

MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

INTRODUCTION

The following discussion and analysis provides an overview of the financial position of the University of Michigan (the "University") at June 30, 2023 and its activities for the fiscal year ended June 30, 2023. This discussion has been prepared by management and should be read in conjunction with the consolidated financial statements and the notes thereto, which follow this section.

The University is a comprehensive public institution of higher learning with over 65,000 students and approximately 8,700 faculty members on three campuses in southeast Michigan. The University offers a diverse range of degree programs from baccalaureate to post-doctoral levels through 19 schools and colleges, and contributes to the state and nation through related research and public service programs. The University also has a nationally renowned health system which includes the University of Michigan Health ("UMH"), the University's Medical School, Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives) and UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations, primarily consisting of Sparrow Health System ["Sparrow Health"] and UMH-West).

The University consistently ranks among the nation's top universities by various measures of quality, both in general academic terms and in terms of strength of offerings, in specific academic disciplines and professional subjects. Research is central to the University's mission and a key aspect of its strong reputation among educational institutions. The University is widely recognized for the breadth and excellence of its research enterprise as well as for the exceptional level of cooperation across disciplines, which allows faculty and students to address the full complexity of real-world challenges. The University's health system also has a tradition of excellence in teaching, advancement of medical science and patient care, consistently ranking among the best health care systems in the nation.

FINANCIAL HIGHLIGHTS

The University's financial position remains strong, with total assets and deferred outflows of \$34.0 billion and total liabilities and deferred inflows of \$13.3 billion at June 30, 2023. 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 \$20.7 billion at June 30, 2023. Changes in net position represent the University's results of operations and are summarized for the years ended June 30 as follows:

(in millions)	2023	2022
Operating revenues and educational appropriations	\$ 11,377	\$ 9,505
Federal economic relief funds	34	152
Private gifts for operating activities	193	219
Operating and net interest expenses	(12,699)	(10,668)
	(1,095)	(792)
Net investment income	1,078	336
Endowment, capital gifts and grants, and other	173	251
Increase (decrease) in net position	\$ 156	\$ (205)

During 2023, the University adopted Governmental Accounting Standards Board ("GASB") Statement No. 100, *Accounting Changes and Error Corrections* ("GASB 100"), which enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more relevant information for making decisions and assessing accountability. The adoption of GASB 100 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022.

During 2023, the University also adopted GASB Statement No. 96, *Subscription-Based Information Technology Arrangements* ("GASB 96"), which establishes accounting and financial reporting requirements for subscription-based information technology arrangements ("SBITAs"). The statement requires the University to recognize right-to-use assets and related subscription liabilities for SBITAs that were previously recognized as outflows of resources. The adoption of GASB 96 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022.

On April 1, 2023, the University completed an affiliation with Sparrow Health, a community health care provider in Lansing, Michigan, pursuant to which UM Health became the sole corporate member of Sparrow Health. Sparrow Health operates multiple hospitals with a combined 845 licensed beds, as well as outpatient clinics throughout Mid-Michigan. In accordance with GASB 100, this membership substitution was considered a change in reporting entity and included in the consolidated financial statements as if it occurred at the beginning of the reporting period. The University recognized, measured and combined the assets, deferred outflows, liabilities, deferred inflows and net position of Sparrow Health based upon GASB accounting principles applied at July 1, 2022. In connection with this affiliation, the University also received a majority equity interest in PHP Holdings, LLC, which is reported as a discretely presented component unit within the basic financial statements.

The impact of the affiliation with Sparrow Health and the adoption of GASB 96 has been reflected at the beginning of the earliest period presented in the consolidated financial statements, or July 1, 2022, and is summarized as follows (in millions):

	June 30, 2022 As Previously Reported	Sparrow Health Affiliation	GASB 96 Adoption	July 1, 2022 As Restated
Current assets	\$ 6,578	\$ 343		\$ 6,921
Noncurrent assets	24,809	1,429	\$ 40	26,278
Total assets	31,387	1,772	40	33,199
Deferred outflows	1,045	6		1,051
Current liabilities	2,827	266	11	3,104
Noncurrent liabilities	9,514	250	29	9,793
Total liabilities	12,341	516	40	12,897
Deferred inflows	793	2		795
Net position	\$ 19,298	\$ 1,260	\$ -	\$ 20,558

For purposes of management's discussion and analysis, the consolidated statement of net position, consolidated statement of revenues, expenses and changes in net position and the consolidated statement of cash flows presented for the year ended June 30, 2022 do not reflect the impact of these items.

The results of operations reflect the University's emphasis on maintaining its national standards in academics, research and health care, within a competitive recruitment environment for faculty, staff and health care professionals; and a period of constrained base state appropriations and rising health care, regulatory and facility costs. The University is addressing these risks through aggressive cost cutting and productivity gains designed to help preserve access to affordable higher education and healthcare for Michigan families. To achieve sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to support enterprise-wide information technology projects and other initiatives.

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The University's long-term investment strategy combined with its endowment spending policy serves to insulate operations from expected volatility in the capital markets and provides for a stable and predictable level of spending distributions from the endowment. The success of the University's long-term investment strategy is evidenced by strong returns over sustained periods of time and the ability to limit losses in the face of challenging markets.

