REPORT OF INDEPENDENT AUDITORS

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To the Regents of the University of Michigan:

We have audited the accompanying consolidated financial statements of the University of Michigan and its subsidiaries (the "University"), which comprise the consolidated statement of net position as of June 30, 2019 and 2018, and the related consolidated statements of revenues, expenses and changes in net position and of cash flows for the years then ended.

MANAGEMENT'S RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

AUDITORS' RESPONSIBILITY

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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REPORT OF INDEPENDENT AUDITORS

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OPINION

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the University of Michigan and its subsidiaries as of June 30, 2019 and 2018, and the changes in their financial position and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

OTHER MATTER

The accompanying management's discussion and analysis on pages 27 through 45 and the supplementary information for pension and postemployment benefits on pages 84 through 86 are required by accounting principles generally accepted in the United States of America to supplement the basic consolidated financial statements. Such information, although not a part of the basic consolidated financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic consolidated financial statements, and other knowledge we obtained during our audits of the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

PricewaterhouseCoopers LLP

October 17, 2019

PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, Michigan 48226
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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, 2019 and 2018 and its activities for the three fiscal years ended June 30, 2019. 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 63,700 students and approximately 8,500 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 System ("UMHS"), 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, currently consisting of Metropolitan Health Corporation). 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.

FINANCIAL HIGHLIGHTS

The University's financial position remains strong, with total assets and deferred outflows of $22.9 billion and total liabilities and deferred inflows of $8.1 billion at June 30, 2019, compared to total assets and deferred outflows of $22.1 billion and total liabilities and deferred inflows of $7.8 billion at June 30, 2018. 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 $14.8 billion and $14.3 billion at June 30, 2019 and 2018, 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)	2019	2018	2017
Operating revenues and educational appropriations	$ 8,411	$ 7,879	$ 7,480
Private gifts for operating activities	178	197	159
Operating and net interest expenses	(9,099)	(8,625)	(7,976)
	(510)	(549)	(337)
Net investment income	810	1,261	1,401
Endowment, capital gifts and grants, and other	223	208	198
Increase in net position	$ 523	$ 920	$ 1,262

MANAGEMENT'S DISCUSSION AND ANALYSIS
(UNAUDITED)

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 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. 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 $361 million and $339 million in 2019 and 2018, 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 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 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 Governmental Accounting Standards Board ("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)	**2019**	**2018**	**2017**
Current assets	$ 2,931	$ 2,743	$ 2,696
Noncurrent assets:			
Endowment, life income and other investments	12,834	12,305	11,323
Capital assets, net	6,227	6,121	6,045
Other	500	510	439
Total assets	22,492	21,679	20,503
Deferred outflows	371	384	349
Total assets and deferred outflows	22,863	22,063	20,852
Current liabilities	1,754	1,775	1,802
Noncurrent liabilities	5,785	5,814	5,606
Total liabilities	7,539	7,589	7,408
Deferred inflows	520	193	83
Net position	$ 14,804	$ 14,281	$ 13,361

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 $2.9 billion and $2.7 billion at June 30, 2019 and 2018, respectively. Cash, cash equivalents and investments for operating activities totaled $1.3 billion at June 30, 2019, 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 the defined benefit pension plan for Metropolitan Health Corporation ("Metro Health"). Deferred outflows totaled $371 million and $384 million at June 30, 2019 and 2018, 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 both June 30, 2019 and 2018.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's obligations for postemployment benefits, Metro Health's defined benefit pension plan and irrevocable split-interest agreements. Deferred inflows totaled $520 million and $193 million at June 30, 2019 and 2018, 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)	2019	2018	2017
Endowment investments	$ 12,449	$ 11,902	$ 10,936
Life income investments	147	144	132
Noncurrent portion of insurance and benefits obligations investments	216	208	205
Other	22	51	50
	$ 12,834	$ 12,305	$ 11,323

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, a unitized pool which represents a collection of approximately 11,700 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 $368 million, $346 million and $325 million and withdrawals from funds functioning as endowment totaled $48 million, $33 million and $7 million in 2019, 2018 and 2017, respectively. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.6 percent, 4.4 percent and 4.2 percent of the current year average fair value of the University Endowment Fund for 2019, 2018 and 2017, respectively. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.9 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 $679 million in 2019, as compared to $650 million in 2018. 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 $504 million and debt proceeds of $175 million.

Projects completed in 2019 include significant new facilities for patient care and student life, as well as technology enhancements.

Construction of the Brighton Center for Specialty Care helps meet growing ambulatory care demands. The new facility, with 300,000 square feet, houses 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 center is located near the existing Brighton Health Center, which continues to be utilized.

The new William Monroe Trotter Multicultural Center celebrates and fosters the University's diversity in a way that is inclusive and more visible. The new facility, with 20,000 square feet, accommodates program, lounge, kitchen and conference room spaces from the former center and adds a multipurpose room with capacity for 300 people for conferences and events, and an active-learning, classroom-style configuration that accommodates 100 students. Its location on State Street near the heart of central campus is easily accessible to the academic community.

An extensive upgrade of the University's WiFi network improves connectivity and helps support greater collaboration and engaged learning throughout the University's north, central and south campuses. This multi-year project encompassed 16 million square feet and added more than 15,000 new wireless access points in 253 academic, research, administrative and residence hall buildings and the Diag. The project was designed to support an increasingly mobile and collaborative learning environment, while also providing a consistently positive WiFi experience for the University's prospective students, parents, alumni and guests.

Construction in progress, which totaled $413 million and $301 million at June 30, 2019 and 2018, respectively, includes important projects for academic instruction and research as well as student life and services.

Construction of a new research and teaching facility for the College of Engineering's Robotics program continues. 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 allows 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 also continues. 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 Edward Henry Kraus Building, which was originally completed in 1915, is undergoing an extensive renovation of 183,000 square feet as well as construction of an infill addition of 62,000 square feet within the exterior courtyard. This renovation and addition will enable the School of Kinesiology to consolidate its programs and operations into one location and allow for future growth. The Department of Ecology and Evolutionary Biology and the Department of Molecular, Cellular, and Developmental Biology that were previously located in the Kraus Building relocated to the Biological Sciences Building when it opened in 2018. This project is scheduled to be completed in fall 2020.

Laboratory renovations are underway at two of the North Campus Research Complex buildings, covering 158,000 square feet to accommodate growth of the Medical School's wet laboratory research over the next decade. Construction of a 6,900 square foot infill addition will also improve connectivity between the buildings and throughout the complex. The project will also address deferred maintenance, including heating, ventilation, air conditioning, electrical and life safety system upgrades, and provide accessibility improvements and new finishes in public spaces. This project is scheduled to be completed in winter 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 winter 2020.

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 2019, 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 ability to translate its international brand into solid revenue growth, excellent student demand, strong philanthropic support and abundant financial reserves.

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

2019

(in millions)	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 158		$ 13	$ 145
Bonds	2,236	$ 260	166	2,330
	$ 2,394	$ 260	$ 179	$ 2,475

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

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 2019, the University issued $227 million of general revenue bonds with a net original issue premium of $33 million, which included $210 million of fixed rate, tax-exempt bonds, and $17 million of fixed rate, taxable bonds. Total bond proceeds of $260 million were utilized to refund existing bonds of $84 million and provide $176 million for capital projects and debt issuance costs.

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.

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

(in millions)	2019	2018	2017
Variable rate:			
Commercial paper	$ 145	$ 158	$ 161
Bonds	566	580	602
Fixed rate bonds	1,764	1,656	1,553
Other			2
	$ 2,475	$ 2,394	$ 2,318

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 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 3.0 percent and 2.9 percent in 2019 and 2018, respectively, 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 $74 million and $66 million in 2019 and 2018, respectively.

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 $3.1 billion at June 30, 2019, as compared to $3.3 billion and $3.2 billion at June 30, 2018 and 2017, respectively. The decrease in the reported liability at June 30, 2019 was driven primarily by an increase in the discount rate and a reduction in the expected health care claims cost due to favorable experience. 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. 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 $580 million, $611 million and $674 million at June 30, 2019, 2018 and 2017, 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, 2019. 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)	2019	2018	2017
Net investment in capital assets	$ 3,743	$ 3,722	$ 3,735
Restricted:			
Nonexpendable:			
Permanent endowment corpus	2,329	2,146	1,967
Expendable:			
Net appreciation of permanent endowments	2,144	2,068	1,829
Funds functioning as endowment	2,382	2,308	2,126
Restricted for operations and other	686	632	633
Unrestricted	3,520	3,405	3,071
	$ 14,804	$ 14,281	$ 13,361

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 4 percent, or $204 million, to $5.2 billion at June 30, 2019, as compared to an increase of 9 percent, or $420 million, to $5.0 billion at June 30, 2018. The increase experienced during both 2019 and 2018 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, 2019 totaled $3.5 billion and included funds functioning as endowment of $5.4 billion offset by unfunded obligations for postemployment benefits of $3.2 billion. 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 also includes other net resources which totaled $1.3 billion at both June 30, 2019 and 2018.

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

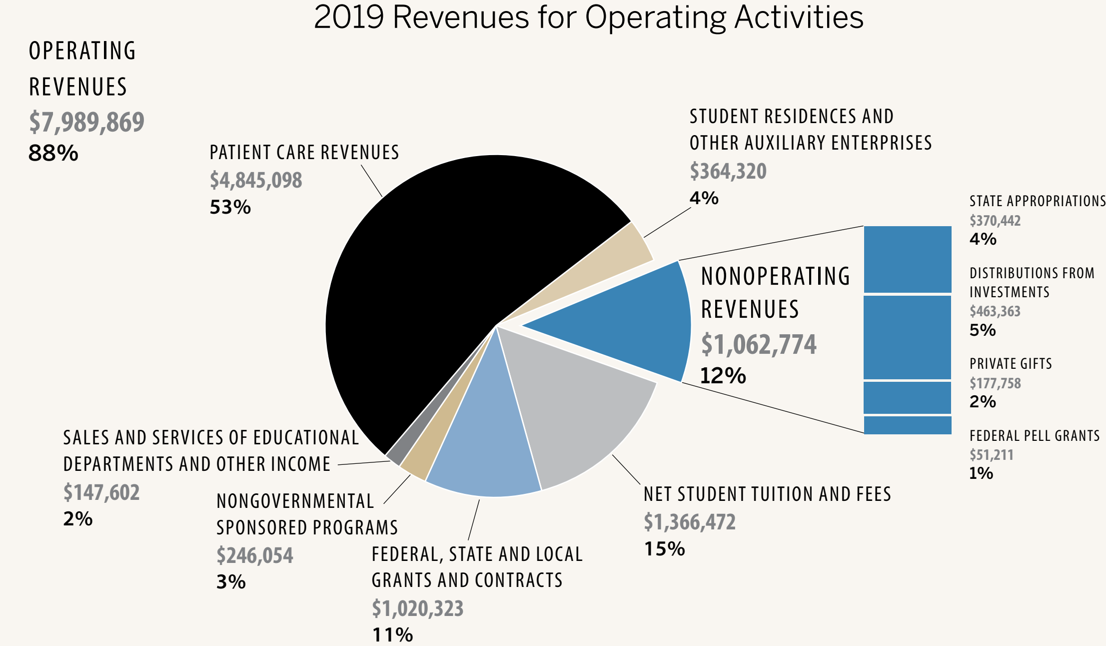
The statement of revenues, expenses and changes in net position presents the University's results of operations. In accordance with GASB reporting principles, revenues and expenses are classified as either operating or nonoperating. The University's revenues, expenses and changes in net position for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

(in millions)	2019	2018	2017
Operating revenues:			
Net student tuition and fees	$ 1,366.5	$ 1,310.9	$ 1,240.6
Sponsored programs	1,266.4	1,229.4	1,180.2
Patient care revenues, net	4,845.1	4,438.7	4,200.1
Other	511.9	487.9	458.8
	7,989.9	7,466.9	7,079.7
Operating expenses	9,025.0	8,559.4	7,910.0
Operating loss	(1,035.1)	(1,092.5)	(830.3)
Nonoperating and other revenues (expenses):			
State educational appropriations	370.4	363.1	356.0
Federal Pell grants	51.2	49.2	43.8
Private gifts for operating activities	177.8	196.6	159.1
Net investment income	810.0	1,261.4	1,400.6
Interest expense, net	(81.4)	(72.9)	(73.1)
Federal subsidies for interest on Build America Bonds	7.0	7.4	7.5
State capital appropriations		5.0	18.0
Endowment and capital gifts and grants	206.1	209.2	187.0
Other	16.9	(6.1)	(6.9)
Nonoperating and other revenues, net	1,558.0	2,012.9	2,092.0
Increase in net position	522.9	920.4	1,261.7
Net position, beginning of year	14,281.0	13,360.6	13,001.2
Affiliation with Metro Health and adoption of GASB 75 and GASB 81			(902.3)
Net position, beginning of year, as restated	14,281.0	13,360.6	12,098.9
Net position, end of year	$ 14,803.9	$ 14,281.0	$ 13,360.6

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, 2019 (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.

