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, 2018 and 2017 and its activities for the three fiscal years ended June 30, 2018. This discussion has been prepared by management and should be read in conjunction with the financial statements and the notes thereto, which follow this section.

The University is a comprehensive public institution of higher learning with over 63,000 students and approximately 8,200 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 Hospitals, 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). The University's health system currently includes four hospitals as well as numerous health centers and outpatient clinics.

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.

On December 15, 2016, the University completed an affiliation with Metropolitan Health Corporation ("Metro Health"), a community health care provider in west Michigan, pursuant to which UM Health became the sole corporate member of Metro Health. In addition to its hospital, Metro Health has neighborhood outpatient clinics and offices throughout west Michigan to serve the greater Grand Rapids area. In accordance with Governmental Accounting Standards Board ("GASB") Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, this combination is included in the financial statements as if it occurred at the beginning of the earliest period presented.

FINANCIAL HIGHLIGHTS

The University's financial position remains strong, with total assets and deferred outflows of $22.1 billion and total liabilities and deferred inflows of $7.8 billion at June 30, 2018, compared to total assets and deferred outflows of $20.9 billion and total liabilities and deferred inflows of $7.5 billion at June 30, 2017. 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 $14.3 billion and $13.4 billion at June 30, 2018 and 2017, respectively. Changes in net position represent the University's results of operations and are summarized for the years ended June 30 as follows:

(in millions)	2018	2017
Operating revenues and educational appropriations	$ 7,879	$ 7,480
Private gifts for operating activities	197	159
Operating and net interest expenses	(8,625)	(7,976)
	(549)	(337)
Net investment income	1,261	1,401
Endowment, capital gifts and grants, and other	208	198
Increase in net position	$ 920	$ 1,262

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

During 2018, net position was restated at July 1, 2016 to reflect the adoption of GASB Statement No. 81, *Irrevocable Split-Interest Agreements* ("GASB 81"), resulting in a decrease of $52 million as compared to amounts previously reported.

During 2017, net position was restated at July 1, 2016 for the affiliation with Metro Health and the adoption of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* ("GASB 75"), resulting in a net decrease of $850 million.

For purposes of management's discussion and analysis, comparative data for the statement of net position has been provided by combining Metro Health with the University and reflecting the adoption of GASB 75 and GASB 81 at June 30, 2016.

The results of operations reflect the University's emphasis on maintaining its national standards academically, in research and in health care within a competitive recruitment environment for faculty and health care professionals and a period of continued pressure on federal funding for research. At the same time, the University is addressing constrained state appropriations and rising health care, regulatory and facility costs with aggressive cost cutting and productivity gains to help preserve access to affordable higher education for Michigan families. In 2018, the results of operations also reflect period costs associated with capacity expansion for the University's health system. To achieve aggressive and 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.

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. Endowment spending rate distributions to University units totaled $339 million and $318 million in 2018 and 2017, respectively. 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 most 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 the insurance and benefit reserves, in an equity oriented long-term strategy through its Long Term Portfolio.

USING THE FINANCIAL STATEMENTS

The University's financial report includes three financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows. These financial statements are prepared in accordance with GASB principles, which establish standards for external financial reporting for public colleges and universities.

STATEMENT OF NET POSITION

The 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)	**2018**	**2017**	**2016**
Current assets	$ 2,743	$ 2,696	$ 2,545
Noncurrent assets:			
Endowment, life income and other investments	12,305	11,323	10,109
Capital assets, net	6,121	6,045	5,948
Other	510	439	346
Total assets	21,679	20,503	18,948
Deferred outflows	384	349	30
Total assets and deferred outflows	22,063	20,852	18,978
Current liabilities	1,775	1,802	1,881
Noncurrent liabilities	5,814	5,606	4,946
Total liabilities	7,589	7,408	6,827
Deferred inflows	193	83	52
Net position	$ 14,281	$ 13,361	$ 12,099

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 $2.7 billion at June 30, 2018 and 2017. Cash, cash equivalents and investments for operating activities totaled $1.3 billion at June 30, 2018, which represents approximately two 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 Metro Health's defined benefit pension plan. Deferred outflows totaled $384 million and $349 million at June 30, 2018 and 2017, respectively.

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. Current liabilities totaled $1.8 billion at June 30, 2018 and 2017.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's postemployment benefits obligations, Metro Health's defined benefit pension plan and irrevocable split-interest agreements. Deferred inflows totaled $193 million and $83 million at June 30, 2018 and 2017, respectively.

