funding through the American Rescue Plan (ARP), and $7 million in federal funding through a Shuttered Venues Operating Grant (SVOG). In accordance with the grants and aid, the University must meet certain eligibility requirements before recognizing the funding. For 2022, the University provided $39 million to students as emergency financial aid grants (ARP), utilized $39 million in institutional aid (ARP), and received reimbursement for $5 million in expenses (SVOG) which was recognized as revenue during the year. For 2021, the University provided $17 million to students as emergency financial aid grants ($15 million CRRSA and $2 million ARP), utilized $47 million in institutional aid ($15 million CARES, $30 million CRRSA, and $2 million ARP), and sought reimbursement for $5 million in expenses (SVOG) which was recognized as revenue during the year. In addition, $2 million of federal CARES Act: Provider Relief Funding was recognized as an eligible health care provider. As previously noted, the University also received $32 million in Coronavirus Relief Funds as 2020 state appropriations substitute which was recognized as revenue in 2021. See footnote 1 for more details.

Other significant components of net nonoperating revenues in 2022 included net investment income, which decreased $1,360 million due to market conditions. In 2021, net investment income increased $1,030 million due to market conditions. Gifts totaled $113 million in 2022, a decrease of $6 million. In 2021, gifts totaled $119 million, an increase of $79 million.

During 2022, $1,518 million was expended for the core missions of the University: instruction and departmental research, research, and public service, an increase of $158 million (11.6%) from 2021. Instruction and departmental research and research expenses increased $104 million (9.8%), while public service expenses increased $54 million (18.0%), which reflects the University returning to more standard operations in the wake of the COVID-19 pandemic. Auxiliary enterprises totaled $391 million, an increase of $126 million, due to a return to more normal operations after easing the restrictions related to the COVID-19 pandemic. In 2021, expenses for the core mission of the University decreased $123 million and auxiliary enterprises decreased $78 million.

Other postemployment benefits expense for the year ended June 30, 2022 was $63 million, an increase of $1,664 from 2021. As discussed in the noncurrent liabilities section, during the year ended June 30, 2021, the University implemented a Medicare Advantage Plan to deliver postemployment benefits. The change in benefit plan to a Medicare Advantage Program reduced the postemployment liability by approximately $1,747 million. The net effect of this change resulted in other postemployment benefits expense of negative $1,601 million in 2021, a $1,721 decrease from 2020. This expense is presented separately from other functional expense classifications in the Statement of Revenues, Expenses, and Changes in Net Position due to the significance of the change.

Operating expenses by source for the year ended June 30, 2022 are presented in millions of dollars:



TOTAL OPERATING EXPENSES $2.8 BILLION

The University's Economic Outlook

Fiscal year 2022 saw a return to more typical higher education operations as vaccines for COVID-19 became readily available allowing for a reduction in the restrictions necessary to ensure a safe environment for students, faculty, staff, and the general public. In-person instruction resumed for many courses, residential halls were near capacity, and auxiliary functions were once again active. The University has returned to normal operations and the vibrant community for which it is known.

In July 2022, the State legislature approved a 4% increase in 2023 state appropriation funding over 2022 base levels. This is the largest increase in base funding in over a decade. The University will also receive $53 million in funding for renovations and new construction of MSU's Dairy Cattle Teaching & Research Center that will improve staff, animal, and building safety, as well as the quality and capacity of MSU research which supports increased growth and sustainability of the $15.7 billion dairy industry in Michigan. Included in the same $53 million is funding to modernize MSU's greenhouse facilities and infrastructure, which will help increase farming efficiency and profitability. This project will support one of Michigan's most important and dynamic industries, one that impacts all 83 counties in Michigan. The State's funding affirms the importance of higher education in the State of Michigan and provides overall stability to the University budget.

Despite the volatility of investment returns over the last several years, investment income continues to be an important component of MSU's ongoing revenue diversification. As strong stewards of funds, the University manages its endowment spending rate to ensure necessary resources are available for operations, while maintaining the purchasing power of the endowment assets for decades to come. Over time, MSU's long-term diversified investment strategy has proven to provide an important source of support for University operations and help keep tuition increases lower.

In Fall 2022, the University welcomed its largest-ever first-year class of approximately 9,800 students. Students enrolled in the incoming class, including representation from 82 of the state of Michigan's 83 counties, reflects one of the most diverse classes in recent history.

Ever moving forward, MSU is positioned to make investments aligned with its 2030 Strategic Plan, including advancing its research portfolio, investing in community partnerships both near and far, and attracting and retaining the best and brightest faculty and staff. Despite uncertainty around inflationary cost pressures, Michigan State University is committed to building on its strength and stature as one of the top 100 research universities in the world.

STATEMENTS OF NET POSITION

	June 30, 2022	June 30, 2021 (as restated)
ASSETS	(in thousands)	
Current assets:		
Cash and cash equivalents	$ 395,199	$ 372,997
Investments	910,877	482,502
Accounts and interest receivable, net	250,065	226,644
Student loans and pledges receivable, net	36,243	35,342
Inventories and other assets	23,058	19,482
Total current assets	1,615,442	1,136,967
Noncurrent assets:		
Endowment investments	3,469,280	3,579,785
Other investments	266,678	281,833
Accounts and interest receivable, net	29,005	25,049
Student loans and pledges receivable, net	107,102	100,008
Investments in joint ventures and other assets	33,780	29,497
Derivative instruments - swap asset	-	324
Capital assets, net	2,948,329	2,955,460
Total noncurrent assets	6,854,174	6,971,956
Total assets	**8,469,616**	**8,108,923**
DEFERRED OUTFLOWS OF RESOURCES	**566,992**	**621,799**
LIABILITIES		
Current liabilities:		
Accounts and interest payable	160,600	136,105
Accrued personnel costs	98,103	69,810
Accrued self-insurance liabilities	22,242	24,194
Payroll taxes and other payroll deductions	24,558	47,037
Deposits held for others	9,178	8,129
Unearned revenues	104,337	96,694
Current portion of net other postemployment benefit obligations	25,938	22,252
Current portion of long-term debt and other obligations	239,325	246,270
Total current liabilities	684,281	650,491
Noncurrent liabilities:		
Accrued personnel costs	38,330	38,964
Accrued self-insurance liabilities	14,520	13,151
Payroll taxes and other payroll deductions	-	21,561
Unearned revenues	7,333	8,067
Derivative instruments - swap liability	33,579	54,840
Net other postemployment benefit obligations	622,613	607,843
Long-term debt and other obligations	2,120,352	1,641,936
Total noncurrent liabilities	2,836,727	2,386,362
Total liabilities	**3,521,008**	**3,036,853**
DEFERRED INFLOWS OF RESOURCES	**357,473**	**376,861**
NET POSITION		
Net investment in capital assets	1,497,079	1,489,684
Restricted:		
Nonexpendable	1,001,402	883,923
Expendable:		
Research and gifts	1,007,697	1,085,289
Quasi and term endowments	304,486	339,480
Debt service and capital projects	86,209	84,192
Student loans	12,983	13,302
Unrestricted	1,248,271	1,421,138
TOTAL NET POSITION	**$ 5,158,127**	**$ 5,317,008**

See accompanying notes

STATEMENTS OF FINANCIAL POSITION

	June 30, 2022	June 30, 2021
	(in thousands)	
ASSETS		
Cash equivalents	$ 20,247	$ 24,307
Interest and dividends receivable, net	391	309
Other receivables, net	3,797	2,670
Investments	434,717	470,302
Land held for investment, net	1,262	1,364
Investment in University Health Park, net	2,861	2,873
Equity in start-up organizations, net	13,390	5,308
Notes receivable, net	4,001	3,083
Prepaid expenses	76	60
Property and equipment, net	31,626	14,413
Intangible assets, net	634	703
TOTAL ASSETS	**$ 513,002**	**$ 525,392**
LIABILITIES AND NET ASSETS		
Liabilities:		
Accrued expenses and other payables	$ 5,394	$ 3,625
Deferred revenue	10	14
Trusts and annuities payable	7,105	6,345
Loan payable	14,753	-
Capital lease obligation	6,047	6,047
Deposit held for Michigan State University	19,984	19,884
Obligations under life estate agreements	403	432
Total liabilities	**53,696**	**36,347**
Net assets:		
Without donor restrictions	421,948	447,813
With donor restrictions:		
Time or purpose restrictions	37,358	41,232
Perpetual restrictions	-	-
Total net assets with donor restrictions	37,358	41,232
Total net assets	**459,306**	**489,045**
TOTAL LIABILITIES AND NET ASSETS	**$ 513,002**	**$ 525,392**

See accompanying notes

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	Year ended June 30, 2022	Year ended June 30, 2021 (as restated)
	(in thousands)	
OPERATING REVENUES		
Student tuition and fees	$ 1,047,072	$ 1,035,806
Less: scholarship allowances	200,973	183,222
Net student tuition and fees	846,099	852,584
State of Michigan grants and contracts	16,816	16,392
Federal grants and contracts	416,435	385,427
Local and private sponsored programs	75,586	76,416
Interest and fees on student loans	384	584
Departmental activities (net of scholarship allowances of $987 in 2022 and $5,992 in 2021)	286,583	206,274
Auxiliary activities (net of room and board allowances of $23,950 in 2022 and $5,984 in 2021)	454,418	251,365
TOTAL OPERATING REVENUES	**2,096,321**	**1,789,042**
OPERATING EXPENSES		
Instruction and departmental research	752,703	685,476
Research	410,856	374,546
Public service	353,913	300,510
Academic support	130,600	121,730
Student services	58,190	56,540
Scholarships and fellowships	125,507	109,301
Institutional support	153,736	170,486
Operation and maintenance of plant	134,073	121,539
Auxiliary enterprises	390,544	265,059
Other postemployment benefits expense	62,971	(1,601,410)
Depreciation and amortization	213,886	199,147
Other operating expenses, net	4,572	8,900
TOTAL OPERATING EXPENSES	**2,791,551**	**811,824**
Operating (loss) income	(695,230)	977,218
NONOPERATING REVENUES (EXPENSES)		
State operating appropriation	303,409	288,936
State AgBioResearch appropriation	35,287	34,937
State Extension appropriation	30,438	30,136
Federal Pell grant revenue	44,615	44,032
Coronavirus federal grants and aid	85,188	101,272
Gifts	113,375	118,936
Net investment (loss) income	(163,575)	1,195,807
Interest expense on indebtedness	(77,587)	(71,418)
Other nonoperating revenues, net	16,813	5,087
Net nonoperating revenues	387,963	1,747,725
(LOSS) INCOME BEFORE OTHER	**(307,267)**	**2,724,943**
State capital appropriations	3,273	20,199
Capital grants and gifts	37,853	41,713
Additions to permanent endowments	107,260	46,205
(Decrease) increase in net position	(158,881)	2,833,060
Net position, beginning of year	5,317,008	2,464,389
Cumulative effect of change in accounting principles	-	81
Beginning net position adjustment, merger	-	19,478
Net position, beginning of year, as adjusted	5,317,008	2,483,948
NET POSITION, END OF YEAR	**$ 5,158,127**	**$ 5,317,008**

See accompanying notes

STATEMENTS OF ACTIVITIES AND CHANGES IN NET ASSETS

	Year ended June 30, 2022		
	Without Donor Restrictions	With Donor Restrictions (in thousands)	Total
REVENUE, GAINS AND OTHER SUPPORT:			
Contributions	$ 2	$ 1,809	$ 1,811
Income from investments - net of investment fees	(13,176)	(2,602)	(15,778)
Royalty income	631	-	631
Rental income	2,187	-	2,187
Grants and contracts	1,065	2,192	3,257
Adjustment to value of annuities payable	-	886	886
Other income	2,505	-	2,505
In-kind contributions	349	-	349
Net assets released from restrictions	6,159	(6,159)	-
TOTAL REVENUE, GAINS AND OTHER SUPPORT	(278)	(3,874)	(4,152)
EXPENSES:			
Contributions to Michigan State University	13,784	-	13,784
Grant expenses	2,610	-	2,610
Salaries, fringe benefits, and payroll taxes	4,023	-	4,023
Consultants and professional fees	1,136	-	1,136
Office expense	352	-	352
Operating expense	385	-	385
Rent and utilities	1,490	-	1,490
Depreciation and amortization	839	-	839
Provision for uncollectible receivables	644	-	644
Other expense	324	-	324
TOTAL EXPENSES	25,587	-	25,587
Change in net assets	(25,865)	(3,874)	(29,739)
Net assets, beginning of year	447,813	41,232	489,045
NET ASSETS, END OF YEAR	$ 421,948	$ 37,358	$ 459,306

	Year ended June 30, 2021		
	Without Donor Restrictions	With Donor Restrictions (in thousands)	Total
REVENUE, GAINS AND OTHER SUPPORT:			
Contributions	$ -	$ 634	$ 634
Income from investments - net of investment fees	118,362	7,592	125,954
Royalty income	1,812	-	1,812
Rental income	2,130	-	2,130
Grants and contracts	(101)	3,000	2,899
Adjustment to value of annuities payable	-	(224)	(224)
Other income	2,918	-	2,918
Net assets released from restrictions	6,102	(6,102)	-
TOTAL REVENUE, GAINS AND OTHER SUPPORT	131,223	4,900	136,123
EXPENSES:			
Contributions to Michigan State University	13,495	-	13,495
Grant expenses	2,409	-	2,409
Salaries, fringe benefits, and payroll taxes	2,910	-	2,910
Consultants and professional fees	446	-	446
Office expense	398	-	398
Operating expense	84	-	84
Rent and utilities	1,006	-	1,006
Insurance	140	-	140
Depreciation and amortization	972	-	972
Provision for uncollectible receivables	271	-	271
Other expense	212	-	212
TOTAL EXPENSES	22,343	-	22,343
Change in net assets	108,880	4,900	113,780
Net assets, beginning of year	338,933	36,332	375,265
NET ASSETS, END OF YEAR	$ 447,813	$ 41,232	$ 489,045

