



ANNUAL FINANCIAL REPORT

2017-2018

MICHIGAN STATE
UNIVERSITY



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MICHIGAN STATE UNIVERSITY
TRUSTEES, OFFICERS, AND FINANCE MANAGEMENT

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October 25, 2018

We are pleased to present Michigan State University's financial report and results of operations for fiscal years ended June 30, 2018, and June 30, 2017. The financial report was prepared by Finance staff 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 enclosed information is accurate in all material respects and reported in a manner fairly representing the University's financial position, to the best of our knowledge.

Financial Report Notable Items:

- The University's financial assets totaled \$6.4 billion with a net position of \$2.3 billion.
- Revenues totaled \$2.9 billion, while expenses totaled \$3.1 billion.
- The University adopted GASB Statement 75, which relates to the University's costs of providing postemployment health and dental benefits to eligible retirees. This statement resulted in net position decreasing by \$1.4 billion.
- Grants and contracts revenue, including capital grants, contributed \$509 million.
- The University reached a \$500 million legal settlement, in principle, related to crimes committed by a former physician. This is included in total expenses for the fiscal year.



The University's longstanding focus and disciplined stewardship of financial resources is designed to provide continuity and planning certainty for students and their families, while, at the same time, providing the resources necessary for the University to respond to numerous opportunities and challenges. MSU's continued financial strength through difficult challenges in fiscal year 2018 demonstrates our focus and disciplined stewardship at work.

MSU has been working to advance the common good in uncommon ways for more than 160 years through more than 200 programs of study in 17 degree-granting colleges. MSU's strength and stature as one of the top 100 research universities in the world results from its focus on exceptional programming accessible to Michigan students and is evidenced by welcoming the largest and most diverse freshman class in MSU's history in fall 2018.

As our nation's pioneer land-grant university, MSU undertakes its mission of world-class instruction, research, and public service to solve the world's most pressing problems. Through the combined efforts of its faculty, staff, alumni, and worldwide supporters, MSU continues to make a significant impact on Michigan, the nation, and the world. Spartans Will.

A handwritten signature in blue ink that reads "Mark P. Haas".

Mark P. Haas
Vice President for Finance and Treasurer

**OFFICE OF THE
VICE PRESIDENT FOR
FINANCE**

Mark P. Haas
Vice President for Finance
and Treasurer

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INTRODUCTION

Michigan State University (the University, or MSU) is recognized around the world as a leading academic institution with world-class faculty, top graduate study programs, a powerful research portfolio, and an engaged entrepreneurial spirit. MSU is ranked among the top 100 global universities by *Times Higher Education* and *U.S. News and World Report*, and among the top 40 in the United States by *Washington Monthly*. The University's excellence, cultivated over a 163 year history, is rooted in the core values of its land grant heritage of providing quality, inclusiveness, and connectivity in all that it does.



MAINTAINING A STRONG FINANCIAL POSITION

The University's longstanding focus and disciplined stewardship of financial resources is designed to provide continuity and planning certainty for students and their families, while, at the same time, providing the resources necessary for the University to respond to numerous opportunities and challenges.

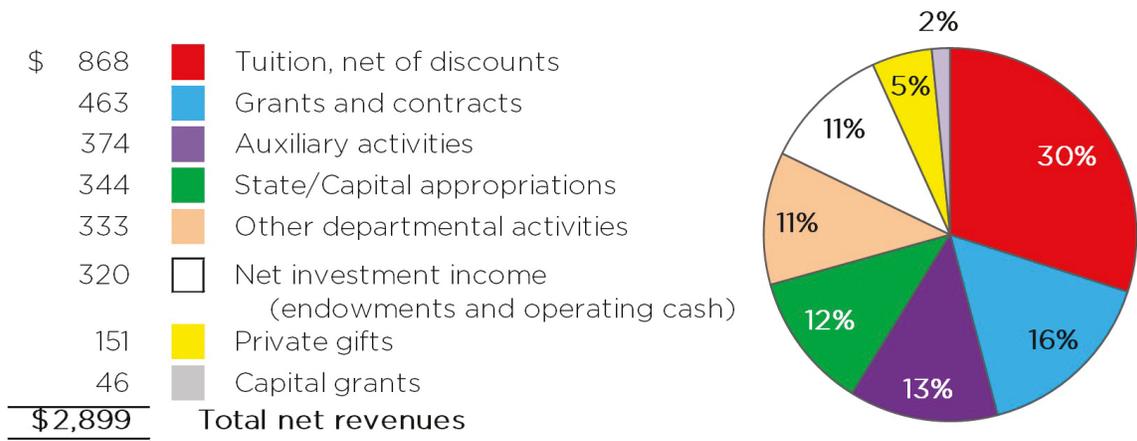
For the fiscal year ended June 30, 2018, the University's financial position continues to be strong with total assets and deferred outflows of \$6.6 billion and total liabilities and deferred inflows of \$4.3 billion. Net position, which represents the residual interest in the University's total assets and deferred outflows after total liabilities and deferred inflows are deducted, totaled \$2.3 billion at June 30, 2018. The University's financial statements have been audited by Plante & Moran, PLLC, and MSU has once again received an unmodified ("clean") opinion.

The University adopted Governmental Accounting Standard Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, in 2018. This statement relates to the University's costs of providing postemployment health and dental benefits (other postemployment benefits, or OPEB) to eligible retirees. Adoption of this statement, which establishes new actuarial methods and discount rate standards for the measurement and recognition of the cost of OPEB, resulted in a decrease in net position of \$1.4 billion at the beginning of the fiscal year.



Revenue diversification has long been an important strategy for the University to achieve financial stability. This strategy has been an integral element in enabling the institution to be financially stable through different economic cycles as well as avoiding unnecessary dependence on student tuition and fee increases. The components of the University's sources of revenue, which totaled \$2.9 billion, are as follows:

Sources of Net Revenue (millions):



The University is in the final months of its *Empower Extraordinary* capital campaign. MSU is thrilled to announce that the original campaign goal of \$1.5 billion has been surpassed, with a total of \$1.7 billion currently raised. In fiscal year 2018, MSU received commitments of \$179 million in gifts and pledges from donors. After an accounting adjustment made to reflect discounted values, MSU recognized \$151 million in gifts, including \$63 million in additions to permanent endowments.

This milestone was reached through the combined generosity of alumni and friends, and is already transforming students' lives, increasing research capacity, and attracting the best and brightest to MSU. Through the fall of 2018, MSU will continue to seek funding for four priority areas to support MSU's vision and strategic objectives:

100 New Endowed Chairs

MSU's fundamental mission is to develop solutions and advance knowledge to make a better tomorrow for students and our global society. The caliber of MSU's faculty is critical to that mission and to ensuring the University's future as one of the top-100 research universities in the world. Endowed chair positions are invaluable when it comes to furthering scholarship, attracting funding — as well as the best graduate students and faculty — and opening possibilities for collaboration across campus and with partner institutions.

PHILANTHROPY GOAL:

100 Endowed Chairs - Status: 104 endowed established to date



Grand Rapids Research Center Opens Doors to Medical Discovery

Opened September 20, 2017, the Grand Rapids Research Center is designed to support 260 members of the College of Human Medicine’s scientific research teams, including 34 principal investigators and their labs. At full capacity, the center will support 44 research teams. Some of the areas of scientific study include Parkinson’s disease, Alzheimer’s disease, pediatric neurology, autism, inflammation, transplantation, cancer, genetics, women’s health and reproductive medicine.

The \$82 million, six-story, 162,800 square foot facility will benefit MSU College of Human Medicine scientists and researchers from MSU’s partnering institutions.

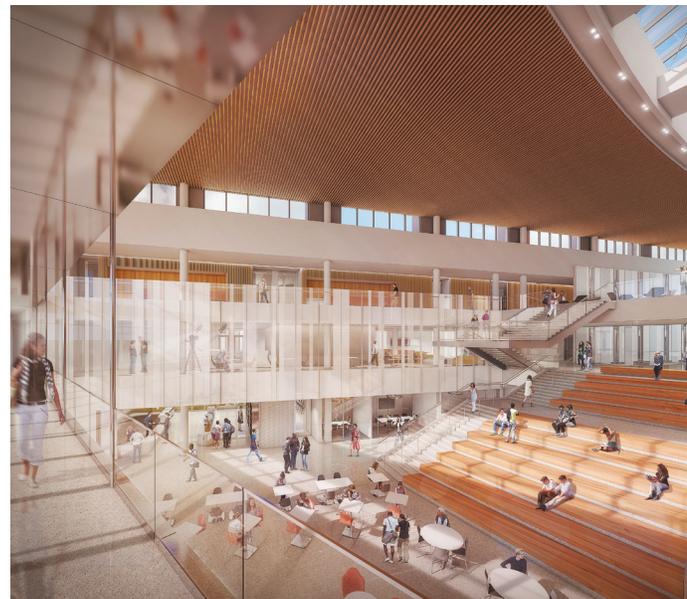
PHILANTHROPY GOAL FOR
GRAND RAPIDS RESEARCH CENTER:
\$40 Million – Status: \$25 Million received to date



Edward J. Minskoff Business Pavilion Brings Competitive Advantage

One of the largest projects in MSU’s Empower Extraordinary Campaign and completely funded by donors, the pavilion will give the Eli Broad College of Business a competitive edge among the nation’s top business schools. The three story, 100,000 square foot facility, is expected to be completed in 2019. The facility will feature flexible classrooms, the latest technology and an expanded career center to serve students, recruiters and corporate partners.

PHILANTHROPY GOAL FOR EDWARD J.
MINSKOFF BUSINESS PAVILION:
\$60 Million – Status: \$64 Million received to date





Music College Pavilion Arrives with Fanfare

The music building, home of the College of Music, opened in 1940 and the last major addition was built in 1956. This new pavilion is the next step in creating high-quality teaching, practice, rehearsal and research spaces that meet the needs of 21st century musicians. The state-of-the-art facility - a 37,000 square foot music pavilion and 8,500 square feet of renovated space - will increase the total facility space by 40% and allow the College of Music to compete with peers on the highest level. The facility will greatly increase space for practice, performance and learning and will utilize state of the art acoustical engineering that will protect the hearing of students and faculty.

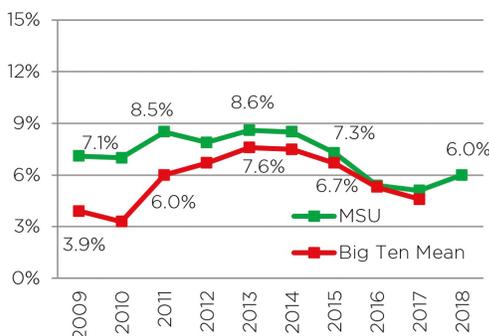


PHILANTHROPY GOAL FOR MUSIC COLLEGE PAVILION:

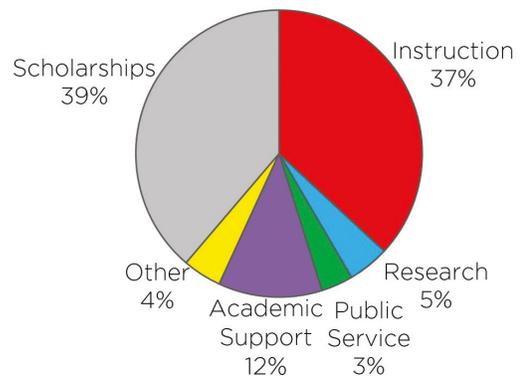
\$18 Million - Status: \$11 Million received to date

The University's total investments, including endowment investments of \$2.7 billion, have grown to \$3.2 billion due to gifts and strong investment returns. Over the period 2009-2018, MSU's average ten-year investment rate of returns have consistently exceeded the Big Ten average. For 2018, MSU's ten-year endowment investments annual returns averaged 6% (Big Ten average is pending). This level of performance allows MSU to direct critical resources to mission-driven initiatives. It is important to effectively utilize our donor funds in order to provide value and recognition to both the recipients and the donor.

MSU Endowment Investments 10 Year Average Returns compared to Big Ten



2018 Donor Funded Endowment Income provided \$64 million for:





ENHANCING STUDENT SUCCESS

Michigan State University continues its investment in initiatives, programs and facilities that promote collaboration, discovery and student success.

MSU was awarded the Eduventures 2017 Innovation Award for its commitment to increasing graduation rates and closing opportunity gaps for first generation, low-income and underrepresented populations through its Student Success Initiative. Presented by the National Research Center for College & University Admissions, it honors higher education institutions that have demonstrated significant innovations in enrollment management, student success and student outcomes.

Aspiring to be a national leader for student success, MSU aims to increase its overall graduation rate from 79% today to 82% by 2020.



**Building Inclusive
Communities**



Go Green Go 15



Spartan Pathways



Spartan Identity

Meeting the Demands of STEM Teaching and Research

Over the past 10 years, enrolled credit hours in science, technology, engineering and math-related courses at MSU have increased by 38 percent. Construction of the new STEM teaching facility will meet the growing needs of MSU's students and provide them with the skills that are in high demand by employers across Michigan. The project will include new construction of approximately 117,000 gross square feet that comprises an addition on the former Shaw Lane Power Plant's north and south sides.

The facility will house undergraduate teaching laboratories, project laboratories and breakout





space that will support gateway courses for biological sciences, chemistry, computer science, physics and engineering. The existing structure has approximately 40,000 square feet that will be renovated to create a vibrant and active student commons and gallery, including a student help center and studio space, that seamlessly connects to the STEM facility.

Estimated project cost \$73 million with \$30 million from the State of Michigan.

INVESTING IN THE RESEARCH ENTERPRISE

Research is fundamental to MSU’s mission and a natural output of the creative process that transforms Spartans from individual faculty and students to globally engaged citizen leaders. MSU researchers are united in the purpose of answering questions and creating solutions to challenges that stand in the way of a better quality of life for individuals and communities at home and around the world.