The University invests its financial assets in pools with distinct risk and liquidity characteristics based on its needs, with a majority of its financial assets invested in two such pools. The University's working capital is primarily invested in relatively short duration, liquid assets, through its Daily and Monthly Portfolios, while the endowment is primarily invested, along with the noncurrent portion of insurance and benefits reserves, in an equity oriented long-term strategy through its Long Term Portfolio.

USING THE BASIC FINANCIAL STATEMENTS

The University's financial report includes: the Consolidated Statement of Net Position; the Consolidated Statement of Revenues, Expenses and Changes in Net Position; the Consolidated Statement of Cash Flows; the Discretely Presented Component Unit Statement of Net Position; the Discretely Presented Component Unit Statement of Revenues, Expenses, and Changes in Net Position; the Statement of Fiduciary Net Position; and the Statement of Changes in Fiduciary Net Position. These basic financial statements are prepared in accordance with GASB principles, which establish standards for external financial reporting for public colleges and universities. The University's business-type activities are reported in the consolidated financial statements and the discretely presented component unit financial statements, while its fiduciary activities are reported in the fiduciary financial statements.

CONSOLIDATED STATEMENT OF NET POSITION

The consolidated statement of net position presents the financial position of the University at the end of the fiscal year and includes all assets, deferred outflows, liabilities and deferred inflows of the University. The difference between total assets and deferred outflows as compared to total liabilities and deferred inflows – net position – is one indicator of the current financial condition of the University, while the change in net position is an indication of whether the overall financial condition has improved or worsened during the year. The University's assets, deferred outflows, liabilities, deferred inflows and net position at June 30 are summarized as follows:

(in millions)	2023	2022
Current assets	\$ 6,152	\$ 6,578
Noncurrent assets:		
Endowment, life income and other investments	19,318	17,838
Capital assets, net	7,089	6,266
Other	377	705
Total Assets	32,936	31,387
Deferred outflows	1,074	1,045
Current liabilities	2,829	2,827
Noncurrent liabilities	9,065	9,514
Total liabilities	11,894	12,341
Deferred inflows	1,402	793
Net position	\$ 20,714	\$ 19,298

The University continues to maintain and protect its strong financial foundation. This financial health, as reflected in the University's net position, results from the prudent utilization of financial resources including careful cost controls, preservation of endowment funds, conservative utilization of debt and adherence to a long-range capital plan for the maintenance and replacement of the physical plant.

Current assets consist primarily of cash and cash equivalents, operating and capital investments, and accounts receivable and totaled \$6.2 billion at June 30, 2023. Cash, cash equivalents and investments for operating activities totaled \$3.9 billion at June 30, 2023, which represents approximately four months of total expenses excluding depreciation.

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and the defined benefit pension plans for Sparrow Health and UMH-West. Deferred outflows totaled \$1.1 billion at June 30, 2023.

Current liabilities consist primarily of accounts payable, accrued compensation, unearned revenue, commercial paper, the current portion of bonds payable and net long-term bonds payable subject to remarketing, and totaled \$2.8 billion at June 30, 2023.

Deferred inflows represent the acquisition of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, the defined benefit pension plans for Sparrow Health and UMH-West, and irrevocable split-interest agreements. Deferred inflows totaled \$1.4 billion at June 30, 2023.

ENDOWMENT, LIFE INCOME AND OTHER INVESTMENTS

The composition of the University's endowment, life income and other investments at June 30 is summarized as follows:

(in millions)	2023	2022
Endowment investments	\$ 17,876	\$ 17,347
Life income investments	174	178
Noncurrent portion of insurance and benefits obligations investments	326	291
Other	942	22
	\$ 19,318	\$ 17,838

The University's endowment funds consist of both permanent endowments and funds functioning as endowment. Permanent endowments are those funds received from donors with the stipulation that the principal remain intact and be invested in perpetuity to produce income that is to be expended for the purposes specified by the donors. Funds functioning as endowment consist of restricted gifts or unrestricted funds that have been allocated by the University for long-term investment purposes, but are not limited by donor stipulations requiring the University to preserve principal in perpetuity. Programs supported by endowment funds include scholarships, fellowships, professorships, research efforts and other important programs and activities.

The University uses its endowment funds to support operations in a way that strikes a balance between generating a predictable stream of annual support for current needs and preserving the purchasing power of the endowment funds for future periods. A majority of the endowment is maintained in the University Endowment Fund ("UEF"), a unitized pool which represents a collection of over 12,600 separate funds, the majority of which are restricted for specific purposes. The UEF is invested in the University's Long Term Portfolio, a single diversified investment pool.

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The endowment spending rule provides for distributions from the UEF to the participants that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of UEF shares. This spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather the uncertainties of challenging economic environments.

To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Capital gains or income generated above the endowment spending rate are reinvested so that in lean times funds will be available for distribution. In addition, participants may also use withdrawals from funds functioning as endowment to support capital expenditures and operations.

Endowment spending rate distributions totaled \$470 million and withdrawals from funds functioning as endowment totaled \$20 million in 2023. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 3.9 percent of the current year average fair value of the UEF for 2023. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.4 percent.

The University participates in certain split-interest agreements and currently holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions.

CAPITAL AND DEBT ACTIVITIES

One of the critical factors in continuing the quality of the University's academic, research and clinical programs is the development and renewal of capital assets. The University continues to implement its long-range plan to maintain and modernize its existing infrastructure and strategically invest in new construction.