See accompanying notes

	Year ended June 30, 2022	2021 (as restated)
	(in thousands)	
Cash flows from operating activities		
Tuition and fees	$ 833,197	$ 842,162
Research grants and contracts	498,649	486,229
Auxiliary activities	456,725	260,139
Departmental activities	294,324	174,890
Interest and fees on student loans	384	584
Loans issued to students	(3,503)	(3,590)
Collection of loans from students	5,521	6,410
Scholarships and fellowships	(129,514)	(108,215)
Payments to suppliers	(667,450)	(505,840)
Payments to employees	(1,719,468)	(1,547,052)
Fiduciary activities - Scholarships and other receipts	319,985	314,816
Fiduciary activities - Scholarships and other payments	(319,985)	(315,328)
William D. Ford Direct Lending receipts	76,324	111,642
William D. Ford Direct Lending disbursements	(76,324)	(111,130)
Other payments	(52,447)	(35,517)
Net cash used by operating activities	(483,582)	(429,800)
Cash flows from noncapital financing activities		
State appropriations	368,432	321,782
Federal Pell grant revenue	44,615	44,032
Coronavirus federal grants and aid receipts	93,374	93,086
Gifts	94,681	83,515
Endowment gifts	107,260	46,214
Proceeds from issuance of noncapital debt	500,000	91,446
Principal paid on noncapital debt	(3,570)	(168,745)
Interest paid on noncapital debt	(16,533)	(14,867)
Other receipts	6,563	67,500
Net cash provided by noncapital financing activities	1,194,822	563,963
Cash flows from capital and related financing activities		
Capital appropriations	7,220	21,362
Capital gifts and grants	46,535	49,929
Proceeds from issuance of capital debt and other long-term obligations	23,895	133,278
Purchase of capital assets	(162,882)	(208,886)
Proceeds from sale of capital assets	2,548	816
Principal paid on capital debt	(77,427)	(154,553)
Interest paid on capital debt	(60,820)	(61,479)
Other receipts	1,951	8,932
Net cash used by capital and related financing activities	(218,980)	(210,601)
Cash flows from investing activities		
Investment income, net	484,167	335,419
Proceeds from sales and maturities of investments	2,713,875	2,256,843
Purchase of investments	(3,668,100)	(2,348,639)
Net cash (used) provided by investing activities	(470,058)	243,623
Net increase in cash	22,202	167,185
Cash and cash equivalents, beginning of year	372,997	205,812
Cash and cash equivalents, end of year	**$ 395,199**	**$ 372,997**

See accompanying notes

Reconciliation of net operating income (loss) to cash flows from operating activities:	Year ended June 30, 2022	2021 (as restated)
	(in thousands)	
Operating income (loss)	$ (695,230)	$ 977,218
Adjustments to reconcile operating income (loss) to net cash used by operating activities:		
Depreciation and amortization expense	213,886	199,147
Change in assets and liabilities:		
Accounts receivable	(28,430)	(16,489)
Student loans receivable	2,017	2,820
Inventories and other assets	(3,576)	2,702
Investments in joint ventures and other assets	(4,283)	(239)
Accounts payable	10,223	4,641
Accrued personnel costs	27,659	7,445
Payroll taxes and other payroll deductions	(44,040)	30,540
Deposits held for others	1,049	989
Unearned revenues	6,909	(6,546)
Accrued self-insurance liabilities	(583)	4,178
Net other postemployment benefit obligation	18,456	(1,511,245)
Change in deferred outflows	34,840	(88,188)
Change in deferred inflows	(22,479)	(36,773)
Net cash used by operating activities	**$ (483,582)**	**$ (429,800)**

See accompanying notes

1. Organization, basis of presentation, reporting entity, and summary of significant accounting policies

Organization:

Michigan State University (the "University") was founded in 1855 as the Agricultural College of the State of Michigan. It was the first institution of higher learning in the nation to teach scientific agriculture and in 1863 became a pioneer land grant college under the Morrill Act. The University has grown into a comprehensive research university providing undergraduate, graduate, and professional degree programs. The University is not a component unit of the State of Michigan as defined by the Governmental Accounting Standards Board ("GASB").

Basis of presentation:

The University follows all applicable GASB pronouncements. The accompanying financial statements have been prepared using the economic resource measurement focus and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America for publicly owned colleges and universities and are presented in accordance with the reporting model prescribed in GASB Statement No. 34, *Basic Financial Statements-and Management's Discussion and Analysis-for State and Local Governments*, and GASB Statement No. 35, *Basic Financial Statements-and Management's Discussion and Analysis-for Public Colleges and Universities*, as amended by GASB Statements No. 37, No. 38, and No. 63. The University follows the "business-type" activities requirements of GASB Statement No. 34. This approach requires the following components of the University's financial statements:

- Management's Discussion and Analysis
- Basic Financial Statements: Statement of Net Position; Statement of Revenues, Expenses, and Changes in Net Position; Statement of Cash Flows; and Notes to the Financial Statements

GASB Statement No. 34, as amended, establishes standards for external financial reporting for public colleges and universities and requires that resources be classified for accounting and reporting purposes into the following four net position categories:

- Net investment in capital assets: Capital assets, net of accumulated depreciation, amortization, and outstanding principal balances of debt attributable to the acquisition, construction, or improvement of those assets.
- Restricted:
  Nonexpendable – Net position subject to externally imposed constraints that they be maintained permanently by the University. Nonexpendable net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.

  Expendable – Net position whose use by the University is subject to externally imposed constraints that can be fulfilled by actions of the University pursuant to those constraints or that expire by the passage of time. Expendable net position includes net appreciation of the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently.
- Unrestricted: Net position that is not subject to externally imposed constraints. Unrestricted net position may be designated for specific purposes by action of management or the Board of Trustees (the "Board") or may otherwise be limited by contractual agreements with outside parties. Unrestricted net position is generally designated for academic, research, and outreach programs and initiatives, postemployment benefits, and capital asset renewals and replacements.

Reporting entity:

The Michigan State University Foundation (the "Foundation") is a legally separate, tax-exempt entity that meets the criteria set forth for component units under GASB Statement No. 39, *Determining Whether Certain Organizations are Component Units*, as amended by GASB Statement No. 61. The Foundation provides financial support for the objectives, purposes, and programs of the University. Although the University does not control the timing, purpose, or amount of its receipts from the Foundation, the resources (and income thereon) that the Foundation holds and invests are dedicated to benefit the University. Because the resources held by the Foundation can only be used by, or for the benefit of, the University, the Foundation is considered a component unit of the University and its Statements of Financial Position and Statements of Activities and Changes in Net Assets are discretely presented in the University's financial statements. In addition, the Foundation's significant notes are summarized in note 4.

The Foundation is a private organization that reports under FASB standards. As such, certain revenue recognition criteria and presentation features are different from those under GASB. No modifications have been made to the Foundation financial information included in the University's financial report to account for these differences. Complete financial statements for the Foundation can be obtained by a written request to:

Michigan State University Foundation, 325 E. Grand River Avenue, Suite 275, East Lansing, MI 48823.

MSU Health Care, Inc. is a legally separate, tax-exempt entity with the University serving as its sole corporate member. MSU Health Care, Inc. is a multi-specialty medical practice that operates the University's primary care, sports medicine, diagnostics, testing, and other services. Under the requirements of GASB Statement No. 80, *Blending Requirements for Certain Component Units - an amendment of GASB Statement No. 14,* MSU Health Care, Inc. is reported as a blended component unit. Effective July 1, 2020, the University transferred the operations of primary care, sports medicine, diagnostics, testing, and other services to MSU Health Care, Inc. MSU Health Care, Inc.'s significant notes are included the University's footnotes, the transfer of operations is disclosed in note 17, and condensed financial statements are presented in note 18. Complete financial statements for MSU Health Care, Inc. can be obtained by a written request to:

MSU Health Care, Inc., 909 Fee Road, Room D130, East Lansing, MI 48824.

Lysander Series of Aesir Series, LLC ("Lysander") was formed as a legally separate entity that meets the criteria set forth for component units under GASB Statement No. 61. Lysander is a cell captive insurance company within an existing and approved captive insurance company used by the University to gain access to global reinsurers for purposes of obtaining general liability insurance and automobile liability insurance as disclosed in note 10. Lysander exclusively benefits the University and the Board is the series member of Lysander which is reported as a blended component unit. Condensed financial statements are presented in note 18.

In August 2020, the University acquired all of the assets and ongoing operations of the Michigan State University College of Law ("Law College") in exchange for assuming the Law College's outstanding liabilities. The operations of the Law College are treated as a department of the University and the Law College's separate legal entity was dissolved in October 2020. The asset purchase agreement was accounted for as a merger with the University recognizing the Law College's assets, liabilities, and net position at carrying value as of July 1, 2020. The Law College reported under FASB accounting standards, so the Law College's financial statements were recalculated under GASB accounting standards, before being recognized in the University financial statements. The merger is disclosed in note 17.

Summary of significant accounting policies:

Cash and cash equivalents – For purposes of the Statement of Cash Flows, the University defines cash equivalents as highly liquid, short-term (90 days or less) investments that bear little or no market risk. Certain cash and cash equivalents held by investment managers in the Liquidity Reserve Pool ("LRP"), Common Investment Fund ("CIF"), and other investment funds are included in investments because the intent of these funds is long-term appreciation. Cash balances held by investment managers in these funds at the date of the financial statements are due to timing of reinvesting the proceeds within the fund.

Pledges – Financial support in the form of pledges is received from business enterprises, foundations, and individuals. Revenue from gift pledges is recorded only when there is an unconditional promise to pay and all eligibility requirements, including time requirements, have been met. Contributions to permanent and term endowments are not recognized as assets until actually received.

Inventories – Inventories are recorded using various methods, including first in, first out (FIFO).

Investments – Investments are stated at fair value, which represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The University values its investments using a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the University, while unobservable inputs reflect the University's own assumptions about how market participants would value an asset or a liability based on the best information available. The University uses various industry standard valuation techniques that are appropriate under the circumstances and for which sufficient data is available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

Capital assets – Capital assets are stated at cost or, when donated, at acquisition value at the date of the gift. Depreciation is computed using the straight-line method, with a full-year expense in the year of acquisition and none in the year of disposal. Assets are depreciated over the estimated useful lives ranging from four to forty years for the respective assets. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts. The University capitalizes but does not depreciate certain works of art and historical treasures that are held for exhibition, education, research, or public service. These collections are neither disposed of for financial gain nor encumbered in any way, and are subject to organizational policy that requires the proceeds of items that are sold to be used to acquire other items for collections.

Deferred outflows of resources – This separate financial statement element represents a consumption of net position that applies to a future period and so will not be recognized as an expense until then. Deferred outflows of resources consist of accumulated changes in the fair value of hedging derivative instruments, contributions subsequent to the measurement date and changes in assumptions related to the valuation of other postemployment benefits, and deferred losses on refunding of debt.

Deferred inflows of resources – Deferred inflows of resources represent an addition to net position that applies to a future period and so will not be recognized as revenue until then. Deferred inflows of resources consist of the investment value, net of related liabilities to other beneficiaries, attributable to the University from irrevocable split-interest agreements, changes in assumptions related to the valuation of other postemployment benefits, lease agreements in which the University serves as the lessor, and deferred gains on refunding of debt.

Compensated absences – University employees earn vacation and sick leave benefits based, in part, on length of service. Vacation pay is fully vested when earned. Upon separation from service, employees are paid accumulated vacation and sick pay based upon the nature of separation (death, retirement, or termination). Certain limitations have been placed on the hours of vacation and sick leave that employees may accumulate and carry over for payment at death, retirement, or termination. Unused hours exceeding these limitations are forfeited.

Self-insurance liabilities – Self-insurance liabilities consist of accrued expenses related to the University's self-insurance programs.

Unearned revenue – Unearned revenue consists primarily of advance ticket sales for athletic events, summer school tuition not earned during the current year, and contract and sponsored program advances.

Derivative instruments – Derivative instruments consist of interest rate swap agreements and are stated at fair value based on the zero-coupon valuation method.

Operating and nonoperating revenues – Operating activities as reported in the Statements of Revenues, Expenses, and Changes in Net Position are those activities that generally result from exchange transactions, such as payments received for providing services and payments made for services or goods received. Nearly all of the University’s expenses are from exchange transactions. Certain significant revenue streams relied upon for operations are recorded as nonoperating revenues, as defined by GASB Statement No. 34, including state appropriations, federal Pell grant revenue, gifts, and investment income. Restricted and unrestricted resources are spent and tracked at the discretion of the recipient University department within the guidelines of donor restrictions, if any.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Coronavirus federal grants and aid - In December 2019, COVID-19 was first reported and subsequently emerged as a global pandemic. The world-wide response to manage the COVID-19 pandemic included many extraordinary measures designed to reduce physical human interactions, including the temporary suspension of community events and other activities, broad travel restrictions, and the temporary closing of many businesses. Likewise, the University's operations and financial results for the year ended June 30, 2021 were significantly impacted, including transitioning instruction to remote learning to the fullest extent possible, limiting on-campus residence, eliminating all non-essential travel, and cancelling or postponing athletic and performing arts events. The year ended June 30, 2022, saw many of these restrictions lifted as vaccines became readily available, and reflects a more standard operating year.

To partially offset the financial impact to students and the losses incurred by the University due to the disruption caused by COVID-19, the University received various federal grants. In accordance with each individual grant, the University was required to meet certain eligibility requirements before recognizing the funding as revenue, which included distributing certain portions to students as emergency financial aid. For the fiscal years ending June 30, 2022 and 2021, federal coronavirus grants recognized were as follows:

	2022	2021
Coronavirus Aid, Relief, and Economic Securities (CARES) Act:		
Institutional aid	$ -	$ 14,918
Coronavirus Provider Relief Funds	1,620	-
Coronavirus Relief Funds	-	32,203
Coronavirus Response and Relief Supplemental Appropriations:		
Emergency student aid	-	15,029
Institutional aid	-	30,936
American Rescue Plan:		
Emergency student aid	39,385	1,527
Institutional aid	39,315	1,527
Shuttered Venue Operators Grant	4,868	5,132
Total coronavirus federal grants and aid	$ 85,188	$ 101,272

These amounts are reported as nonoperating revenues in the Statement of Revenues, Expenses, and Changes in Net Position.

The University was awarded $29,837 in funding through the Coronavirus Aid, Relief, and Economic Security ("CARES") Act: Higher Education Emergency Relief Fund during the year ended June 30, 2020. The final $14,918 of the relief, representing institutional aid, was utilized during the year ended 2021.