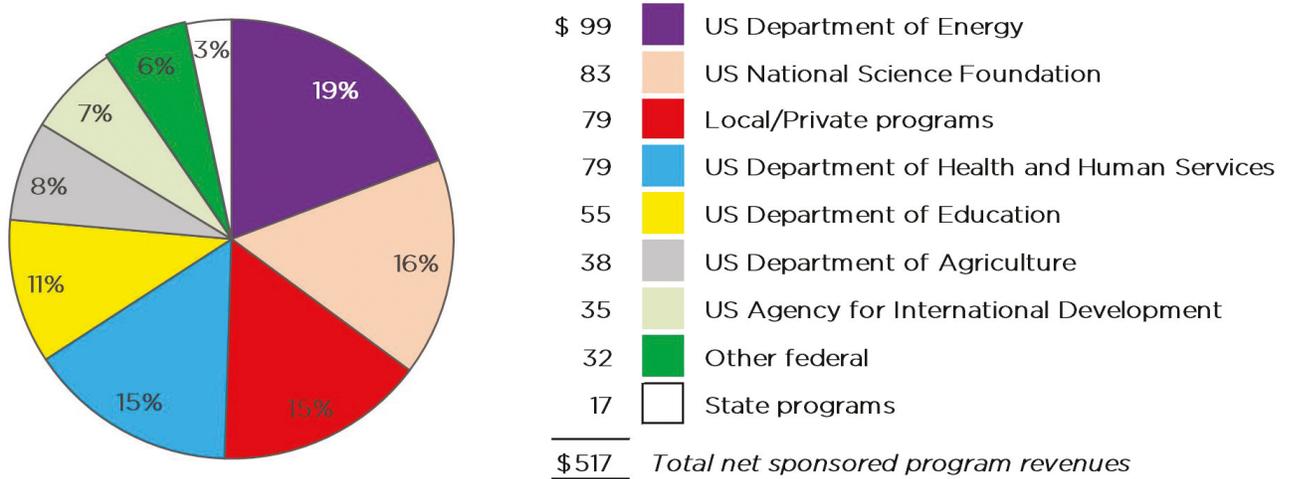
MSU expends more than \$500 million annually in sponsored program funding from a variety of federal, state, and private sources. This funding empowers researchers to propel new ideas into practical applications with commercial promise and potential public benefit. In 2018, the University recognized \$517 million in sponsored program revenue.

RANKINGS FOR COMBINED NSF/DOE EXPENDITURES

IN THE BIG TEN #1

#2 IN THE NATION

Sources of Net Sponsored Program Revenue (millions):



MSU continues to invest in the research enterprise as Spartans work to build a better tomorrow.



Bio Engineering Facility Promotes Cross Campus Research

The newly opened Bio Engineering Facility brings together dozens of researchers from across the campus representing a wide range of disciplines with a mission to conduct futuristic, cutting-edge research that will improve or even save the lives of millions of people around the globe. The 130,000 square foot facility promotes scientific collaboration and hosts faculty scientists from the colleges of Engineering, Human Medicine and Natural Science who also facilitate collaboration among other on-campus units, including Nursing Osteopathic Medicine, Veterinary Medicine and Communications Arts and Sciences.



The building also houses the newly created Institute for Quantitative Health Science and Engineering, an interdisciplinary center devoted to basic and applied research, bringing together the life sciences, engineering, information science and other physical and mathematical sciences.

Total project cost: \$69 million, with \$30 million from the State of Michigan.

Accelerating Into The Future – Facility for Rare Isotope Beams

In partnership with the U.S. Department of Energy Office of Science, MSU continues to construct and operate the \$730 million Facility for Rare Isotope Beams (FRIB), a scientific user facility that spans nearly 500,000 square feet. Since 1958, MSU has been known for its innovations in nuclear science, and today the University is home to the nation's No. 1 nuclear physics graduate program. When it becomes fully operational by 2022, FRIB will power discoveries, develop applications for society and educate the next generation of nuclear scientists who will advance the benefits of rare isotope science for generations to come.



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.



CONCLUSION

Michigan State University has been advancing the common good with uncommon will for more than 160 years. In communities from East Lansing to East Africa, MSU pushes the boundaries of discovery and forges enduring partnerships to solve the world's most pressing problems – from ensuring safe food and water supplies and developing vaccines to exploring alternative energy and preparing a new generation of urban educators.

Spartan faculty, students and alumni are at work every day, at home and around the world, to create a better tomorrow for all people. Whether it's our three colleges of Medicine students bringing medical care to Michigan and around the World, student athletes helping with hurricane relief efforts, or Alumni giving countless hours to Spartan Day of Service, the collective will of Spartans to make a lasting difference in our world is unswerving.

As a top 100 global research university and member of the Association of American Universities, Michigan State University holds true to its land-grant mission of advancing knowledge and transforming lives through teaching, research and outreach. With an entrepreneurial mindset we maintain a focus on innovation with a deep commitment to student safety and success.

Our financial team is dedicated to the support of university's mission and is proud of the fiscal integrity with which it upholds and advances the University's priorities.

Independent Auditor's Report

To the Board of Trustees
Michigan State University

Report on the Financial Statements

We have audited the accompanying financial statements of Michigan State University (the "University") and its discretely presented component unit as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise Michigan State University's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We did not audit the financial statements of Michigan State University Foundation (the "Foundation") which is the sole discretely presented component unit. Those financial statements were audited by other auditors whose report has been furnished to us and, in our opinion, insofar as it relates to the amounts included for the Foundation, is based solely on the report of the other auditors. We conducted our audits 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. The financial statements of the Foundation were not audited under Government Auditing Standards.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, based on our audit and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of Michigan State University and its discretely presented component unit as of June 30, 2018 and 2017 and the respective changes in its financial position and, where applicable, cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

To the Board of Trustees
Michigan State University

Emphasis of Matter

As discussed in Note 1 to the basic financial statements, the University adopted the provisions under GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* and GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, as of July 1, 2017. Our opinion is not modified with respect to these matters.

As described in Note 10 to the financial statements, there was a material lawsuit settlement reached in principle that occurred during fiscal year 2018. Our opinion is not modified with respect to this matter.

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, 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 audit 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

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the University's basic financial statements. The listing of trustees, officers, and finance management, the report from the Vice President for Finance and Treasurer, and the transmittal letter are presented for purposes of additional analysis and are not a required part of the basic financial statements. The listing of trustees, officers, and finance management, the report from the Vice President for Finance and Treasurer, and the transmittal letter have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2018 on our consideration of Michigan State 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 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 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 Michigan State University's internal control over financial reporting and compliance.



October 25, 2018



Introduction

The following discussion provides an overview of the financial position of Michigan State University (the "University") for the fiscal years ended June 30, 2018 and 2017.

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.

Effective for the fiscal year ended June 30, 2018, the University adopted the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, (GASB 75). This statement establishes new actuarial methods and discount rate standards for the measurement and recognition of the cost of postemployment benefits, and eliminates the provision to amortize unfunded liabilities over a 30-year period, superseding the requirements of GASB Statement No. 45. Adoption of this statement resulted in a reduction of beginning net position of \$1,344 million and a total liability of \$2,016 million at June 30, 2018 (see footnotes 1 and 12 for further information).

Also effective for the fiscal year ended June 30, 2018, the University adopted the provisions of GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, (GASB 81). This statement establishes measurement and recognition guidance for situations in which the University is a beneficiary of a split-interest agreement. Adoption of this statement resulted in a reduction of beginning net position of \$7 million (see footnotes 1 and 9 for further information).

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.

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.

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



MICHIGAN STATE UNIVERSITY
MANAGEMENT'S DISCUSSION AND ANALYSIS (continued)

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.

As previously noted, for the fiscal year ended June 30, 2018 the University adopted the provisions of GASB 75. Below is a summarized comparison of the University's assets, deferred outflows, liabilities, deferred inflows, and net position at June 30, 2018 and 2017 adjusted for the impact of postemployment benefit obligations. The 2016 fiscal year is shown as originally reported:

<i>(in millions)</i>	2018	OPEB Adjustment	2018 Net of OPEB	2017	OPEB Adjustment	2017 Net of OPEB	2016
Current assets	\$ 636	\$ -	\$ 636	\$ 542	\$ -	\$ 542	\$ 534
Noncurrent assets:							
Restricted cash and cash equivalents and restricted investments	-	-	-	-	-	-	62
Endowment and other investments	2,954	-	2,954	2,792	-	2,792	2,441
Capital assets, net	2,743	-	2,743	2,614	-	2,614	2,365
Other	112	-	112	136	-	136	108
Total assets	6,445	-	6,445	6,084	-	6,084	5,510
Deferred outflows of resources	166	(125)	41	55	-	55	74
Current liabilities	1,177	(42)	1,135	586	-	586	533
Noncurrent liabilities	3,082	(1,974)	1,108	1,621	(465)	1,156	1,601
Total liabilities	4,259	(2,016)	2,243	2,207	(465)	1,742	2,134
Deferred inflows of resources	17	-	17	-	-	-	-
Net Investment in Capital Assets	1,527	-	1,527	1,419	-	1,419	1,227
Restricted:							
Nonexpendable	709	-	709	647	-	647	583
Expendable	826	-	826	755	-	755	635
Unrestricted	(727)	1,891	1,164	1,111	465	1,576	1,005
Net position	\$ 2,335	\$ 1,891	\$ 4,226	\$ 3,932	\$ 465	\$ 4,397	\$ 3,450

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 2018, cash and cash equivalents increased \$44 million, primarily a function of the University's operating, financing, and investing activities as reported in the statement of cash flows. Investments increased \$50 million, primarily due to increases in short-term investment reserves. These increases were offset by a decrease in net receivables of \$4 million due to a \$26 million decrease from federal, state, and local sponsored programs partially offset by a \$21 million increase in state sponsored medical programs. Sponsored program accounts receivable balances generally reflected timing differences between amounts expended in accordance with grant or contract guidelines and actual cash draws from the grantor. State sponsored medical program accounts receivable balances generally reflected timing differences between delivery of service and payment by the state.



During 2017, net accounts receivable increased \$27 million due in part to an increase of \$23 million from federal, state, and local sponsored programs. In addition, inventory and other assets increased \$4 million. Those increases were offset by a decrease of \$22 million in cash and cash equivalents and investments, which was primarily a function of the University's operating, financing, and investing activities as reported in the Statement of Cash Flows.

Noncurrent assets:

Restricted cash and cash equivalents and restricted investments

All balances represent unspent bond proceeds, which are externally restricted for the construction or purchase of capital assets. There were no unspent bond proceeds in 2018 or 2017. The decrease in 2017 represents the spending of Series 2015A bond proceeds for capital assets consistent with their restricted purpose.

Endowment and other investments

At June 30, 2018 and 2017, the University's endowment investments totaled \$2,700 million (an increase of \$169 million) and \$2,531 million (an increase of \$337 million), respectively. Endowment gifts and University-designated additions to endowment investments totaled \$70 million in 2018 and \$66 million in 2017. In addition, \$16 million in 2018 and 2017 of unspent spending policy distributions were reinvested into the respective endowments, consistent with the underlying endowment agreements. Investments of \$30 million in 2017 were reallocated to designated endowment investments, consistent with the University's Board-approved cash management and investment plan. No such reallocations occurred in 2018. Additionally, there was a net transfer in of accumulated capital gains of \$25 million in 2018 and a net draw of accumulated capital gains of \$28 million in 2017 for programmatic and capital initiatives. Realized and unrealized net investment gains within the investment portfolio accounted for a \$58 million increase in 2018 and a \$253 million increase in 2017.

Other investments consist primarily of retirement and postemployment benefit reserves, which totaled \$95 million and \$94 million at June 30, 2018 and 2017, respectively. Also included in other investments was the Liquidity Reserve Pool component of the University's Operating Cash Pool (\$103 million in 2018 and \$104 million in 2017).



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, 2018, 2017, and 2016, the University's investments in capital assets were as follows:

	<u>2018</u>	<u>2017</u> <i>(in millions)</i>	<u>2016</u>
Land	\$ 48	\$ 44	\$ 43
Buildings and site improvements	3,655	3,042	2,972
Construction in progress	324	712	459
Software and other intangibles	119	117	95
Equipment and other	911	853	826
Museum collections	15	14	14
Less: accumulated depreciation	<u>(2,329)</u>	<u>(2,168)</u>	<u>(2,044)</u>
	<u>\$ 2,743</u>	<u>\$ 2,614</u>	<u>\$ 2,365</u>

Major additions to buildings and site improvements during 2018 included \$215 million for the Facility for Rare Isotope Beams, \$135 million for 1855 Place, \$82 million for the Grand Rapids Research Facility, \$53 million for the Breslin Center facility, \$39 million for the Data Center, and \$30 million for the Cyclotron Building - Office additions. Major additions to buildings and site improvements during 2017 included \$18 million for the Engineering Building chiller replacement and room renovations, \$14 million for the acquisition of 4000 Collins Road property, \$5 million for the acquisition of 600 East Crescent Road property, and \$5 million for the Facility for Rare Isotope Beams – 25 Mega Watt Electrical Duct Bank.

Construction in progress reflects multi-year projects which, once completed and placed into service, are generally categorized as buildings and site improvements. The 2018 balance included \$61 million for Interdisciplinary Science and Technology, \$32 million for the Business College Complex – Grad Pavilion, and \$184 million for the Facility for Rare Isotope Beams specialized equipment fabrication. The 2017 balance included \$210 million for the Facility for Rare Isotope Beams, \$118 million for 1855 Place, \$78 million for the Grand Rapids Research Facility, \$42 million for Breslin Center Facility, \$30 million for the Cyclotron Building – Office additions, \$29 million for Data Center, and \$148 million for the Facility for Rare Isotope Beams specialized equipment fabrication.