Capital asset additions totaled \$817 million in 2023. Capital asset additions primarily represent renovation and new construction of academic, research and clinical facilities, as well as significant investments in equipment, including information technology. Current year capital asset additions were primarily funded with net position and gifts designated for capital purposes of \$590 million, as well as debt proceeds of \$214 million and state capital appropriations of \$13 million.

Construction in progress, which totaled \$659 million at June 30, 2023, includes construction of new patient care, academic and research facilities.

The D. Dan and Betty Kahn Health Care Pavilion at UMH is a new 690,000 square foot clinical inpatient tower under construction. The 12-story hospital will house 264 private rooms capable of converting to intensive care, a state-of-the-art neurosciences center, and high-level specialty care services for cardiovascular and thoracic patients, along with advanced imaging. Locating these services together will enable healthcare providers to quickly respond to complex cases and deliver state-of-the-art treatments. The design will also allow for the relocation of 110 beds currently in semi-private rooms at University Hospital to this new facility, which will improve patient safety, quality and experience, while creating space for family members to participate in their loved one's care, healing and recovery. This project is scheduled to be completed in spring 2025.

The Leinweber Computer Science and Information Building under construction will be the new home for the University's School of Information ("UMSI") and provide expansion space for the Computer Science and Engineering ("CSE") Division of Michigan Engineering, bringing these two units together under one roof for the first time. This 163,000 square foot state-of-the-art facility will strengthen the collaboration between the two disciplines to develop breakthrough technologies, conduct innovative research and facilitate an innovative learning environment. It will also provide much-needed space to meet the increasing demand for computer science and information graduates for research, industry and education. This new North Campus building will connect to the existing Bob and Betty Beyster Building, current home of CSE, and bring together UMSI's community, which is currently spread across multiple buildings on central campus including leased space. This project is scheduled to be completed in summer 2025.

Projects completed in 2023 include significant expansion and new construction of academic, research and transportation facilities.

Expansion of the vivarium at the A. Alfred Taubman Biomedical Science Research Building, which was originally constructed in 2005, was completed by finishing 20,000 square feet of remaining shelled space. The vivarium houses specimens for scientific observation and research on a wide range of topics, including the impact of microbiome on human health, underlying causes of serious diseases and various groundbreaking studies in neurobiology, internal medicine and cancer research. This expansion addresses current and forecasted growth, and accommodates the relocation of germ-free vivarium functions from the Life Sciences Institute.

The new Dean Road Transportation Facility is a 70,000 square foot operations and maintenance center on the North Campus that can accommodate articulated buses, heavy equipment and electric buses for future sustainability improvement; while also maintaining current safety guidelines for vehicle maintenance, circulation and appropriate work zones. This new facility will also result in increased operational efficiency since many bus routes begin on North Campus. The University's auto and truck fleet maintenance will remain at the Transportation Services Building on the Stephen M. Ross Athletic Campus.

The University is aware of its financial stewardship responsibility and works diligently to manage its financial resources effectively, including the prudent use of debt to finance capital projects. A strong debt rating is an important indicator of the University's success in this area. In 2022, S&P Global affirmed its highest credit rating (AAA) for bonds backed by a broad revenue pledge based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, strong reputation of the University's health system, excellent balance sheet, exceptional research presence and manageable debt burden. Moody's also affirmed its highest credit rating (Aaa) based on the University's diversified student demand, sustained philanthropic support, expansive research enterprise, high brand value and reputation of the University's health system, and well-established strategic and budgetary framework.

Long-term debt activity for the year ended June 30, 2023 is summarized as follows (in millions):

	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	\$ 141		\$ 9	\$ 132
Bonds	5,440	\$ 88	257	5,271
Line of credit	14	38		52
	\$ 5,595	\$ 126	\$ 266	\$ 5,455

The University utilizes commercial paper, backed by a general revenue pledge, to provide interim financing for its capital improvement program. Outstanding commercial paper is converted to long-term debt financing as appropriate, within the normal course of business. Certain outstanding bonds are also supported by the University's general revenue pledge.

During 2023, the Sparrow Obligated Group, a group comprised of five Sparrow Health hospitals whose collective revenues are pledged in support of all Sparrow Health debt issuances, issued \$77 million of fixed rate, taxable Michigan Finance Authority Hospital Revenue Bonds Series 2022A with a net original issue premium of \$11 million. Total bond proceeds of \$88 million were utilized to refund \$87 million of existing bonds and provide \$1 million for bond issuance costs.

During 2023, the Sparrow Obligated Group also established an escrow fund using existing resources of \$86 million to legally defease \$83 million of Michigan Finance Authority Hospital Revenue Bonds Series 2015, resulting in a gain on defeasance of \$5 million which was recognized into interest expense.

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The composition of the University's debt at June 30 is summarized as follows:

(in millions)	2023	2022
Variable rate:		
Commercial paper	\$ 132	\$ 141
Bonds	451	426
Line of credit	52	
Fixed rate bonds	4,820	4,639
	<u>\$ 5,455</u>	<u>\$ 5,206</u>

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB requirements, such debt is classified as current unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements which could refinance the debt on a long-term basis. In the event that variable rate bonds are put back to the University by the debt holder, management believes that the use of remarketing agents as well as the University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time.