2019 Revenues for Operating Activities

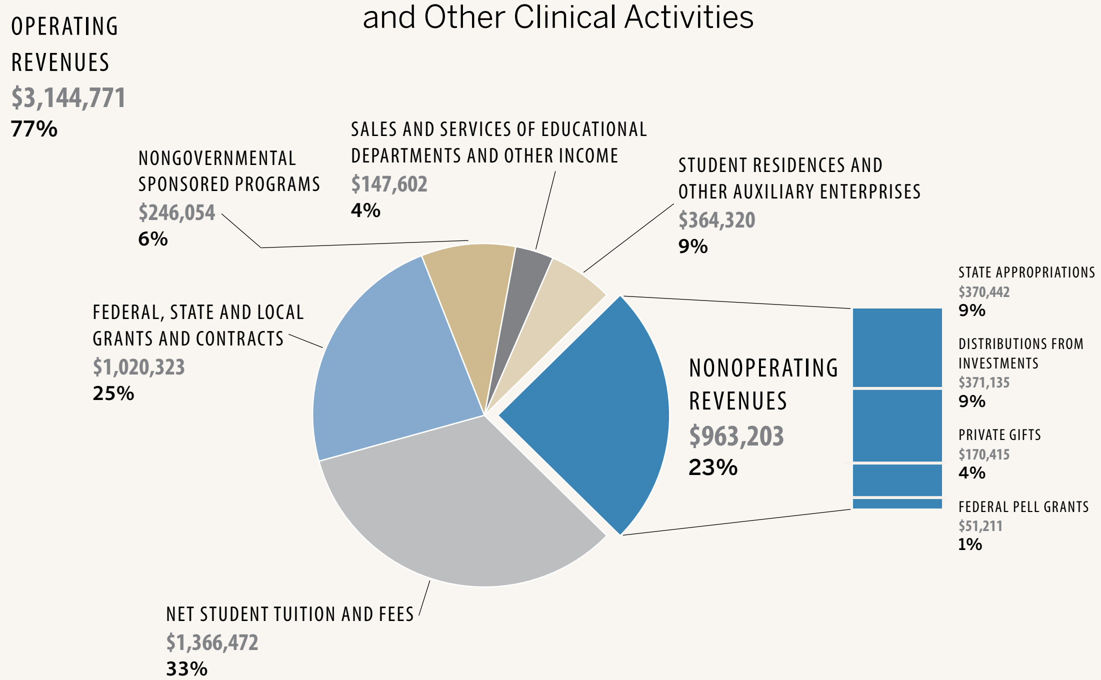


MANAGEMENT'S DISCUSSION AND ANALYSIS

(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, 2019 (amounts are presented in thousands of dollars).

2019 Revenues for Operating Activities Excluding Revenues from the Health System and Other Clinical Activities



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 increased 4 percent, or $63 million, to $1.74 billion in 2019, as compared to 5 percent, or $77 million, to $1.67 billion in 2018.

In 2019, the University's state educational appropriations increased 2 percent, or $7 million, to $370 million. 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)	2019	2018	2017
Student tuition and fees	$ 1,812.5	$ 1,726.0	$ 1,616.6
Less scholarship allowances	446.0	415.1	376.0
	$ 1,366.5	$ 1,310.9	$ 1,240.6

In 2019, net student tuition and fees revenue increased 4 percent, or $56 million, to $1.4 billion, which reflects an increase of 5 percent, or $87 million, in gross student tuition and fees revenue offset by an increase of 7 percent, or $31 million, in scholarship allowances. Tuition rate increases in 2019 were 2.9 percent for resident undergraduate students, 3.9 percent for nonresident undergraduate students and 3.3 percent for most graduate students on the Ann Arbor campus, with a 3.7 and 4.3 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2019, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

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 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 $178 million in 2019, as compared to $197 million in 2018 and $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 3 percent, or $37 million, to $1.3 billion in 2019, and 4 percent, or $49 million, to $1.2 billion in 2018, driven primarily by increases in federally sponsored activity during these periods.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities. Patient care revenues increased 9 percent, or $406 million, to $4.8 billion in 2019, due primarily to an increase in patient volume. Patient care revenues increased 6 percent, or $239 million, to $4.4 billion in 2018, resulting from 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)	2019	2018	2017
University of Michigan Health System	$ 4,212.4	$ 3,890.0	$ 3,694.7
UM Health	472.5	433.9	376.4
Michigan Health Corporation	39.1	17.9	18.4
Other	121.1	96.9	110.6
	$ 4,845.1	$ 4,438.7	$ 4,200.1

The largest component of patient care revenues is generated by UMHS, a national leader in advanced patient care and comprehensive education of physicians and medical scientists. UMHS serves as the principal teaching facility for the University's Medical School and 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 UMHS patients are provided by the University's Medical School faculty. UMHS 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.

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 2019, the University realized payment rate increases from the majority of private insurers and governmental payers as compared to 2018. The distribution of net patient care service revenue by primary payer source for the years ended June 30 is summarized as follows:

	2019	2018	2017
Medicare	26%	26%	26%
Medicaid	12%	12%	11%
Blue Cross	38%	38%	34%
Other	24%	24%	29%

Net investment income totaled $810 million in 2019 as compared to $1.3 billion in 2018 and $1.4 billion in 2017. The investment environment in 2019 was similar to that of 2018, but with increased volatility in the U.S. public equity markets as well as a more challenging landscape in the world equity markets. For 2019, the alternative asset class performance was relatively strong returning 11 percent. Leaders in this asset class included venture capital and private equity, which returned 24 percent and 10 percent, respectively. This compares to 2018 when the U.S. public equity markets were strong, as were alternative asset classes such as private equity and venture capital, which both returned 20 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 help 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.

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 $176 million in 2019, as compared to $169 million and $143 million in 2018 and 2017, respectively. Capital gifts and grants totaled $30 million in 2019, as compared to $40 million and $44 million in 2018 and 2017, respectively. 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):

	2019		2018		2017	
Operating:						
Compensation and benefits	$ 5,769.0	63%	$ 5,431.4	63%	$ 5,064.4	63%
Supplies and services	2,523.8	28	2,402.6	27	2,164.0	27
Depreciation	567.8	6	568.7	7	537.7	7
Scholarships and fellowships	164.4	2	156.7	2	143.9	2
	9,025.0	99	8,559.4	99	7,910.0	99
Nonoperating:						
Interest, net	74.4	1	65.5	1	65.6	1
	$ 9,099.4	100%	$ 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 6 percent, or $338 million, to $5.8 billion in 2019 as compared to 7 percent, or $367 million, to $5.4 billion in 2018. Of the 2019 increase, compensation increased 6 percent, or $257 million, to $4.4 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 6 percent, or $81 million, to $1.4 billion, resulting from an increase in prescription drug costs as well as activity associated with the University's postemployment benefits obligations. For 2018, compensation increased 6 percent, to $4.1 billion, and benefits increased 10 percent, to $1.3 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. 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.

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, College 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 5 percent, or $121 million, to $2.5 billion in 2019 as compared to an increase of 11 percent, or $239 million, to $2.4 billion in 2018. These increases reflect 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 decreased less than 1 percent, or $850,000, to $568 million in 2019, as compared to an increase of 6 percent, or $31 million, to $569 million in 2018. The decrease in depreciation expense is primarily related to a $25 million impairment charge recorded in 2018 associated with certain components of Metro Health's hospital facilities. Capital assets placed in service during 2019 include the Brighton Center for Specialty Care, North Campus Recreation Building renovation and the William Monroe Trotter Multicultural Center. Capital assets placed in service during 2018 include the Biological Sciences Building, 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):

	2019		2018		2017	
Operating:						
Instruction	$ 1,195.2	13%	$ 1,153.2	13%	$ 1,099.8	14%
Research	857.6	10	823.6	10	803.5	10
Public service	208.7	2	211.5	2	187.8	2
Institutional and academic support	767.0	8	681.0	8	646.7	8
Auxiliary enterprises:						
Patient care	4,661.5	51	4,349.2	50	3,976.1	50
Other	251.2	3	264.6	3	198.1	2
Operations and maintenance of plant	351.6	4	350.9	4	316.4	4
Depreciation	567.8	6	568.7	7	537.7	7
Scholarships and fellowships	164.4	2	156.7	2	143.9	2
	9,025.0	99	8,559.4	99	7,910.0	99
Nonoperating:						
Interest, net	74.4	1	65.5	1	65.6	1
	$ 9,099.4	100%	$ 8,624.9	100%	$ 7,975.6	100%

Instruction expenses increased 4 percent, or $42 million, in 2019, and 5 percent, or $53 million, in 2018. This increase reflects the level of growth in the related revenue sources offset by cost containment efforts.

Research expenses increased 4 percent, or $34 million, in 2019, and 3 percent, or $20 million, in 2018. The increase in 2019 reflects 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 $1.62 billion, $1.55 billion and $1.48 billion in 2019, 2018 and 2017, respectively.

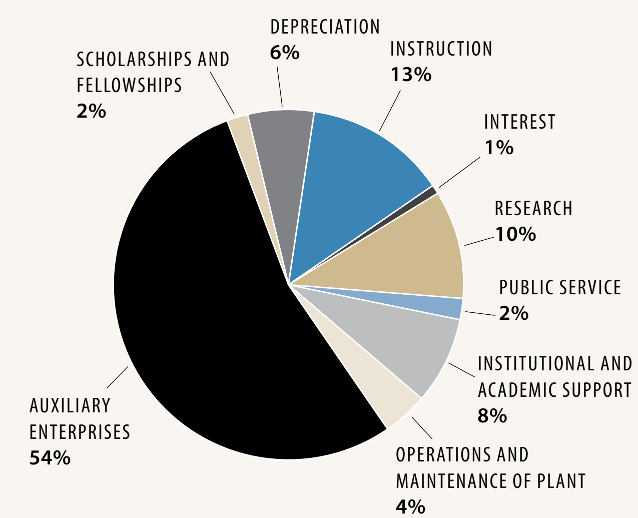
Patient care expenses increased 7 percent, or $312 million, in 2019, and 9 percent, or $373 million, in 2018, and reflect the impact of additional patient activity and capacity expansion. Increased compensation expense related to patient care includes both growth in staff levels and wage increases. Increased medical supplies expense results from higher patient activity levels, new information technology initiatives and the rising cost of pharmaceuticals.

Scholarships and fellowships provided to students totaled $635 million in 2019, as compared to $596 million in 2018 and $543 million in 2017, an increase of 17 percent over the past two years. 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:

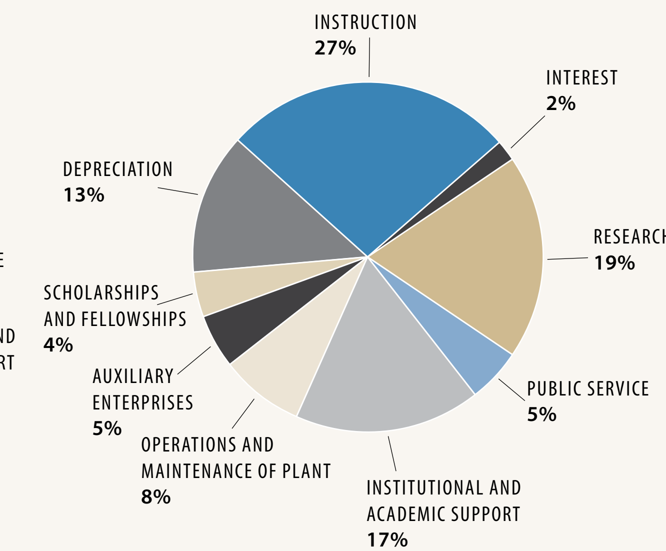
(in millions)	2019	2018	2017
Paid directly to students	$ 164.4	$ 156.7	$ 143.9
Applied to tuition and fees	446.0	415.1	376.0
Applied to University Housing	24.2	23.8	22.7
	$ 634.6	$ 595.6	$ 542.6

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

2019 Expenses by Function



2019 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)	2019	2018	2017
Cash received from operations	$ 7,965.9	$ 7,505.7	$ 7,103.6
Cash expended for operations	(8,283.8)	(7,916.8)	(7,277.3)
Net cash used in operating activities	(317.9)	(411.1)	(173.7)
Net cash provided by noncapital financing activities	767.7	732.7	715.5
Net cash used in capital and related financing activities	(597.2)	(592.6)	(497.9)
Net cash provided by (used in) investing activities	411.3	299.3	(278.4)
Net increase (decrease) in cash and cash equivalents	263.9	28.3	(234.5)
Cash and cash equivalents, beginning of year	133.4	105.1	285.8
Affiliation with Metro Health			53.8
Cash and cash equivalents, beginning of year, as restated	133.4	105.1	339.6
Cash and cash equivalents, end of year	$ 397.3	$ 133.4	$ 105.1

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 2020 anticipates a 1.5 percent increase in state educational appropriations, a 1.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 11.2 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 3.7 percent, while most graduate and professional rates will increase 3.2 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 3.2 percent and 5.0 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 $906 million at June 30, 2019. Funding for these projects is anticipated to include $726 million from internal sources, gifts, grants and future borrowings, $89 million from the State Building Authority and $91 million from the utilization of unexpended bond proceeds. In September 2019, the Board of Regents approved plans for the construction of a 690,000 square foot clinical inpatient tower with an estimated cost of $920 million and an expected completion date of fall 2024.