As of June 30, 2018, 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 \$205 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, 2018 and 2017, deferred outflows of resources totaled \$166 million (an increase of \$111 million) and \$55 million (a decrease of \$19 million), respectively. New in 2018, \$125 million represents deferred amounts due 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 the adoption of GASB 75). Offsetting this increase is a decrease in accumulated changes in the fair value of hedging derivative instruments (\$13 million) and deferred losses on refunding of debt in 2010 (\$1 million).

**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 2018 was due in part to a \$500 million accrued legal settlement discussed in footnote 10 of the financial statements, and increases in the current portion of long-term debt (\$51 million) and other postemployment benefit obligations (\$42 million). The current portion of net other postemployment obligations is new in 2018 in accordance with GASB 75. The increase in current portion of long-term debt and other obligations is due to a net increase in outstanding General Revenue Commercial Paper (short-term financing).

The net increase in 2017 was due in part to a \$34 million increase in the current portion of long-term debt and other obligations and a \$21 million increase in trade accounts and interest payable. The net increase in the current portion of long-term debt and other obligations was due in part to a net increase of outstanding General Revenue Commercial Paper of \$35 million.

Noncurrent liabilities, primarily debt and net postemployment benefit obligations:

At June 30, 2018, the University had noncurrent debt and other obligations outstanding of \$1,004 million compared with \$1,040 million at June 30, 2017. This balance was comprised primarily of outstanding General Revenue Bonds of \$971 million and \$999 million in 2018 and 2017, respectively (including \$44 million and \$47 million in 2018 and 2017, respectively, of related original issue premiums). The decrease was primarily due to scheduled principal debt payments of \$28 million on outstanding General Revenue Bonds. 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, 2018, 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. Subsequent to June 30, 2018, Standard & Poor's changed the University's credit rating to AA in connection with the cost of the legal settlement discussed in footnote 10.

As previously noted, for the fiscal year ended June 30, 2018 the University adopted the provisions of GASB 75. The adoption of the standard resulted in an increase in reported net postemployment benefit obligations of \$1,509 million, due primarily to revaluing the unfunded liability using a 20 year tax-exempt municipal rate as the discount rate, and reporting the full unfunded actuarial liability in its entirety in the financial statements as specified by GASB 75. As GASB 75 requires annual updates to estimated liabilities based on current discount rates, the liability estimate may vary dramatically from year to year in future reports. Although the financial reporting of the liability will be changing, the University's approach on funding the retirement benefits on a pay-as-you-go-basis will continue. Thus, there will be no impact on the payment of the other postemployment benefits.

Prior to 2018, the University recognized postemployment benefit obligations under the provisions of GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. At June 30, 2017, the University's total unfunded OPEB obligation was \$1,086 million using a discount rate of 7%. Of that amount, the University had recorded a noncurrent liability of \$465 million for 2017, representing the net OPEB obligation (the cumulative difference between the annual required contribution less actual retiree health and dental payments made during the respective fiscal years). See footnote 12 for more information.



Deferred inflows of resources:

New in 2018, deferred inflows of resources consist of the University's investment value resulting from irrevocable split-interest agreements (primarily Charitable Remainder Trusts) at June 30, 2018. In accordance with GASB 81 amounts are deferred until all provisions of the agreements are satisfied.

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, 2018, 2017, and 2016 was as follows:

	<u>2018</u>	<u>2017</u> <i>(in millions)</i>	<u>2016</u>
Net investment in capital assets	\$ 1,527	\$ 1,419	\$ 1,227
Restricted:			
Nonexpendable	709	647	583
Expendable	<u>826</u>	<u>755</u>	<u>635</u>
Total restricted	1,535	1,402	1,218
Unrestricted - before OPEB	<u>1,164</u>	<u>1,576</u>	<u>1,411</u>
Total net position - before OPEB	<u>4,226</u>	<u>4,397</u>	<u>3,856</u>
OPEB (Unrestricted)	<u>(1,891)</u>	<u>(465)</u>	<u>(406)</u>
Total net position	<u>\$ 2,335</u>	<u>\$ 3,932</u>	<u>\$ 3,450</u>

Net investment in capital assets represents the University's land, buildings, software, and equipment net of accumulated depreciation 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.

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 2018 summer semester and the first quarter of fiscal year 2019, maintaining reserves for capital projects, sustaining working capital balances for self-supporting departmental activities, and preserving unrestricted quasi and term endowments. At June 30, 2018 and 2017, the unrestricted balances related to these specific commitments totaled \$1,164 million (a decrease of \$412 million due primarily to the accrued legal settlement) and \$1,576 million (an increase of \$165 million), respectively. Offsetting these balances is a draw on unrestricted net position for commitments related to postemployment benefits. At June 30, 2018 and 2017, these commitments reduced unrestricted net position by



\$1,891 million and \$465 million, respectively. The reduction from 2017 to 2018 is primarily due to the adoption of GASB 75, which specifies that the beginning unrestricted net position balance be adjusted for the cumulative effect of accounting change (\$1,344 million decrease).

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 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.



MICHIGAN STATE UNIVERSITY
MANAGEMENT'S DISCUSSION AND ANALYSIS (continued)

A summarized comparison of the University's revenues, expenses, and changes in net position for the years ended June 30, 2018, 2017, and 2016 follows:

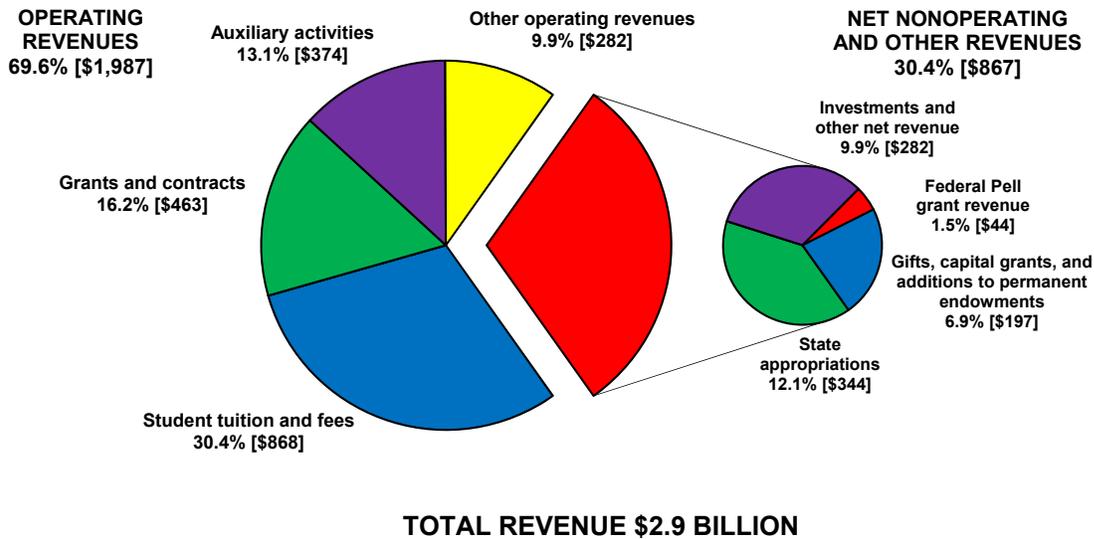
	<u>2018</u>	<u>2017</u> <i>(in millions)</i>	<u>2016</u>
Operating revenues:			
Student tuition and fees, net of allowances	\$ 868	\$ 859	\$ 830
Grants and contracts	463	445	421
Auxiliary activities	374	357	340
Other operating revenues	<u>282</u>	<u>271</u>	<u>220</u>
Total operating revenues	<u>1,987</u>	<u>1,932</u>	<u>1,811</u>
Operating expenses:			
Instruction and departmental research	799	762	706
Research	400	381	350
Public service	327	287	244
Academic support	136	131	128
Student services	55	51	54
Scholarships and fellowships	72	67	66
Institutional support*	666	143	140
Operation and maintenance of plant	129	130	134
Auxiliary enterprises	336	321	318
Depreciation	177	154	147
Other operating expenses, net	<u>3</u>	<u>8</u>	<u>4</u>
Total operating expenses	<u>3,100</u>	<u>2,435</u>	<u>2,291</u>
Operating loss	(1,113)	(503)	(480)
Nonoperating revenues (expenses):			
State operating appropriation	281	276	269
State AgBioResearch appropriation	34	33	33
State Extension appropriation	29	29	28
Federal Pell grant revenue	44	38	39
Gifts	64	68	60
Net investment income (loss)	320	391	(103)
Interest expense on capital asset related debt	(45)	(38)	(44)
Other nonoperating revenues, net	<u>7</u>	<u>8</u>	<u>4</u>
Net nonoperating revenues	<u>734</u>	<u>805</u>	<u>286</u>
Income (loss) before other	(379)	302	(194)
State capital appropriations	-	-	44
Capital grants and gifts	70	122	176
Additions to permanent endowments	<u>63</u>	<u>58</u>	<u>45</u>
Increase (decrease) in net position	(246)	482	71
Net position, beginning of year	3,932	3,450	3,379
Cumulative effect of change in accounting principles	<u>(1,351)</u>	<u>-</u>	<u>-</u>
Net position, beginning of year, restated	<u>2,581</u>	<u>3,450</u>	<u>3,379</u>
Net position, end of year	<u>\$ 2,335</u>	<u>\$ 3,932</u>	<u>\$ 3,450</u>

* Includes the \$500 million accrued legal settlement



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, 2018 are presented in millions of dollars:



Operating revenues: The most significant source of operating revenue for the University was student tuition and fees (net of scholarship allowances), totaling \$868 million and \$859 million in 2018 and 2017, respectively. Gross tuition and fees revenue increased 2.0% and 3.8% in 2018 and 2017, respectively, due in part to increases in student credit hours and rates, and changes in the student blend. Other major revenue sources in 2018 included federal grants and contracts of \$357 million (an increase of \$20 million), including \$332 million in sponsored programs, and auxiliary activities (activities that provide services to students, faculty, staff, and the public) totaled \$374 million (an increase of \$17 million). In 2017, net tuition and fees increased \$29 million due in part to increases in student credit hours and rates and changes in student blend, and auxiliary activities increased \$17 million.

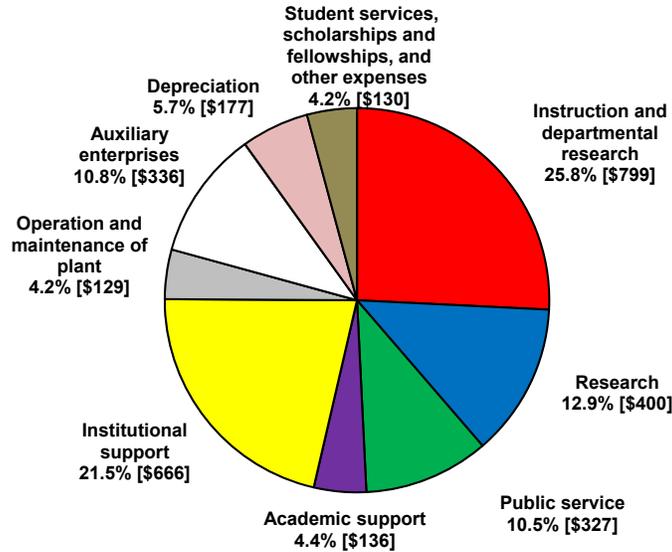
Net nonoperating and other revenues: A primary source of this net revenue was State appropriations, which totaled \$344 million in 2018, an increase of \$6 million. In 2018, the University received \$281 million in funding for general operations, compared to \$276 million in 2017. Michigan State University Extension and MSU AgBioResearch appropriations totaled \$63 million, compared to \$62 million in 2017. Other significant components of net nonoperating revenues in 2018 included net investment income, which decreased \$71 million due to market conditions. In 2017, net investment income increased \$494 million and state appropriations decreased \$36 million.

During 2018, \$1,526 million was expended for the core missions of the University: instruction and departmental research, research, and public service, an increase of \$96 million (6.6%) over 2017. Instruction and departmental research expenses increased \$37 million (4.8%), due in part to general fund salary and labor budget increases from 2017 to 2018 and increased health fringe benefit costs. Research and public service expenses increased \$59 million (8.7%), due primarily to growth in certain medical service plan and Medicaid



Enhanced Reimbursement program costs within the College of Human Medicine and College of Osteopathic Medicine (\$20 million) and the first year of operations of the Institute for Quantitative Health (\$11 million). Institutional support totaled \$666 million, an increase of \$523 million, primarily due to an accrued legal settlement and related legal costs discussed in footnote 10 of the financial statements. Auxiliary enterprises totaled \$336 million, an increase of \$15 million. In 2017, expenses for the core mission of the University increased \$129 million and auxiliary enterprises increased \$3 million.

Operating expenses by source for the year ended June 30, 2018 are presented in millions of dollars:



TOTAL OPERATING EXPENSES \$3.1 BILLION

The University's Economic Outlook

The University's longstanding focus and disciplined management of financial resources provides continuity and planning certainty for students and their families, while, at the same time, providing the resources necessary for the University to respond to numerous opportunities and challenges. The University's continued financial strength through difficult challenges in fiscal year 2018 demonstrates our disciplined stewardship at work.

Fiscal year 2018 saw continued emphasis on revenue diversification and prudent cost containment, both focused on maintaining educational excellence, affordability, and accessibility. With a presence in each Michigan county, the University's economic impact exceeds \$5 billion annually. In the fall of 2018, the University welcomed its largest, most diverse freshman class in its history as students from all 50 states and 140 other countries arrived to a campus boasting world-class faculty, programs, and facilities.

The University's fiscal year 2019 budget features no tuition increase for freshman and modest increases ranging from 2.2% to 3.2% for other undergraduate students. Further, MSU will freeze undergraduate tuition rates and introduce a block tuition structure for undergraduate students taking between 12 and 18 credits during the 2019-20 academic year (fiscal year 2020). As part of the *Go Green Go 15* program, the University aims to incentivize students to pursue more credits per semester thereby lowering their time to degree and minimizing related levels of indebtedness.