The University was awarded $32,203 of CARES Act Relief Funding through the State of Michigan as a substitute for a portion of the originally awarded fiscal year 2020 state appropriation. Eligibility requirements for these funds were satisfied during the year ended June 30, 2021.

The University was awarded $45,965 in funding through the Coronavirus Response and Relief Supplemental Appropriations Act during the year ended June 30, 2021. During the year ended June 30, 2021, the University provided $15,029 to students as emergency financial aid, and utilized $30,936 as institutional aid.

The University was awarded $81,754 in funding through the American Rescue Plan Act during the year ended June 30, 2021. During the year ended June 30, 2021, the University provided $1,527 to students as emergency financial aid, and utilized $1,527 as institutional aid. During the year ended June 30, 2022, the University provided $39,385 as emergency financial aid, and utilized $39,315 as institutional aid.

The University was awarded $7,324 in funding through the Shuttered Venue Operators Grant during the year ended June 30, 2021. The University was reimbursed for $5,132 in expenses recognized prior to June 30, 2021, and thus recognized a receivable and revenue for this amount as of June 30, 2021. The remaining amount awarded was recognized in the year ended June 30, 2022.

The University was awarded an additional $2,676 in funding through the Shuttered Venue Operators Grant during the year ended June 30, 2022. The full amount of the award was utilized and recognized during the year ended June 30, 2022.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Student tuition and fees – Student tuition and fee revenues are reported in the fiscal year in which the student instruction occurs, net of scholarship allowances in the Statements of Revenues, Expenses, and Changes in Net Position. Scholarship allowances represent the difference between the stated charge for goods and services provided by the University and the amount that is paid by the students or third parties on behalf of the students, where the University has discretion over such expenses.

Auxiliary activities – Auxiliary activities primarily represent revenues generated from University Student Life and Engagement Services, Intercollegiate Athletics, and various other departmental activities that provide services to the student body, faculty, staff, and general public.

Donor restricted endowments – Under Michigan law set forth in the Uniform Prudent Management of Institutional Funds Act, as adopted in Michigan in 2009 ("UPMIFA"), the Board acts in a fiduciary capacity as trustee of its endowment funds. UPMIFA requires that the Board exercise its fiduciary duties prudently and consider both the charitable purposes and needs of the University and the purposes of the specific endowment regarding current expenditures and preservation of the purchasing power of the funds. Under the programmatic spending policy established by the Board, 4.4% of the average market value of endowment investments for the twenty quarters of the five fiscal years prior to the beginning of the fiscal year was authorized for expenditure for fiscal year 2022. For fiscal year 2023, the rate will remain at 4.4%.

Reclassification – Cash flows related to William D. Ford Direct Lending from the prior year have been reclassified to conform to the current year's presentation.

Eliminations – In preparing the financial statements, the University eliminates inter-fund assets and liabilities and transactions with blended component units that would otherwise be reflected twice in the Statements of Net Position. Similarly, revenues and expenses related to internal service activities and blended component units are also eliminated from the Statement of Revenues, Expenses, and Changes in Net Position. Student tuition and fees are presented net of scholarships and fellowships applied to student accounts where the University has discretion over such expenses, while stipends and other payments made directly to students are presented as scholarship and fellowship expenses.

Use of estimates – The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and the accompanying notes. Actual results could differ from those estimates.

Income taxes – The University is a part of the State of Michigan for purposes of Internal Revenue Code Section 115, and is an organization as described in Internal Revenue Code Section 501(c)(3). The University's income generally is exempt from federal income taxes, although income from certain activities may be subject to taxation as unrelated business income.

Change in accounting policy – Effective for the fiscal year ended June 30, 2022, the University adopted GASB Statement No. 87, *Leases* ("GASB 87"). This statement supersedes GASB Statement No. 62 and establishes new requirements for calculating and reporting the University's lease activities. The adoption of GASB 87 has been reflected as of July 1, 2020.

Beginning net position as of July 1, 2020 was restated for the effects of the University's adoption of GASB 87 as follows:

	June 30, 2020 as Originally Reported	GASB 87 Adoption	July 1, 2020 as Restated
Current assets	$ 823,898	$ 1,491	$ 825,389
Noncurrent assets	6,137,991	39,203	6,177,194
Total assets	6,961,889	40,694	7,002,583
Deferred outflows of resources	547,578	-	547,578
Current liabilities	744,501	3,047	747,548
Noncurrent liabilities	3,913,029	20,766	3,933,795
Total liabilities	4,657,530	23,813	4,681,343
Deferred inflows of resources	387,548	16,800	404,348
Net position	$ 2,464,389	$ 81	$ 2,464,470

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The Statement of Net Position as of June 30, 2021 was restated for the effects of the University's adoption of GASB 87 as follows:

	June 30, 2021 as Originally Reported	GASB 87 Adoption	June 30, 2021 as Restated
Current assets	$ 1,135,464	$ 1,503	$ 1,136,967
Noncurrent assets	6,925,135	46,821	6,971,956
Total assets	8,060,599	48,324	8,108,923
Deferred outflows of resources	621,799	-	621,799
Current liabilities	646,667	3,824	650,491
Noncurrent liabilities	2,367,804	18,558	2,386,362
Total liabilities	3,014,471	22,382	3,036,853
Deferred inflows of resources	351,378	25,483	376,861
Net position	$ 5,316,549	$ 459	$ 5,317,008

The Statement of Revenues, Expenses, and Changes in Net Position for the year ended June 30, 2021 was restated for the effects of the University's adoption of GASB 87 as follows:

	June 30, 2021 as Originally Reported	GASB 87 Adoption	June 30, 2021 as Restated
Operating revenues	$ 1,791,088	$ (2,046)	$ 1,789,042
Operating expenses	812,166	(342)	811,824
Operating income	978,922	(1,704)	977,218
Net nonoperating revenues	1,745,643	2,082	1,747,725
Net income before other	2,724,565	378	2,724,943
State capital appropriations	20,199	-	20,199
Capital grants and gifts	41,713	-	41,713
Additions to permanent endowments	46,205	-	46,205
Increase in net position	2,832,682	378	2,833,060
Net position, beginning of year	2,464,389	-	2,464,389
Cumulative effect of change in accounting principles	-	81	81
Beginning net position adjustment, merger	19,478	-	19,478
Net position, beginning of year, as adjusted	2,483,867	81	2,483,948
Net position	$ 5,316,549	$ 459	$ 5,317,008

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The Statement of Cash Flows for the year ended June 30, 2021 was restated for the effects of the University's adoption of GASB 87 as follows:

	June 30, 2021 as Originally Reported	GASB 87 Adoption	June 30, 2021 as Restated
Net cash used by operating activities	$ (431,324)	$ 1,524	$ (429,800)
Net cash provided by noncapital financing activities	563,963	-	563,963
Net cash used by capital and related financing activities	(209,077)	(1,524)	(210,601)
Net cash provided by investing activities	243,623	-	243,623
Net increase in cash	167,185	-	167,185
Cash and cash equivalents, beginning of year	205,812	-	205,812
Cash and cash equivalents, end of year	$ 372,997	$ -	$ 372,997

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

2. Cash and cash equivalents

The University's cash and cash equivalents as of June 30, 2022 and 2021 were as follows:

	2022	2021
Total cash and cash equivalents	$ 395,199	$ 372,997

Of the bank balances for cash, $1,075 of the total $527,856 in 2022 and $852 of the total $487,522 in 2021 were held in accounts covered by federal depository insurance. Any remaining amounts were uninsured and uncollateralized, as banks holding deposits of the University are legally prohibited from collateralizing these deposits.

3. Investments and fair value measurements

The University manages investments in accordance with the investment policy approved by the Board. The investment policy distinguishes guidelines for the Liquidity Pool ("LP"), Liquidity Reserve Pool ("LRP"), and Common Investment Fund ("CIF"). In addition, the University has other investments that are restricted by external agreements or by special donor limitations (Other).

As of June 30, 2022 and 2021, the University had the following investments:

	June 30, 2022				
Investment type	LP	LRP	CIF	Other	Total
Investment pools	$ 43,835	$ -	$ 3,565,777	$ 59,112	$ 3,668,724
U.S. Government agencies	495,677	1,822	-	-	497,499
Municipal bonds	185	-	-	-	185
Corporate bonds	240,161	-	-	-	240,161
Asset-backed securities	131,019	104,743	-	-	235,762
Money market and mutual funds	-	54	-	-	54
International bonds	-	-	127	-	127
Life insurance policies	-	-	-	4,323	4,323
Total	$ 910,877	$ 106,619	$ 3,565,904	$ 63,435	$ 4,646,835

	June 30, 2021				
Investment type	LP	LRP	CIF	Other	Total
Investment pools	$ 19,579	$ -	$ 3,366,336	$ 73,987	$ 3,459,902
U.S. Government agencies	178,478	106,742	-	-	285,220
Municipal bonds	1,491	-	-	-	1,491
Corporate bonds	139,893	-	-	-	139,893
Asset-backed securities	142,052	-	-	-	142,052
U.S. equities	-	-	267,570	-	267,570
International equities	-	-	42,559	-	42,559
International bonds	1,009	-	174	-	1,183
Life insurance policies	-	-	-	4,250	4,250
Total	$ 482,502	$ 106,742	$ 3,676,639	$ 78,237	$ 4,344,120

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Custodial Credit Risk: For an investment, custodial credit risk exists that in the event of the failure of the counterparty, the University will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. University investment policy does not limit the value of investments that may be held by an outside party. The University's investments that are held by the University's counterparty in the name of the University as of June 30, 2022 and 2021, respectively, are as follows:

Investment type	2022	2021
Investment pools	$ 15,527	$ 18,980
U.S. Government agencies	497,499	285,220
Municipal bonds	185	1,491
Corporate bonds	240,161	139,893
Asset-backed securities	235,762	142,052
U.S. equities	-	267,570
International equities	-	42,559
International bonds	127	1,183
Total	$ 989,261	$ 898,948

The maturities of fixed income investments as of June 30, 2022 and 2021 were as follows:

	June 30, 2022 Fixed Income Investment Maturities				
Investment type	Less than 1 year	1-5 years	6-10 years	More than 10 years	Total
U.S. Government agencies	$ -	$ 495,677	$ -	$ 1,822	$ 497,499
Municipal bonds	185	-	-	-	185
Corporate bonds	16,235	223,926	-	-	240,161
Asset-backed securities	6,905	75,253	41,396	112,208	235,762
International bonds	-	127	-	-	127
Total	$ 23,325	$ 794,983	$ 41,396	$ 114,030	$ 973,734

	June 30, 2021 Fixed Income Investment Maturities				
Investment type	Less than 1 year	1-5 years	6-10 years	More than 10 years	Total
U.S. Government agencies	$ -	$ 285,220	$ -	$ -	$ 285,220
Municipal bonds	-	1,126	-	365	1,491
Corporate bonds	5,107	132,786	2,000	-	139,893
Asset-backed securities	-	55,843	35,047	51,162	142,052
International bonds	-	1,183	-	-	1,183
Total	$ 5,107	$ 476,158	$ 37,047	$ 51,527	$ 569,839

Interest Rate Risk: As a means of managing its exposure to fair value losses arising from increasing interest rates, University investment policy limits the average duration of the LP portfolio to three years and the LRP and CIF portfolios to six years. At June 30, 2022 and 2021, the University was in compliance with its investment policy with regard to average duration. University policy does not address average duration of investments by investment type.

The University invests in asset-backed securities such as mortgage pass-through securities issued by U.S. Government agencies. These securities are based on cash flows from interest payments on underlying mortgages. Therefore, they are sensitive to prepayments by mortgagees, which may result from a decline in interest rates.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The Standard & Poor's credit ratings for fixed income investments at June 30, 2022 and 2021 were as follows:

	June 30, 2022							
	Rating							
Investment type	AAA	AA	A	BBB	BB	Below BB	Not rated	Total
U.S. Government agencies	$ 3,218	$ 492,459	$ -	$ 1,822	$ -	$ -	$ -	$ 497,499
Municipal bonds	-	-	-	-	-	-	185	185
Corporate bonds	-	14,276	108,536	109,903	-	-	7,446	240,161
Asset-backed securities	70,653	27,233	4,431	15,980	-	-	117,465	235,762
International bonds	-	-	-	-	-	-	127	127
Total	$ 73,871	$ 533,968	$ 112,967	$ 127,705	$ -	$ -	$ 125,223	$ 973,734

	June 30, 2021							
	Rating							
Investment type	AAA	AA	A	BBB	BB	Below BB	Not rated	Total
U.S. Government agencies	$ -	$ 285,220	$ -	$ -	$ -	$ -	$ -	$ 285,220
Municipal bonds	-	1,304	-	-	-	-	187	1,491
Corporate bonds	-	8,788	53,263	68,502	-	-	9,340	139,893
Asset-backed securities	52,449	36,384	1,645	557	-	-	51,017	142,052
International bonds	1,009	-	-	-	-	-	174	1,183
Total	$ 53,458	$ 331,696	$ 54,908	$ 69,059	$ -	$ -	$ 60,718	$ 569,839

Credit Risk: While certain holdings are not individually rated, U.S. Treasury bonds and U.S. Government agencies securities are backed by the full faith and credit of the U.S. government, which has an AA+ rating by Standard & Poor's. University policy does not address credit risk by investment type. As a means of managing credit risk on its fixed income investments, University investment policy limits portfolio average investment quality of all separately managed funds to AA and limits investments at time of purchase to the following minimum ratings issued by nationally recognized statistical rating organizations by portfolio type as follows:

- LP portfolio - Short-term A1/P1, long-term BBB
- LRP portfolio - Short-term A2/P2, long-term B
- CIF portfolio - Short-term A2/P2, long-term BB

Concentration of Credit Risk: As a means of managing the concentration of credit risk, University investment policy limits the concentration of investments as follows:

- LP portfolio – No more than 15% of the portfolio's market value may be invested in dollar denominated foreign securities of developed countries (i.e., no emerging markets). No more than 10% of the portfolio's market value will be invested in securities of any single issuer, except those which are obligations of, or fully guaranteed as to both principal and interest by, the U.S. Government or its agencies.

- LRP portfolio – No more than 10% of the portfolio's market value may be invested in securities below BBB. No more than 10% of the portfolio's market value may be invested in securities of any single issuer, except those which are obligations of, or fully guaranteed as to both principal and interest by, the U.S. Government or its agencies.