While fixed rate bonds typically have a higher effective rate of interest at the date of issuance as compared to variable rate bonds, they reduce the volatility of required debt service payments and do not require liquidity support such as lines of credit, standby bond purchase agreements or internal liquidity.

Effective interest rates averaged 3.5 percent in 2023, including the federal subsidies for interest on taxable Build America Bonds. Interest expense on long-term debt net of federal subsidies received for interest on taxable Build America Bonds totaled \$184 million in 2023.

OBLIGATIONS FOR DEFINED BENEFIT PENSION PLANS

Sparrow Health and UMH-West have defined benefit pension plans that cover a significant number of their employees, and generally provide benefits based on years of service and employee earnings. At June 30, 2023, the obligations for defined benefit pension plans, net totaled \$15 million.

OBLIGATIONS FOR POSTEMPLOYMENT BENEFITS

Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled \$3.7 billion at June 30, 2023. Since a portion of retiree medical services will be provided by the University's health system, this liability is net of the related margin and fixed costs associated with providing those services which totaled \$620 million at June 30, 2023.

By implementing a series of health benefit initiatives over the past several years, the University has favorably impacted its total liability for postemployment benefits by \$1.8 billion at June 30, 2023. These initiatives have included cost sharing changes, elimination of Medicare Part B reimbursements for certain retirees and the adjustment of retirement eligibility criteria.

NET POSITION

Net position represents the residual interest in the University's assets and deferred outflows after liabilities and deferred inflows are deducted. The composition of the University's net position at June 30 is summarized as follows:

(in millions)	2023	2022
Net investment in capital assets	\$ 3,964	\$ 3,522
Restricted:		
Nonexpendable:		
Permanent endowment corpus	2,959	2,822
Expendable:		
Net appreciation of permanent endowments	3,668	3,589
Funds functioning as endowment	3,386	3,218
Restricted for operations and other	800	807
Unrestricted	5,937	5,340
	<u>\$ 20,714</u>	<u>\$ 19,298</u>

Net investment in capital assets represents the University's capital assets, net of accumulated depreciation, outstanding principal balances of debt, lease and subscription liabilities, unexpended bond proceeds, deferred outflows and deferred inflows associated with the acquisition, construction or improvement of those assets.

Restricted nonexpendable net position represents the corpus portion (historical value) of gifts to the University's permanent endowment funds. Restricted expendable net position is subject to externally imposed stipulations governing their use and includes net appreciation of permanent endowments, funds functioning as endowment and net position restricted for operations, facilities and student loan programs. Restricted expendable net position totaled \$7.9 billion at June 30, 2023.

Although unrestricted net position is not subject to externally imposed stipulations, substantially all of the University's unrestricted net position has been designated for various academic programs, research initiatives and capital projects. Unrestricted net position at June 30, 2023 totaled \$5.9 billion and included funds functioning as endowment of \$7.9 billion offset by unfunded obligations for postemployment benefits of \$4.1 billion. Unrestricted net position also includes other net resources which totaled \$2.1 billion at June 30, 2023.

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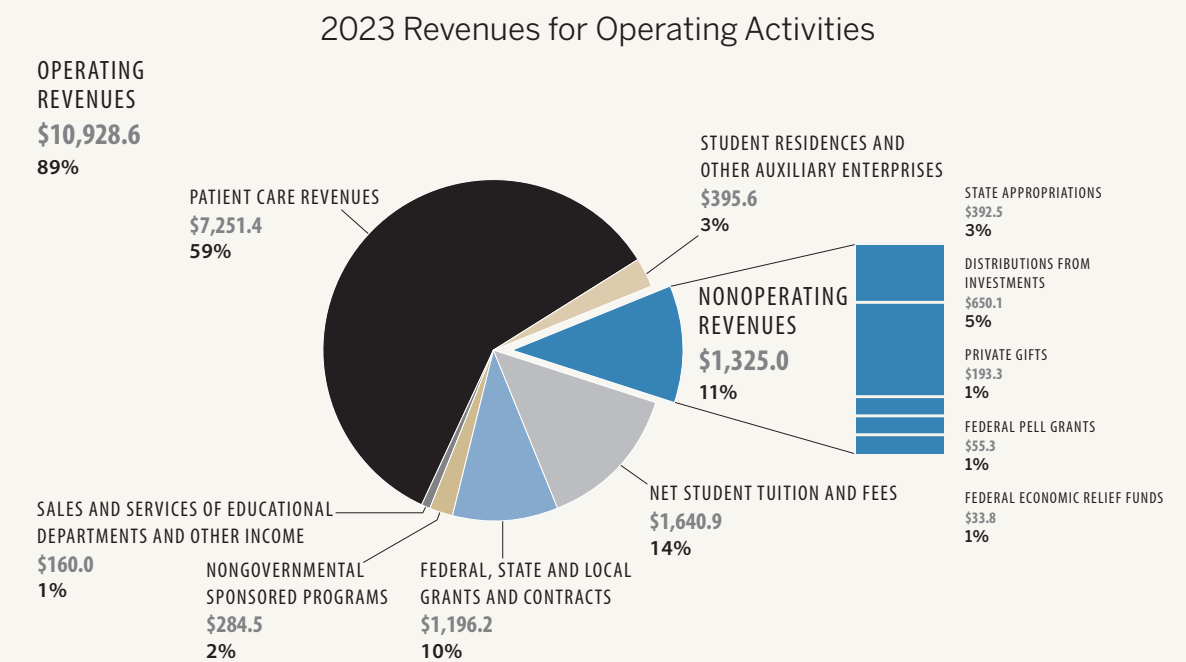
CONSOLIDATED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