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 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.

FINANCIAL STATEMENTS
CONSOLIDATED STATEMENT OF NET POSITION

(in thousands)	June 30, 2019	2018
Asset and Deferred Outflows		
Current Assets:		
Cash and cash equivalents	$ 397,279	$ 133,365
Investments for operating activities	882,303	1,117,063
Investments for capital activities	594,681	533,855
Investments for student loan activities	74,365	57,135
Accounts receivable, net	714,621	666,811
Current portion of notes and pledges receivable, net	80,035	79,765
Current portion of prepaid expenses and other assets	158,320	125,159
Cash collateral held by agent	29,485	29,727
Total Current Assets	2,931,089	2,742,880
Noncurrent Assets:		
Unexpended bond proceeds	90,813	82,797
Endowment, life income and other investments	12,834,065	12,305,228
Notes and pledges receivable, net	301,427	336,870
Prepaid expenses and other assets	107,303	90,618
Capital assets, net	6,226,969	6,120,997
Total Noncurrent Assets	19,560,577	18,936,510
Total Assets	22,491,666	21,679,390
Deferred Outflows	371,574	383,589
Total Assets and Deferred Outflows	**$ 22,863,240**	**$ 22,062,979**

(in thousands)	June 30, 2019	2018
Liabilities, Deferred Inflows and Net Position		
Current Liabilities:		
Accounts payable	$ 293,728	$ 290,563
Accrued compensation and other	508,597	451,458
Unearned revenue	312,092	306,803
Current portion of insurance and benefits reserves	104,235	98,159
Current portion of obligations for postemployment benefits	87,712	87,638
Commercial paper and current portion of bonds payable	232,095	237,371
Long-term bonds payable subject to remarketing, net	133,616	195,552
Collateral held for securities lending	29,485	29,727
Deposits of affiliates and others	52,296	77,422
Total Current Liabilities	1,753,856	1,774,693
Noncurrent Liabilities:		
Accrued compensation	34,126	40,682
Insurance and benefits reserves	127,677	137,003
Obligations for defined benefit pension plan, net	(2,918)	(3,823)
Obligations for postemployment benefits	3,026,343	3,216,102
Obligations under life income agreements	74,516	74,180
Government loan advances	83,542	81,510
Bonds payable	2,109,317	1,961,085
Deposits of affiliates and other	332,850	307,210
Total Noncurrent Liabilities	5,785,453	5,813,949
Total Liabilities	7,539,309	7,588,642
Deferred Inflows	520,023	193,292
Net Position:		
Net investment in capital assets	3,742,630	3,722,086
Restricted:		
Nonexpendable	2,328,667	2,146,358
Expendable	5,212,557	5,007,324
Unrestricted	3,520,054	3,405,277
Total Net Position	14,803,908	14,281,045
Total Liabilities, Deferred Inflows and Net Position	**$ 22,863,240**	**$ 22,062,979**

The accompanying notes are an integral part of the consolidated financial statements.

FINANCIAL STATEMENTS
CONSOLIDATED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

(in thousands)	Year Ended June 30, 2019	2018
Operating Revenues		
Student tuition and fees	$ 1,812,466	$ 1,726,033
Less scholarship allowances	445,994	415,092
Net student tuition and fees	1,366,472	1,310,941
Federal grants and contracts	1,006,368	982,143
State and local grants and contracts	13,955	13,304
Nongovernmental sponsored programs	246,054	233,919
Sales and services of educational departments	145,070	140,139
Auxiliary enterprises:		
Patient care revenues (net of provision for bad debts of $137,660 in 2019 and $128,747 in 2018)	4,845,098	4,438,744
Student residence fees (net of scholarship allowances of $24,226 in 2019 and $23,814 in 2018)	120,122	117,866
Other revenues	244,198	227,288
Student loan interest income and fees	2,532	2,537
Total Operating Revenues	**7,989,869**	**7,466,881**
Operating Expenses		
Compensation and benefits	5,768,951	5,431,392
Supplies and services	2,523,804	2,402,592
Depreciation	567,857	568,707
Scholarships and fellowships	164,428	156,738
Total Operating Expenses	**9,025,040**	**8,559,429**
Operating Loss	(1,035,171)	(1,092,548)
Nonoperating Revenues (Expenses)		
State educational appropriations	370,442	363,074
Federal Pell grants	51,211	49,190
Private gifts for other than capital and endowment purposes	177,758	196,639
Net investment income	809,997	1,261,443
Interest expense, net	(81,372)	(72,905)
Federal subsidies for interest on Build America Bonds	6,961	7,451
Total Nonoperating Revenues, Net	**1,334,997**	**1,804,892**
Income Before Other Revenues (Expenses)	299,826	712,344
Other Revenues (Expenses)		
State capital appropriations		4,978
Capital gifts and grants	29,884	39,835
Private gifts for permanent endowment purposes	176,210	169,337
Other	16,943	(6,104)
Total Other Revenues, Net	**223,037**	**208,046**
Increase in Net Position	522,863	920,390
Net Position, Beginning of Year	14,281,045	13,360,655
Net Position, End of Year	**$ 14,803,908**	**$ 14,281,045**

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(in thousands)	Year Ended June 30, 2019	2018
Cash Flows from Operating Activities		
Student tuition and fees	$ 1,365,386	$ 1,314,268
Federal, state and local grants and contracts	1,016,393	973,815
Nongovernmental sponsored programs	242,527	250,617
Sales and services of educational departments and other	388,016	394,892
Patient care revenues	4,812,476	4,431,064
Student residence fees	118,862	118,192
Payments to employees	(4,352,547)	(4,108,246)
Payments for benefits	(1,239,145)	(1,157,316)
Payments to suppliers	(2,520,758)	(2,478,042)
Payments for scholarships and fellowships	(164,428)	(156,738)
Student loans issued	(6,940)	(16,453)
Student loans collected	19,716	20,328
Student loan interest and fees collected	2,532	2,537
Net Cash Used in Operating Activities	**(317,910)**	**(411,082)**
Cash Flows from Noncapital Financing Activities		
State educational appropriations	369,103	361,787
Federal Pell grants	51,211	49,190
Private gifts and other receipts	350,112	317,215
Student direct lending receipts	280,307	298,011
Student direct lending disbursements	(279,638)	(301,194)
Amounts received for annuity and life income funds	6,442	16,878
Amounts paid to annuitants and life beneficiaries and related expenses	(9,828)	(9,186)
Net Cash Provided by Noncapital Financing Activities	**767,709**	**732,701**
Cash Flows from Capital and Related Financing Activities		
State capital appropriations	1,217	4,968
Private gifts and other receipts	46,264	47,655
Proceeds from issuance of capital debt	260,034	163,328
Principal payments on capital debt	(164,553)	(75,918)
Interest payments on capital debt	(94,202)	(82,096)
Federal subsidies for Build America Bonds interest	3,696	7,413
Payments for bond refunding and related costs	(791)	(526)
Purchases of capital assets	(677,883)	(658,839)
Proceeds from sales of capital assets	28,996	1,329
Net Cash Used in Capital and Related Financing Activities	**(597,222)**	**(592,686)**

FINANCIAL STATEMENTS
CONSOLIDATED STATEMENT OF CASH FLOWS, CONTINUED

(in thousands)	Year Ended June 30, 2019	2018
Cash Flows from Investing Activities		
Interest and dividends on investments, net	52,846	51,985
Proceeds from sales and maturities of investments	6,172,854	5,477,448
Purchases of investments	(5,841,764)	(5,119,195)
Net (increase) decrease in unexpended capital debt proceeds	(8,016)	15,658
Net decrease (increase) in cash equivalents from noncurrent investments	60,971	(126,745)
Net (decrease) increase in deposits of affiliates and other	(25,554)	154
Net Cash Provided by Investing Activities	**411,337**	**299,305**
Net Increase in Cash and Cash Equivalents	263,914	28,238
Cash and Cash Equivalents, Beginning of Year	133,365	105,127
Cash and Cash Equivalents, End of Year	**$ 397,279**	**$ 133,365**
Reconciliation of Operating Loss to Net Cash Used in Operating Activities:		
Operating loss	$ (1,035,171)	$ (1,092,548)
Adjustments to reconcile operating loss to net cash used in operating activities:		
Depreciation expense	567,857	568,707
Changes in assets and liabilities:		
Accounts receivable, net	(35,743)	(21,468)
Prepaid expenses and other assets	(26,249)	(65,680)
Accounts payable	4,052	(32,228)
Accrued compensation and other	24,027	6,106
Unearned revenue	5,539	23,502
Deposits of affiliates and others	2,078	
Insurance and benefits reserves	(3,250)	21,127
Obligations for defined benefit pension plan, net	905	(7,259)
Obligations for postemployment benefits	(189,685)	105,413
Deposits of affiliates and other	32,240	20,345
Changes in deferred outflows	12,762	(43,176)
Changes in deferred inflows	322,728	106,077
Net Cash Used in Operating Activities	$ (317,910)	$ (411,082)

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
JUNE 30, 2019 AND 2018

NOTE 1—ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Basis of Presentation: The University of Michigan (the "University") is a state-supported institution with an enrollment of over 63,700 students on its three campuses. The financial statements include the individual schools, colleges and departments, the University of Michigan Health System ("UMHS"), Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives), 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, currently consisting of Metropolitan Health Corporation) and Veritas Insurance Corporation (a wholly-owned captive insurance company). While the University is a political subdivision of the state of Michigan, it is not a component unit of the State in accordance with Governmental Accounting Standards Board ("GASB") Statement No. 14, *The Financial Reporting Entity*. The University is classified as a state instrumentality under Internal Revenue Code Section 115 and a charitable organization under Internal Revenue Code Section 501(c)(3), and is therefore exempt from federal income taxes. Certain activities of the University may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514.

The University reports as a special purpose government entity engaged primarily in business type activities, as defined by GASB, on the accrual basis. Business type activities are those that are financed in whole or in part by fees charged to external parties for goods or services.

The financial statements of all controlled organizations are included in the University's financial statements; affiliated organizations that are not controlled by, and not dependent on the University, such as booster and alumni organizations, are not included.

Net position is categorized as:

- Net investment in capital assets: 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 subject to externally imposed stipulations that it be maintained permanently. Such net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.

  Expendable – Net position subject to externally imposed stipulations that can be fulfilled by actions of the University pursuant to those stipulations or that expire by the passage of time. Such net position includes net appreciation of the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently.

- Unrestricted: Net position not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. Substantially all unrestricted net position is designated for various academic programs, research initiatives and capital projects.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

Summary of Significant Accounting Policies: For purposes of the statement of cash flows, the University considers all highly liquid investments purchased with a maturity of three months or less, to be cash equivalents. Cash equivalents representing assets of the University's endowment, life income and other investments are included in noncurrent investments as these funds are not used for operating purposes.

Investments are reported in four categories in the statement of net position. Investments reported as endowment, life income and other investments are those funds invested in portfolios that are considered by management to be of a long duration. Investments for student loan and capital activities are those funds that are intended to be used for these specific activities. All other investments are reported as investments for operating activities.

GASB defines fair value and establishes a framework for measuring fair value that includes a three tiered hierarchy of valuation inputs, placing a priority on those which are observable in the market. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the University's own assumptions about how market participants would value an asset or liability based on the best information available. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. The three levels of inputs, of which the first two are considered observable and the last unobservable, are as follows:

- Level 1 – Quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date
- Level 2 – Other significant observable inputs, either direct or indirect, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable; or market corroborated inputs
- Level 3 – Unobservable inputs

GASB allows for the use of net asset value ("NAV") as a practical expedient to determine the fair value of nonmarketable investments if the NAV is calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Investments that use NAV in determining fair value are disclosed separately from the valuation hierarchy as presented in Note 2.

Investments in marketable securities are carried at fair value, as established by the major securities markets. Purchases and sales of investments are accounted for on the trade date basis. Investment income is recorded on the accrual basis. Realized and unrealized gains and losses are reported in investment income.

Investments in nonmarketable limited partnerships are carried at fair value, which is generally established using the NAV provided by the management of the investment partnerships at June 30, 2019 and 2018. The University may also adjust the fair value of these investments based on market conditions, specific redemption terms and restrictions, risk considerations and other factors. As these investments are not readily marketable, the estimated value is subject to uncertainty, and therefore, may differ from the value that would have been used had a ready market for the investments existed.

Investments denominated in foreign currencies are translated into U.S. dollar equivalents using year end spot foreign currency exchange rates. Purchases and sales of investments denominated in foreign currencies and related income are translated at spot exchange rates on the transaction dates.

Derivative instruments such as financial futures, forward foreign exchange contracts and interest rate swaps held in investment portfolios, are recorded on the contract date and are carried at fair value using listed price quotations or amounts that approximate fair value. To facilitate trading in financial futures, the University is required to post cash or securities to satisfy margin requirements of the exchange where such futures contracts are listed. The University monitors the required amount of cash and securities on deposit for financial futures transactions and withdraws or deposits cash or securities as necessary.