- CIF portfolio – Investments are managed in accordance with asset allocation guidelines and manager guidelines established at the time of manager appointment and consist of equities, real assets, limited partnerships, absolute return funds, and fixed income assets.

As of June 30, 2022 and 2021, not more than 5% of the University's total investments were invested in any one issuer except those which are obligations of, or fully guaranteed as to both principal and interest by, the U.S. Government or its agencies.

Foreign Currency Risk: University investment policy limits foreign currency risk on its LRP portfolio to 30% of the portfolio's market value, but does not address foreign risks for the LP or CIF portfolios. The University's exposure to foreign currency risk consisted of $7,881 in investments denominated in British pounds sterling and $2,967 in investments denominated in euros at June 30, 2022. The University's exposure to foreign currency risk consisted of $13,937 in investments denominated in British pounds sterling and $3,403 in investments denominated in euros at June 30, 2021.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The University categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The following describes this hierarchy and the primary valuation methodologies used by the University for financial instruments measured at fair value on a recurring basis:

Level 1: Quoted prices in active markets for identical assets or liabilities. Market-price data are generally obtained from relevant exchanges or dealer markets.

Level 2: Inputs other than Level 1 that are observable either directly or indirectly, such as quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for similar assets or liabilities. Inputs are obtained from various sources, including market participants, dealers, and brokers.

Level 3: Unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The University's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. Certain prior year amounts in the footnote have been reclassified for consistency with the current year presentation.

The University's recurring estimated fair value of investments at June 30, 2022 and 2021, grouped by the valuation hierarchy outlined above were as follows:

	Fair value measurement at June 30, 2022 using:				
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Net asset value (NAV)	Balance at June 30, 2022
Investments by fair value level:					
Equity securities:					
U.S. equities	$ 303,794	$ -	$ -	$ 858,478	$ 1,162,272
International equities	3,323	-	-	46,862	50,185
Debt securities:					
U.S Government agencies	-	497,499	-	-	497,499
Corporate bonds	-	240,161	-	-	240,161
International bonds	-	127	-	-	127
Municipal bonds	-	185	-	-	185
Asset-backed securities	-	235,762	-	-	235,762
Hedge funds	-	-	-	726,434	726,434
Private investments	-	-	1,930	1,373,765	1,375,695
Real assets/Real estate	-	-	26,332	173,847	200,179
Money market and mutual funds	112,185	-	-	-	112,185
Funds held at MSU Foundation	-	-	20,546	-	20,546
Other investments	-	-	21,205	-	21,205
Total investments by fair value level	$ 419,302	$ 973,734	$ 70,013	$ 3,179,386	$ 4,642,435

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

	Fair value measurement at June 30, 2021 using:				
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Net asset value (NAV)	Balance at June 30, 2021
Investments by fair value level:					
Equity securities:					
U.S. equities	$ 609,094	$ -	$ -	$ 368,739	$ 977,833
International equities	46,611	-	-	209,951	256,562
Debt securities:					
U.S Government agencies	-	285,220	-	-	285,220
Corporate bonds	-	139,893	-	-	139,893
International bonds	-	1,183	-	-	1,183
Municipal bonds	-	1,491	-	-	1,491
Asset-backed securities	-	142,052	-	-	142,052
Hedge funds	-	-	-	641,307	641,307
Private investments	-	-	-	1,565,715	1,565,715
Real assets/Real estate	-	-	25,448	162,517	187,965
Money market and mutual funds	87,899	-	-	-	87,899
Funds held at MSU Foundation	-	-	19,684	-	19,684
Other investments	-	-	19,026	-	19,026
Total investments by fair	$ 743,604	$ 569,839	$ 64,158	$ 2,948,229	$ 4,325,830

As prescribed by GASB Statement No. 72, *Fair Value Measurement and Application*, certain investments held by the University are to be valued using methods other than fair value. For the fiscal years ending June 30, 2022 and 2021, the University did not hold any U.S. Treasury bond investments with original maturities of less than one year. In addition, certain funds held by interest rate swap counterparties totaling $4,400 and $18,290 at June 30, 2022 and 2021, respectively, reflect cash balances on deposit in accordance with counterparty collateral posting provisions.

Investments classified in Level 1 at June 30, 2022 and 2021 are valued using prices quoted in active markets for those securities.

The fair value of various equity and debt securities held at June 30, 2022 and 2021 was determined primarily on Level 2 inputs. The University estimates the fair value of these investments using other inputs such as interest rates and yield curves that are observable at commonly quoted intervals.

Investments classified in Level 3 at June 30, 2022 and 2021 are valued using the University's own estimates using pricing models, discounted cash flow methodologies, or similar techniques taking into account the characteristics of the asset. Life insurance policies are valued at their cash surrender value.

Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers benchmark interest rates. The University's estimated fair value of derivatives at June 30, 2022 and 2021 were as follows:

	Fair value measurement at June 30, 2022 using:			
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Balance at June 30, 2022
Derivative instruments by fair value:				
Cash flow hedging derivatives - swap liability	-	(18,329)	-	(18,329)
Investment derivatives - swap liability	-	(15,250)	-	(15,250)
Total derivative instruments by fair value	$ -	$ (33,579)	$ -	$ (33,579)

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

	Fair value measurement at June 30, 2021 using:			
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Balance at June 30, 2021
Derivative instruments by fair value:				
Investment derivatives - swap assets	$ -	$ 324	$ -	$ 324
Cash flow hedging derivatives - swap liability	-	(37,161)	-	(37,161)
Investment derivatives - swap liability	-	(17,679)	-	(17,679)
Total derivative instruments by fair value	$ -	$ (54,516)	$ -	$ (54,516)

The University holds shares or interests in investment companies where the fair value of the investments are measured on a recurring basis using net asset value (or its equivalent) of the investment companies as a practical expedient. For the year ended June 30, 2022 and 2021, the fair value, unfunded commitments, and redemption rules of those investments were as follows:

			As of June 30, 2022		
	June 30, 2022	June 30, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
U.S. equities [a]	$ 858,478	$ 368,739	$ -	Daily	1 day
International equities [b]	46,862	209,951	-	Various	10-30 days
Hedge funds [c]	726,434	641,307	23,720	Various	31-120 days
Private investments [d]	1,373,765	1,565,715	619,405	Not applicable	Not applicable
Real assets/Real estate [e]	173,847	162,517	42,831	Not applicable	Not applicable
Total	$ 3,179,386	$ 2,948,229	$ 685,956		

[a] *U.S. equities.* This category includes U.S. equities that are marketable equity securities of primarily U.S.-based companies. Several sub-categories of this asset class include: large capitalization companies, small capitalization companies, value-style investing, and growth-style investing.

[b] *International equities.* This category includes international equities that are marketable equity securities in developed and emerging countries outside the U.S. The investment is intended to provide long-term performance similar to or in excess of U.S. equities and provide diversification.

[c] *Hedge funds.* The University invests in hedge funds seeking equity-like returns while reducing volatility. The University will consider funds with a diversifier mandate (lower expected volatility and lower correlation to broad market trends), as well as funds with a growth-oriented mandate (higher expected volatility and higher correlation to broad market trends). Managers with either type of mandate will employ risk management techniques intended to reduce downside potential to a degree considered appropriate for their respective strategy. A de minimis amount of the hedge funds have restrictions that do not allow for redemption in the first 12 to 60 months after acquisition. The longer remaining restriction period for these investments ranged from 10 to 22 months at June 30, 2022. Generally, longer redemption restrictions are offered with a lower fee structure

[d] *Private investments.* This category includes distressed, private equity, and venture capital investments. These investments are illiquid and higher risk/return assets than marketable securities. Risk will be controlled by diversifying across a number of fund managers and by geographic focus, industry emphasis, financing stage, and vintage year. This core private investments portfolio may be supplemented with less diversified specialty funds or direct investments. The investments in the private investments class (limited partnerships) are committed to funds for extended periods of time, often multiple years. The pacing of investment returns is determined by market activity and the discretion of the general partner. Secondary markets exist into which limited partners can sell their interest in funds, but often at a steep discount to the fair value of the investment. Distributions from each fund will be received only as the underlying investments of the funds are liquidated. It is estimated that the underlying assets of the fund will be liquidated over the next 1 to 10 years.

[e] *Real assets/Real estate.* This category includes both public and private real assets. Risks related to the investments will be minimized by diversifying through use of investment pools or partnerships that are varied as to property type, location, investment life cycle, and investment manager. This core real asset portfolio may be supplemented with less diversified specialty funds or direct investments.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

4. Foundation investments

The Foundation records investments at fair value. It utilizes valuation techniques that maximize the use of observable inputs and minimizes the use of unobservable inputs. Based on the observability of the inputs used in the valuation techniques the Foundation is required to provide the following information according to the fair value hierarchy. The fair value hierarchy ranks the quality and reliability of the information used to determine fair values. Financial assets carried at fair value will be classified and disclosed in one of the following three categories:

Level 1: Quoted prices for identical assets or liabilities in active markets that the Foundation has the ability to access as of the measurement date.

Level 2: Significant other observable inputs other than Level 1 prices such as quoted prices for similar assets and liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3: Significant unobservable inputs that reflect a company's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

The Foundation's estimated fair values of investments measured on a recurring basis as of June 30, 2022 and 2021 were as follows:

	Fair value measurement at June 30, 2022 using:				
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Net asset value (NAV)	Balance at June 30, 2022
Marketable securities:					
Short-term investments	$ 394	$ -	$ -	$ -	$ 394
Domestic equities	70,918	-	-	-	70,918
Foreign equities	351	-	-	-	351
Mutual funds - equities	64,820	-	-	-	64,820
Mutual funds - fixed income	6,796	-	-	-	6,796
Alternative investments:					
Foreign equities	-	-	-	15,627	15,627
Hedge funds	-	-	-	129,723	129,723
Private equity	-	-	-	146,088	146,088
Total investments by fair value level	$ 143,279	$ -	$ -	$ 291,438	$ 434,717

	Fair value measurement at June 30, 2021 using:				
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Net asset value (NAV)	Balance at June 30, 2021
Marketable securities:					
Short-term investments	$ 285	$ -	$ -	$ -	$ 285
Domestic equities	41,711	-	-	-	41,711
Foreign equities	1,025	-	-	-	1,025
Mutual funds - equities	97,914	-	-	-	97,914
Mutual funds - fixed income	7,583	-	-	-	7,583
Alternative investments:					
Foreign equities	-	-	-	43,772	43,772
Hedge funds	-	-	-	122,337	122,337
Private equity	-	-	-	155,675	155,675
Total investments by fair value level	$ 148,518	$ -	$ -	$ 321,784	$ 470,302

The fair value for marketable debt and equity securities are based on quoted market prices. Securities traded on the national securities exchange are valued at the reported sales price on the last business day of the year. Investments traded over the counter on the over-the-counter market and listed securities for which no sale was reported on that date are valued at the average of the last reported bid and ask price.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

In accordance with applicable accounting standards, certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

Private equity investments are illiquid based upon partnership dissolution. Management, external consultants, and the Board of Directors evaluate these investments for impairment on a quarterly basis. As of June 30, 2022, the Foundation has outstanding commitments to fund limited partnerships and venture capital investments in the amount of $58,975.

5. Accounts and interest receivable

The composition of accounts and interest receivable at June 30, 2022 and 2021 is summarized as follows:

	2022	2021
State appropriations	$ 65,066	$ 64,365
Research and sponsored programs	73,503	65,843
Departmental activities	79,508	77,382
Lease receivables	29,418	25,877
Interest receivable	5,127	1,444
Other	40,799	25,469
	293,421	260,380
Less: allowance for doubtful accounts	14,351	8,687
Total accounts and interest receivable, net	279,070	251,693
Less: current portion	$ 250,065	$ 226,644
Noncurrent portion	$ 29,005	$ 25,049

6. Student loans and pledges receivable

The composition of student loans and pledges receivable at June 30, 2022 and 2021 is summarized as follows:

	2022	2021
Student loans receivable:		
Perkins Federal Loan Program	$ 8,790	$ 11,729
Health Professions Student Loan Programs	14,262	13,363
Other	1,930	2,141
	24,982	27,233
Less: allowance for doubtful accounts	1,867	2,101
Total student loans receivable, net	23,115	25,132
Pledges receivable:		
Capital	47,362	57,026
Operations	86,692	65,872
	134,054	122,898
Less: allowance for doubtful accounts	13,824	12,680
Total pledges receivable, net	120,230	110,218
Total student loans and pledges receivable, net	143,345	135,350
Less: current portion - student loans	6,509	7,279
Less: current portion - pledges	29,734	28,063
Noncurrent portion	$ 107,102	$ 100,008

Principal repayment and interest rate terms of federal and University student loans vary considerably. Campus-based federal loan programs are funded principally with federal and institutional contributions to the University under the Perkins and various health professions loan programs.

The Perkins loan program expired on September 30, 2017, which ended the issuance of new loans under this program, and disallowed any new disbursements after June 30, 2018. The University continues to service outstanding loans in accordance with program specifications as permitted by the Federal government.

For the year ended June 30, 2022 and 2021, the University distributed $319,985 and $315,325, respectively, for student loans through the U.S. Department of Education William D. Ford Direct Loan Program. These distributions and related funding sources are not included as expenses and revenues in the accompanying financial statements.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

As discussed in note 1, pledges for permanent endowments do not meet eligibility requirements, as defined by GASB Statement No. 33, until the related gift is received. Accordingly, pledges for permanent endowments totaling $25,999 and $30,592 at June 30, 2022 and 2021, respectively, are not recognized as assets in the accompanying financial statements, but are expected to be received in future years.

Payments on pledges receivable at June 30, 2022, expected to be received in the following fiscal years ended June 30, are summarized below. The allowance for uncollectible pledges receivable is made based on prior collection experience and management judgment. Gift pledges expected to be collected in the future years are reported at the net present value of the related cash flows discounted at 3.5%.

