

FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2020 and 2019 with REPORT OF INDEPENDENT AUDITORS

June 30, 2020 and 2019

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Report of Independent Auditors

To the Regents of the University of Michigan

We have audited the accompanying consolidated financial statements of the University of Michigan (the "University"), which comprise the consolidated statements of net position as of June 30, 2020 and 2019 and the related consolidated statements of revenues, expenses and changes in net position and of cash flows for the years then ended, and the related notes to the financial statements, which collectively comprise the University's basic financial statements.

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.



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, 2020 and 2019, 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 3 through 28 and the supplementary information for pension and postemployment benefits on pages 79 through 81 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.

October 22, 2020

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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, 2020 and 2019 and its activities for the three fiscal years ended June 30, 2020. 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 64,500 students and approximately 8,600 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.

The global outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, was declared a pandemic by the World Health Organization on March 11, 2020 and a national emergency by the President of the United States on March 13, 2020. The outbreak and related actions taken by federal and state governments in response have impacted several aspects of the University's mission, including those related to instruction, research, patient care and other auxiliary activities.

Management's Discussion and Analysis (Unaudited)—Continued

Financial Highlights

The University's financial position remains strong, with total assets and deferred outflows of \$24.2 billion and total liabilities and deferred inflows of \$9.7 billion at June 30, 2020, compared to total assets and deferred outflows of \$22.9 billion and total liabilities and deferred inflows of \$8.1 billion at June 30, 2019. 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 \$14.5 billion and \$14.8 billion at June 30, 2020 and 2019, respectively. Changes in net position represent the University's results of operations and are summarized for the years ended June 30 as follows:

	2020	2019	2018
		(in millions)	
Operating revenues and educational appropriations Federal economic relief funds	\$ 8,340 144	\$ 8,411	\$ 7,879
Private gifts for operating activities	179	178	197
Operating and net interest expenses	(9,445)	(9,099)	(8,625)
	(782)	(510)	(549)
Net investment income	323	810	1,261
Endowment, capital gifts and grants, and other	182	223	208
(Decrease) increase in net position	\$ (277)	\$ 523	\$ 920

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 constrained state appropriations and rising health care, regulatory and facility costs. During 2020, the University also faced significant challenges associated with the COVID-19 pandemic, which impacted a broad range of its activities. The University is addressing these risks through aggressive cost cutting and productivity gains designed to help preserve access to affordable higher education and healthcare for Michigan families. To achieve sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to support enterprise-wide information technology projects and other initiatives.

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 \$384 million and \$361 million in 2020 and 2019, 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.

Management's Discussion and Analysis (Unaudited)—Continued

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 Consolidated Statement of Net Position; the Consolidated Statement of Revenues, Expenses and Changes in Net Position; and the Consolidated 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.

Management's Discussion and Analysis (Unaudited)—Continued

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:

	2020	2019 (in millions)	2018
Current assets Noncurrent assets:	\$ 4,060	\$ 2,931	\$ 2,743
Endowment, life income and other investments Capital assets, net	12,868	12,834	12,305
	6,273	6,227	6,121
Other Total assets	518	500	510
	23,719	22,492	21,679
Deferred outflows Total assets and deferred outflows	514	371	384
	24,233	22,863	22,063
Current liabilities Noncurrent liabilities Total liabilities	2,424	1,754	1,775
	6,811	5,785	5,814
	9,235	7,539	7,589
Deferred inflows	471	520	193
Net position	\$ 14,527	\$ 14,804	\$ 14,281

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 increased \$1.2 billion to \$4.1 billion at June 30, 2020, as compared to \$2.9 billion at June 30, 2019, primarily as a result of an increase in cash and cash equivalents and investments for operating activities due to the University's enhanced focus on liquidity in response to uncertainties surrounding the COVID-19 pandemic. Cash, cash equivalents and investments for operating activities totaled \$2.8 billion at June 30, 2020, which represents approximately four months of total expenses excluding depreciation.

Management's Discussion and Analysis (Unaudited)—Continued

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 \$514 million and \$371 million at June 30, 2020 and 2019, 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 increased \$670 million to \$2.4 billion at June 30, 2020, as compared to \$1.8 billion at June 30, 2019, primarily as a result of amounts received during the current year from the Centers for Medicare and Medicaid Services under the terms of their Accelerated and Advance Payment program which was expanded in response to the COVID-19 pandemic. The unearned portion of these additional advanced payments totaled \$302 million at June 30, 2020.

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 \$471 million and \$520 million at June 30, 2020 and 2019, 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:

	2020	2019 (in millions)	2018
Endowment investments	\$ 12,477	\$ 12,449	\$ 11,902
Life income investments	145	147	144
Noncurrent portion of insurance and benefits			
obligations investments	225	216	208
Other	21	22	51
	\$ 12,868	\$ 12,834	\$ 12,305

Management's Discussion and Analysis (Unaudited)—Continued

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 12,000 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 the uncertainties of challenging economic environments.

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

Endowment spending rate distributions totaled \$391 million, \$368 million and \$346 million and withdrawals from funds functioning as endowment totaled \$15 million, \$48 million and \$33 million in 2020, 2019 and 2018, respectively. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.4 percent, 4.6 percent and 4.4 percent of the current year average fair value of the University Endowment Fund for 2020, 2019 and 2018, respectively. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.8 percent.

Management's Discussion and Analysis (Unaudited)—Continued

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 \$618 million in 2020 as compared to \$679 million in 2019. 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 \$454 million, as well as debt proceeds of \$150 million and state capital appropriations of \$14 million.

Projects completed in 2020 include significant renovation of facilities for student life and services.

The Michigan Union, which originally opened in 1919 with building additions in the 1930s and 1950s, has undergone an extensive renovation of 250,000 square feet designed to 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 was also addressed during the renovation, including life safety, electrical, mechanical and plumbing system improvements, replacement of the roof, windows and elevators, and upgrades to interior finish and restrooms.