The consolidated statement of revenues, expenses and changes in net position presents the University's results of operations. In accordance with GASB reporting principles, revenues and expenses are classified as either operating or nonoperating. The University's revenues, expenses and changes in net position for the years ended June 30 are summarized as follows:

(in millions)	2023	2022
Operating revenues:		
Net student tuition and fees	\$ 1,640.9	\$ 1,586.1
Sponsored programs	1,480.7	1,361.3
Patient care revenues, net	7,251.4	5,605.7
Other	555.6	507.1
	10,928.6	9,060.2
Operating expenses	12,503.2	10,548.4
Operating loss	(1,574.6)	(1,488.2)
Nonoperating and other revenues (expenses):		
State educational appropriations	392.5	391.6
Federal Pell grants	55.3	53.6
Federal economic relief funds	33.8	151.9
Private gifts for operating activities	193.3	219.1
Net investment income	1,078.3	336.3
Interest expense	(201.2)	(125.2)
Federal subsidies for interest on Build America Bonds	5.5	5.5
State capital appropriations	12.9	29.8
Endowment and capital gifts and grants	177.1	235.0
Other	(16.7)	(14.0)
Nonoperating and other revenues, net	1,730.8	1,283.6
Increase (decrease) in net position	156.2	(204.6)
Net position, beginning of year	19,298.5	19,503.1
Affiliation with Sparrow Health	1,259.0	
Net position, beginning of year, as restated	20,557.5	19,503.1
Net position, end of year	\$ 20,713.7	\$ 19,298.5

One of the University's greatest strengths is the diverse streams of revenue that supplement its student tuition and fees, including private support from individuals, foundations and corporations, along with government and other sponsored programs, state appropriations and investment income. The University continues to aggressively seek funding from all possible sources consistent with its mission in order to supplement student tuition and prudently manage the financial resources realized from these efforts to fund its operating activities, which include instruction, patient care and research.

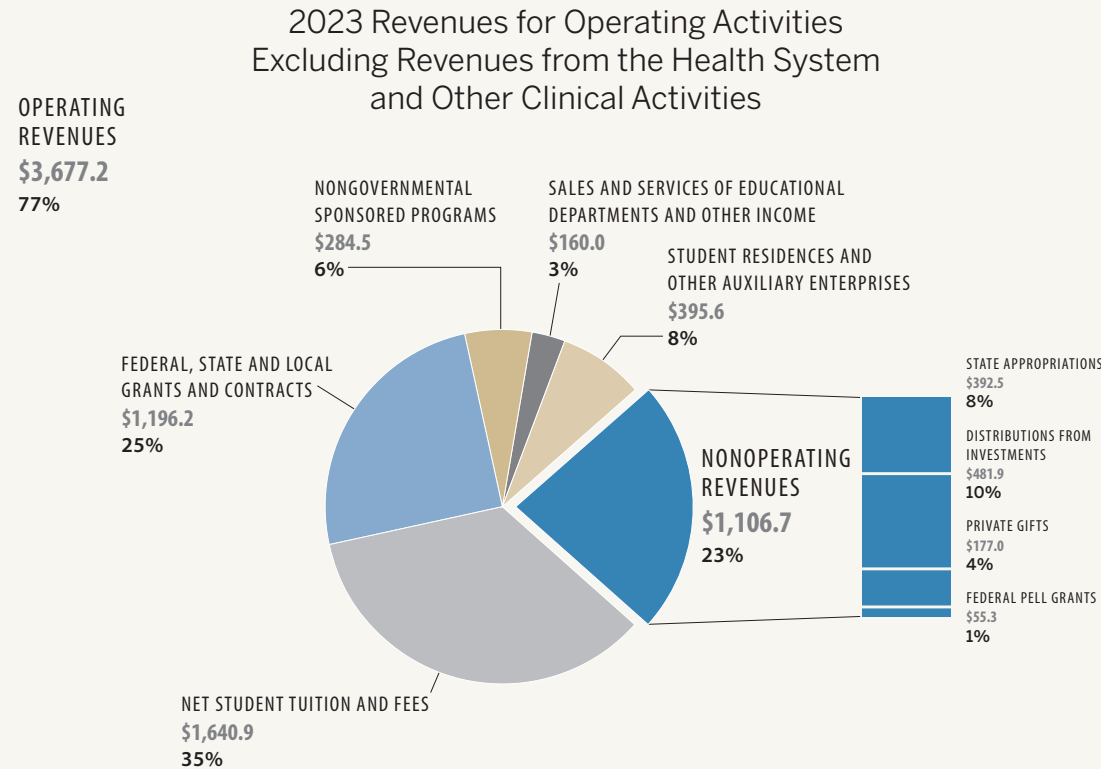
The following is a graphic illustration of revenues by source, both operating and nonoperating, which are used to fund the University's operating activities for the year ended June 30, 2023 (amounts are presented in millions of dollars). Certain recurring sources of the University's revenues are considered nonoperating, as defined by GASB, such as state appropriations, distributions from investments, private gifts and federal Pell grants.