2023	$ 33,163
2024	27,146
2025	21,389
2026	13,312
2027	9,000
2028 and beyond	30,044
Total discounted pledges receivable	134,054
Less: allowance for uncollectible pledges	13,824
Total pledges receivable, net	$ 120,230

7. Investments in joint ventures and other assets

The composition of investment in joint ventures and other assets at June 30, 2022 and 2021 is summarized as follows:

	2022	2021
Investment in joint ventures	$ 9,366	$ 5,877
Other assets	24,414	23,620
Total investment in joint ventures and other assets	$ 33,780	$ 29,497

The University is a member of two separate incorporated nonprofit joint ventures which are accounted for under the equity method. University Rehabilitation Alliance, Inc. (URA) has the University and Peckham Vocational Industries of Lansing as members and is an enterprise for the treatment of persons with brain injury. Henry Ford Health System - Michigan State University Health Sciences (NewCo) has the University and Henry Ford Health System as members and is an enterprise that supports a broader affiliation agreement between the two members (see note 16). As of June 30, 2022 and 2021, respectively, the University had a 50% equity interest in URA. As of June 30, 2022 and 2021, the University had a 75% and 50% equity interest, respectively, in NewCo based on contributions made to the joint venture to date. The University holds 50% of the board appointment and voting rights in NewCo. Copies of financial statements for these entities can be obtained by a written request to: Office of the Controller, Michigan State University, 426 Auditorium Rd., John A. Hannah Administration Building Room 305, East Lansing, Michigan 48824.

Since URA's inception, the University has extended various lines of credit to URA for capital and operational needs, the latest of which expired December 31, 2020 and was not renewed. At June 30, 2022 and 2021, the University had a note receivable balance of $1,672 and $1,751, respectively. This receivable is due in equal monthly installments by March 2036 at a rate of 5.5% and is secured by the land, property, and equipment of URA.

MSU Health Care, Inc., a blended component unit, is a member of an incorporated nonprofit joint venture which is accounted for under the equity method. Spartan Radiology, LLC, whose members are MSU Health Care, Inc. and Advanced Radiology Services, PC, is an enterprise providing professional medical diagnostic imaging, therapeutic and radiology services, and related professional services. MSU Health Care, Inc., and thus the University, is a 50% member of the nonprofit corporation. Copies of financial statements for these entities can be obtained by a written request to: Office of the Controller, Michigan State University, 426 Auditorium Rd., John A. Hannah Administration Building Room 305, East Lansing, Michigan 48824.

MSU Health Care, Inc. has provided two promissory notes to Spartan Radiology, LLC in the amount of $375 and $350, respectively, each at a rate of 6%, which are secured by all tangible and intangible property of Spartan Radiology, LLC. Principal and accrued interest payments are due quarterly at a rate of 50% of the entity's cash balance to the extent it exceeds $250, with any remaining outstanding amounts due 2023.

During the year ending June 30, 2022, MSU Health Care, Inc., along with McLaren Greater Lansing (McLaren), entered into an agreement to form Spartan Imaging, Inc. Spartan Imaging, Inc., is an enterprise engaged in the development, management, and operation of certain outpatient radiology services, consisting of a women's imaging center and outpatient radiology center to serve residents in Lansing, Michigan and the surrounding communities. MSU Health Care, Inc., and thus the University, is a 50% member of the nonprofit corporation.

In connection with the agreement to form Spartan Imaging, Inc., MSU Health Care, Inc. entered into a Capitalization Agreement. The Capitalization Agreement provides certain financial commitments to be made to Spartan Imaging, Inc. by the members of the joint venture. MSU Health Care, Inc.'s commitment totals approximately $10.9 million. As of June 30, 2022, MSU Health Care, Inc. has contributed approximately $3.6 million of the total amount due, with future payments, as follows: $1.5 million on September 30, 2022; 8 monthly installments of $500, starting on October 31, 2022, paid through May 31, 2023; and a final installment (estimated at approximately $400) on June 30, 2023. Additionally, MSU Health Care, Inc. will contribute $750 of value of certificate of need, and $618 of equipment.

Other assets includes a $22,561 deposit made related to a facilities agreement with Consumers Energy and $1,059 of assets originally granted to the University under the Morrill Act as a pioneer land-grant college. The Consumers agreement called for the University to fund an initial deposit of $23,000 to Consumers Energy that was used for the construction of a 138kV electrical substation to provide energy to the University. The facility is owned and operated by Consumers Energy. The University is entitled to an annual utility expense rebate from Consumers Energy, based in part on annual energy consumption for a period of up to 25 years, up to an accumulated rebate total of $23,000. Any portion of the deposit not applied to future energy expenses through the annual rebate amount by March 2042 will be forfeited.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

8. Capital assets and collections

Capital asset and collection activity for the years ended June 30, 2022 and 2021 follows:

	2021 (as restated)	Additions	Disposals	Transfers	2022
Non-depreciated capital assets:					
Land	$ 48,575	$ 696	$ (30)	$ -	$ 49,241
Construction in progress	345,144	107,065	-	(298,448)	153,761
Museum collections	27,101	1,694	-	-	28,795
Total non-depreciated capital assets	420,820	109,455	(30)	(298,448)	231,797
Depreciated and amortized capital assets:					
Buildings and site improvements	4,168,577	2,938	-	292,377	4,463,892
Software and other intangibles	147,011	229	-	6,071	153,311
Equipment and other	1,021,884	62,469	(51,896)	-	1,032,457
Right-to-use assets	28,130	35,055	(805)	-	62,380
Less: accumulated depreciation and amortization					
Buildings and site improvements	(1,875,621)	(139,330)	-	-	(2,014,951)
Software and other intangibles	(120,464)	(7,876)	-	-	(128,340)
Equipment and other	(828,519)	(59,466)	50,639	-	(837,346)
Right-to-use assets	(6,358)	(9,318)	805	-	(14,871)
Total depreciated and amortized capital assets	2,534,640	(115,299)	(1,257)	298,448	2,716,532
Total capital assets	$ 2,955,460	$ (5,844)	$ (1,287)	$ -	$ 2,948,329

	2020 (as restated)	Additions	Disposals	Transfers	2021 (as restated)
Non-depreciated capital assets:					
Land	$ 48,575	$ -	$ -	$ -	$ 48,575
Construction in progress	439,797	135,506	-	(230,159)	345,144
Museum collections	24,042	3,082	(23)	-	27,101
Total non-depreciated capital assets	512,414	138,588	(23)	(230,159)	420,820
Depreciated and amortized capital assets:					
Buildings and site improvements	3,969,290	2,307	(2,809)	199,789	4,168,577
Software and other intangibles	120,147	-	(3,506)	30,370	147,011
Equipment and other	993,392	61,405	(32,913)	-	1,021,884
Right-to-use assets	26,560	1,610	(40)	-	28,130
Less: accumulated depreciation and amortization					
Buildings and site improvements	(1,749,710)	(127,080)	1,169	-	(1,875,621)
Software and other intangibles	(114,167)	(10,043)	3,746	-	(120,464)
Equipment and other	(793,465)	(66,729)	31,675	-	(828,519)
Right-to-use assets	(3,170)	(3,228)	40	-	(6,358)
Total depreciated and amortized capital assets	2,448,877	(141,758)	(2,638)	230,159	2,534,640
Total capital assets	$ 2,961,291	$ (3,170)	$ (2,661)	$ -	$ 2,955,460

As a result of the merger of the College of Law (see note 17) the University added equipment with a cost of $9,739 and accumulated depreciation of $7,933 to the capital asset balance as of July 1, 2020.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The University leases land, office space, office equipment, and medical equipment from external parties. In accordance with GASB 87, the University records right-to-use assets and lease liabilities (see note 13) based on the present value of expected payments over the term of the respective leases. The above tables have been restated to reflect the implementation of GASB 87 as of July 1, 2020. The expected payments are discounted using the interest rate charged on the lease, if available, and are otherwise discounted using the University's incremental borrowing rate. Variable payments are excluded from the valuations unless they are fixed in substance. For leases featuring payments tied to an index or market rate, the valuation is based on the initial index or market rate. The University does not have any leases subject to a residual value guarantee. The right-to-use assets are amortized over the shorter of the lease term or the underlying asset useful life.

The amount of lease assets by major classes of underlying assets at June 30, 2022 and 2021, respectively, are as follows:

	Right-to-Use Assets			
	June 30, 2022		June 30, 2021	
Asset Class	Cost	Accumulated amortization	Cost	Accumulated amortization
Land	$ 204	$ 112	$ 203	$ 71
Buildings	50,941	10,236	27,562	6,098
Equipment and other	11,235	4,523	365	189
	$ 62,380	$ 14,871	$ 28,130	$ 6,358

The University leases space on buildings to cellular companies, cellular towers, office space, and land to external parties. In accordance with GASB 87, the University records lease receivables and deferred inflows of resources based on the present value of expected receipts over the term of the respective leases. The expected receipts are discounted using the interest rate charged on the lease. Variable payments are excluded from the valuations unless they are fixed in substance. During the years ended June 30, 2022 and 2021, the University recognized revenues related to these lease agreements totaling $3,230 and $2,611, respectively.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

9. Deferred outflows and inflows of resources

The composition of deferred outflows of resources at June 30, 2022 and 2021 is summarized as follows:

	2022	2021
Accumulated changes in fair value of hedging derivative instruments	$ 18,329	$ 37,161
Other postemployment benefits (see note 12)	543,240	578,080
Loss on refunding of debt at June 30, 2010	5,423	6,558
Total deferred outflows of resources	$ 566,992	$ 621,799

The composition of deferred inflows of resources at June 30, 2022 and 2021 is summarized as follows:

	2022	2021
Irrevocable split-interest agreements (net of related liabilities)	$ 21,447	$ 20,561
Other postemployment benefits (see note 12)	302,843	325,322
Lease agreements - University lessor	28,625	25,483
Gain on refunding of debt at June 30, 2020	4,558	5,495
Total deferred inflows of resources	$ 357,473	$ 376,861

10. Contingencies and risk management

The University is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters. The University complies with the requirements of GASB Statement No. 10, *Accounting and Financial Reporting for Risk Financing and Related Insurance Issues*, and related guidance, and records liabilities for legal proceedings and other contingent losses in those instances where the liability is deemed probable and the University can reasonably estimate the amount of the loss (or a range of the loss can be estimated). Once established, accruals are adjusted from time to time, as appropriate, to reflect (1) the facts and circumstances known at the time, including information regarding negotiations, settlements, rulings and other relevant events and developments, (2) the advice and analyses of counsel and (3) the assumptions and judgment of management. To manage these risks, the University uses various lines of commercial insurance purchased directly by the University or through Lysander (cell captive insurance company) on an annual basis (including, but not limited to, general liability insurance, educators legal liability insurance, excess medical professional liability insurance, and property insurance) with differing self-insured retentions. The University evaluates self-insured retention amounts annually, and establishes retention amounts based on various factors, including historical claims experience.

The University's liability for various medical professional liability claims is funded based on actuarial valuations. The liability is reported at its present value of $8,981 and $8,216 as of June 30, 2022 and 2021, respectively. The discount rate used was 2.0% at June 30, 2022 and 2021, respectively, which is based in part on the University's short-term internal cost of capital and industry standards.

The University is also self-insured for various employee benefits that include health care and dental insurance, workers compensation, and unemployment compensation. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Those losses include an estimate of claims that have been incurred but not reported. The workers compensation liability, which will be settled by fixed payments over an extended period of time, is reported at its present value of $4,361 and $3,899 as of June 30, 2022 and 2021, respectively. The discount rate used was 3.5% as of June 30, 2022 and 2021, respectively, which is based in part on the University's medium-term internal cost of capital and industry standards.

Changes in the total reported general, professional, and self-insured employee benefit liabilities during 2022, 2021, and 2020 were as follows:

	2022	2021	2020
Balance, beginning of year	$ 37,345	$ 33,167	$ 27,076
Claims incurred and changes in estimates	189,692	200,319	231,804
Claim payments	(190,275)	(196,141)	(225,713)
Balance, end of year	36,762	37,345	33,167
Less: current portion	22,242	24,194	22,907
Noncurrent portion	$ 14,520	$ 13,151	$ 10,260

For those risks that the University has purchased commercial insurance, settled claims have not exceeded the commercial coverage in any of the past three years.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The University has submitted claims to insurance carriers related to claims settled and certain legal costs incurred to date. Insurance reimbursements for settlements and/or legal fees totaling $8,750 were received during the year ended June 30, 2022 and reported as other non-operating revenues net of amounts owed to third parties. Per an agreement contingent on the recoveries, the University paid $2,188 to third parties that aided in the recoveries during the years ended June 30, 2022. The amounts of any future insurance reimbursements are unknown as of June 30, 2022, and as a result no insurance recovery accruals have been recorded in the 2022 financial statements.

In the normal course of its activities, the University has been a party in various legal actions. After taking into consideration legal counsel's evaluation of pending actions, the University is of the opinion that the outcome thereof, will not have a material effect on the financial statements.

11. Retirement benefits

The University has a defined contribution base retirement program administered through TIAA and Fidelity Investments for all qualified employees. All regular employees are eligible to participate based on the service requirements specific to their employee group. Participants maintain individual accounts with the base retirement vendors and are fully vested.

Participating employees contribute 5% of their base salary or wages and the University contributed 10% of the employee's base salary or wages, subject to applicable University guidelines and Internal Revenue Service limits. Effective July 1, 2020, the University reduced the matching contribution to 5% for executive management and non-unionized faculty and academic staff. This matching contribution was restored to 10% effective January 1, 2022. Effective January 1, 2022, the University reduced the matching contribution to 5% for most support staff. This matching contribution was restored to 10% effective July 1, 2022 for most support staff. In addition, for certain employees hired after June 30, 2010, and who are not eligible to receive postemployment benefits upon retirement, the University contributes an additional 0.5% or 0.75% (depending on total years of service) of the employee's base salary or wages, subject to applicable limits. Participants may elect to contribute additional amounts to a supplemental program and/or a deferred compensation plan, within specified limits, which are not matched by University contributions. Plan provisions and contribution requirements of plan members and the University are established and may be amended in accordance with University policies, union contracts, or plan provisions. Contributions under the base program, excluding the participants' supplemental contributions, for the years ended June 30, 2022 and 2021 were as follows:

	2022	2021
University contributions	$ 72,917	$ 70,158
Employee contributions	47,203	45,987

In addition, the University has a single-employer, defined benefit plan covering 171 employees hired prior to January 1, 1973. The plan is closed to new entrants and monies have been internally reserved by the University to fully fund program costs. The plan is not funded through a pension trust. The University has recorded a liability of $2,127 and $2,530 representing the total remaining pension obligation based on an actuarial valuation as of January 1, 2022 and 2021, respectively. The benefits are based on the employee's compensation during the last three years of employment and/or years of service.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

12. Net other postemployment benefit (OPEB) obligations

The University provides retiree health and dental care benefits, including prescription drug coverage, to eligible retired employees and qualified spouses/beneficiaries. This is a closed single employer defined benefit plan administered by the University effective for employees hired prior to July 1, 2010. Employees hired on or after July 1, 2010 are eligible to purchase insurance at the average cost of the defined benefit plan. Benefits are provided to eligible faculty, academic staff and support staff who meet normal retirement requirements while still working for the University. Currently, the plan has approximately 21,500 members. The plan does not issue a separate stand-alone financial statement. Terms of benefit plans are generally determined as part of collective bargaining agreements or set by the University for employees who are not represented. The Provost and Executive Vice President for Academic Affairs and the Executive Vice President for Administration are authorized to enter into collective bargaining agreements. In addition, the President, Senior Vice President and Chief Financial Officer, and Executive Director of Contract and Grant Administration are authorized to approve benefit plan changes.