Accounts receivable are recorded net of an allowance for uncollectible accounts receivable. The allowance is based on management's judgment of potential uncollectible amounts, which includes such factors as historical experience and type of receivable.

The University receives pledges and bequests of financial support from corporations, foundations and individuals. Revenue is recognized when a pledge representing an unconditional promise to give is received and all eligibility requirements, including time requirements, have been met. In the absence of such a promise, revenue is recognized when the gift is received. Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, and are not recorded as assets until the related gift is received.

Unconditional promises to give that are expected to be collected in future years are recorded at the present value of the estimated future cash flows. The discounts on these amounts are computed using risk-free interest rates applicable to the years in which the promises are made, commensurate with expected future payments. An allowance for uncollectible pledges receivable is provided based on management's judgment of potential uncollectible amounts and includes such factors as prior collection history, type of gift and nature of fundraising.

Capital assets are recorded at cost or, if donated, at acquisition value at the date of donation. Depreciation of capital assets is provided on a straight-line method over the estimated useful lives of the respective assets, which generally range from three to fifty years. The University does not capitalize works of art or historical treasures that are held for exhibition, education, research or public service. These collections are neither disposed of for financial gain nor encumbered in any way. Accordingly, such collections are not recognized or capitalized for financial statement purposes.

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 plan for Metropolitan Health Corporation ("Metro Health").

Unearned revenue consists primarily of cash received from grant and contract sponsors which has not yet been earned under the terms of the agreement. Unearned revenue also includes amounts received in advance of an event, such as student tuition and advance ticket sales related to future fiscal years.

Deposits of affiliates and others represents cash and invested funds held by the University as a result of agency relationships with various groups. Noncurrent deposits of affiliates represents the portion of endowment and similar funds held by the University on behalf of others.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

The University 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. All life income fund assets, including those held in trust, are recorded at fair value. The present value of estimated future payments due to life income beneficiaries is recorded as a liability.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's obligations for postemployment benefits, Metro Health's defined benefit pension plan and irrevocable split-interest agreements.

For donor restricted endowments, the Uniform Prudent Management of Institutional Funds Act, as adopted in Michigan, permits the Board of Regents to appropriate amounts for endowment spending rule distributions as is considered prudent. The University's policy is to retain net realized and unrealized appreciation with the endowment after spending rule distributions. Net appreciation of permanent endowment funds, which totaled $2,144,532,000 and $2,067,392,000 at June 30, 2019 and 2018, respectively, is recorded in restricted expendable net position. The University's endowment spending rule is further discussed in Note 2.

Student tuition and residence fees are presented net of scholarships and fellowships applied to student accounts, while stipends and other payments made directly to students are presented as scholarship and fellowship expenses.

Patient care revenues are reported net of contractual allowances and bad debt expenses. Contractual allowances are estimated based on agreements with third-party payers that provide payments for patient care services at amounts different from established rates. These allowances are subject to the laws and regulations governing the federal and state programs and post-payment audits, and adjusted in future periods as final settlements are determined. Patient care services are primarily provided through the University's health system, which includes University Health Service, which offers health care services to students, faculty and staff, and Dental Faculty Associates, which offers dental care services performed by faculty dentists.

Patient care services are provided to patients who meet certain criteria under the University's charity care policies without charge or at amounts less than its established rates. Accordingly, charity care is not reported as revenue in the accompanying statement of revenues, expenses and changes in net position. Charges forgone for charity care services totaled $78,370,000 and $77,259,000 in 2019 and 2018, respectively.

Other auxiliary enterprise revenues primarily represent revenues generated by intercollegiate athletics, parking, student unions and student publications.

The University's policy for defining operating activities as reported on the statement of revenues, expenses and changes in net position are those that generally result from exchange transactions such as payments received for providing services and payments made for services or goods received. Nearly all of the University's expenses result from exchange transactions.

Certain significant revenue streams relied upon for operations result from nonexchange transactions and are recorded as nonoperating revenues including state appropriations, federal Pell grants, gifts and investment income.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. The most significant areas that require management estimates relate to self-insurance and benefits obligations.

NOTE 2—CASH AND INVESTMENTS

Summary: The University maintains centralized management for substantially all of its cash and investments.

Working capital of individual University units is primarily invested in the University Investment Pool ("UIP"). Together with the University's short-term insurance and other benefits reserves, the UIP is invested in the Daily and Monthly Portfolios, which are principally invested in investment-grade money market securities, U.S. government and other fixed income securities, and absolute return strategies.

The University collectively invests substantially all of the assets of its endowment funds along with a portion of its insurance and benefits reserves, charitable remainder trusts and gift annuity program in the Long Term Portfolio. The longer investment horizon of the Long Term Portfolio allows for an equity-oriented strategy to achieve higher expected returns over time, and permits the use of less liquid alternative investments, providing for equity diversification beyond the stock markets. The Long Term Portfolio includes investments in domestic and non-U.S. stocks and bonds, commingled funds and limited partnerships consisting of venture capital, private equity, real estate, natural resources and absolute return strategies.

The University also separately invests certain endowments and charitable remainder trusts, unexpended bond proceeds and other funds with investment restrictions outside of the Daily, Monthly and Long Term Portfolios.

Authorizations: The University's investment policies are governed and authorized by University Bylaws and the Board of Regents. The approved asset allocation policy for the Long Term Portfolio sets general targets for both equities and fixed income securities. Since diversification is a fundamental risk management strategy, the Long Term Portfolio is broadly diversified within these general categories.

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 fund shares. 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. Distributions are also made from the UIP based on the 90-day U.S. Treasury Bill rate. The University's costs to administer and grow the University Endowment Fund and UIP are funded by investment returns.

Cash and Cash Equivalents and Unexpended Bond Proceeds: Cash and cash equivalents, which totaled $397,279,000 and $133,365,000 at June 30, 2019 and 2018, respectively, represent cash and short-term money market investments in mutual funds, overnight collective funds managed by the University's custodian or short-term highly liquid investments registered as securities and held by the University or its agents in the University's name. Of its cash and cash equivalents, the University had actual cash balances in its bank accounts in excess of Federal Deposit Insurance Corporation limits in the amount of $14,121,000 and $42,720,000 at June 30, 2019 and 2018, respectively. The University does not require its deposits to be collateralized or insured.

Unexpended bond proceeds, which totaled $90,813,000 and $82,797,000 at June 30, 2019 and 2018, respectively, represent short-term money market investments in mutual funds. These amounts are used solely for the reimbursement of qualifying expenditures for construction projects associated with certain outstanding general revenue bonds issued by the University.

Cash and cash equivalents and unexpended bond proceeds include certain securities that are subject to the leveling requirements defined by GASB. Level 1 securities, which primarily consist of money market funds and U.S. government securities, totaled $278,275,000 and $132,042,000 at June 30, 2019 and 2018, respectively. Level 2 securities, which primarily consist of U.S. agencies, totaled $36,000,000 and $34,100,000 at June 30, 2019 and 2018, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2—CASH AND INVESTMENTS, CONTINUED

Investments: At June 30, 2019 and 2018, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows:

(in thousands)	2019	2018
Cash equivalents, noncurrent	$ 167,876	$ 229,067
Equity securities	1,222,061	1,238,818
Fixed income securities	1,361,575	1,826,821
Commingled funds	3,295,746	3,101,671
Nonmarketable alternative investments	8,339,202	7,608,059
Other investments	(1,046)	8,845
	$ 14,385,414	$ 14,013,281

At June 30, 2019 and 2018, the fair value of the University's investments based on the inputs used to value them is summarized as follows:

2019					
(in thousands)	Level 1	Level 2	Level 3	NAV	Total Fair Value
Cash equivalents, noncurrent	$ 167,876	-	-	-	$ 167,876
Equity securities:					
Domestic	314,972		$ 46,539		361,511
Foreign	859,552		998		860,550
	1,174,524	-	47,537	-	1,222,061
Fixed income securities:					
U.S. Treasury	735,365				735,365
U.S. government agency		$ 27,355			27,355
Corporate and other		586,024	12,831		598,855
	735,365	613,379	12,831	-	1,361,575
Commingled funds:					
Absolute return				$ 2,282,226	2,282,226
Domestic equities	162			423,668	423,830
Global equities	3			569,546	569,549
U.S. fixed income	3,164				3,164
Other	16,977				16,977
	20,306	-	-	3,275,440	3,295,746
Nonmarketable alternative investments:					
Venture capital				2,249,481	2,249,481
Absolute return				1,885,870	1,885,870
Private equity			267,327	1,354,169	1,621,496
Real estate			10,993	1,265,848	1,276,841
Natural resources			204,555	1,100,959	1,305,514
	-	-	482,875	7,856,327	8,339,202
Other investments	(3,145)	(7,184)	9,283	-	(1,046)
	$ 2,094,926	$ 606,195	$ 552,526	$ 11,131,767	$ 14,385,414

2018					
(in thousands)	Level 1	Level 2	Level 3	NAV	Total Fair Value
Cash equivalents, noncurrent	$ 229,067	-	-	-	$ 229,067
Equity securities:					
Domestic	401,755		$ 34,971		436,726
Foreign	801,506		586		802,092
	1,203,261	-	35,557	-	1,238,818
Fixed income securities:					
U.S. Treasury	752,529				752,529
U.S. government agency		$ 116,085			116,085
Corporate and other		955,166	3,041		958,207
	752,529	1,071,251	3,041	-	1,826,821
Commingled funds:					
Absolute return				$ 2,006,037	2,006,037
Domestic equities	17,089			263,389	280,478
Global equities	9,495			758,608	768,103
U.S. fixed income	9,453			33,589	43,042
Other	4,011				4,011
	40,048	-	-	3,061,623	3,101,671
Nonmarketable alternative investments:					
Venture capital				1,771,258	1,771,258
Absolute return				1,636,355	1,636,355
Private equity			343,688	1,504,786	1,848,474
Real estate			9,225	1,104,080	1,113,305
Natural resources			224,151	1,014,516	1,238,667
	-	-	577,064	7,030,995	7,608,059
Other investments	(2,131)	966	10,010	-	8,845
	$ 2,222,774	$ 1,072,217	$ 625,672	$ 10,092,618	$ 14,013,281

Investments categorized as Level 1 are valued using prices quoted in active markets for those securities. Equity securities categorized as Level 3 represent investments in start-up or venture companies. Fixed income securities categorized as Level 2 represent investments valued using a matrix pricing technique, which values debt securities based on their relationship to a benchmark and the relative spread to that benchmark. Fixed income securities categorized as Level 3 represent debt investments with select venture funded University faculty start-ups as well as a note receivable associated with the sale of a portion of the University's nonmarketable alternative real estate investments at June 30, 2019. Nonmarketable alternative investments categorized as Level 3 primarily represent direct investments which are valued using models that rely on inputs which are unobservable in the market.

NOTE 2—CASH AND INVESTMENTS, CONTINUED

The University's investment strategy incorporates certain financial instruments that involve, to varying degrees, elements of market risk and credit risk in excess of amounts recorded in the financial statements. Market risk is the potential for changes in the value of financial instruments due to market changes, including interest and foreign exchange rate movements and fluctuations embodied in forwards, futures and commodity or security prices. Market risk is directly impacted by the volatility and liquidity of the markets in which the underlying assets are traded. Credit risk is the possibility that a loss may occur due to the failure of a counterparty to perform according to the terms of the contract. The University's risk of loss in the event of a counterparty default is typically limited to the amounts recognized in the statement of net position and is not represented by the contract or notional amounts of the instruments.

Fixed income securities have inherent financial risks, including credit risk and interest rate risk. Credit risk for fixed income securities is the risk that the issuer will not fulfill its obligations. Nationally recognized statistical rating organizations ("NSROs"), such as S&P Global and Moody's, assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors. Fixed income securities considered investment grade are those rated at least BBB by S&P Global and Baa by Moody's. To manage credit risk, the University specifies minimum average and minimum absolute quality NSRO ratings for securities held pursuant to its management agreements.

The University minimizes concentration of credit risk, the risk of a large loss attributed to the magnitude of the investment in a single issuer of fixed income securities, by diversifying its fixed income issues and issuers and holding U.S. Treasury securities which are considered to have minimal credit risk. The University also manages this risk at the account level by limiting each fixed income manager's holding of any non-U.S. government issuer to 5 percent of the value of the investment account.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income securities. Effective duration, a commonly used measure of interest rate risk, incorporates a security's yield, coupon, final maturity, call features and other embedded options into one number expressed in years that indicates how price-sensitive a security or portfolio of securities is to changes in interest rates. The effective duration of a security or portfolio indicates the approximate percentage change in fair value expected for a one percent change in interest rates. The longer the duration, the more sensitive the security or portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income securities was 5.0 years at June 30, 2019 compared to 4.2 years at June 30, 2018. The University manages the effective duration of its fixed income securities at the account level, where fixed income managers generally may not deviate from the duration of their respective benchmarks by more than 25 percent. The Monthly Portfolio held positions in bond futures at June 30, 2019 and 2018, which are used to adjust the duration of cash equivalents and the fixed income portion of the portfolios.