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)	2018	2017	2016
Endowment investments	$ 11,902	$ 10,936	$ 9,743
Life income investments	144	132	111
Noncurrent portion of insurance and benefits obligations investments	208	205	192
Other	51	50	63
	$ 12,305	$ 11,323	$ 10,109

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 amounts (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. The major portion of the endowment is maintained in the University Endowment Fund, a unitized pool which represents a collection of approximately 11,200 separate (individual) funds, the majority of which are restricted for specific purposes. The University Endowment Fund is invested in the University's Long Term Portfolio, a single diversified investment pool.

The endowment spending rule provides for distributions from the University Endowment Fund to the entities 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 University Endowment Fund shares. This spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather challenging economic environments while avoiding measures such as faculty hiring freezes, furloughs, program cuts or halting construction.

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, departments may also use withdrawals from funds functioning as endowment to support capital expenditures and operations.

Endowment spending rate distributions totaled $346 million and $325 million and withdrawals from funds functioning as endowment totaled $33 million and $7 million in 2018 and 2017, respectively. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.4 percent and 4.2 percent of the current year average fair value of the University Endowment Fund for 2018 and 2017, respectively. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 5.0 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. During 2018, the University adopted GASB 81, which establishes recognition and measurement guidance for situations in which a government is a beneficiary of a split-interest agreement. Adoption of this statement resulted in an increase in deferred inflows and a decrease in restricted expendable net position of $52 million, as reflected in the comparative balances presented at June 30, 2016.

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 $650 million in 2018, as compared to $636 million in 2017. Capital asset additions primarily represent renovation and new construction of academic, research, clinical and athletic 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 $482 million, as well as debt proceeds of $163 million and state capital appropriations of $5 million.

Projects completed in 2018 include significant new construction and renovation of academic and research buildings for natural sciences and international studies, as well as new facilities for ambulatory care, clinical pathology and athletics.

The Biological Sciences Building was constructed to provide teaching, research and museum facilities for the biological sciences and exhibit museums. Bringing these programs together creates exciting opportunities for interdisciplinary teaching, research and collaboration, and offers a richer experience for museum visitors. The new building houses 300,000 square feet of classrooms, research laboratories, associated support functions, offices and vivarium services, as well as the anthropology, natural history, paleontology and zoology museums formerly housed at the Alexander G. Ruthven Museums Building. The structure also includes a connection to the adjacent Life Sciences Institute Building to increase the utilization of its loading dock and vivarium functions.

An extensive renovation of Weiser Hall, formerly the Dennison Building which was originally constructed in 1963, was completed. Renovation of 106,000 square feet, vacated by the relocation of the Department of Astronomy to West Hall and the repurposing of classrooms, created space that facilitates faculty collaboration and enhances opportunities for graduate and undergraduate students. This project enabled relocation of the International Institute and its associated centers for international studies from the School of Social Work Building to Weiser Hall, along with other College of Literature, Science, and the Arts centers, institutes and units that have a primary focus on international engagement.

Construction of a new West Ann Arbor Health Center improves patient access to ambulatory care services. The new center, which includes 75,000 square feet, houses 27 adult and pediatric primary and specialty care services and replaces a prior center of 6,000 square feet that was previously located in leased space.

Many of the Health System's clinical pathology laboratories relocated into newly refurbished space at the University's North Campus Research Complex, freeing up space in University hospitals and other patient care locations. Previously, pathology laboratories were dispersed throughout various buildings on the University's medical campus and leased space. This project included the renovation of 186,000 square feet to enhance the clinical laboratory functions necessary to meet the growing demand for advanced clinical and anatomic pathology testing, improve operational efficiency and reduce the expense of maintaining laboratories in multiple locations. The new laboratories have also been designed to provide flexibility to meet future education, research and technology requirements.

The Athletics South Competition and Performance Project added 280,000 square feet of space for men's and women's track and field, cross country, lacrosse, soccer and women's rowing. This facility includes an indoor and outdoor track competition venue, a lacrosse stadium and an indoor rowing tank. The complex also includes a performance and team center with specialized spaces for each team and shared resources for all teams, with strength and conditioning, athletic medicine, meeting space and locker rooms. This new center enables consolidation of various team facilities formerly dispersed across the athletic campus. The facilities are also available to student-athletes who already practice and compete in that area, as well as students who participate in the University's recreational sports programs.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

Construction in progress, which totaled $301 million and $476 million at June 30, 2018 and 2017, respectively, includes important projects for patient care, instruction, research and student life.