Renovation of the first floor of the Literature, Science and the Arts ("LSA") Building included the revitalization of 24,000 existing square feet as well as the addition of 21,000 square feet which will be used to house the LSA Internship Program and Opportunity Hub for students to explore the connection between their liberal arts education and their goals and aspirations. The light-filled space is designed to be open, welcoming, vibrant, student-focused and encourage interaction.

Construction in progress, which totaled \$636 million and \$413 million at June 30, 2020 and 2019, respectively, includes important projects for academic instruction and research as well as student life and services.

Management's Discussion and Analysis (Unaudited)—Continued

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 fall 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 continue 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 summer 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 fall 2020.

Management's Discussion and Analysis (Unaudited)—Continued

Expansion of the William R. Murchie Science Building on the University's Flint campus will address immediate space limitations, meet growing demand for instructional, research, and collaborative spaces for the science, technology, engineering and math disciplines, and create engineering-specific instructional and research laboratories. The project will add 61,000 square feet and a third wing to the current Murchie building structure. This project is scheduled to be completed in fall 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 2020, S&P Global affirmed its highest credit rating (AAA) for bonds backed by a broad revenue pledge based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, strong reputation of the University's health system, excellent balance sheet, exceptional research presence and manageable debt burden. Moody's also affirmed its highest credit rating (Aaa) based on the University's diversified student demand, sustained philanthropic support, expansive research enterprise, high brand value and reputation of the University's health system, and well-established strategic and budgetary framework.

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

	2020			
	Beginning			Ending
	Balance	Additions	Reductions	Balance
		(in mi	llions)	
Commercial paper	\$ 145		\$ 10	\$ 135
Bonds	2,330	\$ 1,026	115	3,241
	\$ 2,475	\$ 1,026	\$ 125	\$ 3,376
		20	19	
	Beginning			Ending
	Balance	Additions	Reductions	Balance
		(in mi	llions)	
Commercial paper	\$ 158		\$ 13	\$ 145
Bonds	2,236	\$ 260	166	2,330
	\$ 2,394	\$ 260	\$ 179	\$ 2,475

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.

Management's Discussion and Analysis (Unaudited)—Continued

During 2020, the University issued \$988 million of general revenue bonds with a net original issue premium of \$38 million, which included \$138 million of fixed rate, tax-exempt bonds, and \$850 million of fixed rate, taxable bonds. Total bond proceeds of \$1,026 million were utilized to refund existing bonds of \$26 million and provide \$150 million for capital projects, \$848 million for capital projects, refunding of debt and general purposes, and \$2 million for debt issuance costs.

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.

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

	2020	2020 2019 (in millions)	
Variable rate:			
Commercial paper	\$ 135	\$ 145	\$ 158
Bonds	551	566	580
Fixed rate bonds	2,690	1,764	1,656
	\$ 3,376	\$ 2,475	\$ 2,394

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 2.9 percent and 3.0 percent in 2020 and 2019, 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 totaled \$80 million and \$74 million in 2020 and 2019, respectively.

Management's Discussion and Analysis (Unaudited)—Continued

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 \$3.5 billion at June 30, 2020, as compared to \$3.1 billion and \$3.3 billion at June 30, 2019 and 2018, respectively. The increase in the reported liability at June 30, 2020 was driven primarily by a decrease in the discount rate and mortality and longevity improvements, offset by a reduction in expected health care claims cost due to favorable experience. 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. 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 \$629 million, \$580 million and \$611 million at June 30, 2020, 2019 and 2018, 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 \$1.5 billion at June 30, 2020. These initiatives have included cost sharing changes, elimination of Medicare Part B reimbursements for certain retirees and the adjustment of retirement eligibility criteria.

Management's Discussion and Analysis (Unaudited)—Continued

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:

	2020	2019 (in millions)	2018
Net investment in capital assets Restricted:	\$ 3,767	\$ 3,743	\$ 3,722
Nonexpendable: Permanent endowment corpus	2,483	2,329	2,146
Expendable: Net appreciation of permanent endowments	2,055	2,144	2,068
Funds functioning as endowment Restricted for operations and other	2,260 852	2,382 686	2,308 632
Unrestricted	3,110 \$ 14,527	3,520 \$ 14,804	3,405 \$ 14,281

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 decreased 1 percent, or \$45 million, to \$5.2 billion at June 30, 2020, as compared to an increase of 4 percent, or \$204 million, to \$5.2 billion at June 30, 2019. The decrease experienced during 2020 was driven primarily by spending rate distributions offset 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, 2020 totaled \$3.1 billion and included funds functioning as endowment of \$5.5 billion offset by unfunded obligations for postemployment benefits of \$3.4 billion. 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 also includes other net resources which totaled \$1.0 billion and \$1.3 billion at June 30, 2020 and 2019, respectively.

Management's Discussion and Analysis (Unaudited)—Continued

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:

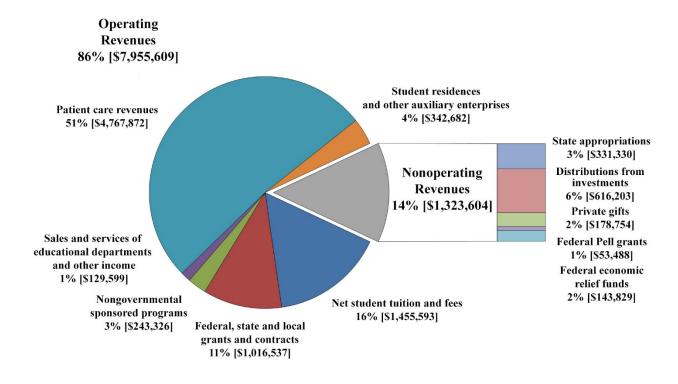
	2020	2019	2018
		(in millions)	
Operating revenues:			
Net student tuition and fees	\$ 1,455.6	\$ 1,366.5	\$ 1,310.9
Sponsored programs	1,259.9	1,266.4	1,229.4
Patient care revenues, net	4,767.9	4,845.1	4,438.7
Other	472.2	511.9	487.9
	7,955.6	7,989.9	7,466.9
Operating expenses	9,364.3	9,025.0	8,559.4
Operating loss	(1,408.7)	(1,035.1)	(1,092.5)
Nonoperating and other revenues (expenses):			
State educational appropriations	331.3	370.4	363.1
Federal Pell grants	53.5	51.2	49.2
Federal economic relief funds	143.8		
Private gifts for operating activities	178.8	177.8	196.6
Net investment income	322.6	810.0	1,261.4
Interest expense	(86.0)	(81.4)	(72.9)
Federal subsidies for interest on Build America Bonds	5.6	7.0	7.4
State capital appropriations	13.9		5.0
Endowment and capital gifts and grants	167.6	206.1	209.2
Other	0.7	16.9	(6.1)
Nonoperating and other revenues, net	1,131.8	1,558.0	2,012.9
(Decrease) increase in net position	(276.9)	522.9	920.4
Net position, beginning of year	14,803.9	14,281.0	13,360.6
Net position, end of year	\$ 14,527.0	\$ 14,803.9	\$ 14,281.0

Management's Discussion and Analysis (Unaudited)—Continued

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, 2020 (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.

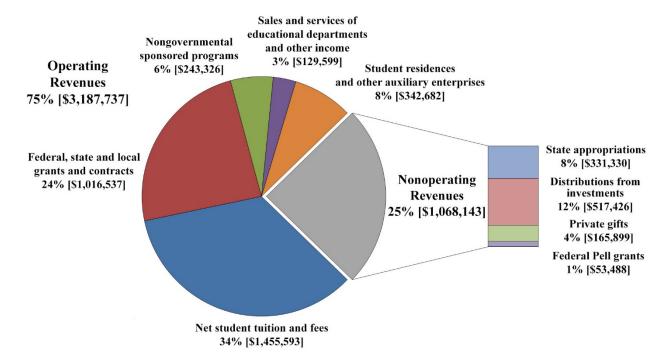
2020 Revenues for Operating Activities



Management's Discussion and Analysis (Unaudited)—Continued

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, 2020 (amounts are presented in thousands of dollars).

2020 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 3 percent, or \$50 million, to \$1.8 billion in 2020, as compared to 4 percent, or \$63 million, to \$1.7 billion in 2019.

Management's Discussion and Analysis (Unaudited)—Continued

In 2020, the University's state educational appropriations decreased 11 percent, or \$39 million, to \$331 million, primarily as a result of the establishment of an allowance against the University's outstanding state educational appropriations receivable due to uncertainties associated with the COVID-19 pandemic. In 2019, the University's state educational appropriations increased 2 percent, or \$7 million, to \$370 million.

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

	2020	2019	2018
		(in millions)	
Student tuition and fees	\$ 1,944.2	\$ 1,812.5	\$ 1,726.0
Less scholarship allowances	488.6	446.0	415.1
	\$ 1,455.6	\$ 1,366.5	\$ 1,310.9

In 2020, net student tuition and fees revenue increased 7 percent, or \$89 million, to \$1.5 billion, which reflects an increase of 7 percent, or \$132 million, in gross student tuition and fees revenue offset by an increase of 10 percent, or \$43 million, in scholarship allowances. Tuition rate increases in 2020 were 1.9 percent for resident undergraduate students, 3.7 percent for nonresident undergraduate students and 3.2 percent for most graduate students on the Ann Arbor campus, with a 3.2 and 5.0 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2020, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

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.

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.

Management's Discussion and Analysis (Unaudited)—Continued

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 \$179 million in 2020, as compared to \$178 million in 2019 and \$197 million in 2018.

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 remained stable at \$1.3 billion in 2020, as compared to an increase of 3 percent, or \$37 million, to \$1.3 billion in 2019. The rate of increase in 2020 was primarily impacted by the temporary suspension of nonessential laboratory research in response to the COVID-19 pandemic. The increase in 2019 was driven primarily by an increase in federally sponsored activity.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities. Patient care revenues decreased 2 percent, or \$77 million, to \$4.8 billion in 2020, due primarily to a decrease in patient volume resulting from a temporary reduction in operations in response to the COVID-19 pandemic. Patient care revenues increased 9 percent, or \$406 million, to \$4.8 billion in 2019, 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 are summarized as follows:

	2020	2019 (in millions)	2018
University of Michigan Health System UM Health Michigan Health Corporation Other	\$ 4,152.6 464.3 36.4 114.6 \$ 4,767.9	\$ 4,212.4 472.5 39.1 121.1 \$ 4,845.1	\$ 3,890.0 433.9 17.9 96.9 \$ 4,438.7

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.

Management's Discussion and Analysis (Unaudited)—Continued

UM Health patient care 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. The distribution of net patient care service revenue by primary payer source for the years ended June 30 is summarized as follows:

	2020	2019	2018	
Medicare	27%	26%	26%	
Medicaid	11%	12%	12%	
Blue Cross	39%	38%	38%	
Other	23%	24%	24%	

Federal economic relief funds represent funding received from the federal government as a result of the Coronavirus Aid, Relief and Economic Security ("CARES") Act. The CARES Act was signed into law in March 2020 in order to provide economic assistance for businesses and individuals that have been negatively impacted by the COVID-19 pandemic. During 2020, the University recognized revenue of \$135 million associated with the Provider Relief Fund distributed by the Department of Health and Human Services, and \$9 million associated with the Higher Education Emergency Relief Fund distributed by the Department of Education.