The composition of fixed income securities at June 30, 2019 and 2018, along with credit quality and effective duration measures, is summarized as follows:

2019

(in thousands)	U.S. Government	Investment Grade	Non-Investment Grade	Not Rated	Total	Duration (in years)
U.S. Treasury	$ 724,727				$ 724,727	5.0
U.S. Treasury inflation protected	10,638				10,638	7.3
U.S. government agency	27,355				27,355	0.9
Mortgage backed		$ 13,346	$ 404	$ 6,514	20,264	0.8
Asset backed		34,271		377	34,648	0.7
Corporate and other		508,015	13,583	22,345	543,943	5.5
	$ 762,720	$ 555,632	$ 13,987	$ 29,236	$ 1,361,575	5.0

2018

(in thousands)	U.S. Government	Investment Grade	Non-Investment Grade	Not Rated	Total	Duration (in years)
U.S. Treasury	$ 527,662				$ 527,662	8.7
U.S. Treasury inflation protected	224,867				224,867	2.2
U.S. government agency	116,085				116,085	0.4
Mortgage backed		$ 82,258	$ 2,930	$ 22,634	107,822	0.6
Asset backed		68,336		2,210	70,546	0.7
Corporate and other		753,876	16,841	9,122	779,839	3.2
	$ 868,614	$ 904,470	$ 19,771	$ 33,966	$ 1,826,821	4.2

Of the University's fixed income securities, 97 percent were rated investment grade or better at both June 30, 2019 and 2018, and 63 percent and 59 percent of these securities consisted of either U.S. treasury and government agencies or non-U.S. government securities rated AAA/Aaa at June 30, 2019 and 2018, respectively.

Commingled (pooled) funds include Securities and Exchange Commission regulated mutual funds and externally managed funds, limited partnerships and corporate structures which are generally unrated and unregulated. Certain commingled funds may use derivatives, short positions and leverage as part of their investment strategy. These investments are structured to limit the University's risk exposure to the amount of invested capital.

Nonmarketable alternative investments consist of limited partnerships and similar vehicles involving an advance commitment of capital called by the general partner as needed and distributions of capital and return on invested capital as underlying strategies are concluded during the life of the partnership. There is not an active secondary market for these alternative investments, which are generally unrated and unregulated, and the liquidity of these investments is dependent on actions taken by the general partner. The University's limited partnerships are diversified in terms of manager selection, industry and geographic focus. At June 30, 2019 and 2018, no individual partnership investment represented 5 percent or more of total investments.

NOTE 2—CASH AND INVESTMENTS, CONTINUED

Absolute return strategies in the commingled funds and nonmarketable alternative investments classifications include long/short stock programs, merger arbitrage, intra-capital structure arbitrage and distressed debt investments. The goal of absolute return strategies is to provide, in aggregate, a return that is consistently positive and uncorrelated with the overall market.

The University's investments in commingled funds and nonmarketable alternative investments are contractual agreements that may limit the ability to initiate redemptions due to notice periods, lock-ups and gates. Additional information about current redemption terms and outstanding commitments at June 30, 2019 is summarized as follows (amounts in thousands):

	Fair Value	Remaining Life	Outstanding Commitments	Redemption Terms	Redemption Notice
Commingled funds	$ 3,295,746	N/A		Daily, monthly, quarterly and annually, with varying notice periods	Lock-up provisions range from none to 3 years
Nonmarketable alternative investments	$ 8,339,202	1-12 years	$ 6,089,675	Ineligible for redemption	N/A

Commingled funds have liquidity (redemption) provisions, which enable the University to make full or partial withdrawals with notice, subject to restrictions on the timing and amount. Of the University's commingled funds at June 30, 2019 and 2018, approximately 75 percent and 79 percent are redeemable within one year, with 58 percent and 63 percent redeemable within 90 days under normal market conditions. The remaining amounts are redeemable beyond one year, with redemption of certain funds dependent on disposition of the underlying assets. The University's committed but unpaid obligation to nonmarketable alternative investments is further discussed in Note 14.

The University participates in non-U.S. developed and emerging markets through commingled funds invested in non-U.S./global equities and absolute return strategies. Although all of these funds are reported in U.S. dollars, price changes of the underlying securities in local markets as well as changes to the value of local currencies relative to the U.S. dollar are embedded in investment returns. In addition, a portion of the University's equity securities and nonmarketable alternative investments are denominated in foreign currencies, which must be settled in local (non-U.S.) currencies.

Foreign exchange risk is the risk that investments denominated in foreign currencies may lose value due to adverse fluctuations in the value of the U.S. dollar relative to foreign currencies. Forward foreign currency contracts are typically used to manage the risks related to fluctuations in currency exchange rates between the time of purchase or sale and the actual settlement of foreign securities. Various investment managers acting for the University use forward foreign exchange contracts in risk-based transactions to carry out their portfolio strategies and are subject to agreements that provide minimum diversification and maximum exposure limits by country and currency.

The value of the University's non-U.S. dollar holdings, net of the value of the outstanding forward foreign exchange contracts, totaled $1,726,091,000 or 12 percent of total investments at June 30, 2019, and $1,766,714,000 or 13 percent of total investments at June 30, 2018, and are summarized as follows:

(in thousands)	2019	2018
Euro	$ 805,536	$ 983,971
British pound sterling	289,940	252,537
Japanese yen	232,252	233,049
Swedish krona	111,224	78,464
Canadian dollar	83,105	79,368
Swiss franc	68,733	35,564
Norwegian krone	39,071	49,760
Other	96,230	54,001
	$ 1,726,091	$ 1,766,714

The Long Term Portfolio and the Monthly Portfolio participate in a short-term, fully collateralized, securities lending program administered by the University's master custodian. Together, the Portfolios had $64,548,000 and $79,224,000 in securities loans outstanding at June 30, 2019 and 2018, respectively. At loan inception, an approved borrower must deliver collateral of cash, securities or letters of credit to the University's lending agent equal to 102 percent of fair value for domestic securities and 105 percent for foreign securities. Collateral positions are monitored daily to ensure that borrowed securities are never less than 100 percent collateralized. At June 30, 2019, collateral of $67,327,000 (104 percent of securities on loan) includes invested cash of $29,485,000 and U.S. government securities of $37,842,000, while at June 30, 2018, collateral of $82,085,000 (104 percent of securities on loan) includes invested cash of $29,727,000 and U.S. government securities of $52,358,000.

Cash collateral held by the University's lending agent, along with the offsetting liability to return the collateral at loan termination, are recorded in the statement of net position. Neither the University nor its securities lending agent has the ability to pledge or sell securities received as collateral unless a borrower defaults. Securities loans may be terminated upon notice by either the University or the borrower.

NOTE 3—ACCOUNTS RECEIVABLE

The composition of accounts receivable at June 30, 2019 and 2018 is summarized as follows:

(in thousands)	2019	2018
Patient care	$ 539,653	$ 507,827
Sponsored programs	172,681	164,264
State appropriations, educational and capital	67,353	67,230
Student accounts	32,715	27,457
Other	36,975	32,219
	849,377	798,997
Less allowance for uncollectible accounts receivable:		
Patient care	125,731	123,370
All other	9,025	8,816
	$ 714,621	$ 666,811

NOTE 4—NOTES AND PLEDGES RECEIVABLE

The composition of notes and pledges receivable at June 30, 2019 and 2018 is summarized as follows:

(in thousands)	2019	2018
Notes:		
Federal student loan programs	$ 74,153	$ 85,918
University student loan funds	15,691	16,664
Other	1,396	1,390
	91,240	103,972
Less allowance for uncollectible notes	3,134	3,134
Total notes receivable, net	88,106	100,838
Gift pledges:		
Capital	138,983	165,342
Operations	167,350	164,920
	306,333	330,262
Less:		
Allowance for uncollectible pledges	8,137	9,523
Unamortized discount to present value	4,840	4,942
Total pledges receivable, net	293,356	315,797
Total notes and pledges receivable, net	381,462	416,635
Less current portion	80,035	79,765
	$ 301,427	$ 336,870

The principal repayment and interest rate terms of federal and University loans vary considerably. The allowance for uncollectible notes only applies to University funded notes and the University portion of federal student loans, as the University is not obligated to fund the federal portion of uncollected student loans. Federal loan programs are funded principally with federal advances to the University under the Perkins and various health professions loan programs.

Payments on pledges receivable at June 30, 2019 are expected to be received in the following years ended June 30 (in thousands):

2020	$ 63,261
2021	57,970
2022	43,855
2023	35,386
2024	46,680
2025 and after	59,181
	$ 306,333

Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling $156,957,000 and $168,926,000 at June 30, 2019 and 2018, respectively, are not recognized as assets in the accompanying financial statements. In addition, bequest intentions and other conditional promises are not recognized as assets until the specified conditions are met due to uncertainties with regard to their realizability and valuation.

NOTE 5—CAPITAL ASSETS

Capital assets activity for the years ended June 30, 2019 and 2018 is summarized as follows:

2019

(in thousands)	Beginning Balance	Additions	Retirements	Ending Balance
Land	$ 129,376	$ 24,533	$ 599	$ 153,310
Land improvements	143,738	18,026	1,463	160,301
Infrastructure	262,207	2,550		264,757
Buildings	9,178,875	265,783	31,782	9,412,876
Construction in progress	301,434	111,773		413,207
Equipment	2,098,370	228,688	84,565	2,242,493
Library materials	646,376	28,115		674,491
	12,760,376	679,468	118,409	13,321,435
Less accumulated depreciation	6,639,379	567,857	112,770	7,094,466
	$ 6,120,997	$ 111,611	$ 5,639	$ 6,226,969

2018

(in thousands)	Beginning Balance	Additions	Retirements	Ending Balance
Land	$ 126,617	$ 2,952	$ 193	$ 129,376
Land improvements	137,981	7,275	1,518	143,738
Infrastructure	258,449	4,149	391	262,207
Buildings	8,618,377	620,725	60,227	9,178,875
Construction in progress	476,124	(174,690)		301,434
Equipment	2,050,848	163,428	115,906	2,098,370
Library materials	620,200	26,176		646,376
	12,288,596	650,015	178,235	12,760,376
Less accumulated depreciation	6,243,154	568,707	172,482	6,639,379
	$ 6,045,442	$ 81,308	$ 5,753	$ 6,120,997

The increase in construction in progress of $111,773,000 in 2019 represents the amount of capital expenditures for new projects of $559,735,000 net of assets placed in service of $447,962,000. The decrease in construction in progress of $174,690,000 in 2018 represents the amount of capital expenditures for new projects of $527,908,000 net of assets placed in service of $702,598,000.

During 2018, the University recognized $24,698,000 of additional depreciation expense in connection with the impairment of certain components of Metro Health's hospital facilities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 6—LONG-TERM DEBT

Long-term debt at June 30, 2019 and 2018 is summarized as follows:

(in thousands)	2019	2018
Commercial paper:		
Tax-exempt, variable rate (1.57%)*	$ 142,990	$ 155,595
Taxable, variable rate (2.30%)*	2,250	2,865
General revenue bonds:		
Series 2019A, 5.00% through 2036	148,330	
unamortized premium	26,936	
Series 2019B, taxable, 2.535% to 3.416% through 2029	16,755	
Series 2019C, 4.00% through 2049	61,725	
unamortized premium	5,949	
Series 2018A, 4.00% to 5.00% through 2048	135,130	137,510
unamortized premium	17,988	19,055
Series 2017A, 4.00% to 5.00% through 2047	447,410	456,265
unamortized premium	72,310	78,186
Series 2015, 4.00% to 5.00% through 2046	294,850	302,415
unamortized premium	44,612	47,640
Series 2014A, 4.25% to 5.00% through 2044	74,250	76,060
Series 2014B, 2.071% to 3.516% through 2024	4,820	5,730
unamortized premium	6,056	6,503
Series 2013A, 2.50% to 5.00% through 2029	43,575	44,975
unamortized premium	1,424	1,649
Series 2012A, variable rate (1.78%)* through 2036	50,000	50,000
Series 2012B, variable rate (1.86%)* through 2042	65,000	65,000
Series 2012D-1, variable rate (1.80%)* through 2025 with partial swap to fixed through 2025	56,635	60,220
Series 2012D-2, variable rate (1.80%)* through 2030 with partial swap to fixed through 2026	58,315	62,725
Series 2012E**, variable rate (2.17%)* through 2033	94,525	95,020
Series 2010A, taxable Build America Bonds, 4.926% to 5.593% through 2040	163,110	163,110
Series 2010C, 3.75% to 5.00% through 2027	38,330	50,485
unamortized premium	2,937	3,647
Series 2010D, taxable Build America Bonds, 3.356% to 5.333% through 2041	157,860	165,790
Series 2009A, 3.00% to 5.00% through 2019		4,165
unamortized premium		2,769
Series 2009B, variable rate (1.52%)* through 2039	118,710	118,710
Series 2009D, taxable Build America Bonds, 5.155% to 6.172% through 2019		89,815
Series 2008A, variable rate (1.93%)* through 2038	57,085	57,085
Series 2008B, variable rate (1.82%)* through 2028 with swap to fixed through 2026	65,070	70,845
Other	91	174
	2,475,028	2,394,008
Less:		
Commercial paper and current portion of bonds payable	232,095	237,371
Long-term bonds payable subject to remarketing, net	133,616	195,552
	$ 2,109,317	$ 1,961,085

* Denotes variable rate at June 30, 2019

** Denotes variable rate bonds not subject to remarketing

Certain variable rate bonds have remarketing features which allow bondholders to put debt back to the University. Accordingly, variable rate bonds payable is classified as current unless supported by liquidity agreements, such as lines of credit or standby bond purchase agreements, which can refinance the debt on a long-term basis. The classification of the University's variable rate bonds payable at June 30, 2019 and 2018 is summarized as follows:

(in thousands)	2019	2018
Variable rate bonds payable subject to remarketing	$ 470,815	$ 484,585
Less:		
Current principal maturities	14,365	13,770
Long-term liquidity agreements:		
Unsecured line of credit	275,263	275,263
Standby bond purchase agreements	47,571	
Long-term bonds payable subject to remarketing, net	$ 133,616	$ 195,552

The University's available lines of credit were entirely unused at both June 30, 2019 and 2018.