The University is nearing completion of the Brighton Center for Specialty Care, which is designed to meet growing ambulatory care demands. This new facility, with 300,000 square feet, will house more than 40 specialty services for pediatric and adult health care, including a comprehensive musculoskeletal center, sleep lab, ambulatory diagnostic and treatment center, medical procedure unit, radiation oncology, infusion, pharmacy, radiology, operating rooms and lab services. This new building is located near the existing Brighton Health Center, which will continue to be utilized. This project is scheduled to be completed in fall 2018.

Construction has commenced on a new research and teaching facility for the College of Engineering's Robotics program. This state-of-the-art facility will include 140,000 square feet to house research and testing laboratories, associated support functions, offices and classroom space. The building will also accommodate space for its corporate partner, Ford Motor Company, which will establish collaborative research activities within the facility. The open plan design of the building will allow for greater collaboration, increased flexibility and better space utilization. The facility will include labs for robot walking, flight testing, rehabilitation robotics and electronics and software development. This project is scheduled to be completed in winter 2020.

Renovation and expansion of the Engineering Lab Building on the University's Dearborn campus is underway. The renovated building, which was originally constructed in 1959, will include teaching labs designed to facilitate entrepreneurial problem solving, encourage multidisciplinary cooperation in the context of 21st-century engineering instruction, and provide students with new collaboration and project spaces. The new facility is also designed to allow for research partnerships with industry as well as expanded K-12 and community outreach efforts, with a focus on women and minorities. When finished, the new facility will include 123,000 square feet of space to be used for classrooms, research and teaching laboratories, faculty offices and student support spaces. Regional boiler and electrical distribution equipment replacement are also included in this project, which is scheduled to be completed in spring 2020.

The Michigan Union, which originally opened in 1919 with building additions in the 1930s and 1950s, is undergoing an extensive renovation. This project will improve accessibility throughout the building, create state-of-the-art student organization and student involvement space, improve space for counseling and student support services, and enhance meeting, lounge and study spaces. Deferred maintenance will also be addressed, including life safety, electrical, mechanical, and plumbing system improvements, replacement of the roof, windows and elevators, and upgrades to interior finish and restrooms. This project is scheduled to be completed in fall 2019.

Construction is also underway on a new William Monroe Trotter Multicultural Center dedicated to celebrating and fostering the University's diversity in a way that is inclusive and more visible. Located on central campus, the new center will accommodate lounge, kitchen and conference room spaces from the current center, and add a multipurpose room with capacity for 300 people for conferences and events, as well as an active-learning, classroom-style configuration that will accommodate 100 students. This project is scheduled to be completed in winter 2019.

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 2018, 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 care 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 ability to translate its international brand into solid revenue growth, strong philanthropic support and substantial financial reserves.

Long-term debt activity for the years ended June 30 is summarized as follows:

2018

(in millions)	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 161	$ 6	$ 9	$ 158
Bonds	2,155	157	76	2,236
Other	2		2	-
	$ 2,318	$ 163	$ 87	$ 2,394

2017

(in millions)	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 160	$ 23	$ 22	$ 161
Bonds	2,025	550	420	2,155
Other	4		2	2
	$ 2,189	$ 573	$ 444	$ 2,318

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. Outstanding bonds are also supported by the University's general revenue pledge.

During 2018, the University issued $138 million of fixed rate, tax-exempt, general revenue bonds with a net original issue premium of $19 million. Total bond proceeds of $157 million, were utilized for capital projects and debt issuance costs.

During 2017, the University issued $465 million of fixed rate, tax-exempt, general revenue bonds with a net original issue premium of $85 million. Total bond proceeds of $550 million, together with amounts held by trustees under bond indenture of $12 million, were utilized to convert $12 million of commercial paper to long-term debt, refund existing bonds of $238 million, establish an escrow to advance refund existing bonds of $112 million and provide $200 million for capital projects and debt issuance costs.

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

(in millions)	2018	2017	2016
Variable rate:			
Commercial paper	$ 158	$ 161	$ 160
Bonds	580	602	676
Fixed rate bonds	1,656	1,553	1,349
Other		2	4
	$ 2,394	$ 2,318	$ 2,189

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB Interpretation No. 1, 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 University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time. In addition, the University utilizes remarketing agents to achieve a wide distribution of its variable rate bonds.

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 2.9 percent in 2018 and 2.7 percent in 2017, including the federal subsidies for interest on taxable Build America Bonds. Interest expense net of federal subsidies received for interest on taxable Build America Bonds and interest capitalized during construction totaled $66 million in 2018 and 2017.