Also included in the Board approved two-year budget, MSU anticipates a 1.8 percent and 2.0 percent increase in appropriations from the State of Michigan for the 2019 and 2020 fiscal years respectively. Other adjustments to operating revenues and expenditures are consistent with broader market expectations and have been approved by the Board of Trustees.

Investment income continues to be an important component of MSU's ongoing revenue diversification. As strong stewards of University 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 help keep tuition increases lower and provide an important source of support for University operations.

With the support from nearly 250,000 alumni and friends, MSU has surged past its goal of raising \$1.5 billion through the *Empower Extraordinary* capital campaign, which will conclude in December 2018. This amazing support of Spartans from around the world has allowed the University to meet or exceed its goals to support scholarships and fellowships, create new endowed faculty positions, create new facilities, and increase research and scholarly efforts to solve real-world problems.

MSU remains among the top 100 universities in the world receiving recognition for both academic quality and value. Residents of Michigan make up about 75% of undergraduate students, the most of any institution in the Big Ten. Together, we will continue to fulfill our land-grant mission: to advance knowledge and transform lives by providing outstanding education to all who qualify, to seek answers to questions and create solutions, and to advance outreach, engagement, and economic development activities which lead to a better quality of life for individuals and communities, both in Michigan and around the world.



MICHIGAN STATE UNIVERSITY
STATEMENTS OF NET POSITION

	June 30,	
	2018	2017
ASSETS		
Current assets:	(in thousands)	
Cash and cash equivalents	\$ 64,332	\$ 20,369
Investments	320,393	270,804
Accounts and interest receivable, net	191,067	195,447
Student loans and pledges receivable, net	34,732	32,512
Inventories and other assets	25,389	23,151
Total current assets	<u>635,913</u>	<u>542,283</u>
Noncurrent assets:		
Restricted cash and cash equivalents	-	4
Endowment investments	2,700,319	2,531,144
Other investments	252,982	260,809
Student loans and pledges receivable, net	83,023	100,110
Investments in joint ventures and other assets	28,823	34,614
Derivative instruments - swap asset	321	345
Capital assets, net	2,742,855	2,614,490
Total noncurrent assets	<u>5,808,323</u>	<u>5,541,516</u>
Total assets	<u>6,444,236</u>	<u>6,083,799</u>
DEFERRED OUTFLOWS OF RESOURCES	166,272	54,749
LIABILITIES		
Current liabilities:		
Accounts and interest payable	125,112	111,773
Accrued personnel costs	60,543	57,722
Accrued self-insurance liabilities (footnote 10)	517,786	15,334
Payroll taxes and other payroll deductions	22,471	27,940
Deposits held for others	23,956	30,244
Unearned revenues	127,676	136,805
Current portion of net other postemployment benefit obligations (footnote 12)	42,094	-
Current portion of long term debt and other obligations	257,626	206,283
Total current liabilities	<u>1,177,264</u>	<u>586,101</u>
Noncurrent liabilities:		
Accrued personnel costs	36,881	37,566
Accrued self-insurance liabilities	7,791	7,609
Unearned revenues	11,025	12,517
Derivative instruments - swap liability	48,081	57,178
Net other postemployment benefit obligations (footnote 12)	1,973,954	465,452
Long term debt and other obligations	1,003,762	1,040,191
Total noncurrent liabilities	<u>3,081,494</u>	<u>1,620,513</u>
Total liabilities	<u>4,258,758</u>	<u>2,206,614</u>
DEFERRED INFLOWS OF RESOURCES	16,661	-
NET POSITION		
Net investment in capital assets	1,527,271	1,419,260
Restricted:		
Nonexpendable	708,761	647,189
Expendable	825,901	754,587
Unrestricted	<u>(726,844)</u>	<u>1,110,898</u>
TOTAL NET POSITION	<u>\$ 2,335,089</u>	<u>\$ 3,931,934</u>

See accompanying notes



MICHIGAN STATE UNIVERSITY FOUNDATION
STATEMENTS OF FINANCIAL POSITION

	June 30,	
	2018	2017
	(in thousands)	
ASSETS		
Cash equivalents	\$ 8,050	\$ 10,279
Interest and dividends receivable	182	129
Grants and contracts receivable, net	40	43
Receivable from related party	467	1,319
Other receivables, net	4,472	138
Investments:		
Marketable securities	192,938	215,094
Investments in limited partnerships	107,167	96,079
Venture capital	83,359	74,092
Cash value of life insurance	-	3,998
Land held for investment, net	5,212	4,956
Other investments, net	550	1,713
Investment in Research Park, net	5,374	5,386
Notes receivable/equity in start-up organizations, net	1,449	858
Prepaid expenses	126	9
Property and equipment, net	11,000	11,557
Intangible assets, net	895	1,016
	\$ 421,281	\$ 426,666
TOTAL ASSETS	\$ 421,281	\$ 426,666
LIABILITIES AND NET ASSETS		
Liabilities:		
Accrued expenses and other payables	\$ 3,286	\$ 4,546
Deferred revenue	536	526
Line of credit	1,000	1,000
Trusts and annuities payable	7,974	8,730
Deposit held for Michigan State University	19,215	18,866
Obligations under life estate agreements	707	754
Total liabilities	32,718	34,422
Net assets:		
Unrestricted	346,692	335,471
Temporarily restricted	39,875	39,859
Permanently restricted	1,996	16,914
Total net assets	388,563	392,244
TOTAL LIABILITIES AND NET ASSETS	\$ 421,281	\$ 426,666

See accompanying notes

**MICHIGAN STATE UNIVERSITY****STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**

	Year ended June 30,	
	2018	2017
OPERATING REVENUES	(in thousands)	
Student tuition and fees	\$ 1,008,806	\$ 988,877
Less: scholarship allowances	140,904	129,760
Net student tuition and fees	<u>867,902</u>	<u>859,117</u>
State of Michigan grants and contracts	14,263	14,166
Federal grants and contracts	357,133	337,022
Local and private sponsored programs	91,222	93,853
Interest and fees on student loans	965	956
Departmental activities (net of scholarship allowances of \$7,580 in 2018 and \$6,622 in 2017)	281,507	269,901
Auxiliary activities (net of room and board allowances of \$24,835 in 2018 and \$25,513 in 2017)	373,881	356,538
TOTAL OPERATING REVENUES	<u>1,986,873</u>	<u>1,931,553</u>
OPERATING EXPENSES		
Instruction and departmental research	798,736	762,112
Research	400,594	380,481
Public service	326,524	286,991
Academic support	136,280	131,448
Student services	54,584	51,190
Scholarships and fellowships	71,869	67,013
Institutional support (footnote 10)	665,845	142,707
Operation and maintenance of plant	128,883	129,603
Auxiliary enterprises	335,937	321,039
Depreciation	177,372	154,344
Other operating expenses, net	2,974	8,183
TOTAL OPERATING EXPENSES	<u>3,099,598</u>	<u>2,435,111</u>
Operating loss	(1,112,725)	(503,558)
NONOPERATING REVENUES (EXPENSES)		
State operating appropriation	281,239	275,862
State AgBioResearch appropriation	33,913	33,243
State Extension appropriation	29,253	28,673
Federal Pell grant revenue	44,471	37,775
Gifts	63,967	68,413
Net investment income	319,886	391,106
Interest expense on capital asset related debt	(45,246)	(37,461)
Other nonoperating revenues, net	6,507	7,567
Net nonoperating revenues	<u>733,990</u>	<u>805,178</u>
INCOME (LOSS) BEFORE OTHER	(378,735)	301,620
Capital grants and gifts	69,941	122,375
Additions to permanent endowments	62,503	57,952
Increase (decrease) in net position	<u>(246,291)</u>	<u>481,947</u>
Net position, beginning of year	3,931,934	3,449,987
Cumulative effect of change in accounting principles	(1,350,554)	-
Net position, beginning of year, as restated	<u>2,581,380</u>	<u>3,449,987</u>
NET POSITION, END OF YEAR	<u>\$ 2,335,089</u>	<u>\$ 3,931,934</u>

See accompanying notes



MICHIGAN STATE UNIVERSITY FOUNDATION
STATEMENTS OF ACTIVITIES AND CHANGES IN NET ASSETS

	Year ended June 30, 2018			Total
	Unrestricted Funds	Temporarily Restricted	Permanently Restricted	
REVENUE, GAINS AND OTHER SUPPORT:				
Contributions	\$ 351	\$ 6,852	\$ 109	\$ 7,312
Income from investments	28,648	1,654	1,098	31,400
Royalty income	1,815			1,815
Rental income	2,269			2,269
Rental expenses	(1,447)			(1,447)
Grants and contracts	945			945
Adjustment to value of annuities payable		938		938
Other income	141			141
Net assets released from restrictions:				
Satisfaction of program restrictions	189	(176)	(13)	-
Current year transfers	25,364	(9,252)	(16,112)	-
TOTAL REVENUE, GAINS AND OTHER SUPPORT	58,275	16	(14,918)	43,373
EXPENSES:				
Contributions to Michigan State University	34,810			34,810
Expenses related to land held for investment, net	247			247
Investment management fees	4,817			4,817
Investment consulting fees	632			632
Management and general	2,048			2,048
Unrelated business income tax	54			54
Postretirement benefits:				
Net periodic benefit cost	457			457
Provision for uncollectible receivables, net	156			156
MBI expenses	1,310			1,310
Spartan Innovations expenses, net	2,036			2,036
UCRP-I expenses	487			487
TOTAL EXPENSES	47,054	-	-	47,054
Change in net assets	11,221	16	(14,918)	(3,681)
Net assets, beginning of year	335,471	39,859	16,914	392,244
NET ASSETS, END OF YEAR	\$ 346,692	\$ 39,875	\$ 1,996	\$ 388,563

	Year ended June 30, 2017			Total
	Unrestricted Funds	Temporarily Restricted	Permanently Restricted	
REVENUE, GAINS AND OTHER SUPPORT:				
Contributions	\$ 264	\$ 2,339	\$ 106	\$ 2,709
Income from investments	45,315	3,217	1,708	50,240
Royalty income	1,489			1,489
Rental income	1,987			1,987
Rental expenses	(1,530)			(1,530)
Grants and contracts	974			974
Adjustment to value of annuities payable		59		59
Other income	1,237			1,237
Net assets released from restrictions:				
Satisfaction of program restrictions	349	(347)	(2)	-
Current year transfers	2,209	(1,661)	(548)	-
TOTAL REVENUE, GAINS AND OTHER SUPPORT	52,294	3,607	1,264	57,165
EXPENSES:				
Contributions to Michigan State University	11,538			11,538
Expenses related to land held for investment, net	392			392
Investment management fees	2,829			2,829
Investment consulting fees	569			569
Management and general	1,757			1,757
Unrelated business income tax	(45)			(45)
Postretirement benefits:				
Net periodic benefit cost	457			457
Changes other than net periodic benefit costs	(479)			(479)
Provision for uncollectible receivables, net	812			812
MBI expenses	1,716			1,716
Spartan Innovations expenses, net	1,848			1,848
UCRP-I expenses	221			221
TOTAL EXPENSES	21,615	-	-	21,615
Change in net assets	30,679	3,607	1,264	35,550
Net assets, beginning of year	304,792	36,252	15,650	356,694
NET ASSETS, END OF YEAR	\$ 335,471	\$ 39,859	\$ 16,914	\$ 392,244

See accompanying notes



MICHIGAN STATE UNIVERSITY
STATEMENTS OF CASH FLOWS

	Year ended June 30,	
	2018	2017
	(in thousands)	
Cash flows from operating activities		
Tuition and fees	\$ 866,730	\$ 856,346
Research grants and contracts	471,004	427,495
Auxiliary activities	379,386	351,249
Departmental activities	290,022	275,682
Interest and fees on student loans	965	956
Loans issued to students	(3,539)	(5,625)
Collection of loans from students	8,532	8,777
Scholarships and fellowships	(110,267)	(103,667)
Payments to suppliers	(622,977)	(597,993)
Payments to employees	(1,592,972)	(1,512,395)
Other payments	(14,552)	(19,711)
Net cash used by operating activities	(327,668)	(318,886)
Cash flows from noncapital financing activities		
State appropriations	343,200	336,232
Federal Pell grant revenue	44,471	37,775
Gifts	64,625	68,668
Endowment gifts	62,466	57,979
William D. Ford Direct Lending receipts	350,530	370,119
William D. Ford Direct Lending disbursements	(354,834)	(369,631)
Net cash provided by noncapital financing activities	510,458	501,142
Cash flows from capital and related financing activities		
Capital gifts and grants	79,195	107,515
Proceeds from issuance of debt and other long term obligations	85,365	98,590
Purchase of capital assets	(324,080)	(383,555)
Proceeds from sale of capital assets	1,040	1,381
Principal paid on capital debt	(63,267)	(88,546)
Interest paid	(49,396)	(49,473)
Other receipts	10,062	3,246
Net cash used by capital and related financing activities	(261,081)	(310,842)
Cash flows from investing activities		
Investment income, net	193,277	102,214
Proceeds from sales and maturities of investments	4,132,610	4,756,392
Purchase of investments	(4,203,637)	(4,731,381)
Net cash provided by investing activities	122,250	127,225
Net increase (decrease) in cash	43,959	(1,361)
Cash and cash equivalents, beginning of year	20,373	21,734
Cash and cash equivalents, end of year	\$ 64,332	\$ 20,373

See accompanying notes



MICHIGAN STATE UNIVERSITY
STATEMENTS OF CASH FLOWS (Continued)

	Year ended June 30,	
	2018	2017
Reconciliation of net operating loss to cash flows from operating activities:	(in thousands)	
Operating loss	\$ (1,112,725)	\$ (503,558)
Adjustments to reconcile net loss to net cash used by operating activities:		
Depreciation expense	177,372	154,344
Change in assets and liabilities:		
Accounts receivable	5,676	(23,481)
Student loans receivable	4,993	3,152
Inventories and other assets	(2,238)	(3,953)
Investments in joint ventures and other assets	5,791	(15,620)
Accounts payable	28,973	9,968
Accrued personnel costs	2,136	7,956
Payroll taxes and other payroll deductions	(5,469)	(1,527)
Deposits held for others	(6,288)	(43)
Unearned revenues	(10,621)	(5,735)
Accrued self-insurance liabilities	502,634	542
Net other postemployment benefit obligation	188,010	59,069
Change in deferred outflows	(105,912)	-
Net cash used by operating activities	\$ (327,668)	\$ (318,886)

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 by No. 63, 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 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. Substantially all unrestricted net position is 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 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 Footnote 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

On August 31, 2018, the Board of Trustees approved a resolution to convert the operations of MSU Health Team, a multi-specialty medical practice of the University, to a separate, newly established 501(c)(3) entity called Michigan State University Health Care. This new entity is expected to begin operations on July 1, 2019. The University will be the parent organization of the new entity, which will have its own management structure and governing board. The University is in the process of determining the full impact of this organizational realignment on the Michigan State University reporting entity.