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The University measures its performance both for the University as a whole and for the University without its health system and other clinical activities. The exclusion of these activities allows a clearer view of the operations of the schools and colleges, as well as central administration. The following is a graphic illustration of University revenues by source, both operating and nonoperating, which are used to fund operating activities other than the health system and other clinical activities, for the year ended June 30, 2023 (amounts are presented in millions of dollars).



Tuition and state appropriations are the primary sources of funding for the University's academic programs. There is a relationship between the growth or reduction in state support and the University's ability to restrain tuition fee increases. Together, net student tuition and fees and state educational appropriations totaled \$2.0 billion in 2023.

For the years ended June 30 net student tuition and fees revenue consisted of the following components:

(in millions)	2023	2022
Student tuition and fees	\$ 2,186.8	\$ 2,085.0
Less scholarships allowances	545.9	498.9
	<u>\$ 1,640.9</u>	<u>\$ 1,586.1</u>

Tuition rate increases in 2023 were 3.4 percent for resident undergraduate students and 3.9 percent for both nonresident undergraduate students and most graduate students on the Ann Arbor campus, with a 3.6 and 4.9 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2023, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

The University's tuition rate increases have consistently been among the lowest in the state, even in years of significant reductions in state appropriations, which reflects a commitment to affordable higher education for Michigan families. In addition, the University has increased scholarship and fellowship expenses and related allowances to benefit students in financial need. The University's long-term plan includes an ongoing commitment to cost containment and reallocating resources to the highest priorities to provide support for innovative new initiatives to maintain academic excellence and help students keep pace with the evolving needs of society.

While tuition and state appropriations fund a large percentage of University costs, private support is also essential to the University's academic distinction. Private gifts for other than capital and endowment purposes totaled \$193 million in 2023.

The University receives revenues for sponsored programs from various government agencies and private sources, which normally provide for both direct and indirect costs to perform these sponsored activities, with a significant portion related to federal research. Revenues for sponsored programs totaled \$1.5 billion in 2023.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities and totaled \$7.3 billion in 2023.

For the years ended June 30 patient care revenues by source is summarized as follows:

(in millions)	2023	2022
University of Michigan Health	\$ 5,305.0	\$ 4,926.4
UM Health	1,787.7	522.4
Michigan Health Corporation	23.7	22.6
Other	135.0	134.3
	<u>\$ 7,251.4</u>	<u>\$ 5,605.7</u>

The largest component of patient care revenues is generated by UMH, a national leader in advanced patient care and comprehensive education of physicians and medical scientists. UMH serves as the principal teaching facility for the University's Medical School and operates three hospitals with 1,043 licensed beds, as well as numerous ambulatory care centers and various other health care programs across the state. Substantially all physician services to UMH patients are provided by the University's Medical School faculty. UMH also provides educational and clinical opportunities to students of the University's Schools of Nursing, Dentistry, Social Work and Public Health, as well as the College of Pharmacy.

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UM Health patient care revenues primarily represent Sparrow Health, a community health care provider in Mid-Michigan, and UMH-West, a community health care provider in West Michigan. Sparrow Health operates multiple hospitals with a combined 845 licensed beds, as well as outpatient clinics throughout the Mid-Michigan region. UMH-West operates a hospital with 208 licensed beds, as well as outpatient clinics and a growing network of specialty services. The University's affiliations with Sparrow Health and UMH-West position UM Health to expand research capabilities, primary care, specialty services and the use of complex medical technologies.

Michigan Health Corporation generates revenue through its various joint venture and managed care initiatives, which provide services to patients including dialysis and other health services.

Other patient care revenues include amounts received from governmental and commercial payers associated with initiatives designed to improve accessibility and quality of care for patients, services provided by physicians working at facilities outside of the University and ambulatory care services provided by University Health Service, the School of Dentistry and the School of Nursing.

Contractual arrangements with governmental payers (Medicare and Medicaid) and private insurers impact patient care revenues. The distribution of net patient care service revenue by primary payer source for the years ended June 30 is summarized as follows:

	2023	2022
Medicare	30%	27%
Medicaid	13%	13%
Blue Cross	35%	38%
Other	22%	22%

Federal economic relief funds represent amounts received from the federal government to provide economic assistance to entities that have been negatively impacted by the COVID-19 pandemic. During 2023, the University recognized revenue of \$34 million primarily associated with the Coronavirus State and Local Fiscal Recovery Fund.

Net investment income totaled \$1.1 billion in 2023, driven in part by a stabilized interest rate environment and positive returns in both marketable and alternative asset classes.

State capital appropriations help the University improve its academic buildings. Recent capital outlays have supported renovations of the W.K. Kellogg Institute and Dental Building on the Ann Arbor campus, the Engineering Lab Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus.

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. In 2023, private gifts for permanent endowment purposes totaled \$118 million, while capital gifts and grants totaled \$59 million. In recent years, major gifts have been received in support of the University's wide-ranging capital initiatives which include the health system, Ross School of Business, College of Engineering and Intercollegiate Athletics.

In addition to revenue diversification, the University continues to make cost containment an ongoing priority. This is necessary as the University faces significant financial pressures, particularly in the areas of compensation and benefits, which represent 61 percent of total expenses, as well as in the areas of energy, technology and ongoing maintenance of facilities and infrastructure.