OBLIGATIONS FOR POSTEMPLOYMENT BENEFITS

During 2017, the University adopted GASB 75, which establishes new actuarial methods and discount rate standards for the measurement and recognition of the cost of postemployment benefits during the periods when employees render their services, superseding the requirements of GASB Statement No. 45. Adoption of this statement resulted in an increase in the reported liability for postemployment benefits obligations and a decrease in unrestricted net position of $930 million, as reflected in the comparative balances presented at June 30, 2016.

Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled $3.3 billion at June 30, 2018, as compared to $3.2 billion and $2.8 billion at June 30, 2017 and 2016, respectively. The increase in the reported liability at June 30, 2018 was driven primarily by the recognition of additional service cost and interest expense, offset somewhat by an increase in the discount rate used in developing the valuation. The increase in the reported liability at June 30, 2017, was driven primarily by a decline in the discount rate. 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 of providing those services which totaled $611 million, $674 million and $616 million at June 30, 2018, 2017 and 2016, respectively.

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 $1.4 billion at June 30, 2018. 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)	2018	2017	2016
Net investment in capital assets	$ 3,722	$ 3,735	$ 3,715
Restricted:			
Nonexpendable:			
Permanent endowment corpus	2,146	1,967	1,816
Expendable:			
Net appreciation of permanent endowments	2,068	1,829	1,519
Funds functioning as endowment	2,308	2,126	1,942
Restricted for operations and other	632	633	617
Unrestricted	3,405	3,071	2,490
	$ 14,281	$ 13,361	$ 12,099

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

Restricted nonexpendable net position represents the historical value (corpus) 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 increased 9 percent, or $420 million, to $5.0 billion at June 30, 2018, as compared to an increase of 13 percent, or $510 million, to $4.6 billion at June 30, 2017. The increase experienced during both 2018 and 2017 was driven primarily by investment income and new gift activity.

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, 2018 totaled $3.4 billion and included funds functioning as endowment of $5.2 billion offset by unfunded obligations for postemployment benefits of $3.1 billion. Unrestricted net position at June 30, 2017 totaled $3.1 billion and included funds functioning as endowment of $4.9 billion offset by unfunded obligations for postemployment benefits of $2.9 billion. Unrestricted net position also includes other net resources which totaled $1.3 billion and $1.1 billion at June 30, 2018 and 2017, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

The 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:

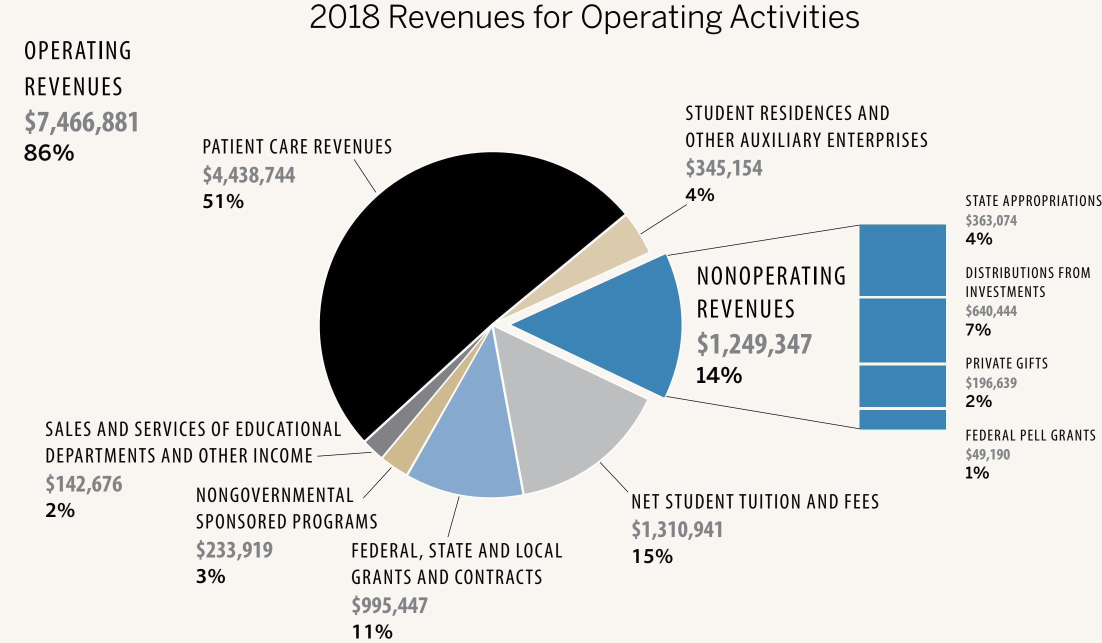
(in millions)	2018	2017	2016
Operating revenues:			
Net student tuition and fees	$ 1,310.9	$ 1,240.6	$ 1,161.7
Sponsored programs	1,229.4	1,180.2	1,107.1
Patient care revenues, net	4,438.7	4,200.1	3,587.3
Other	487.9	458.8	421.9
	7,466.9	7,079.7	6,278.0
Operating expenses	8,559.4	7,910.0	7,152.8
Operating loss	(1,092.5)	(830.3)	(874.8)
Nonoperating and other revenues (expenses):			
State educational appropriations	363.1	356.0	345.8
Federal Pell grants	49.2	43.8	43.3
Private gifts for operating activities	196.6	159.1	167.2
Net investment income (loss)	1,261.4	1,400.6	(129.7)
Interest expense, net	(72.9)	(73.1)	(55.6)
Federal subsidies for interest on Build America Bonds	7.4	7.5	7.6
State capital appropriations	5.0	18.0	47.6
Endowment and capital gifts and grants	209.2	187.0	163.0
Other	(6.1)	(6.9)	(9.0)
Nonoperating and other revenues, net	2,012.9	2,092.0	580.2
Increase (decrease) in net position	920.4	1,261.7	(294.6)
Net position, beginning of year	13,360.6	13,001.2	13,295.8
Affiliation with Metro Health and adoption of GASB 75 and GASB 81		(902.3)	
Net position, beginning of year, as restated	13,360.6	12,098.9	13,295.8
Net position, end of year	$ 14,281.0	$ 13,360.6	$ 13,001.2