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. Cash and cash equivalents held 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. Any cash balances held in these funds at the date of the financial statements are due to timing of reinvesting the proceeds within the fund.

Restricted cash and cash equivalents and restricted investments – Restricted cash and cash equivalents and restricted investments represent unspent bond proceeds that are externally restricted for the construction or purchase of capital assets.

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 last in first out (LIFO) and 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.

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. The accrued legal settlement disclosed in footnote 10 is recognized as a self-insurance liability.

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.

Student tuition and fees – Student tuition and fee revenues are reported in the fiscal year in which the substantial portion of the educational term 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 Residential and Hospitality 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, 4.6% 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 2018. For fiscal year 2019, the rate will be 4.4%.

Eliminations – In preparing the financial statements, the University eliminates inter-fund assets and liabilities that would otherwise be reflected twice in the Statements of Net Position. Similarly, revenues and expenses related to internal service activities 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, 2018, the University adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, ("GASB 75"). This statement supersedes GASB Statement No. 45 and establishes new requirements for calculating and reporting the University's postemployment benefits. The adoption of GASB 75 has been reflected as of July 1, 2017, resulting in an increase in obligations for postemployment benefits of \$1,362,586, an increase in deferred outflows of resources of \$18,915, and a decrease in unrestricted net position of \$1,343,671 at July 1, 2017. Ending balances as of June 30, 2017 have not been restated to reflect the impact of GASB 75 because applicable information is not available to calculate the impact on OPEB expense for the fiscal year ended June 30, 2017.



Effective for the fiscal year ended June 30, 2018, the University adopted GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, ("GASB 81"). This statement provides recognition and measurement guidance for situations in which the University is a beneficiary of a split-interest agreement. The adoption of GASB 81 has been reflected as of July 1, 2017, resulting in an increase in investments of \$10,089, an increase in deferred inflows of resources of \$16,972, and a reduction in net position of \$6,883. Ending balances as of June 30, 2017 have not been restated to reflect the impact of GASB 81 because applicable information is not available to calculate the impact on noncurrent assets for the fiscal year ended June 30, 2017.

Beginning net position as of July 1, 2017 was restated for the effects of the University's adoption of GASB 75 and GASB 81 as follows:

	June 30, 2017 as Originally Reported	GASB 81 Adoption	GASB 75 Adoption	July 1, 2017 as Restated
Current assets	\$ 542,283	\$ -	\$ -	\$ 542,283
Noncurrent assets	5,541,516	10,089		5,551,605
Total assets	6,083,799	10,089		6,093,888
Deferred outflows of resources	54,749		18,915	73,664
Current liabilities	586,101		39,962	626,063
Noncurrent liabilities	1,620,513		1,322,624	2,943,137
Total liabilities	2,206,614		1,362,586	3,569,200
Deferred inflows of resources	-	16,972		16,972
Net Position	\$ 3,931,934	\$ (6,883)	\$ (1,343,671)	\$ 2,581,380

2. Cash and cash equivalents

The University's cash and cash equivalents as of June 30, 2018 and 2017 were as follows:

	2018	2017
Cash and cash equivalents, current	\$ 64,332	\$ 20,369
Restricted cash and cash equivalents, noncurrent	-	4
Total cash and cash equivalents	\$ 64,332	\$ 20,373

Of the bank balances for cash, \$857 of the total \$84,742 in 2018 and \$832 of the total \$50,577 in 2017 were 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**

The University manages investments in accordance with the 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, 2018 and 2017, the University had the following investments:

Investment type	June 30, 2018				
	LP	LRP	CIF	Other	Total
Investment pools	\$ 12,841	\$ 47,900	\$ 2,432,276	\$ 62,661	\$ 2,555,678
U.S. Treasury bonds	108,142	20,546	26,701	-	155,389
U.S. Government agencies	27,748	7,238	9,407	-	44,393
Municipal bonds	-	581	755	-	1,336
Corporate bonds	103,655	13,887	18,047	305	135,894
Asset-backed securities	38,242	7,807	10,145	2,328	58,522
U.S. equities	-	-	228,424	-	228,424
International equities	-	-	49,688	-	49,688
International bonds	29,765	4,629	6,015	-	40,409
Life insurance policies	-	-	-	3,961	3,961
Total	<u>\$ 320,393</u>	<u>\$ 102,588</u>	<u>\$ 2,781,458</u>	<u>\$ 69,255</u>	<u>\$ 3,273,694</u>

Investment type	June 30, 2017				
	LP	LRP	CIF	Other	Total
Investment pools	\$ 12,781	\$ 43,080	\$ 2,214,359	\$ 61,541	\$ 2,331,761
U.S. Treasury bonds	120,648	19,405	25,216	-	165,269
U.S. Government agencies	22,126	13,416	17,436	-	52,978
Municipal bonds	-	381	496	-	877
Corporate bonds	49,783	11,914	15,483	625	77,805
Asset-backed securities	41,041	11,860	15,413	2,299	70,613
U.S. equities	-	-	273,783	-	273,783
International equities	-	-	57,005	-	57,005
International bonds	24,425	3,584	4,657	-	32,666
Total	<u>\$ 270,804</u>	<u>\$ 103,640</u>	<u>\$ 2,623,848</u>	<u>\$ 64,465</u>	<u>\$ 3,062,757</u>

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, 2018 and 2017, 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 maturities of fixed income investments as of June 30, 2018 and 2017 were as follows:

June 30, 2018					
Fixed Income Investment Maturities					
Investment type	Less than 1 year	1-5 years	6-10 years	More than 10 years	Total
Investment pools	\$ -	\$ -	\$ 78,818	\$ 2,107	\$ 80,925
U.S. Treasury bonds	-	132,479	15,546	7,364	155,389
U.S. Government agencies	1,444	17,004	266	25,679	44,393
Municipal bonds	-	-	-	1,336	1,336
Corporate bonds	13,991	101,117	14,008	6,778	135,894
International bonds	918	33,796	4,768	927	40,409
Asset-backed securities	-	14,095	14,605	29,822	58,522
Total	<u>\$ 16,353</u>	<u>\$ 298,491</u>	<u>\$ 128,011</u>	<u>\$ 74,013</u>	<u>\$ 516,868</u>

June 30, 2017					
Fixed Income Investment Maturities					
Investment type	Less than 1 year	1-5 years	6-10 years	More than 10 years	Total
Investment pools	\$ -	\$ -	\$ 79,975	\$ 2,170	\$ 82,145
U.S. Treasury bonds	422	148,948	9,329	6,570	165,269
U.S. Government agencies	167	16,148	822	35,841	52,978
Municipal bonds	-	-	-	877	877
Corporate bonds	8,702	46,907	14,688	7,508	77,805
International bonds	2,343	25,217	4,064	1,042	32,666
Asset-backed securities	365	18,579	20,298	31,371	70,613
Total	<u>\$ 11,999</u>	<u>\$ 255,799</u>	<u>\$ 129,176</u>	<u>\$ 85,379</u>	<u>\$ 482,353</u>

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.

Credit Risk: As a means of managing credit risk on its fixed income investments, University investment policy limits investments at time of purchase to the following minimum ratings issued by nationally recognized statistical rating organizations: 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. Thereafter, the minimum quality for separately managed funds in all three portfolios is limited to AA. University policy does not address credit risk by investment type.



The Standard & Poor's credit ratings for fixed income investments at June 30, 2018 and 2017 were as follows:

June 30, 2018								
Rating	Investment pools	U.S. Treasury bonds	U.S. Government agencies	Municipal bonds	Corporate bonds	International bonds	Asset-backed securities	Total
AAA	\$ -	\$ -	\$ -	\$ -	\$ 267	\$ -	\$ 14,291	\$ 14,558
AA	-	-	18,265	799	23,747	7,471	5,909	56,191
A	-	-	-	166	35,128	19,373	2,101	56,768
BBB	-	-	-	371	75,412	12,836	1,988	90,607
BB	-	-	-	-	465	172	205	842
Below BB	-	-	-	-	-	-	-	-
Not rated	80,925	155,389	26,128	-	875	557	34,028	297,902
Total	<u>\$ 80,925</u>	<u>\$ 155,389</u>	<u>\$ 44,393</u>	<u>\$ 1,336</u>	<u>\$ 135,894</u>	<u>\$ 40,409</u>	<u>\$ 58,522</u>	<u>\$ 516,868</u>

June 30, 2017								
Rating	Investment pools	U.S. Treasury bonds	U.S. Government agencies	Municipal bonds	Corporate bonds	International bonds	Asset-backed securities	Total
AAA	\$ -	\$ -	\$ -	\$ -	\$ 841	\$ -	\$ 27,698	\$ 28,539
AA	-	-	15,612	714	3,976	8,290	4,313	32,905
A	-	-	-	163	17,674	12,503	4,304	34,644
BBB	-	-	-	-	52,856	10,715	846	64,417
BB	-	-	-	-	269	247	-	516
Below BB	-	-	-	-	-	-	-	-
Not rated	82,145	165,269	37,366	-	2,189	911	33,452	321,332
Total	<u>\$ 82,145</u>	<u>\$ 165,269</u>	<u>\$ 52,978</u>	<u>\$ 877</u>	<u>\$ 77,805</u>	<u>\$ 32,666</u>	<u>\$ 70,613</u>	<u>\$ 482,353</u>

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, 2018 and 2017, 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.

Custodial Credit Risk: For an investment, custodial credit risk is the risk 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. Of the University's investments at June 30, 2018, \$155,389 of the U.S. Treasury bonds, \$44,393 of the U.S. Government agencies, \$1,336 of the municipal bonds, \$135,894 of the corporate bonds, \$40,409 of the international bonds, \$58,522 of the asset-backed securities, \$227,573 of the U.S. equities, \$49,688 of the international equities, and \$34,917 of the external investment pools are held by the University's counterparty, in the name of the University. Of the University's investments at June 30, 2017, \$165,269 of the U.S. Treasury bonds, \$52,978 of the U.S. Government agencies, \$877 of the municipal bonds, \$77,805 of the corporate bonds, \$32,666 of the international bonds, \$70,613 of the asset-backed securities, \$273,748 of the U.S. equities, \$57,005 of the international equities, and \$28,913 of the external investment pools are held by the University's counterparty, in the name of the University.

Foreign Currency Risk: University investment policy limits foreign currency risk on its LRP portfolio to 30% of the portfolio's market value.

**4. Foundation Investments**

The Foundation records investments at fair value. It utilizes valuation techniques that maximize the use of observable inputs and minimize 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, 2018 and 2017 were as follows:

Fair value measurement at June 30, 2018 using:				
	Balance at June 30, 2018	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Marketable securities:				
Short-term investments	\$ 1,002	\$ 1,002		\$ -
Domestic equities	71,497	58,039	13,458	-
Foreign equities	86,376	46,594	39,782	-
Fixed income	9,606	9,606		-
Mutual funds - equities	16,026	16,026		-
Mutual funds - fixed income	8,431	8,431		-
Total marketable securities	192,938	139,698	53,240	-
Investments in limited partnerships	81,631			81,631
Other investments	54	54		
Total investments by fair value level	\$ 274,623	\$ 139,752	\$ 53,240	\$ 81,631

At June 30, 2018, \$25,536 of investments in limited partnerships and \$83,359 of venture capital was valued at net asset value and not included above. In addition, \$496 of other investments are not recorded at fair value.

Fair value measurement at June 30, 2017 using:				
	Balance at June 30, 2017	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Marketable securities:				
Short-term investments	\$ 2,625	\$ 2,625	\$ -	\$ -
Domestic equities	62,582	46,232	16,350	-
Foreign equities	97,758	59,485	38,273	-
Fixed income	11,729	11,729	-	-
Mutual funds - equities	27,147	27,147	-	-
Mutual funds - fixed income	13,253	13,253	-	-
Total marketable securities	215,094	160,471	54,623	-
Investments in limited partnerships	75,225	-	-	75,225
Other investments	1,145	48	1,097	-
Total investments by fair value level	\$ 291,464	\$ 160,519	\$ 55,720	\$ 75,225

At June 30, 2017, \$20,854 of investments in limited partnerships and \$74,092 of venture capital was valued at net asset value and not included above. In addition, \$568 of other investments are not recorded at fair value.



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.

The Foundation has entered into various limited partnerships and managed accounts with investment managers. These investments are secured by the underlying value of the securities composing the portfolios. The carrying amount reported is stated at market value or estimated market value. Although limited partnership investments have been classified as Level 3, within certain individual funds there may be certain assets or liabilities that are classified as Level 1 or 2 by limited partnerships.