On January 1, 2021, the University transitioned its retiree medical plan to a Medicare advantage and prescription drug plan, for those retirees eligible for Medicare. Medicare advantage and prescription drug plans are offered by private companies approved by Medicare to provide bundled Medicare benefits. The University pays a premium for each eligible retiree, spouse, and covered dependent to enroll in the plan and the actual claims are paid by the provider. Retirees are responsible for various co-payments. Prior to January 1, 2021, the University’s medical plans were self-funded and each plan’s premiums were updated annually based on actual claims. The University contributed to the lowest cost health plan’s applicable rate cost for which retirees are eligible. No payment was required by retirees who selected the lowest cost health plan for coverage. In the event a retiree selected an alternative health plan, the retiree was responsible for payment of the difference in premium costs. Retirees were responsible for various co-payments. The University does not maintain a separate legal trust to hold assets used to fund postemployment benefits, has no obligation to make contributions in advance of when insurance premiums or claims are due for payment, and currently pays for postemployment benefits on a pay-as-you-go basis.

The University's annual postemployment benefits expense is actuarially determined in accordance with GASB Statement No. 75 ("GASB 75"). Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point.

For the year ended June 30, 2022, the University's reported liability for providing retiree health and dental care benefits is estimated based on an actuarial valuation date of January 1, 2022 and measurement date of December 31, 2021 in accordance with GASB 75. The University’s liability is calculated using the entry age normal level percent of pay method. The actuarial assumptions are as follows:

Discount rate	2.06%, based on the Bond Buyer 20-year General Obligation Municipal Bond Index
Salary increases	5.0%
Healthcare cost trend rates	6.25%/9.03% for 2022, decreasing 0.31% per year, to an ultimate rate of 5% for 2026 and later years. Trend rates shown are for pre-65 rates/post-65 rates, respectively. As of July 1, 2010, internal policy caps healthcare cost increases at a maximum of 5% per year.

For the year ended June 30, 2021, the University's reported liability for providing retiree health and dental care benefits is estimated based on an actuarial valuation date of January 1, 2020 and measurement date of December 31, 2020 in accordance with GASB 75. The University’s liability is calculated using the entry age normal level percent of pay method. The actuarial assumptions are as follows:

Discount rate	2.12%, based on the Bond Buyer 20-year General Obligation Municipal Bond Index
Salary increases	5.0%
Healthcare cost trend rates	6.56%/9.03% for 2021, decreasing 0.31% per year, to an ultimate rate of 5% for 2026 and later years. Trend rates shown are for pre-65 rates/post-65 rates, respectively. As of July 1, 2010, internal policy caps healthcare cost increases at a maximum of 5% per year.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

For the December 31, 2021 measurement date, the University utilized separate mortality assumptions for faculty and non-faculty staff. Faculty mortality is based on the Pub T.H-2010.H (A) Public Retirement Plans Mortality Tables with MP-2021 improvement scale. Non-faculty staff mortality is based on the RP-2014 Generational Healthy Mortality Tables, with mixed collar adjustments, projected back to 2006 using scale MP-2014 and then projected forward using MP-2021. For the December 31, 2020 measurement date, the University utilized separate mortality assumptions for faculty and non-faculty staff. Faculty mortality was based on the Pub T.H-2010.H (A) Public Retirement Plans Mortality Tables with MP-2020 improvement scale. Non-faculty staff mortality was based on the RP-2014 Generational Healthy Mortality Tables, with mixed collar adjustments, projected back to 2006 using scale MP-2014 and then projected forward using MP-2020. Additional assumptions utilized include employee withdrawal rates up to 1.5% at age 65 for certain employee groups, a retirement age up to 69.0 for certain employee groups, 90% of males and 60% of females having covered spouses, and a retiree opt-out rate of 8%. These additional assumptions are based on an experience study performed in 2019. Changes in the total reported liability for postemployment benefits obligations for the year ended June 30, 2022 and 2021, are summarized as follows:

	2022	2021
Balance, beginning of year	$ 630,095	$ 2,141,340
Service cost	19,691	57,333
Interest cost	13,480	59,410
Changes in assumptions	(23,184)	170,012
Difference between expected and actual plan experience	36,300	(6,475)
Benefits payments	(27,831)	(44,938)
Changes in benefit terms	-	(1,746,587)
Balance, end of year	648,551	630,095
Less: current portion	25,938	22,252
Noncurrent portion	$ 622,613	$ 607,843

Changes in assumptions reflect a change in the discount rate at both the measurement dates of December 31, 2021 and 2020, respectively. Changes in the benefit terms reflects the change to the Medicare advantage plan at the December 31, 2020 measurement date.

Under the Medicare advantage plan, the Medicare Retiree Drug Subsidy is paid directly to the plan provider, and thus has the effect of reducing the University's postemployment benefits obligations at June 30, 2022 and 2021, respectively.

The December 31, 2021 measurement date amounts are based on the valuation date of January 1, 2022. The December 31, 2020 measurement date amounts are based on the valuation date of January 1, 2020. Therefore, census data, including the number of plan participants, consisted of the following:

	2022	2021
Active employees - Hired before July 1, 2010	4,824	5,682
Active employees - Hired after July 1, 2010	7,739	7,333
Retirees receiving benefits	5,692	5,385
Dependents	3,261	3,088
Total plan participants	21,516	21,488

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the health care cost trend.

A one-percentage point change in the discount rate and assumed health care cost trend rates would have the following impact on the liability for postemployment benefits obligations at June 30, 2022:

	1% Decrease	Current Rates	1% Increase
Discount rate:			
Net OPEB obligations	$ 740,734	$ 648,551	$ 572,506
Increase (decrease)	92,183	-	(76,045)
Health care trend rate:			
Net OPEB obligations	$ 558,795	$ 648,551	$ 673,456
Increase (decrease)	(89,756)	-	24,905

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

A one-percentage point change in the discount rate and assumed health care cost trend rates would have the following impact on the liability for postemployment benefits obligations at June 30, 2021:

	1% Decrease	Current Rates	1% Increase
Discount rate:			
Net OPEB obligations	$ 721,384	$ 630,095	$ 554,618
Increase (decrease)	91,289	-	(75,477)
Health care trend rate:			
Net OPEB obligations	$ 541,285	$ 630,095	$ 667,541
Increase (decrease)	(88,810)	-	37,446

The components of postemployment benefits expense for the year ended June 30, 2022 and 2021 are summarized as follows:

	2022	2021
Service cost	$ 19,691	$ 57,333
Interest cost	13,480	59,410
Changes in benefit terms	-	(1,746,587)
Amortization of differences between expected and actual experience	5,863	2,082
Amortization of changes in assumptions	23,937	26,352
Total expense	$ 62,971	$ (1,601,410)

Deferred outflows and inflows of resources related to postemployment benefits obligations at June 30, 2022 are summarized as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net deferred impact to OPEB
Changes in assumptions	$ 475,165	$ 297,664	$ 177,501
Differences between expected and actual experience	51,627	5,179	46,448
Benefit payments made after measurement date	16,448	-	16,448
Total	$ 543,240	$ 302,843	$ 240,397

Deferred outflows and inflows of resources related to postemployment benefits obligations at June 30, 2021 are summarized as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net deferred impact to OPEB
Changes in assumptions	$ 544,117	$ 319,495	$ 224,622
Differences between expected and actual experience	21,837	5,827	16,010
Benefit payments made after measurement date	12,126	-	12,126
Total	$ 578,080	$ 325,322	$ 252,758

Of the total amount reported as deferred outflows of resources related to OPEB at June 30, 2022, $16,448 resulting from University contributions subsequent to the measurement date and before the end of the fiscal year will be included as a reduction in the net OPEB liability in the year ended June 30, 2023. Deferred outflows and inflows related to changes in assumptions and the difference between expected and actual plan experience will be amortized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants.

2023	$ 29,800
2024	29,800
2025	29,800
2026	29,800
2027	28,630
2028 and beyond	76,119
Total	$ 223,949

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

13. Long-term debt and other obligations

Long-term debt and other obligations for the years ended June 30, 2022 and 2021 are summarized as follows:

	2021	Borrowed	Retired	2022	Current Portion
General Revenue Bonds:					
Series 2022A	$ -	$ 500,000	$ -	$ 500,000	$ -
Series 2020A	91,360	-	3,570	87,790	3,955
Series 2019C	136,915	-	8,635	128,280	8,930
Series 2019A	322,395	-	700	321,695	720
Series 2019B	286,905	-	5,460	281,445	5,735
Series 2015A	146,395	-	4,045	142,350	4,250
Series 2013A	145,870	-	4,285	141,585	4,505
Series 2010A	205,000	-	-	205,000	-
Series 2007B	20,945	-	2,140	18,805	2,225
Series 2005	51,090	-	3,170	47,920	3,295
Series 2003A	45,340	-	2,990	42,350	3,135
Series 2000A	77,125	-	2,580	74,545	2,705
	1,529,340	500,000	37,575	1,991,765	39,455
General Revenue Commercial Paper:					
Series B taxable	113,375	7,000	10,375	110,000	110,000
Series G tax-exempt	83,405	15,920	23,450	75,875	75,875
	196,780	22,920	33,825	185,875	185,875
Unamortized bond premiums	109,152	-	3,703	105,449	4,289
Student loan deposits	29,136	-	3,409	25,727	2,471
Lease obligations	22,341	32,275	5,296	49,320	6,389
Installment purchases and others	1,457	975	891	1,541	846
Total long-term debt and other obligations	$ 1,888,206	$ 556,170	$ 84,699	$ 2,359,677	$ 239,325

	2020	Borrowed	Retired	2021	Current Portion
General Revenue Bonds:					
Series 2020A	$ -	$ 91,360	$ -	$ 91,360	$ 3,570
Series 2019C	147,755	-	10,840	136,915	8,635
Series 2019A	323,070	-	675	322,395	700
Series 2019B	292,105	-	5,200	286,905	5,460
Series 2018A - Direct placement	168,745	-	168,745	-	-
Series 2015A	180,410	-	34,015	146,395	4,045
Series 2013A	149,950	-	4,080	145,870	4,285
Series 2010A	205,000	-	-	205,000	-
Series 2007B	23,010	-	2,065	20,945	2,140
Series 2005	54,140	-	3,050	51,090	3,170
Series 2003A	48,205	-	2,865	45,340	2,990
Series 2000A	77,125	-	-	77,125	2,580
	1,669,515	91,360	231,535	1,529,340	37,575
General Revenue Commercial Paper:					
Series B taxable	130,615	24,180	41,420	113,375	113,375
Series F tax-exempt	43,740	-	43,740	-	-
Series G tax-exempt	-	87,630	4,225	83,405	83,405
	174,355	111,810	89,385	196,780	196,780
Unamortized bond premiums	92,495	20,027	3,370	109,152	3,703
Student loan deposits	28,564	572	-	29,136	3,767
Lease obligations	23,769	57	1,485	22,341	3,783
Installment purchases and others	1,452	900	895	1,457	662
Total long-term debt and other obligations	$ 1,990,150	$ 224,726	$ 326,670	$ 1,888,206	$ 246,270

All General Revenue bonds are secured by General Revenues and certain variable rate issues bear interest based on weekly or quarterly rates determined by the indexing agent or remarketing agent and are amortized through mandatory redemptions as follows:

- Series 2007B: through 2037
- Series 2005: through 2034
- Series 2003A: through 2033
- Series 2000A: through 2031

Except for the Series 2007B bonds, the foregoing bonds may be converted to a permanent fixed rate provided certain conditions are met.

The Series 2000A, 2003A, and 2005 bonds can be tendered by bondholders with 7 days' notice. If the tendered bonds are not remarketed within those 7 days, the University is obligated to purchase the tendered bonds. The University has entered into standby bond purchase agreements to fund the purchase of tendered bonds that are not remarketed. Repayment terms vary between 2 and 3 years for draws under the standby bond purchase agreements. Therefore, these bonds are classified as non-current for the fiscal year ending June 30, 2022.

During the year ended June 30, 2022, the University issued Series 2022A taxable general revenue bonds in the amount of $500,000. The proceeds may be used at the University's discretion and were used to pay issuance costs. The bonds bear interest at a fixed rate of 4.165% and are subject to mandatory redemption in fiscal 2123.

The Series 2020A bonds bear interest at fixed rates from 3% to 5% and mature either serially through fiscal 2032 or are subject to mandatory redemption from fiscal 2042 through 2046.

The Series 2019C bonds bear interest at fixed rates from 4% to 5% and mature either serially through fiscal 2039 or are subject to mandatory redemption from fiscal 2042 through 2046.

The Series 2019B bonds bear interest at fixed rates from 3% to 5% and mature either serially from fiscal 2022 through 2039 or are subject to mandatory redemption from fiscal 2040 through 2048.

The Series 2019A bonds bear interest at fixed rates from 3.066% to 4.496% and subject to mandatory redemption from fiscal 2022 through 2049.

The Series 2015A bonds bear interest at fixed rates from 3% to 5% and mature either serially through fiscal 2036 or are subject to mandatory redemption from fiscal 2037 through 2046.