The impact of the Metro Health affiliation and the adoption of GASB 75 and GASB 81 has been reflected as of the beginning of the earliest period presented in the financial statements, or July 1, 2016. Therefore, the statement of revenues, expenses and changes in net position presented above for the year ended June 30, 2016 does not reflect these items. During 2016, Metro Health reported total operating revenues of $374 million and total operating expenses of $357 million.

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.

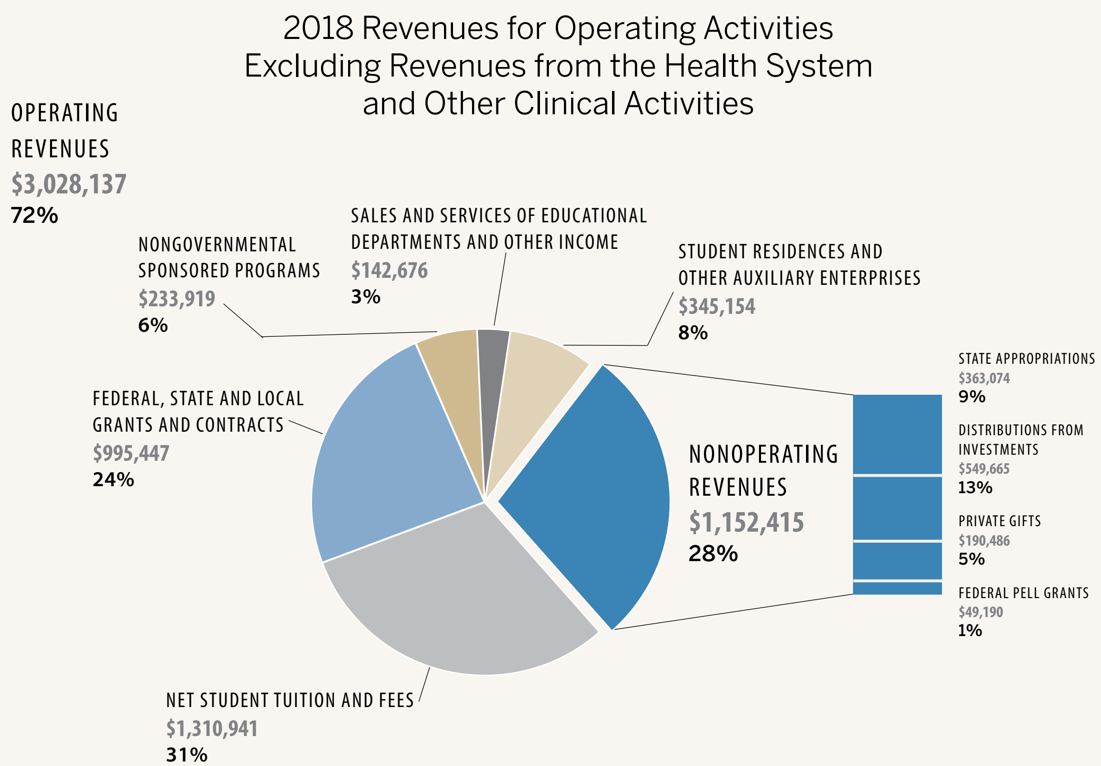
The following is a graphic illustration of revenues by source, both operating and nonoperating, which are used to fund the University's operating activities for the year ended June 30, 2018 (amounts are presented in thousands of dollars). Certain recurring sources of the University's revenues are considered nonoperating, as defined by GASB, such as state appropriations, distributions from investments, private gifts and federal Pell grants.