The University's expenses for the years ended June 30 are summarized as follows (amounts in millions):

	2023		2022	
Operating:				
Compensation and benefits	\$ 7,808.4	61%	\$ 6,573.9	62%
Supplies and services	3,809.0	30	3,137.1	29
Depreciation	685.4	5	606.5	6
Scholarships and fellowships	200.4	2	230.9	2
	12,503.2	98	10,548.4	99
Nonoperating:				
Interest, net	195.7	2	119.7	1
	\$ 12,698.9	100%	\$ 10,668.1	100%

The University is committed to recruiting and retaining outstanding faculty and staff and the compensation package is one way to successfully compete with peer institutions and nonacademic employers. During 2023, compensation and benefits totaled \$7.8 billion, which included compensation of \$5.9 billion and employee benefits of \$1.9 billion.

The University faces external and industry realities that put significant pressure on its ability to reduce compensation costs while remaining competitive. To help address this risk, the University continues to review components of its existing benefits program to find opportunities for potential savings without compromising the ability to offer competitive benefits to all faculty and staff.

Health care benefits are one of the most significant employee benefits. Compared to most employers, the University is in a unique position to utilize internal experts to advise and guide its health care and drug plans. Over the past several years, the University has implemented initiatives to better control its rate of cost increase, encourage employees to choose the lowest cost health care plan that meets their needs and share a larger portion of health care cost increases with employees. These initiatives reflect the reality of the national landscape while remaining true to the commitment we make to our employees for a robust benefits package. Careful stewardship of our health benefit plans, including the use of wellness initiatives, helps maintain our competitive position while preserving funding for the University's core mission.

Supplies and services expenses totaled \$3.8 billion in 2023 and reflect growth in the University's mission related activities.

MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

In addition to their natural classification, it is also informative to review operating expenses by function. The University's expenses by functional classification for the years ended June 30 are summarized as follows (amounts in millions):

	2023		2022	
Operating:				
Instruction	\$ 1,330.8	10%	\$ 1,243.3	12%
Research	971.9	8	919.2	9
Public service	303.4	2	271.1	2
Institutional and academic support	1,083.5	9	1,084.5	10
Operations and maintenance of plant	370.0	3	330.4	3
Auxiliary enterprises:				
Patient care	7,368.4	58	5,459.0	51
Other	189.4	1	403.5	4
Depreciation	685.4	5	606.5	6
Scholarships and fellowships	200.4	2	230.9	2
	12,503.2	98	10,548.4	99
Nonoperating:				
Interest, net	195.7	2	119.7	1
	\$ 12,698.9	100%	\$ 10,668.1	100%

Instruction expenses totaled \$1.3 billion in 2023 and reflect the growth in the related revenue sources offset by cost containment efforts.

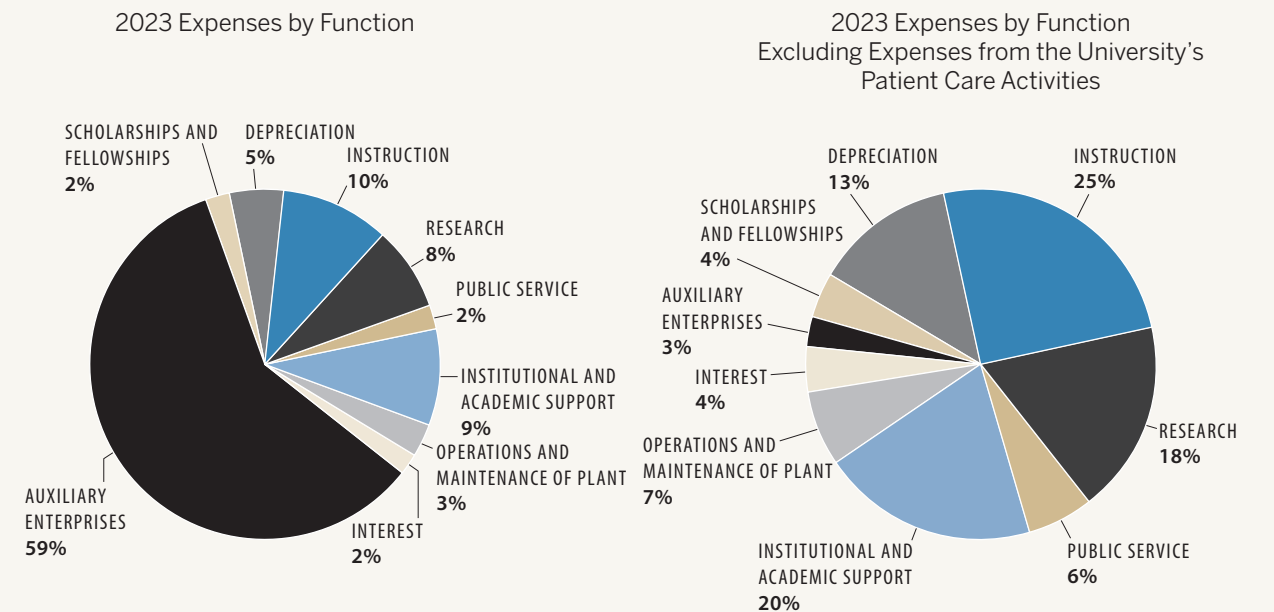
Research expenses totaled \$972 million in 2023 and reflect the strength of the University's overall research enterprise. To measure its total volume of research expenditures, the University considers research expenses included in the above table, as well as research related facilities and administrative expenses, research initiative and start-up expenses, and research equipment purchases. These amounts totaled \$1.9 billion in 2023.