The Series 2013A bonds bear interest at fixed rates from 3% to 5% and mature either serially through fiscal 2034 or are subject to mandatory redemption from fiscal 2035 through 2042.

The Series 2010A bonds bear interest at 6.173% and are subject to mandatory redemption from fiscal 2044 through 2050. Prior to March 1, 2013, in accordance with the Build America Bonds program, the University received semi-annual federal credit payments equal to 35% of actual interest expense incurred on the outstanding principal balance of the bonds. Pursuant to the requirements of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended, certain automatic reductions took place on March 1, 2013. These required reductions included a reduction to refundable credits applicable to certain qualified bonds, including Series 2010A. The sequestration reduction rate was 5.7% from October 1, 2020 to September 30, 2030. The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise impacts the sequester, at which time the sequestration rate is subject to change.

The University utilizes variable-rate commercial paper to provide interim financing. The Board has authorized the issuance of up to $250,000 in commercial paper secured by General Revenues and allows for tax-exempt and taxable issuances. Outstanding commercial paper debt is converted to long-term financing, as appropriate, within the normal course of business. Outstanding tax-exempt balances as of June 30, 2022 bear interest at rates from 0.95% to 1.20% and taxable balances bear interest at rates from 1.14% to 1.63%, with principal and accrued interest payments due within a maximum of 270 days from the date of issuance.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Hedging derivative instrument payments and hedged debt: Using rates as of June 30, 2022, scheduled fiscal year maturities of bonds payable and related interest expense are as follows. These amounts assume that current interest rates on variable-rate bonds and the current reference rates of hedging derivative instruments will remain the same for their term. As these rates vary, interest payments on variable-rate bonds and net receipts/payments on the hedging derivative instruments will vary. See note 14 for information on derivative instruments.

Fiscal Year	Fixed-Rate Bonds		Variable-Rate Bonds		Hedging	
Ending June 30,	Principal	Interest	Principal	Interest	Derivatives, Net	Total
2023	28,095	82,561	11,360	1,871	4,560	128,447
2024	24,045	81,394	16,375	1,697	4,125	127,636
2025	25,305	80,199	17,120	1,514	3,666	127,804
2026	26,565	78,904	17,725	1,324	3,186	127,704
2027	24,830	77,648	18,515	1,127	2,687	124,807
2028-2032	144,570	369,241	85,105	2,907	6,408	608,231
2033-2037	198,110	332,665	17,420	382	343	548,920
2038-2042	293,880	274,552	-	-	-	568,432
2043-2047	369,320	199,726	-	-	-	569,046
2048-2052	173,425	116,708	-	-	-	290,133
2053-2057	-	104,125	-	-	-	104,125
2058-2062	-	104,125	-	-	-	104,125
2063-2067	-	104,125	-	-	-	104,125
2068-2072	-	104,125	-	-	-	104,125
2073-2077	-	104,125	-	-	-	104,125
2078-2082	-	104,125	-	-	-	104,125
2083-2087	-	104,125	-	-	-	104,125
2088-2092	-	104,125	-	-	-	104,125
2093-2097	-	104,125	-	-	-	104,125
2098-2102	-	104,125	-	-	-	104,125
2103-2107	-	104,125	-	-	-	104,125
2108-2112	-	104,125	-	-	-	104,125
2113-2117	-	104,125	-	-	-	104,125
2118-2122	-	104,125	-	-	-	104,125
2123-2127	500,000	2,603	-	-	-	502,603
Total	$ 1,808,145	$ 3,153,951	$ 183,620	$ 10,822	$ 24,975	$ 5,181,513

Interest expense was $77,587 and $71,418 for 2022 and 2021, respectively.

Unamortized bond premiums totaled $105,449 ($4,289 current) and $109,152 ($3,703 current) at June 30, 2022 and 2021, respectively. Bond premium amounts are amortized over the applicable bond issue life.

As of June 30, 2022, the scheduled fiscal year maturities of lease liabilities and related interest expense are as follows:

Fiscal Year Ending June 30,	Principal	Interest
2023	6,450	1,238
2024	5,785	1,021
2025	5,721	887
2026	6,066	766
2027	4,545	609
2028-2032	19,320	1,406
2032-2034	1,433	21
	$ 49,320	$ 5,948

Student loan deposits represent funds from the federal government and other private entities related to various student loan programs.

As of June 30, 2022 and 2021, the University held $75,000 and $37,500, respectively, in revolving lines of credit that are available for maintaining the required operating cash reserves of the University and providing necessary funds to meet extraordinary cash flow needs, if necessary. For the years ending June 30, 2022 and 2021, no amounts were drawn on these lines of credit.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Installment purchases and other is comprised lease-purchase obligations of $1,035 ($580 current) and obligations for installment purchases of $506 ($266 current).

Accrued personnel costs include vacation and sick leave days earned but unused, including the University's share of payroll taxes, valued at the current rate of pay. Changes in the balances of accrued personnel costs during 2022 and 2021 were as follows:

	2022	2021
Balance, beginning of year	$ 108,774	$ 101,329
Additions	35,175	11,862
Reductions	(7,516)	(4,417)
Balance, end of year	136,433	108,774
Less: current portion	98,103	69,810
Noncurrent portion	$ 38,330	$ 38,964

14. Derivative instruments

At June 30, 2022 and 2021, the University was party to seven separate pay-fixed, receive-variable interest rate swaps and five separate pay-variable, receive-variable interest rate swaps. After considering any netting arrangements or other rights of offsets that may exist with each counterparty, interest rate swaps are reported at the net fair value as of the balance sheet date as either a noncurrent asset or noncurrent liability in the Statement of Net Position.

The fair value and notional amounts of derivative instruments outstanding at June 30, 2022 and 2021 were as follows:

	June 30, 2022		June 30, 2021	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Derivative instruments - swap asset:				
Investment derivatives:				
Pay-variable interest rate swaps	$ -	$ -	$ 19,015	$ 324
Derivative instruments - swap liability:				
Cash flow hedging derivatives				
Pay-fixed interest rate swaps	$ 181,100	$ (18,329)	$ 193,080	$ (37,161)
Investment derivatives:				
Pay-variable interest rate swaps	303,045	(3,006)	300,980	5,563
Pay-fixed interest rate swaps	71,685	(12,244)	71,685	(23,242)
Total Derivative instruments - swap liability	$ 555,830	$ (33,579)	$ 565,745	$ (54,840)

In accordance with GASB Statement No. 53, an interest rate swap is considered an effective cash flow hedge if the swap payment received substantially offsets the payment made on the associated debt and changes in fair value are deferred as either a deferred outflow or a deferred inflow of resources. An interest rate swap that is not considered an effective cash flow hedge, in accordance with the provisions of the Statement, is deemed to be an investment derivative instrument and changes in fair value are recorded as net investment income (loss). For the fiscal year ending June 30, 2022 and 2021, the fair value of hedging derivative instruments increased $18,832 and $12,834, respectively, while the fair value of investment derivative instruments increased $2,105 and $11,041, respectively.

Fair Value: The fair values of the interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swaps, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. The payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the dates of each future net settlement on the swaps.

Objective: The University is party to seven separate derivative instruments which are pay-fixed, receive-variable interest rate swaps that hedge the changes in cash flows on various variable-rate debt series. In order to protect against the potential of rising interest rates, the University entered into these derivative instruments at a cost less than what the University would have paid to issue fixed-rate debt. In order to benefit from both expected changes in the relationship of short and long-term interest rates and the relationships between the SIFMA Municipal Swap Index and both the ten-year USD-ISDA Index and the one-month USD-LIBOR-BBA Index and the relationship between the one-month USD-LIBOR-BBA Index and the ten-year USD-ISDA Index, the University also entered into five separate investment derivative instruments which are pay-variable, receive-variable interest rate swaps which relate to various debt series.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Terms, Fair Values, and Credit Risk: The following table displays the terms and fair values of the University's hedging derivative instruments outstanding at June 30, 2022 and 2021, along with the notional amounts and credit rating of the associated counterparty as of June 30, 2022.

Type	Cash Flow Hedge for Debt Series	2022 Notional Amount	Effective Date	Termination Date	Rate Paid	Rate Received	Counterparty/ Counterparty Credit Rating	2022 Fair Value	2021 Fair Value
Pay-fixed interest rate swap	2000A	$ 68,995	11/3/2008	8/15/2029	4.074%	67% USD-LIBOR-BBA one month	Deutsche Bank AG / Baa2/A-	$ (6,526)	$ (13,025)
Pay-fixed interest rate swap	Taxable CP	535	10/17/2002	8/15/2022	5.280%	USD-LIBOR-BBA one month	Deutsche Bank AG / Baa2/A-	(12)	(55)
Pay-fixed interest rate swap	2003A	42,350	11/3/2008	2/15/2033	3.618%	67% USD-LIBOR-BBA one month	Barclays Bank PLC / A1/A	(4,645)	(9,351)
Pay-fixed interest rate swap	Taxable CP	6,115	11/3/2008	2/15/2033	5.330%	USD-LIBOR-BBA one month	Barclays Bank PLC / A1/A	(923)	(1,898)
Pay-fixed interest rate swap	2005	47,920	11/3/2008	2/15/2034	3.647%	67% USD-LIBOR-BBA one month	Barclays Bank PLC / A1/A	(5,314)	(10,655)
Pay-fixed interest rate swap	2007B & Tax-exempt CP	15,185	5/17/2007	2/15/2028	4.139%	67% USD-LIBOR-BBA three month plus .58%	JP Morgan Chase Bank / Aa2/A+	(909)	(2,177)
		$ 181,100						$ (18,329)	$ (37,161)

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

The following table displays the terms and fair values of the University's investment derivative instruments outstanding at June 30, 2022 and 2021, along with the notional amounts and credit rating of the associated counterparty as of June 30, 2022:

Type	Associated Debt Series	2022 Notional Amount	Effective Date	Termination Date	Rate Paid	Rate Received	Counterparty/ Counterparty Credit Rating	2022 Fair Value	2021 Fair Value
Pay-variable interest rate swap	2000A, 2003A, 2005, 2019C	$ 181,020	8/15/2009	2/15/2034	67% USD-LIBOR-BBA one month	67% USD-ISDA Swap Rate ten year less 0.407%	Deutsche Bank AG / Baa2/A-	$ (534)	$ 2,538
Pay-variable interest rate swap	Taxable CP	6,650	5/26/2006	2/15/2033	USD-LIBOR-BBA one month	USD-LIBOR-BBA ten year less 0.575%	Deutsche Bank AG / Baa2/A-	(12)	153
Pay-variable interest rate swap	2019C	11,400	5/17/2010	8/15/2032	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 0.44%	Deutsche Bank AG / Baa2/A-	(49)	214
Pay-variable interest rate swap	2019C	17,105	5/17/2010	8/15/2032	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 0.44%	Bank of New York Mellon / Aa2/AA-	(72)	324
Pay-variable interest rate swap	2007B, 2019C	86,870	5/17/2007	2/15/2037	SIFMA Municipal Swap Index	67% USD-ISDA Swap Rate ten year plus 0.0063%	JP Morgan Chase Bank / Aa2/A+	(2,339)	2,658
Pay-fixed interest rate swap	2007B, Taxable and Tax-exempt CP	71,685	5/17/2007	2/15/2037	4.226%	67% USD-LIBOR-BBA three month plus 0.63%	JP Morgan Chase Bank / Aa2/A+	(12,244)	(23,242)
		$ 374,730						$ (15,250)	$ (17,355)

Subsequent to the original effective dates, the University amended the following pay-variable, receive-variable interest rate swap per the terms listed in the table below. After the amendment period, the interest rate swap reverted back to the original terms as outlined in the table above.

2022 Notional Amount	Amendment Effective Date	Amendment Termination Date	Rate Paid	Rate Received	Counterparty/ Counterparty Credit Rating
$ 86,870	8/1/2011	7/31/2014	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 1.8653%	JP Morgan Chase Bank / Aa2/A+
	8/1/2014	2/14/2021	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 1.1245%	

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Credit Risk: The University is exposed to credit risk on derivative instruments that are in asset positions. To minimize its exposure to loss related to credit risk, it is the University's policy to require counterparty collateral posting provisions. The University has never failed to access collateral when required. The aggregate fair value of derivative instruments in asset positions at June 30, 2022 and 2021 was $0 and $5,887, respectively. This represents the maximum loss that would be recognized at the reporting date if the counterparties to those derivatives failed to perform as contracted. This maximum exposure is offset by negative hedging and investment derivative fair values included in netting arrangements with the same counterparties as the derivative instruments in asset positions. The net exposure to credit risk with any individual counterparty is $0 and $324 at June 30, 2022 and 2021, respectively.

The following table demonstrates the thresholds and minimum transfers for collateralization:

Credit Rating	Deutsche Bank AG Threshold	Deutsche Bank AG Minimum Transfer	JP Morgan Chase Bank N.A. Threshold	JP Morgan Chase Bank N.A. Minimum Transfer	Bank of New York Mellon Threshold	Bank of New York Mellon Minimum Transfer	Barclays Bank PLC Threshold	Barclays Bank PLC Minimum Transfer
Aaa/AAA	$ 40,000	$ 1,000	$ 40,000	$ 1,000	$ 40,000	$ 1,000	$ 40,000	$ 1,000
Aa3/AA- to Aa1/AA+	6,000*	1,000	20,000	1,000	6,000*	1,000	6,000	1,000
A3/A- to A1/A+	1,500	500	5,000	500	1,500	500	1,500	500
Baa1/BBB+	500	250	500	250	500	250	500	250
Below Baa1/BBB+	-	250	-	250	-	250	-	-

* Threshold for the University is $20,000

Interest Rate Risk: The University is not exposed to interest rate risk on its derivative instruments.

Basis Risk: The University is exposed to basis risk on its pay-fixed, receive-variable interest rate swaps because the variable-rate payments received by the University on these derivative instruments are based on a rate or index other than interest rates the University pays on its variable-rate debt, which bear interest based on periodic rates determined by the indexing agent or remarketing agent. These pay-fixed, receive-variable swaps expose the University to basis risk should the rates resulting from the 67% of USD-LIBOR-BBA swaps not equal the rate the University pays on the 2000A, 2003A, 2005, 2007B, and tax-exempt Commercial Paper Series debt, and should the rates resulting from the USD-LIBOR-BBA swaps not equal the rate the University pays on the taxable Commercial Paper Series debt.