2018 Revenues for Operating Activities



MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

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, 2018 (amounts are presented in thousands 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 appropriations increased 5 percent, or $77 million, to $1.7 billion in 2018.

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. In 2018, the University's state educational appropriations increased 2 percent, or $7 million, to $363 million.

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

(in millions)	2018	2017
Student tuition and fees	$ 1,726.0	$ 1,616.6
Less scholarship allowances	415.1	376.0
	$ 1,310.9	$ 1,240.6

In 2018, net student tuition and fees revenue increased 6 percent, or $70 million, to $1.3 billion, which reflects an increase of 7 percent, or $109 million, in gross student tuition and fees revenue offset by an increase of 10 percent, or $39 million, in scholarship allowances. Tuition rate increases in 2018 were 2.9 percent for resident undergraduate students, 4.5 percent for nonresident undergraduate students and 4.1 percent for most graduate students on the Ann Arbor campus, with a 3.7 and 4.1 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2018, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to non-resident students.

Tuition rate increases in 2017 were 3.9 percent for resident undergraduate students, 4.4 percent for nonresident undergraduate students and 3.9 percent for most graduate students on the Ann Arbor campus, with a 4.1 percent tuition rate increase for most undergraduate students on both the Dearborn and Flint campuses.

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.

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 $197 million in 2018, as compared to $159 million in 2017.

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 increased 4 percent, or $49 million, to $1.2 billion in 2018 driven primarily by an increase in federally sponsored activity.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities. Patient care revenues increased 6 percent, or $239 million, to $4.4 billion in 2018 and reflect growth in patient volume, as well as an increase in revenue per patient case.

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

(in millions)	2018	2017
University of Michigan Hospitals	$ 3,404.9	$ 3,206.5
University of Michigan Medical Group	485.1	488.2
UM Health	433.9	376.4
Michigan Health Corporation	17.9	18.4
Other	96.9	110.6
	$ 4,438.7	$ 4,200.1

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

UM Health is a growing component of patient care activity and its revenues currently represent Metro Health, a community health care provider in west Michigan, which operates a hospital with 208 licensed beds for acute care, as well as neighborhood outpatient clinics and a growing network of specialty services. The University's affiliation with Metro Health positions 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. In 2018, the University realized payment rate increases from the majority of private insurers and governmental payers as compared to 2017. The distribution of net patient care service revenue by primary payer source for the years ended June 30 is summarized as follows:

	2018	2017
Medicare	26%	26%
Medicaid	12%	11%
Blue Cross	38%	34%
Other	24%	29%

Net investment income totaled $1.3 billion in 2018 as compared to $1.4 billion in 2017. The investment environment in 2018 continued its positive momentum from 2017. The US public equity markets were very strong in the first half of the year and climbed to all-time highs in January 2018. While these markets lost momentum in February, they spent the remainder of the fiscal year climbing back to near all-time highs. The alternative asset class performance was particularly strong in 2018, returning 17 percent. Leaders in this asset class included private equity and venture capital, which both returned 20 percent. Public equity performance while returning 6 percent this year, was down from last year when it returned 25 percent. In 2017, returns were strong in all asset classes including equity securities, as well as the alternative asset class where private equity and natural resources had the highest returns at 17 percent.

State capital appropriations are also helping the University improve its academic buildings. Recent capital outlays have supported renovations of the George Granger Brown Memorial Laboratories on the Ann Arbor campus, the Science Building and Computer Information Science Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus. Revenue is recognized as qualified capital expenditures are incurred and totaled $5 million and $18 million in 2018 and 2017, respectively.