Net investment income totaled \$323 million in 2020 as compared to \$810 million in 2019 and \$1.3 billion in 2018. The investment environment in 2020 proved to be challenging with a significant amount of volatility experienced in the third and fourth quarters due to the impact of the COVID-19 pandemic. During 2020, the alternative asset class had the strongest performance and returned 6 percent for the year. The venture capital and private equity assets led the

Management's Discussion and Analysis (Unaudited)—Continued

alternative asset class with returns of 19 percent and 11 percent, respectively. In 2019, the alternative asset class performance was relatively strong returning 11 percent, with leaders in this class including 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.

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 Engineering Lab Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus.

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. Private gifts for permanent endowment purposes totaled \$149 million in 2020, as compared to \$176 million and \$169 million in 2019 and 2018, respectively. Capital gifts and grants totaled \$19 million in 2020, as compared to \$30 million and \$40 million in 2019 and 2018, 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 64 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):

2010

2010

2020

	2020	U	2019	,	2018	
Operating:						
Compensation and benefits	\$ 6,049.9	64%	\$ 5,769.0	63%	\$ 5,431.4	63%
Supplies and services	2,574.6	27	2,523.8	28	2,402.6	27
Depreciation	566.7	6	567.8	6	568.7	7
Scholarships and fellowships	173.1	2	164.4	2	156.7	2
	9,364.3	99	9,025.0	99	8,559.4	99
Nonoperating:						
Interest, net	80.4	1	74.4	1	65.5	1
	\$ 9,444.7	100%	\$ 9,099.4	100%	\$ 8,624.9	100%
Depreciation Scholarships and fellowships Nonoperating:	566.7 173.1 9,364.3 80.4	99 1	164.4 9,025.0 74.4	99	568.7 156.7 8,559.4 65.5	99

Management's Discussion and Analysis (Unaudited)—Continued

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 5 percent, or \$281 million, to \$6.0 billion in 2020 as compared to 6 percent, or \$338 million, to \$5.8 billion in 2019. Of the 2020 increase, compensation increased 5 percent, or \$212 million, to \$4.6 billion, driven primarily by increases in staffing levels resulting from an increase in patient activity volumes within the University's health system prior to the onset of the COVID-19 pandemic, and employee benefits increased 5 percent, or \$69 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 2019, compensation increased 6 percent, to \$4.4 billion, and benefits increased 6 percent, to \$1.4 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)—Continued

Supplies and services expenses increased 2 percent, or \$51 million, to \$2.6 billion in 2020 as compared to an increase of 5 percent, or \$121 million, to \$2.5 billion in 2019. 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 \$1 million, to \$567 million in 2020, as compared to a decrease of less than 1 percent, or \$850,000, to \$568 million in 2019. Capital assets placed in service during 2020 include the Michigan Union renovation and the LSA Building first floor renovation. 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.

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):

	2020		2019		2018	
Operating:						
Instruction	\$ 1,204.8	13%	\$ 1,195.2	13%	\$ 1,153.2	13%
Research	862.8	9	857.6	10	823.6	10
Public service	206.4	2	208.7	2	211.5	2
Institutional and academic support	779.9	8	767.0	8	681.0	8
Operations and maintenance of plant	324.1	3	351.6	4	350.9	4
Auxiliary enterprises:						
Patient care	4,975.4	53	4,661.5	51	4,349.2	50
Other	271.1	3	251.2	3	264.6	3
Depreciation	566.7	6	567.8	6	568.7	7
Scholarships and fellowships	173.1	2	164.4	2	156.7	2
	9,364.3	99	9,025.0	99	8,559.4	99
Nonoperating:						
Interest, net	80.4	1	74.4	1	65.5	1
	\$ 9,444.7	100%	\$ 9,099.4	100%	\$ 8,624.9	100%

Instruction expenses increased less than 1 percent, or \$10 million, in 2020, and 4 percent, or \$42 million, in 2019. This increase reflects the level of growth in the related revenue sources offset by cost containment efforts.

Management's Discussion and Analysis (Unaudited)—Continued

Research expenses increased less than 1 percent, or \$5 million, in 2020, as compared to an increase of 4 percent, or \$34 million, in 2019. The relative stability in 2020, despite the challenges associated with the temporary suspension of nonessential laboratory research in response to the COVID-19 pandemic, reflects the strength of the University's overall research enterprise. To measure its total volume of research expenditures, the University considers research expenses included in the above table, as well as research related facilities and administrative expenses, research initiative and start-up expenses and research equipment purchases. These amounts totaled \$1.62 billion in both 2020 and 2019, and \$1.55 billion in 2018.

Patient care expenses increased 7 percent, or \$314 million, in 2020, and 7 percent, or \$312 million, in 2019, 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 and the rising cost of pharmaceuticals. During 2020, the increase in medical supplies expense also included the additional cost of personal protective equipment acquired in response to the COVID-19 pandemic.

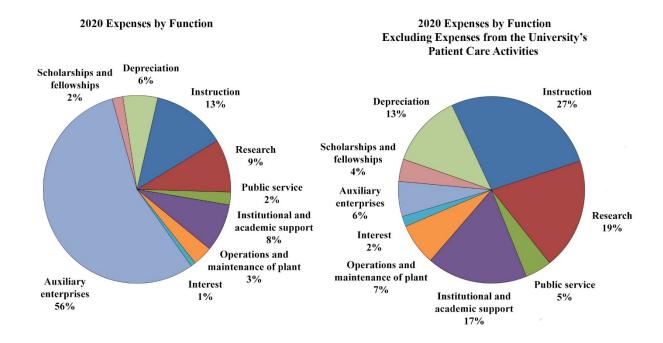
Scholarships and fellowships provided to students totaled \$685 million in 2020, as compared to \$635 million in 2019 and \$596 million in 2018, an increase of 15 percent over the past two years. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarships and fellowships expense. Scholarships and fellowships for the years ended June 30 are summarized as follows:

	2020	2019	2018
		(in millions)	
Paid directly to students	\$ 173.1	\$ 164.4	\$ 156.7
Applied to tuition and fees	488.6	446.0	415.1
Applied to University Housing	23.1	24.2	23.8
	\$ 684.8	\$ 634.6	\$ 595.6

During 2020, scholarships and fellowships expense included \$8 million in emergency financial aid grants distributed directly to students in accordance with the terms of the Higher Education Emergency Relief Fund.