In connection with certain issues of variable rate debt, the University has entered into floating-to-fixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value, significant terms and other information about the University's interest rate swaps is discussed in Note 7.

Long-term debt activity for the years ended June 30, 2019 and 2018 is summarized as follows:

2019 (in thousands)	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 158,460		$ 13,220	$ 145,240
Bonds	2,235,374	$ 260,034	165,711	2,329,697
Other	174		83	91
	$ 2,394,008	$ 260,034	$ 179,014	$ 2,475,028

2018 (in thousands)	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	$ 161,045	$ 6,600	$ 9,185	$ 158,460
Bonds	2,154,723	156,728	76,077	2,235,374
Other	1,747		1,573	174
	$ 2,317,515	$ 163,328	$ 86,835	$ 2,394,008

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 3.0 percent and 2.9 percent in 2019 and 2018, respectively, including federal subsidies for interest on taxable Build America Bonds.

The University utilizes commercial paper to provide interim financing for its capital improvement program. The Board of Regents has authorized the issuance of up to $300,000,000 in commercial paper backed by a general revenue pledge. Outstanding commercial paper debt is converted to long-term debt financing, as appropriate, within the normal course of business.

NOTE 6—LONG-TERM DEBT, CONTINUED

During 2019, the University issued $226,810,000 of General Revenue Bonds with a net original issue premium of $33,224,000, which included $148,330,000 of fixed rate, tax-exempt bonds Series 2019A, $16,755,000 of fixed rate, taxable bonds Series 2019B and $61,725,000 of fixed rate, tax-exempt bonds Series 2019C. Total bond proceeds of $260,034,000 were utilized to refund existing bonds of $83,985,000 and to provide $175,245,000 for capital projects and $804,000 for debt issuance costs.

The refunded bonds represent the remaining portion of General Revenue Bonds Series 2009D, which had an average interest rate of 5.98 percent and a final maturity date of April 1, 2030. As a result of the refunding, the University reduced its aggregate debt service payments over the next 11 years by $10,769,000, resulting in an economic gain with present value savings of $9,493,000.

During 2018, the University issued $137,510,000 of fixed rate General Revenue Bonds Series 2018A with a net original issue premium of $19,218,000. Total bond proceeds of $156,728,000 were utilized to provide $156,200,000 for capital projects and $528,000 for debt issuance costs.

Deferred outflows associated with the University's refunding activity totaled $10,481,000 and $14,095,000 at June 30, 2019 and 2018, respectively, which will be amortized into interest expense over the remaining life of the refunded bonds.

Debt obligations are generally callable by the University and mature at various dates through fiscal 2049. Principal maturities, including interest on debt obligations, based on scheduled bond maturities for the next five years and in subsequent five-year periods are as follows:

(in thousands)	Principal	Interest*	Total
2020	$ 217,551	$ 86,047	$ 303,598
2021	76,250	83,700	159,950
2022	79,725	81,303	161,028
2023	81,010	78,325	159,335
2024	87,225	75,214	162,439
2025-2029	468,850	321,451	790,301
2030-2034	465,690	223,482	689,172
2035-2039	490,670	130,926	621,596
2040-2044	233,755	49,834	283,589
2045-2049	96,090	10,367	106,457
Total payments	2,296,816	$ 1,140,649	$ 3,437,465
Plus unamortized premiums	178,212		
	$ 2,475,028		

* Interest on variable rate debt is estimated based on rates in effect at June 30, 2019; amounts do not reflect federal subsidies to be received for Build America Bonds interest

If all variable rate bonds were put back to the University and existing unsecured lines of credit were not extended upon their current expiration dates, the total principal payments due in 2020 would increase to $351,167,000, total principal payments due in 2021 would increase to $259,752,000, total principal payments due in 2022 would increase to $112,582,000, total principal payments due in 2023 would increase to $93,848,000 and total principal payments due in 2024 would increase to $89,379,000. Accordingly, principal payments due in subsequent years would be reduced to $396,813,000 in 2025 through 2029, $364,240,000 in 2030 through 2034, $331,065,000 in 2035 through 2039 and $201,880,000 in 2040 through 2044. Principal payments due in 2045 through 2049 would not change. There would not be a material impact on annual interest payments due to the low variable rate of interest on these bonds.

NOTE 7—DERIVATIVE INSTRUMENTS

Derivatives held by the University are recorded at fair value in the statement of net position. For hedging derivative instruments that are effective in significantly reducing an identified financial risk, the corresponding change in fair value is deferred and included in the statement of net position. For all other derivative instruments, changes in fair value are reported as net investment income (loss).

Derivative instruments held by the University at June 30, 2019 and 2018 are summarized as follows:

2019

(in thousands)	Notional Amount	Fair Value
Investment derivative instruments:		
Futures	$ 79,838	$ (3,145)
Foreign currency forwards:		
Chinese yuan	340,704	7,792
New Zealand dollar	181,678	4,568
Norwegian krone	168,849	(2,938)
Russian ruble	36,354	2,784
Euro	210,332	1,987
Japanese yen	14,948	(1,929)
All other currencies	1,079,010	(1,474)
	2,031,875	10,790
Other	1,834,929	(14,445)
	$ 3,946,642	$ (6,800)
Effective cash flow hedges:		
Floating-to-fixed interest rate swaps on debt	$ 138,900	$ (13,695)

2018

(in thousands)	Notional Amount	Fair Value
Investment derivative instruments:		
Futures	$ 183,096	$ (2,131)
Foreign currency forwards:		
Chinese yuan	332,924	10,829
Swedish krona	209,549	8,221
South African rand	58,800	(7,463)
Australian dollar	207,419	(7,647)
Turkish lire	59,214	(8,269)
Brazil real	123,133	(11,745)
All other currencies	1,573,663	20,467
	2,564,702	4,393
Other	2,939,567	(790)
	$ 5,687,365	$ 1,472
Effective cash flow hedges:		
Floating-to-fixed interest rate swaps on debt	$ 152,655	$ (12,212)

NOTE 7—DERIVATIVE INSTRUMENTS, CONTINUED

The University utilizes bond futures in its investment portfolios to adjust the duration of cash equivalents and fixed income securities, while foreign currency forward contracts are utilized to settle securities and transactions denominated in foreign currencies and manage foreign exchange risk. Other derivative instruments in the University's investment portfolios consist primarily of interest rate swaps, credit default swaps and total return swaps used to carry out investment and portfolio strategies.

In connection with certain issues of variable rate debt, the University has entered into floating-to-fixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value of these swaps generally represent the estimated amount that the University would pay to terminate the swap agreements at the statement of net position date, taking into account current interest rates and creditworthiness of the underlying counterparty. The valuation inputs used to determine the fair value of these instruments are considered Level 2, as they rely on observable inputs other than quoted market prices. The notional amount represents the underlying reference of the instrument and does not represent the amount of the University's settlement obligations.

At June 30, 2019 and 2018, the fair value of floating-to-fixed interest rate swaps associated with the University's variable rate debt is ($13,695,000) and ($12,212,000), respectively, and is included in the statement of net position as a component of deposits of affiliates and other. The deferred outflows for these effective cash flow hedges totaled $4,694,000 and $731,000 at June 30, 2019 and 2018, respectively.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the years ended June 30, 2019 and 2018 is summarized as follows:

(in thousands)	2019	2018
Investment derivative instruments:		
Investment portfolios:		
Futures	$ 22,332	$ 8,592
Foreign currency forwards	41,907	(58,308)
Other	(117,840)	1,098
	$ (53,601)	$ (48,618)
Floating-to-fixed interest rate swap on debt	$ -	$ 186
Effective cash flow hedges:		
Floating-to-fixed interest rate swaps on debt	$ (1,483)	$ 7,100

The University's interest rate swaps, along with their associated variable rate debt and significant terms, are summarized below.

The floating-to-fixed interest rate swap associated with the Series 2008B General Revenue Bonds has a notional amount of $48,355,000 and $54,130,000 at June 30, 2019 and 2018, respectively, and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 3.105 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, until the swap terminates in April 2026. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of ($3,884,000) and ($3,076,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 2012D-2 General Revenue Bonds has a notional amount of $34,030,000 and $38,430,000 at June 30, 2019 and 2018, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 3.229 percent and receives variable rate payments from the swap counterparty based on 68 percent of the One-Month USD LIBOR, until the swap terminates in December 2025. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of ($2,376,000) and ($2,010,000), respectively.

The first floating-to-fixed interest rate swap associated with the Series 2012D-1 General Revenue Bonds has a notional amount of $44,670,000 at both June 30, 2019 and 2018, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 4.705 percent and receives variable rate payments from the swap counterparty based on the floating Securities Industry and Financial Markets Association ("SIFMA") Municipal Index through the final maturity dates of the underlying bonds in December 2024. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of ($6,816,000) and ($6,234,000), respectively.

The second floating-to-fixed interest rate swap associated with the Series 2012D-1 General Revenue Bonds has a notional amount of $11,845,000 and $15,425,000 at June 30, 2019 and 2018, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 4.685 percent and receives variable rate payments based on the floating SIFMA Municipal Index through the final maturity dates of a portion of the underlying bonds in December 2021. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2019 and 2018 and has a fair value of ($619,000) and ($892,000), respectively.

Using rates in effect at June 30, 2019, the projected cash flows for the floating-to-fixed interest rate swaps deemed effective cash flow hedges, along with the debt service requirements of the associated variable rate debt, are summarized as follows:

	Variable Rate Bonds		Swap	Total
(in thousands)	Principal	Interest	Payments, Net	Payments
2020	$ 14,365	$ 3,144	$ 2,717	$ 20,226
2021	15,000	2,871	2,438	20,309
2022	15,645	2,599	2,157	20,401
2023	26,150	2,208	1,660	30,018
2024	27,320	1,728	1,022	30,070
2025-2029	79,405	3,209	426	83,040
2030	2,135	16		2,151
	$ 180,020	$ 15,775	$ 10,420	$ 206,215

By using derivative financial instruments to hedge exposures to changes in interest rates, the University is exposed to termination risk and basis risk. There is termination risk with floating-to-fixed interest rate swaps as the University or swap counterparty may terminate a swap if the other party fails to perform under the terms of the contract or its credit rating falls below investment grade. Termination risk is the risk that the associated variable rate debt no longer carries a synthetic fixed rate and if at the time of termination a swap has a negative fair value, the University is liable to the counterparty for payment equal to the swap's fair value. The University is also exposed to basis risk as a portion of the variable payments paid to the University by the counterparties are based on a percentage of LIBOR. Basis risk is the risk that changes in the relationship between SIFMA and LIBOR may impact the synthetic fixed rate of the variable rate debt. At June 30, 2019 and 2018, the University is not exposed to credit risk as the swaps have negative fair values.

The University is subject to collateral requirements with its counterparties on certain derivative instrument positions. To meet trading margin requirements for bond futures, the University had cash and U.S. government securities with a fair value of $10,227,000 and $15,306,000 at June 30, 2019 and 2018, respectively, on deposit with its futures broker as collateral.

NOTE 8—SELF-INSURANCE

The University is self-insured for medical malpractice, workers' compensation, directors' and officers' liability, property damage, auto liability and general liability through Veritas Insurance Corporation. The University is also self-insured for various employee benefits through internally maintained funds.

Claims and expenses are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Those losses include an estimate of claims that have been incurred but not reported and the future costs of handling claims. These liabilities are generally based on actuarial valuations and are reported at present value, discounted at a rate of 5 percent.