Venture capital investments are stated at market value or estimated market value. Management, external consultants, and the Board of Directors evaluate these investments for impairment on a quarterly basis. As of June 30, 2018, the Foundation has an outstanding commitment to fund limited partnerships and venture capital investments in the amount of \$66,077.

All donated life insurance policies, restricted student loan funds, and certain endowments were transferred to the University as of June 30, 2018. These amounts totaled \$20,660.

5. Accounts and interest receivable

The composition of accounts and interest receivable at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
State appropriations	\$ 62,619	\$ 61,414
Research and sponsored programs	52,065	77,997
Departmental activities	64,189	45,173
Interest receivable	2,375	1,578
Other	22,788	22,360
	<u>204,036</u>	<u>208,522</u>
Less: allowance for doubtful accounts	12,969	13,075
Total accounts and interest receivable, net	<u>\$ 191,067</u>	<u>\$ 195,447</u>

6. Student loans and pledges receivable

The composition of student loans and pledges receivable at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
Student loans receivable:		
Perkins Federal Loan Program	\$ 29,940	\$ 34,643
Health Professions Student Loan Programs	9,440	9,433
Other	2,860	3,144
	<u>42,240</u>	<u>47,220</u>
Less: allowance for doubtful accounts	7,273	7,260
Total student loans receivable, net	34,967	39,960
Pledges receivable:		
Capital	60,957	71,252
Operations	31,678	32,766
	<u>92,635</u>	<u>104,018</u>
Less: allowance for doubtful accounts	9,847	11,356
Total pledges receivable, net	82,788	92,662
Total student loans and pledges receivable, net	117,755	132,622
Less current portion - student loans	9,028	9,515
Less current portion - pledges	25,704	22,997
Noncurrent portion	<u>\$ 83,023</u>	<u>\$ 100,110</u>



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 plans to continue servicing outstanding loans in accordance with program specifications as permitted by the Federal government.

For the year ended June 30, 2018 and 2017, the University distributed \$350,530 and \$369,630, 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.

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 \$42,650 and \$35,626 at June 30, 2018 and 2017, 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, 2018, 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 4%.

2019	\$ 28,767
2020	27,623
2021	15,329
2022	9,489
2023	6,940
2024 and beyond	4,487
Total discounted pledges receivable	<u>92,635</u>
Less: allowance for uncollectible pledges	9,847
Total pledges receivable, net	<u>\$ 82,788</u>

7. Investments in joint ventures and other assets

The composition of investment in joint ventures and other assets at June 30, 2018 and 2017 is summarized as follows:

	<u>2018</u>	<u>2017</u>
Investment in joint ventures	\$ 5,160	\$ 10,555
Other assets	23,663	24,059
Total investment in joint ventures and other assets	<u>\$ 28,823</u>	<u>\$ 34,614</u>

The University is a member of two separate incorporated nonprofit joint ventures, which are accounted for under the equity method. The University and Sparrow Health System are members of Mid-Michigan MRI, Inc., which provides high technology cross-sectional diagnostic imaging services. 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. The University is a 50% member in each of the foregoing nonprofit corporations. 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 48824-1046.

Since its inception, the University has extended various lines of credit to URA for capital and operational needs. At June 30, 2018 and 2017, the University had a note receivable balance of \$1,964 and \$2,028, 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. In addition, in February 2018 an additional line of credit of \$1,000 was established to be used by URA for capital and operational needs. As of June 30, 2018, no amounts had been drawn on this line of credit.

In June 2017, the Board of Trustees authorized the dissolution of the University's interest in Mid-Michigan MRI, Inc., which totaled \$5,878 at June 30, 2017. During fiscal year 2018, the University received net distributions of \$6,276. Final dissolution and any remaining distributions are expected to be completed during fiscal year 2019.



Other assets is comprised of a \$22,604 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 within the 25 year period will be forfeited.

8. Capital assets and collections

Capital asset and collection activity for the years ended June 30, 2018 and 2017 follows:

	2017	Additions	Disposals	Transfers	2018
Non-depreciated capital assets:					
Land	\$ 43,649	\$ 1,650	\$ (2,481)	\$ 4,701	\$ 47,519
Construction in progress	712,164	238,255	-	(625,961)	324,458
Museum collections	14,661	417	-	-	15,078
Total non-depreciated capital assets	<u>770,474</u>	<u>240,322</u>	<u>(2,481)</u>	<u>(621,260)</u>	<u>387,055</u>
Depreciated capital assets:					
Buildings and site improvements	3,042,481	-	(6,828)	619,579	3,655,232
Software and other intangibles	117,111	-	-	1,681	118,792
Equipment and other	852,770	72,186	(13,837)	-	911,119
Less: accumulated depreciation					
Buildings and site improvements	(1,408,205)	(114,938)	3,181	-	(1,519,962)
Software and other intangibles	(99,419)	(5,128)	-	-	(104,547)
Equipment and other	(660,722)	(57,306)	13,194	-	(704,834)
Total depreciated capital assets	<u>1,844,016</u>	<u>(105,186)</u>	<u>(4,290)</u>	<u>621,260</u>	<u>2,355,800</u>
Total capital assets	<u>\$ 2,614,490</u>	<u>\$ 135,136</u>	<u>\$ (6,771)</u>	<u>\$ -</u>	<u>\$ 2,742,855</u>
	2016	Additions	Disposals	Transfers	2017
Non-depreciated capital assets:					
Land	\$ 42,788	\$ 861	\$ -	\$ -	\$ 43,649
Construction in progress	459,017	326,662	-	(73,515)	712,164
Museum collections	13,483	1,525	(17)	(330)	14,661
Total non-depreciated capital assets	<u>515,288</u>	<u>329,048</u>	<u>(17)</u>	<u>(73,845)</u>	<u>770,474</u>
Depreciated capital assets:					
Buildings and site improvements	2,971,885	19,407	(826)	52,015	3,042,481
Software and other intangibles	95,611	-	-	21,500	117,111
Equipment and other	826,243	57,329	(31,132)	330	852,770
Less: accumulated depreciation					
Buildings and site improvements	(1,312,117)	(96,566)	478	-	(1,408,205)
Software and other intangibles	(94,234)	(5,185)	-	-	(99,419)
Equipment and other	(637,986)	(52,593)	29,857	-	(660,722)
Total depreciated capital assets	<u>1,849,402</u>	<u>(77,608)</u>	<u>(1,623)</u>	<u>73,845</u>	<u>1,844,016</u>
Total capital assets	<u>\$ 2,364,690</u>	<u>\$ 251,440</u>	<u>\$ (1,640)</u>	<u>\$ -</u>	<u>\$ 2,614,490</u>

9. Deferred outflows and inflows of resources

The composition of deferred outflows of resources at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
Accumulated changes in fair value of hedging derivative instruments	\$ 31,487	\$ 43,656
Other postemployment benefits - see footnote 12	124,827	-
Loss on refunding of debt at June 30, 2010	9,958	11,093
Total deferred outflows of resources	<u>\$ 166,272</u>	<u>\$ 54,749</u>

Deferred inflows of resources consists of the investment value, net of related liabilities to other beneficiaries, attributable to the University from irrevocable split-interest agreements totaling \$16,661 and \$0 at June 30, 2018 and 2017, respectively.



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, 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 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. Effective July 1, 2018, the University established a cell captive insurance company within an existing and approved captive insurance company to gain access to global reinsurers for purposes of obtaining general liability insurance and automobile liability insurance. The University is self-insured for the first \$5,000 of each claim with any excess being fully insured up to \$55,000.

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 \$6,454 and \$5,813 as of June 30, 2018 and 2017, respectively. The discount rate used was 2%, which is based on 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 \$3,669 and \$3,768 as of June 30, 2018 and 2017, respectively. The discount rate used was 4%, which is based in part on the University's internal cost of capital.

Changes in the total reported general, professional, and self-insured employee benefit liabilities during 2018, 2017, and 2016 were as follows:

	2018	2017	2016
Balance, beginning of year	\$ 22,943	\$ 22,401	\$ 21,724
Claims incurred and changes in estimates	704,204	192,687	168,723
Claim payments	(201,570)	(192,145)	(168,046)
Balance, end of year	525,577	22,943	22,401
Less: current portion	517,786	15,334	14,609
Noncurrent portion	<u>\$ 7,791</u>	<u>\$ 7,609</u>	<u>\$ 7,792</u>

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, with the exception of the civil actions discussed in the following paragraph.

On August 29, 2016, a criminal complaint was filed with the University Police Department against a physician then employed by the University. The physician was immediately reassigned from all clinical duties on August 30, 2016. This criminal complaint and subsequent allegations were made by individuals who accused the physician of sexual assault based, in large part, on conduct that occurred under the guise of medical treatment, including on University non-campus property. The University terminated the employee from his position on September 20, 2016. He pled guilty to the criminal charges across multiple jurisdictions and is now incarcerated. Civil actions relating to these crimes were filed by 332 individuals naming the University and, in some cases, several other current and former employees, as co-defendants. On May 17, 2018, a settlement agreement was reached, in principle, with the 332 individuals for \$500,000. The final agreement is pending review and approval by federal judges. The University has accrued a \$500,000 liability for the year ended June 30, 2018, with such expenses included in institutional support within the Statement of Revenues, Expenses, and Changes in Net Position. As of June 30, 2018, the University was under various reviews and investigations by external parties, including the United States Department of Education, the National Collegiate Athletic Association (NCAA), and the Michigan Attorney General. On August 29, 2018, the NCAA reported that no violations were substantiated during its review and there is no need for further inquiry. The outcome of other third-party actions is unknown at this time. As of June 30, 2017, the outcome of the pending and potential litigation was unknown, therefore, no accruals for future costs were recorded in the 2017 financial statements.

Upon judicial approval of the settlement agreement, the University is prepared to enter into a bond purchase agreement with a commercial bank for \$500,400 to finance the settlement payment and to pay issuance costs. The bonds will be secured by General Revenues and are expected to bear interest at variable rates determined by the indexing agent.



In accordance with the terms of the pending settlement agreement, \$425,000 will be paid directly to a Qualified Settlement Fund administered by the plaintiffs' counsel within 10 business days of satisfaction of conditions precedent in the settlement agreement. \$75,000 will be held by the University as a Litigation Reserve for up to two years following the funding of the Qualified Settlement Fund. During this period, the Litigation Reserve will be used to litigate or settle any related claims not released by the settlement agreement and the University may use up to \$6,000 to fund costs and expenses, including attorney's fees, incurred in defending and settling related claims. In addition, professional fees associated with the bi-annual audit of the Litigation Reserve may be funded by the reserve. At the conclusion of the two-year period, the University must remit any remaining portions of the Litigation Reserve (including accumulated interest) to the Qualified Settlement Fund for distribution to plaintiffs. Subsequent to fiscal year end, 168 related claims not released by the settlement have been filed.

For the years ended June 30, 2018 and 2017, the University incurred costs totaling \$18,681 and \$1,004, respectively, for internal investigation, legal, and other related costs associated with the settlement. These expenses are included in institutional support within the Statement of Revenues, Expenses, and Changes in Net Position.

The University has submitted claims to insurance carriers at June 30, 2018 related to claims settled and certain legal costs incurred to date. No insurance reimbursements for settlements and/or legal fees have been received to date. Amounts of future insurance reimbursements are unknown as of June 30, 2018, and as a result no insurance recovery accruals have been recorded in the 2018 financial statements.

In the normal course of its activities, the University has been a party in various other legal actions. Historically, the University has not experienced material losses from such actions. After taking into consideration legal counsel's evaluation of other pending actions, the University is of the opinion that the outcome thereof, other than the litigation associated with the former physician, 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 contributes 10% of the employee's base salary or wages, subject to applicable University guidelines and Internal Revenue Service limits. 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, 2018 and 2017 were as follows:

	2018	2017
University contributions	\$ 89,228	\$ 85,160
Employee contributions	44,161	42,195

In addition, the University has a single-employer, defined benefit plan covering 303 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 \$3,814 and \$4,443 representing the total remaining pension obligation based on an actuarial valuation as of January 1, 2018 and 2017, respectively. The benefits are based on the employee's compensation during the last three years of employment and/or years of service.



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 20,000 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 Administrative Services are authorized to enter into collective bargaining agreements. In addition, the President and Vice President for Finance and Treasurer are authorized to approve benefit plan changes.

The University's medical plans are self-funded and each plan's premiums are updated annually based on actual claims. The University contributes to the lowest cost health plan's single rate cost for which retirees are eligible. No payment is required by retirees who select the lowest cost health plan for coverage. In the event a retiree selects an alternative health plan, the retiree is responsible for payment of the difference in premium costs. Retirees are 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 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, 2018, the University's reported liability for providing retiree health and dental care benefits is estimated based on an actuarial valuation date of January 1, 2018 and measurement date of December 31, 2017 in accordance with GASB Statement No. 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	3.44%, based on the Bond Buyer 20-year General Obligation Municipal Bond Index
Salary increases	4.0%
Healthcare cost trend rates	7.5% for 2018, decreasing 0.31% per year, to an ultimate rate of 5% for 2026 and later years. As of July 1, 2010, internal policy caps healthcare cost increases at a maximum of 5 percent per year.

As part of the January 1, 2018 valuation, the University utilized mortality assumptions based on the RP-2014 Generational Healthy Mortality Tables, with white collar adjustments, projected back to 2006 using scale MP-2014 and then projected forward using MP-2017. Changes in the total reported liability for postemployment benefits obligations for the year ended June 30, 2018 are summarized as follows:

	2018
Balance, beginning of year	\$ 1,828,038
Service cost	41,211
Interest cost	69,928
Changes in assumptions	115,470
Difference between expected and actual plan experience	-
Benefits payments	<u>(38,599)</u>
Balance, end of year	2,016,048
Less current portion	42,094
Noncurrent portion	<u>\$ 1,973,954</u>

Changes in assumptions reflects a change in discount rate from 3.78% to 3.44% at the measurement dates of December 31, 2016 and 2017, respectively.