Termination Risk: The University or any of the involved counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. If at the time of termination, a derivative instrument is in a liability position, the University would be liable to the appropriate counterparty for a payment equal to the liability, subject to any netting arrangement.

Rollover Risk: The University is not exposed to rollover risk on its derivative instruments.

Contingencies: All of the University's derivative instruments include provisions that require the University to post collateral at certain thresholds depending on the University's credit rating. See the table under "Credit Risk" for thresholds and minimum transfers for collateralization. As of June 30, 2022, the University's credit ratings were Aa2 as assigned by Moody's and AA as assigned by Standard & Poor's. The aggregate fair value of all derivative instruments with these collateral posting provisions as of June 30, 2022 was ($33,579). The related collateral postings totaled $4,400 posted by the University to its counterparties and $0 held by the University posted by its counterparties.

15. Grants and contracts

The University receives grants and contracts from certain federal, state, and local agencies to fund research and other activities. Revenues from grants and contracts are recognized when all eligibility requirements have been met. The University records indirect costs related to such grants and contracts at predetermined rates that are negotiated with the University's federal cognizant agency. Both direct and indirect costs charged to the grants or contracts are subject to audit and approval by the granting agencies. University management believes adjustments of costs, if any, resulting from such examination by the granting agency would not be material.

16. Commitments

At June 30, 2022, the University has initiated plans and incurred certain contractual commitments related to the construction or capital improvement of various facilities. The costs to complete the projects are estimated to be $87,568 and are to be funded from debt proceeds, capital grants, private gifts, and other University funds. Certain University facilities have been, or are scheduled to be, financed in whole or in part by SBA bond issues secured by a pledge of rentals to be received from the State of Michigan pursuant to agreements among the SBA, the State of Michigan, and the University. During the lease terms, the SBA will hold title to the respective facilities, although the University has capitalized the facilities and pays all operating and maintenance costs. Once the SBA bonds are fully paid, the SBA will transfer title of the facilities to the University.

At June 30, 2022, the University had entered into various limited partnerships with investment managers of hedge, real assets, real estate, venture capital, private equity, and restructuring funds. As of June 30, 2022, $685,956 of the initial $2,188,179 investment commitment remains outstanding.

The University is party to an electric power purchase and site access agreement for renewable solar energy. Under the terms of the contract, the University has granted a third party access to construct, operate, and maintain solar arrays on the University's property. The University is committed to purchase, at a fixed rate, all of the electric power generated from the solar arrays. The University has the option to purchase the solar array infrastructure at specific dates throughout the term of the contract.

In January 2021 the University entered into an affiliation agreement with Henry Ford Health System to form the Health Sciences Center. The overall goals of the Health Sciences Center include developing a jointly branded and nationally recognized research program, developing a new research building in Detroit, creating a National Cancer Institute designated cancer center, an expanded educational agenda, and establishing a regional campus and training sites in Detroit. In connection with the agreement, the University has committed to investing $3,750 per year in Health Sciences Center research and education programming. The University has also committed to participate in fundraising and other initiatives to assist in funding the overall goals of the Health Sciences Center as mutually agreed to by both parties. The agreement runs through 2051.

17. Merger and transfer of operations

On August 17, 2020, the University acquired all of the assets and ongoing operations of the Michigan State University College of Law ("Law College") in exchange for assuming the Law College's outstanding liabilities. The asset purchase agreement was accounted for as a merger and was entered into as a means to enhance administrative services at the Law College and promote greater opportunities for collaboration between the faculty and students of the University and Law College. The Law College was not previously included in the University's reporting entity.

The Law College's financial statements were previously reported under FASB accounting standards and had to be converted to GASB accounting standards before being merged with the University's financial statements. The adjustments to convert the financial statements to GASB accounting standards included writing off pledges for permanent endowments and recording deferred inflows of resources reflecting the investment value, net of related liabilities to other beneficiaries, attributable to the University from irrevocable split-interest agreement. Adjustments were also made to eliminate receivables, payables, and a capital lease arrangement between the two entities to avoid double counting the amounts once the Law College was merged with the University.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

After these adjustments to convert the Law College's financial statements to GASB accounting standards and removing accruals between the two entities, the University recognized the following at July 1, 2020:

		July 1, 2020
Current assets	$	2,593
Capital assets		1,806
Other assets		17,230
Total assets		21,629
Deferred outflows of resources		-
Current liabilities		288
Noncurrent liabilities		778
Total liabilities		1,066
Deferred inflows of resources		1,085
Net investment in capital assets		1,806
Restricted nonexpendable		1,827
Restricted expendable		4,104
Unrestricted		11,741
Total net position	$	19,478

On July 1, 2020, the University transferred the operations of primary care, sports medicine, diagnostics, testing, and other services to MSU Health Care, Inc. These operations were transferred to MSU Health Care, Inc. to promote the focused development of these services separate from the operations of the University as a whole. On July 1, 2020, the University transferred the following amounts to MSU Health Care, Inc.:

		July 1, 2020
Current assets	$	25,070
Capital assets		2,237
Other assets		-
Total assets		27,307
Deferred outflows of resources		-
Current liabilities		2,291
Noncurrent liabilities		-
Total liabilities		2,291
Deferred inflows of resources		-
Net investment in capital assets		2,237
Restricted nonexpendable		-
Restricted expendable		-
Unrestricted		22,779
Total net position	$	25,016

As a blended component unit, the financial results of MSU Health Care, Inc. are consolidated as part of the University financial statements for the years ended June 30, 2022 and 2021, respectively.

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

18. Blended component units

As indicated in note 1, the University consolidates MSU Health Care, Inc. and Lysander in a blended presentation. Condensed combining financial information for the years ended June 30, 2022 and 2021, respectively, are presented below:

Condensed Statement of Net Position:	MSU Health Care, Inc.		Lysander	
	2022	2021	2022	2021
Current assets	$ 29,520	$ 34,996	$ 3,050	$ 2,594
Capital assets, net	8,083	1,272	-	-
Amounts receivable from the University	425	176	-	-
Other assets	3,645	110	-	-
Total assets	41,673	36,554	3,050	2,594
Deferred outflows of resources	-	-	-	-
Current liabilities	3,882	2,100	1,838	1,567
Noncurrent liabilities	4,400	-	-	-
Amounts payable to the University	8,571	5,415	-	-
Total liabilities	16,853	7,515	1,838	1,567
Deferred inflows of resources		-	-	-
Net investment in capital assets	1,464	1,272	-	-
Restricted:	-		-	-
Nonexpendable	-	-	-	-
Expendable	-	-	-	-
Unrestricted	23,356	27,767	1,212	1,027
Total net position	$ 24,820	$ 29,039	$ 1,212	$ 1,027

Condensed Statement of Revenues, Expenses, and Changes in Net Position:	MSU Health Care, Inc.		Lysander	
	2022	2021	2022	2021
Operating revenues	$ 98,928	$ 103,677	$ -	$ -
Revenues from the University	2,086	2,267	1,092	974
Total operating revenues	101,014	105,944	1,092	974
Operating expenses, external	28,812	31,527	907	955
Operating expenses, University	39,912	37,366	-	-
Depreciation expense	2,977	1,334		-
Total operating expenses	71,701	70,227	907	955
Net operating income (loss)	29,313	35,717	185	19
Gifts and contributions	341	91	-	-
Investment income	-	488	-	-
Coronavirus federal grants and aid	1,620	-	-	-
Other nonoperating revenues, net	1,952	-	-	-
Contributions from the University	1,783	7,235	-	-
Net non-operating revenue (expense)	5,696	7,814	-	-
Gain on transfer of operations	-	25,016	-	-
Transfers from (to) the University	(39,228)	(44,585)	-	-
Change in net position	(4,219)	23,962	185	19
Beginning net position	29,039	5,077	1,027	1,008
Ending net position	$ 24,820	$ 29,039	$ 1,212	$ 1,027

NOTES TO THE FINANCIAL STATEMENTS (continued) (dollars in thousands)

Condensed Statement of Cash Flows:	MSU Health Care, Inc.		Lysander	
	2022	2021	2022	2021
Net cash provided (used) by operating activities	$ 30,322	$ 35,318	$ 315	$ 262
Net cash provided (used) by noncapital financing activities	(30,765)	(34,181)	-	-
Net cash provided (used) by capital and related financing activities	(3,154)	17,277	-	-
Net cash provided (used) by investing activities	(3,236)	567	-	-
Beginning cash and cash equivalents	23,861	4,880	1,270	1,008
Ending cash and cash equivalents	$ 17,028	$ 23,861	$ 1,585	$ 1,270

19. New accounting pronouncements

The University will be required to implement the provisions of GASB Statement No. 93, *Replacement of Interbank Offered Rates,* when LIBOR ceases to be determined by the ICE Benchmark Administration at June 30, 2023. This GASB Statement amends accounting guidance that will be impacted by global reference rate reform and the related end of the London Interbank Offered Rate (LIBOR). The University is in the process of determining the full impact of this standard on its financial statements.

The University will be required to implement the provisions of GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements,* effective for the fiscal year ending June 30, 2023. This GASB Statement improves guidance on accounting and financial reporting for public-private and public-public partnership arrangements. The University is in the process of determining the full impact of this standard on its financial statements.

The University will be required to implement the provisions of GASB Statement No. 96, *Subscription-Based Information Technology Arrangements,* effective for the fiscal year ending June 30, 2023. This GASB Statement provides guidance on accounting and financial reporting for subscription-based information technology arrangements. The University is in the process of determining the full impact of this standard on its financial statements.

The University will be required to implement the provisions of GASB Statement No. 100, *Accounting Changes and Error Corrections - An Amendment of GASB No. 62,* effective for the fiscal year ending June 30, 2024. This GASB Statement provides guidance on accounting and financial reporting for accounting changes and error corrections. The University is in the process of determining the full impact of this standard on its financial statements.

The University will be required to implement the provisions of GASB Statement No. 101, *Compensated Absences,* effective for the fiscal year ending June 30, 2025. This GASB Statement updates the recognition and measurement guidance for compensated absences. The University is in the process of determining the full impact of this standard on its financial statements.

Financial report prepared under the direction of Lisa A. Frace, Senior Vice President, Chief Financial Officer, and Treasurer;
Gregory J. Deppong, Associate Vice President and University Controller; John L. Thelen, Assistant Controller;
and Shea M. Bryant, Manager of Financial Analysis and Reporting

REQUIRED SUPPLEMENTARY INFORMATION (dollars in thousands)

Schedule of changes in the University's total OPEB liability and related ratios

The historical reconciliation of the total reported liability for postemployment benefits obligations for the year ended June 30, 2022, 2021, 2020, 2019, and 2018 is summarized as follows:

	2022	2021	2020	2019	2018
Service cost	$ 19,691	$ 57,333	$ 41,383	$ 48,202	$ 41,211
Interest cost	13,480	59,410	66,476	70,323	69,928
Changes in assumptions	(23,184)	170,012	402,866	(447,295)	115,470
Differences between expected and actual plan experience	36,300	(6,475)	27,297	-	-
Benefit payments	(27,831)	(44,938)	(44,017)	(39,943)	(38,599)
Change in benefit terms	-	(1,746,587)	-	-	-
Net changes	$ 18,456	$ (1,511,245)	$ 494,005	$ (368,713)	$ 188,010
Total liability, beginning of year	$ 630,095	$ 2,141,340	$ 1,647,335	$ 2,016,048	$ 1,828,038
Total liability, ending of year	$ 648,551	$ 630,095	$ 2,141,340	$ 1,647,335	$ 2,016,048
Covered payroll	$ 1,023,446	$ 1,041,405	$ 1,006,188	$ 993,122	$ 959,538
Total liability as a percentage of covered payroll	63.4%	60.5%	212.8%	165.9%	210.1%

Notes to Schedule:

No assets are accumulated in a trust to pay related other postemployment benefits.

Discount rates used in determining the total reported liability for postemployment benefits obligations were 2.06%, 2.12%, 2.73%, 4.09%, 3.44%, and 3.78% at the measurement dates of December 31, 2021, 2020, 2019, 2018, 2017, and 2016, respectively.

In 2021, the change in benefit terms includes a transition to a Medicare advantage and prescription drug plan.

In 2020, changes in assumption include the repeal of the Affordable Care Act high cost plan excise tax and a reduction in the current health care cost trend rate from 7.50% to 6.88%.

In 2019, as a result of an experience study, assumptions related to mortality, employee withdrawal rates, retirement age, salary increases, marital status, and retiree opt-out rates were adjusted to more closely reflect actual experience. The changes were as follows:

- Mortality – The University changed from using the RP-2014 Generational Healthy Mortality Tables, with white collar adjustments for all employees to Pub T.H-2010.H (A) Public Retirement Plans Mortality Tables for faculty and MP-2014 Generational Healthy Mortality Tables, with mixed collar adjustments for non-faculty.

- Employee withdrawal rate – The University changed from 0% at age 55 to up to 1.5% at age 65 for certain employee groups.

- Retirement age – The University increased the retirement age from 62.4 for all employees to up to 69.0 for certain employee groups.

- Salary increase – The University increased the salary increase level from 4% to 5%.

- Marital status – The University increased the number of covered spouses from 80% for males and 50% for females to 90% for males and 60% for females.

- Retiree opt-out rate – The University increased the retiree opt-out rate from 0% to 8%

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Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Independent Auditor's Report

To Management and the Board of Trustees
Michigan State University

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities and discretely presented component unit of Michigan State University (the "University") as of and for the year ended June 30, 2022 and the related notes to the financial statements, which collectively comprise the University's basic financial statements, and have issued our report thereon dated October 27, 2022. Our report includes a reference to other auditors who audited the financial statements of the Michigan State University Foundation (the "Foundation"), as described in our report on Michigan State University's financial statements. The financial statements of the Foundation were not audited in accordance with *Government Auditing Standards*, and, accordingly, this report does not include reporting on internal control over financial reporting or compliance and other matters associated with the Foundation or that are reported on separately by those auditors who audited the financial statements of the Foundation.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the University's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the University's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

To Management and the Board of Trustees
Michigan State University

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Plante & Moran, PLLC

October 27, 2022