Management's Discussion and Analysis (Unaudited)—Continued

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



Management's Discussion and Analysis (Unaudited)—Continued

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:

	2020	2019 (in millions)	2018
Cash received from operations	\$ 8,345.6	\$ 7,965.9	\$ 7,505.7
Cash expended for operations	(8,440.6)	(8,283.8)	(7,916.8)
Net cash used in operating activities	(95.0)	(317.9)	(411.1)
Net cash provided by noncapital financing activities	1,705.4	767.7	732.7
Net cash used in capital and related financing activities	(602.3)	(597.2)	(592.6)
Net cash (used in) provided by investing activities	(130.0)	411.3	299.3
Net increase in cash and cash equivalents	878.1	263.9	28.3
Cash and cash equivalents, beginning of year	397.3	133.4	105.1
Cash and cash equivalents, end of year	\$ 1,275.4	\$ 397.3	\$ 133.4

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.

Management's Discussion and Analysis (Unaudited)—Continued

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 on-going impact of the COVID-19 pandemic is expected to result in a significant reduction to the state's revenues, which provide the foundation for the University's annual appropriations. Although the State has worked to identify and initiate various cost saving measures in response to this decline in revenue, the University's budget for 2021 reflects the impact of these economic challenges at the state and local level, and therefore anticipates no change in the level of base state educational appropriations as compared to the prior year. The 2021 budget also anticipates a 1.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 5.6 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 1.9 percent, while most graduate and professional rates will increase 1.9 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 1.9 percent and 3.9 percent, respectively.

The University continues to execute its long-range plan to maintain, modernize and expand its complement of older facilities while adding key new facilities for instruction, research, patient care, athletics and residential life. This strategy addresses the University's growth and the continuing effects of technology on teaching, research and clinical activities. Authorized costs to complete construction and other projects totaled \$1,502 million at June 30, 2020. Funding for these projects is anticipated to include \$1,301 million from internal sources, gifts, grants and proceeds from borrowings, \$75 million from the State Building Authority and \$126 million from the utilization of unexpended bond proceeds.

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

Management's Discussion and Analysis (Unaudited)—Continued

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

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

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

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

The COVID-19 pandemic and related actions taken by federal and state governments in response may materially impact the University's financial position and its results of operations, including those related to instruction, research, patient care and other auxiliary activities. While the University continues to design and execute plans to mitigate these risks, the extent of the impact to the University will depend on future developments beyond its control, including the overall duration and spread of the outbreak, and cannot be fully determined at this time.

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

Consolidated Statement of Net Position

Consolitated Statement of Net I ositi	Jun	June 30,		
	2020 2019			
_	(in thousands)			
Assets and Deferred Outflows				
Current Assets:	A 1 255 101			
Cash and cash equivalents	\$ 1,275,401	\$ 397,279		
Investments for operating activities	1,569,611	882,303		
Investments for capital activities	301,721	594,681		
Investments for student loan activities	69,866	74,365		
Accounts receivable, net	583,857	714,621		
Current portion of notes and pledges receivable, net	98,723	80,035		
Current portion of prepaid expenses and other assets Cash collateral held by agent	151,859 8,728	158,320 29,485		
Total Current Assets		2,931,089		
Noncurrent Assets:	4,059,766	2,931,089		
	125 005	00.912		
Unexpended bond proceeds	125,905	90,813		
Endowment, life income and other investments Notes and pledges receivable, net	12,867,857	12,834,065		
	275,714 116,184	301,427 107,303		
Prepaid expenses and other assets Capital assets, net	6,273,008	6,226,969		
Total Noncurrent Assets	19,658,668	19,560,577		
Total Assets	23,718,434	22,491,666		
Deferred Outflows	514,092	371,574		
=	\$ 24,232,526	\$ 22,863,240		
Total Assets and Deferred Outflows	\$ 24,232,320	\$ 22,003,240		
Liabilities, Deferred Inflows and Net Position				
Current Liabilities:				
Accounts payable	\$ 333,934	\$ 293,728		
Accrued compensation and other	544,352	508,597		
Unearned revenue	586,252	312,092		
Current portion of insurance and benefits reserves	144,827	104,235		
Current portion of obligations for postemployment benefits	92,684	87,712		
Commercial paper and current portion of bonds payable	215,658	232,095		
Long-term bonds payable subject to remarketing, net	441,450	133,616		
Collateral held for securities lending	8,728	29,485		
Deposits of affiliates and others	56,111	52,296		
Total Current Liabilities	2,423,996	1,753,856		
Noncurrent Liabilities:				
Accrued compensation	88,952	34,126		
Insurance and benefits reserves	158,604	127,677		
Obligations for defined benefit pension plan, net	(1,247)	(2,918)		
Obligations for postemployment benefits	3,384,804	3,026,343		
Obligations under life income agreements	71,556	74,516		
Government loan advances	64,989	83,542		
Bonds payable	2,719,063	2,109,317		
Deposits of affiliates and other	323,968	332,850		
Total Noncurrent Liabilities	6,810,689	5,785,453		
Total Liabilities	9,234,685	7,539,309		
Deferred Inflows	470,841	520,023		
Net Position:				
Net investment in capital assets	3,767,199	3,742,630		
Restricted:	3,101,133	3,772,030		
Nonexpendable	2,483,225	2,328,667		
Expendable	5,166,803	5,212,557		
Unrestricted	3,109,773	3,520,054		
Total Net Position	14,527,000	14,803,908		
Total Liabilities, Deferred Inflows and Net Position	\$ 24,232,526	\$ 22,863,240		
Total Diabilities, Deterred filliows and Net Position	φ 47,434,340	Ψ 44,003,440		