Patient care expenses totaled \$7.4 billion in 2023 and reflect the impact of additional patient volume during the period. Increased medical supplies expense resulted from higher patient activity levels, the rising cost of pharmaceuticals and increased expenses related to ongoing global supply chain challenges.

Scholarships and fellowships provided to students totaled \$773 million in 2023. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarships and fellowships expense. Scholarships and fellowships for the years ended June 30 are summarized as follows:

(in millions)	2023	2022
Paid directly to students	\$ 200.4	\$ 230.9
Applied to tuition and fees	545.9	498.9
Applied to University Housing	26.4	24.8
	\$ 772.7	\$ 754.6

The following graphic illustrations present total expenses by function, with and without the University's health system and other patient care activities:



MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

CONSOLIDATED STATEMENT OF CASH FLOWS

The consolidated statement of cash flows provides additional information about the University's financial results by reporting the major sources and uses of cash. The University's cash flows for the years ended June 30 are summarized as follows:

(in millions)	2023	2022
Cash received from operations	\$ 10,827.7	\$ 8,866.2
Cash expended for operations	(12,118.8)	(9,336.1)
Net cash used in operating activities	(1,291.1)	(469.9)
Net cash provided by noncapital financing activities	755.8	2,626.5
Net cash used in capital and related financing activities	(957.1)	(281.0)
Net cash (used in) provided by investing activities	(797.4)	72.5
Net (decrease) increase in cash and cash equivalents	(2,289.8)	1,948.1
Cash and cash equivalents, beginning of year	2,951.9	1,003.8
Affiliation with Sparrow Health	88.0	
Cash and cash equivalents, beginning of year, as restated	3,039.9	1,003.8
Cash and cash equivalents, end of year	\$ 750.1	\$ 2,951.9

Cash received from operations primarily consists of student tuition, sponsored program grants and contracts, and patient care revenues. Significant sources of cash provided by noncapital financing activities, as defined by GASB, include state appropriations, federal Pell grants and private gifts used to fund operating activities.

ECONOMIC FACTORS THAT MAY AFFECT THE FUTURE

The University maintains the highest credit ratings of S&P Global (AAA) and Moody's (Aaa). Achieving and maintaining the highest credit ratings provides the University with significant flexibility in securing capital funds on the most competitive terms. This flexibility, along with ongoing efforts toward revenue diversification and cost containment, will enable the University to provide the necessary resources to support a consistent level of excellence in service to students, patients, the research community, the state and the nation.

A crucial element to the University's future continues to be a strong relationship with the state of Michigan. Historically, there has been a connection between the growth or reduction of state support and the University's ability to control tuition increases. Over the past several years, the University has successfully addressed the realities of the state's challenging economy and, pursuant to a long-range plan, continues to work relentlessly to cut and mitigate operational costs in order to remain affordable and preserve access, while protecting the academic enterprise.

The University's budget for 2024 anticipates a 5.1 percent increase in state educational appropriations, a 2.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 7.8 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates, as well as most graduate and professional rates, will increase 4.9 percent. Resident undergraduate tuition rates for the Dearborn and Flint campuses will increase 4.4 percent and 4.9 percent, respectively.

The University continues to execute its long-range plan to maintain, modernize and expand its complement of older facilities while adding key new facilities for instruction, research, patient care, athletics and residential life. This strategy addresses the University's growth and the continuing effects of technology on teaching, research and clinical activities. Authorized costs to complete construction and other projects totaled \$1,875 million at June 30, 2023. Funding for these projects is anticipated to include \$1,845 million from internal sources, gifts, grants and proceeds from borrowings and \$30 million from the State Building Authority.

The University's health system continues its strategy to expand access to patients, locally and on a statewide basis. In addition to strategic capital and technological investments, the University's health system is also focusing on clinical affiliation arrangements and population management programs designed to expand community access and improve patient, family and provider experiences across the continuum of care. The affiliation arrangements are also expected to enhance clinical research, physician recruitment and support services.

While the University's health system is well positioned to maintain its strong financial condition in the near term, ongoing constraints on revenue are expected due to fiscal pressures from employers and federal and state governments. Lawmakers continue to discuss Medicare and Medicaid changes which may target graduate medical education-related payments and could result in a significant impact on teaching hospitals. In addition, private insurance and managed care contracts historically provide for annual increases in reimbursement rates that met or exceeded the rate of inflation; however, there can be no assurance that such trends will continue. Management believes that much of the payment pressure can be offset by growth in patient volume and continued efforts to contain certain costs.

The University will continue to employ its long-term investment strategy to maximize total returns, at an appropriate level of risk, while utilizing a spending rate policy to preserve endowment capital and insulate the University's operations from temporary market volatility.

As a labor-intensive organization, the University faces competitive pressures related to attracting and retaining faculty and staff. Moreover, consistent with the national landscape, the University also faces rising costs of health benefits for its employees and retirees. The University has successfully taken and will continue to take proactive steps to respond to these challenges while protecting the quality of the overall benefits package.

A portion of the University's labor force is unionized, with negotiated labor agreements defining terms and conditions of employment. Changes in relations with unions and represented employees, including the negotiation of new agreements, could have a material effect on the University.

While it is not possible to predict the ultimate results, management believes that the University's financial position will remain strong.