Changes in the total reported liability for insurance and benefits obligations for the years ended June 30, 2019 and 2018 are summarized as follows:

(in thousands)	2019	2018
Balance, beginning of year	$ 235,162	$ 214,035
Claims incurred and changes in estimates	745,730	694,199
Claim payments	(748,980)	(673,072)
Balance, end of year	231,912	235,162
Less current portion	104,235	98,159
	$ 127,677	$ 137,003

NOTE 9—PENSION PLAN

Metro Health has a noncontributory, single employer defined benefit pension plan, which covered substantially all employees prior to being frozen as of December 31, 2007. The plan generally provides benefits based on each employee's years of service and final average earnings, as defined, and does not provide any automatic or ad-hoc cost of living adjustments. The Metro Health Board of Directors has the authority to establish and amend benefit provisions of the plan.

The annual pension expense and net pension liability is actuarially determined using the entry age normal level percentage of pay method. Metro Health has elected to measure the net pension liability one year prior to the fiscal year end reporting date and amounts measured at June 30, 2018 and 2017 were determined based on an actuarial valuation at October 1, 2017 and 2016, respectively. There are no significant changes known which would impact the total net pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2018 and 2017 measurement dates, the number of plan participants consisted of the following:

	2018	2017
Active participants	574	612
Vested terminated participants	905	947
Retirees, beneficiaries and disabled participants	372	366
	1,851	1,925

Changes in the reported net pension liability for the years ended June 30, 2019 and 2018 are summarized as follows:

2019

(in thousands)	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 72,680	$ 76,503	$ (3,823)
Interest cost	4,930		4,930
Changes in assumptions	(273)		(273)
Differences between expected and actual plan experience	1,361		1,361
Benefit payments	(4,489)	(4,489)	-
Contributions from the employer		1,047	(1,047)
Net investment income:			
Expected investment earnings		5,234	(5,234)
Differences between expected and actual investment earnings		(1,168)	1,168
Balance, end of year	$ 74,209	$ 77,127	$ (2,918)

2018

(in thousands)	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 73,968	$ 70,532	$ 3,436
Interest cost	5,013		5,013
Changes in assumptions	(822)		(822)
Differences between expected and actual plan experience	(767)		(767)
Benefit payments	(4,712)	(4,712)	-
Contributions from the employer		2,171	(2,171)
Net investment income:			
Expected investment earnings		4,848	(4,848)
Differences between expected and actual investment earnings		3,664	(3,664)
Balance, end of year	$ 72,680	$ 76,503	$ (3,823)

The plan fiduciary net position as a percentage of the total pension liability was 104 percent and 105 percent at June 30, 2019 and 2018, respectively.

NOTE 9—PENSION PLAN, CONTINUED

Significant actuarial assumptions used at the June 30, 2018 and 2017 measurement dates are as follows:

	2018	2017
Discount rate	7.00%	7.00%
Inflation	2.00%	2.00%
Investment rate of return	7.00%	7.00%
Mortality table	RP-2014 Employee and Healthy Annuitant, Scale MP-2017	RP-2014 Employee and Healthy Annuitant, Scale MP-2016

Discount rates are based on the expected rate of return on pension plan investments. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the minimum contribution projection under provisions of ERISA and the Pension Protection Act of 2006, including MAP-21, for future years. Based on the stated assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the future benefit payments of the current plan members for all projection years. As a result, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments of 7.00 percent at both June 30, 2018 and 2017 was determined using the expected future rates of return for the target asset allocation of the portfolio. The target allocation and best estimate geometric rates of return by asset class are summarized as follows:

	2018		2017	
	Portfolio Allocation	Long-Term Expected Return	Portfolio Allocation	Long-Term Expected Return
U.S. large cap	25.0%	6.3%	25.0%	6.8%
U.S. mid cap	10.5%	7.1%	10.5%	7.6%
U.S. small cap	6.5%	7.8%	6.5%	8.3%
International developed	14.0%	5.2%	14.0%	5.6%
Emerging market	9.0%	5.1%	9.0%	5.6%
STRIPs	7.0%	4.3%	7.0%	4.5%
Corporate 10+ year	28.0%	5.0%	28.0%	4.8%

A one-percentage point change in the discount rate would impact the reported net pension liability at June 30, 2019 and 2018 as follows:

	2019		2018	
(in thousands)	1% Decrease	1% Increase	1% Decrease	1% Increase
Net pension liability	$ 8,313	$ (6,931)	$ 8,751	$ (7,252)

The components of pension income for the years ended June 30, 2019 and 2018 are summarized as follows:

(in thousands)	2019	2018
Interest cost	$ 4,930	$ 5,013
Expected investment earnings	(5,234)	(4,848)
Amortization of deferred outflows and deferred inflows	(7,857)	(9,582)
	$ (8,161)	$ (9,417)

Deferred outflows and deferred inflows related to the reported net pension liability at June 30, 2019 and 2018 are summarized as follows:

	2019		2018	
(in thousands)	Deferred Outflows	Deferred Inflows	Deferred Outflows	Deferred Inflows
Changes in assumptions		$ 330		$ 8,047
Differences between expected and actual plan experience	$ 789	161	$ 626	464
Differences between expected and actual investment earnings	934	2,724		3,720
	1,723	3,215	626	12,231
Contributions made after measurement date	1,244		1,047	
	$ 2,967	$ 3,215	$ 1,673	$ 12,231

Deferred outflows and deferred inflows related to changes in assumptions and differences between expected and actual experience will be recognized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants (in thousands):

2020	$ (638)
2021	(589)
2022	(499)
2023	234
	$ (1,492)

NOTE 9—PENSION PLAN, CONTINUED

The inputs used to determine the fair value of the plan's investments reported at June 30, 2019 and 2018 are summarized as follows:

2019

(in thousands)	Level 1	Level 2	NAV	Total Fair Value
Equity securities	$ 53,515			$ 53,515
Fixed income securities		$ 22,616		22,616
Nonmarketable alternative investments			$ 996	996
	$ 53,515	$ 22,616	$ 996	$ 77,127

2018

(in thousands)	Level 1	Level 2	NAV	Total Fair Value
Equity securities	$ 54,057			$ 54,057
Fixed income securities		$ 21,297		21,297
Nonmarketable alternative investments			$ 1,149	1,149
	$ 54,057	$ 21,297	$ 1,149	$ 76,503

NOTE 10—POSTEMPLOYMENT BENEFITS

The University provides retiree health and welfare benefits, primarily medical, prescription drug, dental and life insurance coverage, to eligible retirees and their eligible dependents. Substantially all full-time regular University employees may become eligible for these benefits if they reach retirement age while working for the University. For employees retiring on or after January 1, 1987, contributions toward health and welfare benefits are shared between the University and the retiree and can vary based on date of hire, date of retirement, age and coverage elections.

The University also provides income replacement benefits, retirement savings contributions and health and life insurance benefits to substantially all regular University employees that are enrolled in a University sponsored long-term disability plan and qualify, based on disability status while working for the University, to receive basic or expanded long-term disability benefits. Contributions toward the expanded long-term disability plan are shared between the University and employees and vary based on years of service, annual base salary and coverage elections. Contributions toward the basic long-term disability plan are paid entirely by the University.

These postemployment benefits are provided through single-employer plans administered by the University. The Executive Vice Presidents of the University have the authority to establish and amend benefit provisions of the plans.

Actuarial projections of benefits expense are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided and announced future changes at the time of each valuation and the historical pattern of sharing benefit costs between the employer and plan members to that point.

The University's reported liability for postemployment benefits obligations is calculated using the entry age normal level percent of pay method. The University has elected to measure the total postemployment liability one year prior to the fiscal year end reporting date and amounts measured at June 30, 2018 and 2017 were determined based on an actuarial valuation at January 1, 2018 and 2017, respectively. There are no significant changes known which would impact the total postemployment liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2018 and 2017 measurement dates, the number of plan participants consisted of the following:

2018

	Retiree Health and Welfare	Long-term Disability
Active employees	42,559	36,331
Retirees receiving benefits	10,092	
Surviving spouses	871	
Participants receiving disability benefits		578
	53,522	36,909

2017

	Retiree Health and Welfare	Long-term Disability
Active employees	40,757	35,020
Retirees receiving benefits	9,694	
Surviving spouses	862	
Participants receiving disability benefits		619
	51,313	35,639

NOTE 10—POSTEMPLOYMENT BENEFITS, CONTINUED

Changes in the reported total liability for postemployment benefits obligations for the years ended June 30, 2019 and 2018 are summarized as follows:

2019

(in thousands)	Retiree Health and Welfare	Long-term Disability	Total
Balance, beginning of year	$ 3,002,304	$ 301,436	$ 3,303,740
Service cost	112,698	29,235	141,933
Interest cost	110,559	11,241	121,800
Changes in assumptions	(379,778)	(3,537)	(383,315)
Differences between expected and actual plan experience	23,232	(5,697)	17,535
Benefit payments	(53,974)	(33,664)	(87,638)
Balance, end of year	2,815,041	299,014	3,114,055
Less current portion	56,815	30,897	87,712
	$ 2,758,226	$ 268,117	$ 3,026,343

2018

(in thousands)	Retiree Health and Welfare	Long-term Disability	Total
Balance, beginning of year	$ 2,930,656	$ 267,671	$ 3,198,327
Service cost	115,686	28,101	143,787
Interest cost	86,129	8,024	94,153
Changes in assumptions	(124,729)	16,855	(107,874)
Differences between expected and actual plan experience	43,472	9,249	52,721
Benefit payments	(48,910)	(28,464)	(77,374)
Balance, end of year	3,002,304	301,436	3,303,740
Less current portion	53,974	33,664	87,638
	$ 2,948,330	$ 267,772	$ 3,216,102

Since a portion of retiree medical services will be provided by the University's health system, the reported liability for postemployment benefits obligations is net of the related margin and fixed costs associated with providing those services which totaled $579,735,000 and $611,361,000 at June 30, 2019 and 2018, respectively.

The University's liability for postemployment benefits obligations at June 30, 2019 is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods. This subsidy would reduce the total postemployment benefits liability by approximately $295,000,000.

Assets used to fund postemployment benefits are not maintained in a separate legal trust. The University has no obligation to make contributions in advance of when insurance premiums or claims are due for payment and currently pays for postemployment benefits on a pay-as-you-go basis. The University's reported postemployment benefits obligations at June 30, 2019 and 2018 as a percentage of covered payroll of $4,013,983,000 and $3,792,553,000 was 78 percent and 87 percent, respectively.

Significant actuarial assumptions used at the June 30, 2018 and 2017 measurement dates are as follows:

	2018	2017
Discount rate*	3.87%	3.58%
Inflation rate	2.00%	2.00%
Immediate/ultimate administrative trend rate	0.0%/3.0%	0.0%/3.0%
Immediate/ultimate medical trend rate	6.5%/4.5%	6.5%/4.5%
Immediate/ultimate Rx trend rate	9.0%/4.5%	9.5%/4.5%
Increase in compensation rate	4.00%	4.00%
Mortality table**	RP-2014 White Collar Head Count Table, Scale MP-2017	RP-2014 White Collar Head Count Table, Scale MP-2016
Average future work life expectancy (years):		
Retiree health and welfare	9.14	9.17
Long-term disability	11.47	11.43

* Bond Buyer 20-year General Obligation Municipal Bond Index as of the last publication of the measurement period

** Based on the University's study of mortality experience from 2010-2014

A one-percentage point change in the discount rate and assumed health care cost trend rates would impact the reported total liability for postemployment benefits obligations at June 30, 2019 and 2018 as follows:

2019

(in thousands)	1% Decrease	1% Increase
Discount rate:		
Retiree health and welfare	$ 604,507	$ (467,375)
Long-term disability	$ 11,362	$ (11,012)
Health care trend rates:		
Retiree health and welfare	$ (511,949)	$ 688,288
Long-term disability	$ (12,311)	$ 12,540

2018

(in thousands)	1% Decrease	1% Increase
Discount rate:		
Retiree health and welfare	$ 677,895	$ (520,431)
Long-term disability	$ 11,211	$ (11,260)
Health care trend rates:		
Retiree health and welfare	$ (563,305)	$ 768,219
Long-term disability	$ (11,907)	$ 12,196

NOTE 10—POSTEMPLOYMENT BENEFITS, CONTINUED

The components of postemployment benefits expense for the years ended June 30, 2019 and 2018 are summarized as follows:

2019			
(in thousands)	Retiree Health and Welfare	Long-term Disability	Total
Service cost	$ 112,698	$ 29,235	$ 141,933
Interest cost	110,559	11,241	121,800
Amortization of deferred outflows and deferred inflows	(21,731)	3,135	(18,596)
	$ 201,526	$ 43,611	$ 245,137

2018			
(in thousands)	Retiree Health and Welfare	Long-term Disability	Total
Service cost	$ 115,686	$ 28,101	$ 143,787
Interest cost	86,129	8,024	94,153
Amortization of deferred outflows and deferred inflows	17,278	3,940	21,218
	$ 219,093	$ 40,065	$ 259,158

Deferred outflows and deferred inflows related to the reported total liability for postemployment benefits obligations at June 30, 2019 and 2018 are summarized as follows:

	2019		2018	
(in thousands)	Deferred Outflows	Deferred Inflows	Deferred Outflows	Deferred Inflows
Changes in assumptions	$ 189,425	$ 438,981	$ 217,407	$ 111,127
Differences between expected and actual plan experience	72,475	5,200	58,623	
	261,900	444,181	276,030	111,127
Benefit payments made after measurement date	87,712		87,638	
	$ 349,612	$ 444,181	$ 363,668	$ 111,127

Deferred outflows and deferred inflows related to changes in assumptions and the differences between expected and actual plan experience will be recognized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants (in thousands):

2020	$ (18,596)
2021	(18,596)
2022	(18,596)
2023	(18,596)
2024	(18,596)
2025 and beyond	(89,301)
	$ (182,281)

NOTE 11—RETIREMENT PLAN

The University has a defined contribution retirement plan for all qualified employees through TIAA and Fidelity Management Trust Company ("FMTC") mutual funds. All regular and supplemental instructional and primary staff are eligible to participate in the plan based upon age and service requirements. Participants maintain individual contracts with TIAA, or accounts with FMTC, and are fully vested.