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

Consolidated Statement of Revenues, Expenses and Changes in Net Position

	Year Ended June 30,	
	2020 2019	
	(in thousands)	
Operating Revenues	Φ 1.044.160	ф. 1.01 2. 466
Student tuition and fees	\$ 1,944,169	\$ 1,812,466
Less scholarship allowances	488,576	445,994
Net student tuition and fees	1,455,593	1,366,472
Federal grants and contracts	1,005,408	1,006,368
State and local grants and contracts Nongovernmental sponsored programs	11,129 243,326	13,955 246,054
Sales and services of educational departments	127,353	145,070
Auxiliary enterprises:	127,333	143,070
Patient care revenues (net of provision for bad debts of		
(\$119,101 in 2020 and \$137,660 in 2019)	4,767,872	4,845,098
Student residence fees (net of scholarship allowances of	.,,,,,,,,	.,0.0,00
\$23,138 in 2020 and \$24,226 in 2019)	114,648	120,122
Other revenues	228,034	244,198
Student loan interest income and fees	2,246	2,532
Total Operating Revenues	7,955,609	7,989,869
·		
Operating Expenses		
Compensation and benefits	6,049,913	5,768,951
Supplies and services	2,574,614	2,523,804
Depreciation	566,694	567,857
Scholarships and fellowships	173,073	164,428
Total Operating Expenses _	9,364,294	9,025,040
	(1, 400, (0.5)	(1.005.151)
Operating Loss	(1,408,685)	(1,035,171)
Nonoperating Revenues (Expenses)		
State educational appropriations	331,330	370,442
Federal Pell grants	53,488	51,211
Federal economic relief funds	143,829	31,211
Private gifts for other than capital and endowment purposes	178,754	177,758
Net investment income	322,642	809,997
Interest expense	(86,035)	(81,372)
Federal subsidies for interest on Build America Bonds	5,584	6,961
Total Nonoperating Revenues, Net	949,592	1,334,997
<u> </u>		
(Loss) Income Before Other Revenues	(459,093)	299,826
Other Revenues		
State capital appropriations	13,853	
Capital gifts and grants	18,682	29,884
Private gifts for permanent endowment purposes	148,932	176,210
Other	718	16,943
Total Other Revenues _	182,185	223,037
(D. M. M. M. M.	(27(000)	522.062
(Decrease) Increase in Net Position	(276,908)	522,863
Net Pocition Reginning of Vegr	14,803,908	14 281 045
Net Position, Beginning of Year		\$ 14,281,045
Net Position, End of Year	\$ 14,527,000	\$ 14,803,908

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

Consolidated Statement of Cash Flows

	Year Ended June 30,		
	2020 2019 (in thousands)		
Cash Flows from Operating Activities	(III tile	asanas)	
Student tuition and fees	\$ 1,448,009	\$ 1,365,386	
Federal, state and local grants and contracts	1,035,664	1,016,393	
Nongovernmental sponsored programs	256,097	242,527	
Sales and services of educational departments and other	309,712	388,016	
Patient care revenues	5,161,492	4,812,476	
Student residence fees	114,183	118,862	
Payments to employees	(4,548,764)	(4,352,547)	
Payments for benefits	(1,240,427)	(1,239,145)	
Payments to suppliers	(2,471,802)	(2,520,758)	
Payments for scholarships and fellowships	(173,073)	(164,428)	
Student loans issued	(6,523)	(6,940)	
Student loans collected	18,234	19,716	
Student loan interest and fees collected	2,246	2,532	
Net Cash Used in Operating Activities	(94,952)	(317,910)	
	· · · · · · · · · · · · · · · · · · ·		
Cash Flows from Noncapital Financing Activities			
State educational appropriations	372,530	369,103	
Federal Pell grants	53,488	51,211	
Federal economic relief funds	142,164		
Private gifts and other receipts	291,577	350,112	
Proceeds from issuance of debt	850,025		
Payments for bond refunding and related costs	(1,963)		
Student direct lending receipts	317,320	280,307	
Student direct lending disbursements	(316,410)	(279,638)	
Amounts received for annuity and life income funds	6,370	6,442	
Amounts paid to annuitants and life beneficiaries and related expenses	(9,702)	(9,828)	
Net Cash Provided by Noncapital Financing Activities	1,705,399	767,709	
Cash Flows from Capital and Related Financing Activities	10.020	1 017	
State capital appropriations	10,938	1,217	
Private gifts and other receipts	36,347	46,264	
Proceeds from issuance of capital debt	175,997	260,034	
Principal payments on capital debt	(107,946)	(164,553)	
Interest payments on capital debt	(101,409)	(94,202)	
Federal subsidies for Build America Bonds interest	9,315	3,696	
Payments for bond refunding and related costs	(273)	(791)	
Purchases of capital assets	(626,564)	(677,883)	
Proceeds from sales of capital assets	1,240	28,996	
Net Cash Used in Capital and Related Financing Activities	(602,355)	(597,222)	
Cash Flows from Investing Activities			
Interest and dividends on investments, net	49,260	52,846	
Proceeds from sales and maturities of investments	5,472,203	6,172,854	
Purchases of investments	(5,491,398)	(5,841,764)	
Net increase in unexpended capital debt proceeds	(35,092)	(8,016)	
Net (increase) decrease in cash equivalents from noncurrent investments	(116,546)	60,971	
Net decrease in deposits of affiliates and other	(8,397)	(25,554)	
Net Cash (Used in) Provided by Investing Activities	(129,970)	411,337	
Thet Cash (Oscu III) Frovided by Investing Activities	(149,970)	711,337	
Net Increase in Cash and Cash Equivalents	878,122	263,914	
Cash and Cash Equivalents, Beginning of Year	397,279	133,365	
Cash and Cash Equivalents, Beginning of Tear	\$ 1,275,401	\$ 397,279	
Cash and Cash Equivalents, End of Teal	ψ 1,4/3,401	φ 371,417	