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. Private gifts for permanent endowment purposes totaled $169 million in 2018, as compared to $143 million in 2017. Capital gifts and grants totaled $40 million in 2018, as compared to $44 million in 2017. 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 63 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):

	2018		2017	
Operating:				
Compensation and benefits	$ 5,431.4	63%	$ 5,064.4	63%
Supplies and services	2,402.6	27	2,164.0	27
Depreciation	568.7	7	537.7	7
Scholarships and fellowships	156.7	2	143.9	2
	8,559.4	99	7,910.0	99
Nonoperating:				
Interest, net	65.5	1	65.6	1
	$ 8,624.9	100%	$ 7,975.6	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. Compensation and benefits increased 7 percent, or $367 million, to $5.4 billion in 2018. Of the 2018 increase, compensation increased 6 percent, or $244 million, to $4.1 billion, driven primarily by increases in staffing levels resulting from patient activity and capacity expansion within the University's health system, and employee benefits increased 10 percent, or $123 million, to $1.3 billion, resulting from an increase in prescription drug costs as well as activity associated with the University's postemployment benefits obligations.

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. 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.

During 2013, the University began to implement changes to eligibility requirements and the University contribution to retiree health benefits that were announced in 2011. These changes were recommended by a committee that evaluated ways to maintain competitive retiree health benefits while helping address the acceleration of future costs, and are being phased in over eight years in order to assist current employees with the transition. These adjustments will keep the University's retiree benefits competitive with peer institutions while producing an estimated $9 million reduction in annual cash outlay by 2020 and an estimated $165 million reduction in annual cash outlay by 2040.

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. For example, the Pharmacy Benefits Advisory Committee, which consists of internal experts including health system physicians, School of Pharmacy faculty and on-staff pharmacists, monitors the safety and effectiveness of covered medications and guides appropriate prescribing, dispensing and cost effective use of prescription drugs. In addition, the University utilizes its nationally recognized health policy experts to guide future health plan strategies.

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

Supplies and services expenses increased 11 percent, or $239 million, to $2.4 billion in 2018 and reflects the growth in patient care related expenses including higher costs of prescription drugs and infusion treatments, as well as costs associated with significant capital projects.

Depreciation expense increased 6 percent, or $31 million, to $569 million in 2018 and reflects the completion of current year capital projects, the impact of a full year of depreciation for the capital projects completed during the prior year, and a $25 million impairment charge associated with certain components of Metro Health's hospital facilities. Capital assets placed in service during 2018 include the Biological Sciences Buildings, Weiser Hall renovation, West Ann Arbor Health Center, Clinical Pathology renovation and relocation, and Athletics South Competition and Performance Project.

In addition to their natural (object) 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):

	2018		2017	
Operating:				
Instruction	$ 1,153.2	13%	$ 1,099.8	14%
Research	823.6	10	803.5	10
Public service	211.5	2	187.8	2
Institutional and academic support	681.0	8	646.7	8
Auxiliary enterprises:				
Patient care	4,349.2	50	3,976.1	50
Other	264.6	3	198.1	2
Operations and maintenance of plant	350.9	4	316.4	4
Depreciation	568.7	7	537.7	7
Scholarships and fellowships	156.7	2	143.9	2
	8,559.4	99	7,910.0	99
Nonoperating:				
Interest, net	65.5	1	65.6	1
	$ 8,624.9	100%	$ 7,975.6	100%

Instruction expenses increased 5 percent, or $53 million, in 2018 and reflect the level of growth in the related revenue sources offset by cost containment efforts.

Research expenses increased 3 percent, or $20 million, in 2018 driven by the strength of the University's research enterprise, in spite of continued pressure on federal funding and intense competition for research dollars. 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 $1.55 billion and $1.48 billion in 2018 and 2017, respectively.

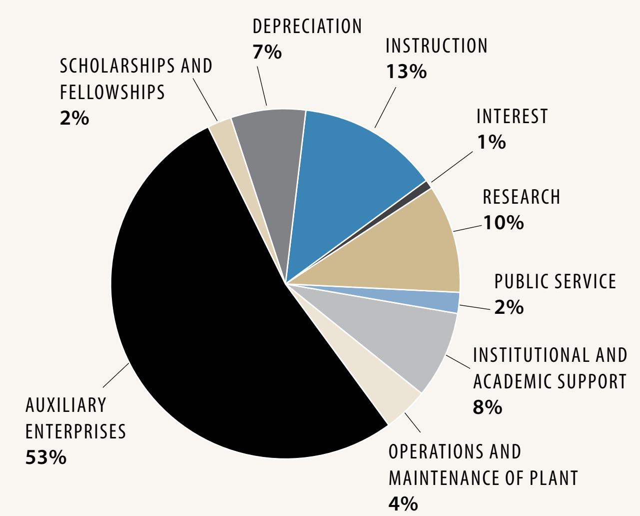
Patient care expenses increased 9 percent, or $373 million, in 2018 and reflect the impact of additional patient activity and capacity expansion. Increased compensation expense related to patient care includes both growth in staff levels and wage increases. Increased medical supplies expense results from higher patient activity levels, particularly in operating rooms and infusion treatments, new information technology initiatives and the rising cost of pharmaceuticals.