In accordance with GASB 75, the University's liability for postemployment benefits obligations at June 30, 2018 is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods. This subsidy would reduce the total postemployment benefits liability by approximately \$2,293.

For purposes of the December 31, 2017 measurement date, the number of plan participants consisted of the following:

	2018
Active employees - Hired before July 1, 2010	6,791
Active employees - Hired after July 1, 2010	6,027
Retirees receiving benefits	4,401
Dependents	2,879
Total plan participants	<u>20,098</u>

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, 2018:

	1% Decrease	Current Rates	1% Increase
Discount Rate:			
Net OPEB Obligations	\$ 2,416,516	\$ 2,016,048	\$ 1,701,319
Health Care Trend Rate:			
Net OPEB Obligations	\$ 1,897,593	\$ 2,016,048	\$ 2,168,318

The components of postemployment benefits expense for the year ended June 30, 2018 are summarized as follows:

	2018
Service cost	\$ 41,211
Interest cost	69,928
Amortization of changes in assumptions	11,664
Total expense	<u>\$ 122,803</u>

Deferred outflows and inflows of resources related to postemployment benefits obligations at June 30, 2018 are summarized as follows:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ 103,806	\$ -
Benefit payments made after measurement date	21,021	-
Total	<u>\$ 124,827</u>	<u>\$ -</u>

Of the total amount reported as deferred outflows of resources related to OPEB, \$21,021 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, 2019. Deferred outflows 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, which is calculated at 8.9 years as of the measurement date.

2019	\$ 11,664
2020	11,664
2021	11,664
2022	11,664
2023	11,664
2024 and beyond	45,486
Total	<u>\$ 103,806</u>



As discussed in note 1, GASB 75 was adopted as of July 1, 2017, which superseded GASB 45. For comparative purposes, the GASB 45 disclosures related to the year ended June 30, 2017 are included. For the year ended June 30, 2017, the University estimated the cost (annual expense) of providing retiree health and dental care benefits through an actuarial valuation as of January 1, 2016. In accordance with GASB Statement No. 45, the valuation computes an annual required contribution, which represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years. This valuation's computed contribution and actual funding are summarized as follows:

	2017
Annual required contribution	\$ 95,417
Interest on the prior year's net OPEB obligation	28,258
Less: adjustment to the annual required contribution	<u>(26,038)</u>
Annual OPEB cost	97,637
Amounts contributed:	
Payments of current premiums and claims	<u>(38,568)</u>
Increase in net OPEB obligation	59,069
OPEB obligation - beginning of year	406,383
OPEB obligation - end of year	<u><u>\$ 465,452</u></u>

The annual OPEB cost, the percentage contributed to the plan, and the net OPEB obligation for the year ended June 30, 2017 were as follows:

Annual OPEB cost	\$ 97,637
Percentage contributed	39.5%
Net OPEB obligation	\$ 465,452

The funding progress of the plan as of January 1, 2017 was as follows:

	2017
Actuarial value of assets	\$ -
Actuarial accrued liability (AAL)	1,085,998
Unfunded AAL (UAAL)	<u><u>\$ 1,085,998</u></u>
Funded ratio	0.0%
Annual covered payroll (annual payroll of active employees covered by the plan)	\$ 674,257
UAAL as a percentage of covered payroll	161.1%

In the January 1, 2016 actuarial valuation, the projected unit credit actuarial cost method was used. The actuarial assumptions include a 7% investment rate of return (net of administrative expenses), which is a blended rate of the expected long-term and short-term investment returns on the University's own assets to be used for funding the current liability, and an annual health care cost trend rate of 5%, which includes a 4% inflation assumption. As part of the January 1, 2016, valuation, the University adopted updated mortality assumptions based on the RP-2014 General Healthy Mortality Tables, projected back to 2007 using scale MP-2014 and then projected forward using MP-2015. The UAAL was being amortized over 30 years as a level percentage of projected payroll on a closed basis, with 20 years remaining as of June 30, 2017.



13. Long term debt and other obligations

Long term debt and other obligations for the years ended June 30, 2018 and 2017 are summarized as follows:

	2017	Borrowed	Retired	2018	Current Portion
General Revenue Bonds:					
Series 2015A	\$ 191,890	\$ -	\$ 3,655	\$ 188,235	\$ 3,825
Series 2013A	161,140	-	3,565	157,575	3,725
Series 2010A	205,000	-	-	205,000	-
Series 2010C	209,040	-	14,230	194,810	14,820
Series 2007A	4,095	-	2,005	2,090	2,090
Series 2007B	25,000	-	-	25,000	-
Series 2005	54,140	-	-	54,140	-
Series 2003A	48,205	-	-	48,205	-
Series 2000A	77,125	-	-	77,125	-
	<u>975,635</u>	<u>-</u>	<u>23,455</u>	<u>952,180</u>	<u>24,460</u>
General Revenue Commercial Paper:					
Series B taxable	94,195	44,090	-	138,285	138,285
Series F tax-exempt	85,595	41,275	39,655	87,215	87,215
	<u>179,790</u>	<u>85,365</u>	<u>39,655</u>	<u>225,500</u>	<u>225,500</u>
Unamortized bond premiums	49,858	-	2,881	46,977	3,195
Student loan deposits	40,148	-	4,303	35,846	4,308
Lease obligations and other	1,043	-	158	885	163
	<u>\$ 1,246,474</u>	<u>\$ 85,365</u>	<u>\$ 70,452</u>	<u>\$ 1,261,388</u>	<u>\$ 257,626</u>
	2016	Borrowed	Retired	2017	Current Portion
General Revenue Bonds:					
Series 2015A	\$ 192,890	\$ -	\$ 1,000	\$ 191,890	\$ 3,655
Series 2013A	164,545	-	3,405	161,140	3,565
Series 2010A	205,000	-	-	205,000	-
Series 2010C	222,740	-	13,700	209,040	14,230
Series 2007A	8,005	-	3,910	4,095	2,005
Series 2007B	25,000	-	-	25,000	-
Series 2005	54,140	-	-	54,140	-
Series 2003A	48,205	-	-	48,205	-
Series 2000A	77,130	-	5	77,125	-
	<u>997,655</u>	<u>-</u>	<u>22,020</u>	<u>975,635</u>	<u>23,455</u>
General Revenue Commercial Paper:					
Series B taxable	92,890	8,720	7,415	94,195	94,195
Series E tax-exempt	54,685	-	54,685	-	-
Series F tax-exempt	-	89,870	4,275	85,595	85,595
	<u>147,575</u>	<u>98,590</u>	<u>66,375</u>	<u>179,790</u>	<u>179,790</u>
Unamortized bond premiums	52,439	-	2,581	49,858	2,881
Student loan deposits	39,660	488	-	40,148	-
Lease obligations and other	1,194	-	151	1,043	157
	<u>\$ 1,238,523</u>	<u>\$ 99,078</u>	<u>\$ 91,127</u>	<u>\$ 1,246,474</u>	<u>\$ 206,283</u>

All 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: from fiscal 2020 through 2037
- Series 2005: from 2021 through 2034
- Series 2003A: from 2021 through 2033
- Series 2000A: from 2022 through 2031



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

The Series 2015A bonds bear interest at fixed rates from 2% 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 6.17% 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 is 6.6% for payments processed on or after October 1, 2017 and on or before September 30, 2018. The sequestration reduction rate was 6.9% from October 1, 2016 to September 30, 2017. 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 Series 2010C bonds bear interest at fixed rates from 3% to 5.125% and mature either serially through fiscal 2029 or are subject to mandatory redemption from 2030 through 2044.

The Series 2007A bonds bear interest at 5% and mature serially through fiscal 2019.

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 bear interest at rates from 1.7% to 1.95% and taxable balances bear interest at rates from 1.84% to 2.55%, with principal and accrued interest payments due within a maximum of 270 days from the date of issuance.

Hedging derivative instrument payments and hedged debt: Using rates as of June 30, 2018, 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 Footnote 14 for information on derivative instruments.

Fiscal Year Ending June 30,	Fixed-Rate Bonds		Variable-Rate Bonds		Hedging Derivatives, Net	Total
	Principal	Interest	Principal	Interest		
2019	\$ 24,460	\$ 36,514	\$ -	\$ 3,249	\$ 4,945	\$ 69,168
2020	23,290	35,385	1,990	3,233	4,903	68,801
2021	18,205	34,617	7,980	3,157	4,782	68,741
2022	16,245	33,848	10,880	2,987	4,512	68,472
2023	16,945	33,015	11,360	2,805	4,223	68,348
2024-2028	61,975	156,486	89,020	9,957	14,630	332,068
2029-2033	75,375	142,935	74,740	3,226	4,138	300,414
2034-2038	106,850	124,235	8,500	225	69	239,879
2039-2043	151,535	93,084	-	-	-	244,619
2044-2048	182,925	48,537	-	-	-	231,462
2049-2050	69,905	4,921	-	-	-	74,826
Total	\$ 747,710	\$ 743,577	\$ 204,470	\$ 28,839	\$ 42,202	\$ 1,766,798

Interest expense was \$45,246 (net of \$3,808 capitalized interest) and \$37,461 (net of \$11,708 capitalized interest) for 2018 and 2017, respectively.

Unamortized bond premiums totaled \$46,977 (\$3,195 current) at June 30, 2018. Bond premium amounts are amortized over the applicable bond issue life.

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



The University holds \$75,000 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, 2018 and 2017, no amounts were drawn on these lines of credit.

Lease obligations and other is comprised of lease obligations of \$885 (\$163 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 2018 and 2017 were as follows:

	2018	2017
Balance, beginning of year	\$ 95,288	\$ 87,332
Additions	5,616	12,450
Reductions	<u>(3,480)</u>	<u>(4,494)</u>
Balance, end of year	97,424	95,288
Less: current portion	60,543	57,722
Noncurrent portion	<u>\$ 36,881</u>	<u>\$ 37,566</u>

14. Derivative instruments

At June 30, 2018 and 2017, the University was party to eight 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, 2018 and 2017 were as follows:

	June 30, 2018		June 30, 2017	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Derivative instruments - swap asset:				
Investment derivatives:				
Pay variable interest rate swaps	<u>\$ 35,400</u>	<u>\$ 321</u>	<u>\$ 41,555</u>	<u>\$ 345</u>
Derivative instruments - swap liability:				
Cash flow hedging derivatives				
Pay-fixed interest rate swaps	\$ 206,005	\$ (31,487)	\$ 206,785	\$ (43,656)
Investment derivatives:				
Pay-variable interest rate swaps	350,170	(366)	366,070	7,568
Pay-fixed interest rate swaps	<u>71,685</u>	<u>(16,228)</u>	<u>71,685</u>	<u>(21,090)</u>
Total Derivative instruments - swap liability	<u>\$ 627,860</u>	<u>\$ (48,081)</u>	<u>\$ 644,540</u>	<u>\$ (57,178)</u>

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, 2018 and 2017, the fair value of hedging derivative instruments increased \$12,169 and \$18,353, respectively, while the fair value of investment derivative instruments decreased \$3,096 and \$2,085, 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 eight 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.

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, 2018 and 2017, along with the notional amounts and credit rating of the associated counterparty as of June 30, 2018.

Type	Cash Flow Hedge for Debt Series	2018 Notional Amount	Effective Date	Termination Date	Rate Paid	Rate Received	Counterparty/Counterparty Credit Rating	2018 Fair Value	2017 Fair Value
Pay-fixed interest rate swap	2000A	\$ 71,535	11/3/2008	8/15/2029	4.074%	67% USD-LIBOR-BBA one month	Deutsche Bank AG / Baa2/BBB+	\$ (11,917)	\$ (16,244)
Pay-fixed interest rate swap	CP Series B	465	10/17/2002	8/15/2018	4.330%	USD-LIBOR-BBA one month	Deutsche Bank AG / Baa2/BBB+	(8)	(31)
Pay-fixed interest rate swap	CP Series B	2,040	10/17/2002	8/15/2022	5.280%	USD-LIBOR-BBA one month	Deutsche Bank AG / Baa2/BBB+	(169)	(290)
Pay-fixed interest rate swap	2003A	48,205	11/3/2008	2/15/2033	3.618%	67% USD-LIBOR-BBA one month	Barclays Bank PLC / A2/A-	(7,312)	(10,106)
Pay-fixed interest rate swap	CP Series B	7,620	11/3/2008	2/15/2033	5.330%	USD-LIBOR-BBA one month	Barclays Bank PLC / A2/A-	(1,521)	(2,156)
Pay-fixed interest rate swap	2005	54,140	11/3/2008	2/15/2034	3.647%	67% USD-LIBOR-BBA one month	Barclays Bank PLC / A2/A-	(8,367)	(11,529)
Pay-fixed interest rate swap	2007B & CP Series E	22,000	5/17/2007	2/15/2028	4.139%	67% USD-LIBOR-BBA three month plus .58%	JP Morgan Chase Bank / Aa3/A+	(2,193)	(3,300)
		<u>\$ 206,005</u>						<u>\$ (31,487)</u>	<u>\$ (43,656)</u>



The following table displays the terms and fair values of the University's investment derivative instruments outstanding at June 30, 2018 and 2017, along with the notional amounts and credit rating of the associated counterparty as of June 30, 2018:

Type	Associated Debt Series	2018 Notional Amount	Effective Date	Termination Date	Rate Paid	Rate Received	Counterparty/Counterparty Credit Rating	2018 Fair Value	2017 Fair Value
Pay-variable interest rate swap	2000A, 2003A, 2005, 2010C	\$ 220,670	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/BBB+	\$ (279)	\$ 4,499
Pay-variable interest rate swap	CP Series B	10,125	5/26/2006	2/15/2033	USD-LIBOR-BBA one month	USD-LIBOR-BBA ten year less 0.575%	Deutsche Bank AG / Baa2/BBB+	38	346
Pay-variable interest rate swap	2010C	23,600	5/17/2010	8/15/2032	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 0.44%	Deutsche Bank AG / Baa2/BBB+	214	230
Pay-variable interest rate swap	2010C	35,400	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-	321	345
Pay-variable interest rate swap	2007A, 2007B, 2010C	95,775	5/17/2007	2/15/2037	SIFMA Municipal Swap Index	67% USD-ISDA Swap Rate ten year plus 0.0063%	JP Morgan Chase Bank / Aa3/A+	(339)	2,493
Pay-fixed interest rate swap	2007B, CP Series B & E	71,685	5/17/2010	2/15/2037	4.226%	67% USD-LIBOR-BBA three month plus 0.63%	JP Morgan Chase Bank / Aa3/A+	(16,228)	(21,090)
		<u>\$ 457,255</u>						<u>\$ (16,273)</u>	<u>\$ (13,177)</u>

Subsequent to the original effective dates, the University amended three of its pay-variable, receive-variable interest rate swaps per the terms listed in the table below. After the amendment periods, these interest rate swaps revert back to the original terms as outlined in the table above.