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

Consolidated Statement of Cash Flows—Continued

	Year Ended June 30,		
	2020	2019	
	(in thousands)		
Reconciliation of Operating Loss to Net Cash Used in Operating Activities:			
Operating loss	\$ (1,408,685)	\$ (1,035,171)	
Adjustments to reconcile operating loss to net cash used in operating activities:			
Depreciation expense	566,694	567,857	
Changes in assets and liabilities:			
Accounts receivable, net	106,576	(35,743)	
Prepaid expenses and other assets	(16,161)	(26,249)	
Accounts payable	49,994	4,052	
Accrued compensation and other	90,109	24,027	
Unearned revenue	272,979	5,539	
Deposits of affiliates and others	(181)	2,078	
Insurance and benefits reserves	71,519	(3,250)	
Obligations for defined benefit pension plan, net	1,671	905	
Obligations for postemployment benefits	363,433	(189,685)	
Deposits of affiliates and other	4,019	32,240	
Changes in deferred outflows	(147,161)	12,762	
Changes in deferred inflows	(49,758)	322,728	
Net Cash Used in Operating Activities	\$ (94,952)	\$ (317,910)	

Notes to Consolidated Financial Statements

June 30, 2020 and 2019

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 64,500 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 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.

Notes to Consolidated Financial Statements—Continued

Note 1—Organization and Summary of Significant Accounting Policies—Continued

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.

<u>Expendable</u> – 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.

<u>Summary of Significant Accounting Policies</u>: 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.

Notes to Consolidated Financial Statements—Continued

Note 1—Organization and Summary of Significant Accounting Policies—Continued

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, 2020 and 2019. 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.

Notes to Consolidated Financial Statements—Continued

Note 1—Organization and Summary of Significant Accounting Policies—Continued

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.

Notes to Consolidated Financial Statements—Continued

Note 1—Organization and Summary of Significant Accounting Policies—Continued

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. In 2020, the University received amounts from the Centers for Medicare and Medicaid Services under the terms of their Accelerated and Advance Payment Program, which was expanded in response to the COVID-19 pandemic. The unearned portion of these additional advanced payments totaled \$302,298,000 at June 30, 2020, and will be reported as patient care revenues in a future period as the qualifying patient care services are performed.

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.

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 \$2,055,430,000 and \$2,144,532,000 at June 30, 2020 and 2019, 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.

Notes to Consolidated Financial Statements—Continued

Note 1—Organization and Summary of Significant Accounting Policies—Continued

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 \$94,292,000 and \$78,370,000 in 2020 and 2019, 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.

Federal economic relief funds represent funding received from the federal government as a result of the Coronavirus Aid, Relief and Economic Security ("CARES") Act. The CARES Act was signed into law in March 2020 in order to provide economic assistance for businesses and individuals that have been negatively impacted by the COVID-19 pandemic. During 2020, the University received payments primarily from two CARES Act programs, the Provider Relief Fund and the Higher Education Emergency Relief Fund.

The Provider Relief Fund is administered through the U.S. Department of Health and Human Services and offers funding to hospitals and health care providers to support expenses incurred or revenues lost associated with the COVID-19 pandemic. Funds received are recognized into revenue as the University identifies eligible expenditures or lost revenues which qualify for reimbursement. Revenue recognized under the terms of this program totaled \$134,670,000 in 2020.

Notes to Consolidated Financial Statements—Continued

Note 1—Organization and Summary of Significant Accounting Policies—Continued

The Higher Education Emergency Relief Fund is administered through the U.S. Department of Education and was designed to facilitate the distribution of emergency financial aid grants directly to students, as well as to provide funding for institutions negatively impacted by the COVID-19 pandemic. Under the terms of the student portion of this program, revenue is recognized once eligible expenditures associated with the distribution of aid to students have been incurred. For the institutional portions of this program, revenue is recognized as the University identifies eligible expenditures or lost revenues which qualify for reimbursement. Revenue recognized from the Higher Education Emergency Relief Fund totaled \$9,159,000 in 2020, and was primarily related to the distribution of emergency financial aid grants to students.

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

<u>Summary</u>: 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.

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

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.

<u>Authorizations</u>: 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.

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

Cash and Cash Equivalents and Unexpended Bond Proceeds: Cash and cash equivalents, which totaled \$1,275,401,000 and \$397,279,000 at June 30, 2020 and 2019, 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 \$84,860,000 and \$14,121,000 at June 30, 2020 and 2019, respectively. The University does not require its deposits to be collateralized or insured.

Unexpended bond proceeds, which totaled \$125,905,000 and \$90,813,000 at June 30, 2020 and 2019, 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 \$1,198,773,000 and \$278,275,000 at June 30, 2020 and 2019, respectively. Level 2 securities, which primarily consist of U.S. agencies, totaled \$59,000,000 and \$36,000,000 at June 30, 2020 and 2019, respectively.