Scholarships and fellowships provided to students totaled $596 million in 2018, as compared to $543 million in 2017, an increase of 10 percent. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarship and fellowship expenses. Scholarships and fellowships for the years ended June 30 are summarized as follows:

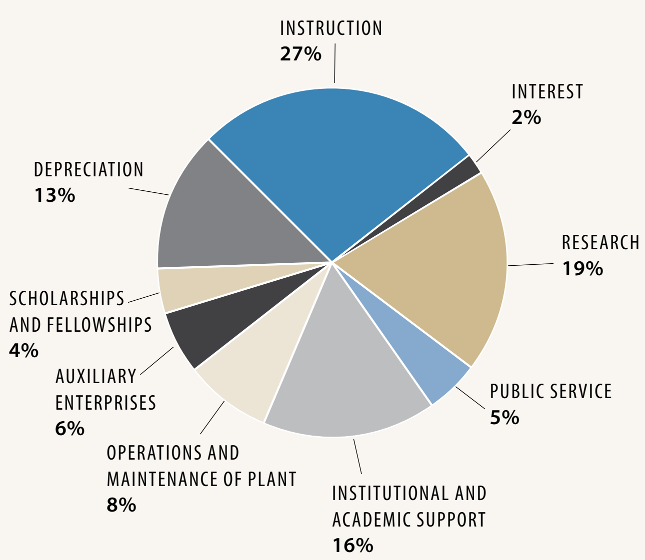
(in millions)	2018	2017
Paid directly to students	$ 156.7	$ 143.9
Applied to tuition and fees	415.1	376.0
Applied to University Housing	23.8	22.7
	$ 595.6	$ 542.6

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

2018 Expenses by Function



2018 Expenses by Function Excluding Expenses from the University's Health System and Other Patient Care Activities



MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

STATEMENT OF CASH FLOWS

The 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)	2018	2017	2016
Cash received from operations	$ 7,505.7	$ 7,103.6	$ 6,330.7
Cash expended for operations	(7,916.8)	(7,277.3)	(6,496.5)
Net cash used in operating activities	(411.1)	(173.7)	(165.8)
Net cash provided by noncapital financing activities	732.7	715.5	679.0
Net cash used in capital and related financing activities	(592.6)	(497.9)	(449.3)
Net cash provided by (used in) investing activities	299.3	(278.4)	116.4
Net increase (decrease) in cash and cash equivalents	28.3	(234.5)	180.3
Cash and cash equivalents, beginning of year	105.1	285.8	105.5
Affiliation with Metro Health		53.8	
Cash and cash equivalents, beginning of year, as restated	105.1	339.6	105.5
Cash and cash equivalents, end of year	$ 133.4	$ 105.1	$ 285.8

The impact of the Metro Health affiliation is reflected as of the beginning of the earliest period presented in the financial statements, or July 1, 2016. Therefore, the statement of cash flows presented above for the year ended June 30, 2016 does not reflect the impact of this affiliation.

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 2019 anticipates a 2.0 percent increase in state educational appropriations, a 2.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 16.3 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 3.9 percent, while most graduate and professional rates will increase 3.3 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 3.7 percent and 4.3 percent, respectively.

While tuition and state appropriations fund a large percentage of academic costs, private support is also essential to the University's academic distinction. In November 2013, the University launched the public phase of a major fundraising campaign with the announcement of an ambitious goal of $4 billion. The campaign, titled "Victors for Michigan", is focused on raising funds for three priority areas of student support, engaged learning and bold ideas, in order to better prepare tomorrow's leaders and address the complex problems facing the world. The campaign is expected to continue through December 2018.

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 $971 million at June 30, 2018. Funding for these projects is anticipated to include $799 million from internal sources, gifts, grants and future borrowings, $89 million from the State Building Authority and $83 million from the utilization of unexpended bond proceeds.

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 a strong financial position 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.