For payroll covered under the plan, eligible employees generally contribute 5 percent of their pay and the University generally contributes 10 percent of employees' pay to the plan, while certain employees generally contribute 4.5 percent of their pay, with the University contributing 9 percent of those employees' pay to the plan. The University contribution commences after an employee has completed one year of employment. Participants may elect to contribute additional amounts to the plans within specified limits that are not matched by University contributions. Contributions and covered payroll under the plan (excluding participants' additional contributions) for the years ended June 30, 2019 and 2018 are summarized as follows:

(in thousands)	2019	2018
University contributions	$ 304,344	$ 286,376
Employee contributions	$ 158,856	$ 150,488
Payroll covered under plan	$ 4,013,983	$ 3,792,553
Total payroll	$ 4,182,021	$ 3,947,501

NOTE 12—NET POSITION

The composition of net position at June 30, 2019 and 2018 is summarized as follows:

(in thousands)	2019	2018
Net investment in capital assets	$ 3,742,630	$ 3,722,086
Restricted:		
Nonexpendable:		
Permanent endowment corpus	2,328,667	2,146,358
Expendable:		
Net appreciation of permanent endowments	2,144,532	2,067,392
Funds functioning as endowment	2,382,037	2,308,185
Restricted for operations and other	685,988	631,747
Unrestricted	3,520,054	3,405,277
	$ 14,803,908	$ 14,281,045

Unrestricted net position is not subject to externally imposed stipulations; however, it is subject to internal restrictions. For example, unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. At June 30, 2019 and 2018, substantially all of the unrestricted net position has been designated for various academic programs, research initiatives and capital projects.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 13—FEDERAL DIRECT LENDING PROGRAM

The University distributed $279,638,000 and $301,194,000 during the years ended June 30, 2019 and 2018, respectively, for student loans through the U.S. Department of Education ("DoED") federal direct lending program. These distributions and related funding sources are not included as expenses and revenues in the accompanying financial statements. The statement of net position includes a receivable of $2,514,000 and $3,183,000 at June 30, 2019 and 2018, respectively, for DoED funding received subsequent to distribution.

NOTE 14—COMMITMENTS AND CONTINGENCIES

Authorized expenditures for construction and other projects unexpended at June 30, 2019 were $905,719,000. Of these expenditures, the University expects that $725,656,000 will be funded by internal sources, gifts, grants and future borrowings; $89,250,000 by the State Building Authority and the remaining $90,813,000 will be funded using unexpended bond proceeds.

Under the terms of various limited partnership agreements approved by the Board of Regents or University officers, the University is obligated to make periodic payments for advance commitments to venture capital, private equity, real estate, natural resources and absolute return strategies. At June 30, 2019, the University had committed, but not paid, a total of $6,089,675,000 in funding for these alternative investments. Based on historical capital calls and discussions with those managing the limited partnerships, outstanding commitments for such investments are anticipated to be paid in the following years ended June 30 (in thousands):

2020	$ 2,028,944
2021	1,413,306
2022	1,017,833
2023	631,414
2024	393,723
2025 and beyond	604,455
	$ 6,089,675

These commitments are generally able to be called prior to an agreed commitment expiration date and therefore may occur earlier or later than estimated.

The University has entered into capital and operating leases for certain space and equipment, which expire at various dates through 2039. Outstanding commitments for these leases are expected to be paid in the following years ended June 30:

(in thousands)	Capital	Operating
2020	$ 10,589	$ 47,369
2021	10,053	42,360
2022	10,211	38,335
2023	10,327	33,058
2024	8,815	29,771
2025-2029	45,738	78,248
2030-2034	48,351	16,526
2035-2039	18,821	2,135
	162,905	$ 287,802
Less amount representing interest	72,894	
Present value of minimum lease payments	$ 90,011	

Operating lease expenses totaled $47,572,000 and $49,058,000 in 2019 and 2018, respectively.

Substantial amounts are received and expended by the University under federal and state programs and are subject to audit by cognizant governmental agencies. This funding relates to research, student aid, patient care and other programs. The University believes that any liabilities arising from such audits will not have a material effect on its financial position.

The University is a party to various pending legal actions and other claims in the normal course of business, and is of the opinion that the outcome of these proceedings will not have a material adverse effect on its financial position.

NOTE 15—OPERATING EXPENSES BY FUNCTION

Operating expenses by functional classification for the years ended June 30, 2019 and 2018 are summarized as follows:

2019					
(in thousands)	Compensation and Benefits	Supplies and Services	Depreciation	Scholarships and Fellowships	Total
Instruction	$ 1,031,768	$ 163,400			$ 1,195,168
Research	583,018	274,560			857,578
Public service	132,685	76,032			208,717
Academic support	278,109	87,967			366,076
Student services	100,220	28,743			128,963
Institutional support	196,839	75,132			271,971
Operations and maintenance of plant	92,387	259,190			351,577
Auxiliary enterprises	3,353,925	1,558,780			4,912,705
Depreciation			$ 567,857		567,857
Scholarships and fellowships				$ 164,428	164,428
	$ 5,768,951	$ 2,523,804	$ 567,857	$ 164,428	$ 9,025,040

2018					
(in thousands)	Compensation and Benefits	Supplies and Services	Depreciation	Scholarships and Fellowships	Total
Instruction	$ 1,000,388	$ 152,833			$ 1,153,221
Research	555,853	267,734			823,587
Public service	129,675	81,769			211,444
Academic support	255,641	61,604			317,245
Student services	89,762	27,516			117,278
Institutional support	185,801	60,702			246,503
Operations and maintenance of plant	53,337	297,558			350,895
Auxiliary enterprises	3,160,935	1,452,876			4,613,811
Depreciation			$ 568,707		568,707
Scholarships and fellowships				$ 156,738	156,738
	$ 5,431,392	$ 2,402,592	$ 568,707	$ 156,738	$ 8,559,429

NOTE 16—UM HEALTH

Condensed financial information for UM Health, a blended component unit, before the elimination of certain intra-University transactions, at and for the years ended June 30, 2019 and 2018 is as follows:

(in thousands)	2019	2018
Condensed Statement of Net Position		
Assets:		
Current assets	$ 78,296	$ 121,110
Noncurrent assets	258,841	242,561
Total assets	337,137	363,671
Deferred outflows	5,479	5,094
Total assets and deferred outflows	$ 342,616	$ 368,765
Liabilities:		
Current liabilities	$ 49,389	$ 60,717
Noncurrent liabilities	208,875	214,465
Total liabilities	258,264	275,182
Deferred inflows	5,860	15,042
Net position:		
Net investment in capital assets	19,765	(2,536)
Restricted:		
Nonexpendable	3,881	3,247
Expendable	13,567	13,310
Unrestricted	41,279	64,520
Total net position	78,492	78,541
Total liabilities, deferred inflows and net position	$ 342,616	$ 368,765
Condensed Statement of Revenues, Expenses and Changes in Net Position		
Operating revenues	$ 472,905	$ 434,611
Operating expenses other than depreciation expense	438,974	401,607
Depreciation expense	22,028	46,268
Operating gain (loss)	11,903	(13,264)
Nonoperating expenses, net	(6,966)	(7,408)
Other expenses, net	(4,986)	(3,268)
Decrease in net position	(49)	(23,940)
Net position, beginning of year	78,541	102,481
Net position, end of year	$ 78,492	$ 78,541
Condensed Statement of Cash Flows		
Net cash provided by operating activities	$ 15,865	$ 10,509
Net cash used in noncapital financing activities	(1,033)	(1,187)
Net cash used in capital and related financing activities	(53,924)	(32,866)
Net cash provided by investing activities	23,942	148
Net decrease in cash and cash equivalents	(15,150)	(23,396)
Cash and cash equivalents, beginning of year	21,327	44,723
Cash and cash equivalents, end of year	$ 6,177	$ 21,327

REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)

PENSION PLAN

Changes in the reported net pension liability for the years ended June 30 are summarized as follows:

2019

(in thousands)	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 72,680	$ 76,503	$ (3,823)
Interest cost	4,930		4,930
Changes in assumptions	(273)		(273)
Differences between expected and actual plan experience	1,361		1,361
Benefit payments	(4,489)	(4,489)	-
Contributions from the employer		1,047	(1,047)
Net investment income:			
Expected investment earnings		5,234	(5,234)
Differences between expected and actual investment earnings		(1,168)	1,168
Balance, end of year	$ 74,209	$ 77,127	$ (2,918)

2018

(in thousands)	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 73,968	$ 70,532	$ 3,436
Interest cost	5,013		5,013
Changes in assumptions	(822)		(822)
Differences between expected and actual plan experience	(767)		(767)
Benefit payments	(4,712)	(4,712)	-
Contributions from the employer		2,171	(2,171)
Net investment income:			
Expected investment earnings		4,848	(4,848)
Differences between expected and actual investment earnings		3,664	(3,664)
Balance, end of year	$ 72,680	$ 76,503	$ (3,823)

2017

(in thousands)	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance, beginning of year	$ 96,414	$ 67,236	$ 29,178
Interest cost	4,482		4,482
Changes in assumptions	(24,906)		(24,906)
Differences between expected and actual plan experience	2,067		2,067
Benefit payments	(4,089)	(4,089)	-
Contributions from the employer		2,903	(2,903)
Net investment income:			
Expected investment earnings		3,166	(3,166)
Differences between expected and actual investment earnings		1,316	(1,316)
Balance, end of year	$ 73,968	$ 70,532	$ 3,436

The plan fiduciary net position as a percentage of the total pension liability reported at June 30 was as follows:

2019	104%
2018	105%
2017	95%

Employer contributions in relation to actuarially determined contributions for the years ended June 30 are as follows:

(in thousands)	Employer Contributions*	Actuarially Determined Contributions	Excess (Deficient) Contributions
2019	$ 1,244	$ 393	$ 851
2018	$ 1,047	$ 1,622	$ (575)
2017	$ 2,171	$ 1,754	$ 417

* Reflects no employer contributions after April 30 of the respective fiscal year

Significant methods and assumptions used to calculate the actuarially determined contributions for the years ended June 30 are as follows:

Actuarially determined contributions	The plan is subject to funding requirements under the provisions of ERISA and the Pension Protection Act of 2006 (including MAP-21, HATFA and BBA). The actuarially determined contributions represent the IRC Section 430 minimum required contributions.
Contributions in relation to actuarially determined contributions	Under IRC Section 430, the due date to pay minimum required contributions for the plan year is generally 8 ½ months after the end of the plan year. For the plan years ended September 30, contributions are due by June 15 of the following year.
Actuarial cost method	Unit Credit method
Asset valuation method	24-month smoothed value of assets

Interest rate

	First Segment Rate	Second Segment Rate	Third Segment Rate	Effective Rate
2019	4.16%	5.72%	6.48%	5.94%
2018	4.16%	5.72%	6.48%	5.93%
2017	4.43%	5.91%	6.65%	6.13%

Mortality	Prescribed by the Secretary of Treasury and described in Treasury regulation 1.430(h)(3)-1. Based on the RP-2000 gender distinct table that reflects projected mortality improvements 15 years into the future from the valuation date for nonannuitants and seven years into the future for annuitants.

REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)

POSTEMPLOYMENT BENEFITS

The historical reconciliation of the total reported liability for postemployment benefits obligations for the years ended June 30 is summarized as follows (amounts in thousands):

	2019	2018	2017
Service cost	$ 141,933	$ 143,787	$ 122,073
Interest cost	121,800	94,153	108,561
Changes in assumptions	(383,315)	(107,874)	255,041
Differences between expected and actual plan experience	17,535	52,721	14,028
Benefit payments	(87,638)	(77,374)	(72,302)
Net change	$ (189,685)	$ 105,413	$ 427,401
Total liability, beginning of year	$ 3,303,740	$ 3,198,327	$ 2,770,926
Total liability, end of year	$ 3,114,055	$ 3,303,740	$ 3,198,327
Covered employee payroll	$ 4,013,983	$ 3,792,553	$ 3,568,918
Total liability, end of year, as a percentage of covered employee payroll	78%	87%	90%

Discount rates used in determining the total reported liability for postemployment benefits obligations at June 30 are as follows:

2019	3.87%
2018	3.58%
2017	2.85%
2016	3.80%