2018 Notional Amount	Amendment Effective Date	Amendment Termination Date	Rate Paid	Rate Received	Counterparty/Counterparty Credit Rating
\$ 220,670	8/15/2011	8/14/2014	0%	1.407%	Deutsche Bank AG / Baa2/BBB+
	8/15/2014	8/14/2019	0%	0.857%	
\$ 10,125	8/15/2011	8/14/2014	0%	2.1725%	Deutsche Bank AG / Baa2/BBB+
	8/15/2014	8/14/2019	0%	1.3530%	
\$ 95,775	8/1/2011	7/31/2014	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 1.8653%	JP Morgan Chase Bank / Aa3/A+
	8/1/2014	2/14/2021	SIFMA Municipal Swap Index	67% USD-LIBOR-BBA one month plus 1.1245%	

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, 2018 and 2017 was \$573 and \$7,913, 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 \$321 and \$345 at June 30, 2018 and 2017, respectively.



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

Credit Rating	Deutsche Bank AG		JP Morgan Chase Bank N.A.		Bank of New York Mellon		Barclays Bank PLC	
	Threshold	Minimum Transfer	Threshold	Minimum Transfer	Threshold	Minimum Transfer	Threshold	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 hedging 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 hedging 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, 2018, the University's credit ratings were Aa2 as assigned by Moody's and AA+ as assigned by Standard & Poor's. As of July 11, 2018, Standard & Poor's changed the University's credit rating to AA. The aggregate fair value of all derivative instruments with these collateral posting provisions as of June 30, 2018 was (\$47,760). The related collateral postings totaled \$11,840 posted by the University to its counterparties and \$0 held by the University posted by its counterparties.



15. Net position

Restricted and unrestricted net position for the years ended June 30, 2018 and 2017 were as follows:

	2018	2017
Restricted - nonexpendable:		
Permanent endowments	\$ 708,761	\$ 647,189
Restricted - expendable:		
Gifts, endowment income and sponsored programs	\$ 508,018	\$ 454,190
Quasi and term endowments	217,422	200,008
Capital projects	88,208	93,129
Student loans	12,253	7,260
Total Restricted - expendable	\$ 825,901	\$ 754,587
Total Restricted Net Position	\$ 1,534,662	\$ 1,401,776
Unrestricted	\$ (726,844)	\$ 1,110,898

Restricted – Net position is restricted when it is subject to externally imposed constraints.

Unrestricted – Unrestricted net position is not subject to externally imposed constraints. However, this net position is subject to internal designations. Unrestricted net position includes the full amount of the unfunded other postemployment benefit actuarial liability in accordance with GASB 75. Excluding OPEB, amounts are primarily designated for specific purposes by action of the Board or management or may otherwise be subject to pending contractual commitments with external parties. Substantially all unrestricted net position is internally designated for programmatic initiatives or capital asset renewals.

16. 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.

17. Commitments

At June 30, 2018, the University had 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 \$205,076 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 lease agreements among the SBA, the State of Michigan, and the University. During the lease terms, the SBA will hold title to the respective buildings, the State of Michigan will make all lease payments to the SBA, and the University will pay certain operating and maintenance costs. The SBA will be obligated to sell each building to the University for one dollar, after full payment of all rentals due under the related lease.

At June 30, 2018, the University had entered into various limited partnerships with investment managers of hedge, oil and gas, real estate, venture capital, private equity, and restructuring funds. As of June 30, 2018, \$637,783 of the initial \$1,619,037 investment commitment remains outstanding.

The University has entered into 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.



18. Fair value measurements

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.

The University's recurring estimated fair value of investments and derivatives at June 30, 2018 and 2017, grouped by the valuation hierarchy outlined above were as follows:

Fair value measurement at June 30, 2018 using:				
	Balance at June 30, 2018	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Investments by fair value level:				
Equity securities:				
U.S. equities	\$ 422,345	\$ 421,950	\$ -	\$ 395
International equities	80,979	34,104	45,828	1,047
Debt securities:				
U.S Treasury bonds	155,389	155,389	-	-
U.S Government agencies	61,422	-	61,422	-
Corporate bonds	119,396	-	119,396	-
International bonds	39,878	-	39,878	-
Municipal bonds	1,336	-	1,336	-
Asset-backed securities	58,522	-	58,522	-
Other fixed income	6,376	5,843	-	533
Real assets	39,176	-	-	39,176
Money market and mutual funds	31,244	31,244	-	-
Funds held at MSU Foundation	19,215	-	-	19,215
Other investments	27,873	10,062	-	17,811
Total investments by fair value level	<u>1,063,151</u>	<u>\$ 658,592</u>	<u>\$ 326,382</u>	<u>\$ 78,177</u>
Investments measured at the net asset value (NAV):				
Hedge funds - event driven	307,619			
Hedge funds - long/short	345,190			
International equities	564,984			
Private investments - opportunistic	45,665			
Private investments - private equity	348,549			
Private investments - secondaries	72,499			
Private investments - venture capital	213,038			
Real assets	158,616			
Fixed income	78,817			
U.S. equities	73,566			
Total investments measured at NAV	<u>2,208,543</u>			
Total investments measured at fair value	<u>\$ 3,271,694</u>			



Fair value measurement at June 30, 2018 using:

	Balance at June 30, 2018	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Derivative instruments by fair value:				
Investment derivatives - swap assets	\$ 321	\$ -	\$ 321	\$ -
Cash flow hedging derivatives - swap liability	(31,487)	-	(31,487)	-
Investment derivatives - swap liability	(16,594)	-	(16,594)	-
Total derivative instruments by fair value	<u>\$ (47,760)</u>	<u>\$ -</u>	<u>\$ (47,760)</u>	<u>\$ -</u>

Fair value measurement at June 30, 2017 using:

	Balance at June 30, 2017	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Investments by fair value level:				
Equity securities:				
U.S. equities	\$ 452,251	\$ 452,251	\$ -	\$ -
International equities	96,444	42,551	53,893	-
Debt securities:				
U.S Treasury bonds	164,847	164,847	-	-
U.S Government agencies	52,978	-	52,978	-
Corporate bonds	77,805	-	77,805	-
International bonds	32,666	-	32,666	-
Municipal bonds	877	-	877	-
Asset-backed securities	70,613	-	69,662	951
Other fixed income	4,779	4,715	-	64
Real assets	36,546	-	-	36,546
Money market and mutual funds	25,210	25,210	-	-
Funds held at MSU Foundation	18,866	-	-	18,866
Other investments	19,136	15,429	-	3,707
Total investments by fair value level	<u>1,053,018</u>	<u>\$ 705,003</u>	<u>\$ 287,881</u>	<u>\$ 60,134</u>

Investments measured at the net asset value (NAV):

Hedge funds - event driven	263,377
Hedge funds - long/short	389,843
International equities	580,997
Private investments - opportunistic	40,301
Private investments - private equity	258,194
Private investments - secondaries	48,579
Private investments - venture capital	162,781
Real assets	160,010
Fixed income	79,975
U.S. equities	18,110
Total investments measured at NAV	<u>2,002,167</u>
Total investments measured at fair value	<u>\$ 3,055,185</u>

Derivative instruments by fair value:

Investment derivatives - swap assets	\$ 345	\$ -	\$ 345	\$ -
Cash flow hedging derivatives - swap liability	(43,656)	-	(43,656)	-
Investment derivatives - swap liability	(13,522)	-	(13,522)	-
Total derivative instruments by fair value	<u>\$ (56,833)</u>	<u>\$ -</u>	<u>\$ (56,833)</u>	<u>\$ -</u>

As prescribed by GASB Statement No. 72, certain investments held by the University are to be valued using methods other than fair value. For the fiscal year ending June 30, 2017, the University valued U.S. Treasury bond investments with original maturities of less than one year at amortized cost that totaled \$422. No such U.S. Treasury bond investments were held as of June 30, 2018. In addition, certain funds held by interest rate swap counterparties totaling \$2,000 and \$7,150 at June 30, 2018 and 2017, respectively, reflect cash balances on deposit in accordance with counterparty collateral posting provisions.



Investments classified in Level 1 at June 30, 2018 and 2017 are valued using prices quoted in active markets for those securities.

The fair value of various equity and debt securities held at June 30, 2018 and 2017 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, 2018 and 2017 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 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, 2018 and 2017, the fair value, unfunded commitments, and redemption rules of those investments were as follows:

	June 30, 2018	June 30, 2017	As of June 30, 2018		
			Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Hedge funds	\$ 652,809	\$ 653,220	\$ 2,970	Various	4-180 days
International equities	564,984	580,997		Various	1-90 days
Private investments	679,751	509,855	404,161	Not applicable	Not applicable
Real assets	158,616	160,010	90,858	Not applicable	Not applicable
Other fixed income	78,817	79,975		Daily	10 days
U.S. equities	73,566	18,110		Annually	1-90 days
Total	<u>\$ 2,208,543</u>	<u>\$ 2,002,167</u>	<u>\$ 497,989</u>		

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. Managers employing "long/short" strategies invest primarily in equities and mitigate market risk by purchasing equity shares that are expected to appreciate in value and selling short equity shares that are expected to decline in value. Managers employing event-driven and arbitrage strategies seek to maximize returns by investing in publicly announced corporate transactions, such as mergers, tender offers, liquidations, bankruptcies and reorganizations or in arbitraging temporary discrepancies in securities pricing in the equity and fixed income markets. Distressed security managers invest primarily in bonds and bank loans trading at a significant discount to par value as a result of the debtor's troubled financial condition.

The University invests in 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.

The University seeks to enhance the total return of the CIF by investing a portion of its funds in private investments, which include 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 University seeks to reduce volatility and provide a hedge against sudden, unanticipated inflation by investing in 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.

The University invests in other fixed income assets that are intended to reduce exposure to market risk and provide a hedge against sudden, unanticipated deflation.

The University invests in 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.



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 partnerships can sell their interest in funds, but often at a steep discount to the fair value of the investment. In addition, \$198,892 and \$128,002 of the real asset class at June 30, 2018 and 2017, respectively, and \$3,600 and \$4,502 of the hedge fund class at June 30, 2018 and 2017, respectively, can never be redeemed. 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.

Approximately, 11% of the value of the investments in the hedge funds class, 6% of the value of the investments in the international equities class, and 12.5% of the value in the U.S. equities class cannot be redeemed because the investments include restrictions that do not allow for redemption in the first 12 to 60 months after acquisition. The remaining restriction period for these investments ranged from 4 to 30 months at June 30, 2018. Generally, longer redemption restrictions are offered with a lower fee structure.

19. New accounting pronouncements

The University will be required to implement the provisions of GASB Statement No. 83, *Certain Asset Retirement Obligations*, effective with the fiscal year ending June 30, 2019. This GASB Statement aims to improve accounting and financial reporting for asset retirement obligations by providing criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources. 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. 84, *Fiduciary Activities*, effective with the fiscal year ending June 30, 2020. This GASB Statement aims to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. 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. 87, *Leases*, effective with the fiscal year ending June 30, 2021. This GASB Statement aims to improve accounting and financial reporting for leases by establishing a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. 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. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, effective with the fiscal year ending June 30, 2020. This GASB Statement aims to improve the disclosure of information in the notes to financial statements related to debt. 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. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, effective with the fiscal year ending June 30, 2021. This GASB Statement aims to improve the accounting and financial reporting of interest cost incurred during a construction period. The University is in the process of determining the full impact of this standard on its financial statements.



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, 2018 is summarized as follows:

	<u>2018</u>
Service cost	\$ 41,211
Interest cost	69,928
Changes in assumptions	115,470
Differences between expected and actual plan experience	-
Benefit payments	<u>(38,599)</u>
Net changes	<u>\$ 188,010</u>
Total liability, beginning of year	\$ 1,828,038
Total liability, ending of year	\$ 2,016,048
Covered employee payroll	\$ 959,538
Total liability as a percentage of covered employee payroll	210.1%

Discount rates used in determining the total reported liability for postemployment benefits obligations were 3.44% and 3.78% at the measurement dates of December 31, 2017 and 2016, respectively.

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 Michigan State University (the "University") and its discretely presented component unit as of and for the year ended June 30, 2018 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 25, 2018. Our report includes a reference to other auditors who audited the financial statements of Michigan State University Foundation (the "Foundation"), as described in our report on Michigan State University's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. The financial statements of the Foundation were not audited in accordance with *Government Auditing Standards*.

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) to determine the 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 may exist that have not been identified.

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 determination of financial statement amounts. 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 25, 2018