<u>Investments</u>: At June 30, 2020 and 2019, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows:

2020

2019

	2020	2017	
	(in thousands)		
Cash equivalents, noncurrent	\$ 284,268	\$ 167,876	
Equity securities	486,404	1,222,061	
Fixed income securities	2,075,171	1,361,575	
Commingled funds	2,589,411	3,295,746	
Nonmarketable alternative investments	9,361,811	8,339,202	
Other investments	11,990	(1,046)	
	\$ 14,809,055	\$ 14,385,414	

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

At June 30, 2020 and 2019, the fair value of the University's investments based on the inputs used to value them is summarized as follows:

	2020				
	Level 1	Level 2	Level 3 (in thousands)	NAV	Total Fair Value
Cash equivalents, noncurrent	\$ 284,268	-	-	-	\$ 284,268
Equity securities:					
Domestic	88,599		\$ 52,098		140,697
Foreign	344,722		985		345,707
	433,321	-	53,083	-	486,404
Fixed income securities:	,				,
U.S. Treasury	1,405,695				1,405,695
U.S. government agency	-,,	\$ 31,848			31,848
Corporate and other		626,043	11,585		637,628
•	1,405,695	657,891	11,585	-	2,075,171
Commingled funds: Absolute return	, ,	,		\$ 2,154,259	2,154,259
Domestic equities	9,494			144,541	154,035
Global equities	674			261,379	262,053
U.S. fixed income	3,061				3,061
Other	16,003				16,003
	29,232	-	-	2,560,179	2,589,411
Nonmarketable alternative investments:					
Venture capital				2,673,995	2,673,995
Absolute return				2,174,643	2,174,643
Private equity			279,200	1,701,552	1,980,752
Real estate			8,331	1,347,008	1,355,339
Natural resources			160,993	1,016,089	1,177,082
	-	-	448,524	8,913,287	9,361,811
Other investments	(6)	2,467	9,529	-	11,990
_	\$ 2,152,510	\$ 660,358	\$ 522,721	\$ 11,473,466	\$ 14,809,055

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

			2019		
- -	Level 1	Level 2	Level 3 (in thousands)	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
<u>-</u>	1,174,524	_	47,537	-	1,222,061
Fixed income securities:	-,-, ,,,		11,500,		-,,
U.S. Treasury	735,365				735,365
U.S. government agency	, 50,500	\$ 27,355			27,355
Corporate and other		586,024	12,831		598,855
-	735,365	613,379	12,831	-	1,361,575
Commingled funds:	700,000	0.0,0,7	12,000		1,0 0 1,0 7 0
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

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. 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.

Notes to Consolidated Financial Statements—Continued

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 3.6 years at June 30, 2020 compared to 5.0 years at June 30, 2019. 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, 2020 and 2019, which are used to adjust the duration of cash equivalents and the fixed income portion of the portfolios.

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

The composition of fixed income securities at June 30, 2020 and 2019, along with credit quality and effective duration measures, is summarized as follows:

			2020			
	11.0		Non-			
	U.S. Government	Investment Grade	Investment Grade	Not Rated	Total	Duration
	Government	Grade	(in thousands)	Not Rated	Total	(in years)
U.S. Treasury	\$ 1,396,416				\$ 1,396,416	2.1
U.S. Treasury inflation protected	9,279				9,279	8.0
U.S. government agency	31,848				31,848	1.7
Mortgage backed		\$ 31,752	\$ 299	\$ 2,531	34,582	1.9
Asset backed		40,676			40,676	0.9
Corporate and other		527,843	14,431	20,096	562,370	7.8
	\$ 1,437,543	\$ 600,271	\$ 14,730	\$ 22,627	\$ 2,075,171	3.6

			2019			
	U.S. Government	Investment Grade	Non- Investment Grade (in thousands)	Not Rated	Total	Duration (in years)
U.S. Treasury U.S. Treasury inflation	\$ 724,727				\$ 724,727	5.0
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

Of the University's fixed income securities, 98 percent and 97 percent were rated investment grade or better at June 30, 2020 and 2019, respectively, and 75 percent and 63 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, 2020 and 2019, 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.

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

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, 2020 and 2019, no individual partnership investment represented 5 percent or more of total investments.

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, 2020 is summarized as follows (amounts in thousands):

		Remaining	Outstanding		_
	Fair Value	Life	Commitments	Redemption Terms	Redemption Notice
Commingled funds	\$ 2,589,411	N/A		Daily, monthly, quarterly and annually, with varying notice periods	Lock-up provisions range from none to 5 years
Nonmarketable alternative					
investments	\$ 9,361,811	1-12 years	\$ 5,386,280	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, 2020 and 2019, 74 percent and 75 percent, respectively, are redeemable within one year, with 55 percent and 58 percent, respectively, 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.

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

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 \$1,377,093,000 or 9 percent of total investments at June 30, 2020, and \$1,726,091,000 or 12 percent of total investments at June 30, 2019, and are summarized as follows:

	2020	2019
	(in the	nousands)
Euro	\$ 840,583	\$ 805,536
British pound sterling	173,115	289,940
Japanese yen	129,016	232,252
Swedish krona	100,114	111,224
Canadian dollar	43,004	83,105
Norwegian krone	63,875	39,071
Other	27,386	164,963
	\$ 1,377,093	\$ 1,726,091

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 \$15,989,000 and \$64,548,000 in securities loans outstanding at June 30, 2020 and 2019, 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

Notes to Consolidated Financial Statements—Continued

Note 2—Cash and Investments—Continued

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, 2020, collateral of \$16,607,000 (104 percent of securities on loan) includes invested cash of \$8,728,000 and U.S. government securities of \$7,879,000, while 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.

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, 2020 and 2019 is summarized as follows:

	2020	2019
	(in the	ousands)
Patient care Sponsored programs State appropriations, educational and capital Student accounts Other	\$ 439,345 153,470 70,732 43,327 38,500	\$ 539,653 172,681 67,353 32,715 36,975
Other Control	745,374	849,377
Less allowance for uncollectible accounts receivable:	,	,
Patient care	110,131	125,731
State educational appropriations	41,664	0.005
All other	9,722	9,025
	\$ 583,857	\$ 714,621

The state of Michigan is expected to experience a reduction to its overall revenues due to the economic impact of the COVID-19 pandemic, which creates uncertainty regarding the timing and amount of the University's future state appropriations payments. In July 2020, the State amended its 2020 appropriations bill to replace \$41,664,000 of the University's state educational appropriations with Coronavirus Relief Funds received under the CARES Act. The University considered this amendment to be a recognized subsequent event relative to contingencies that existed at the date of the financial statements, and therefore established a corresponding valuation allowance at June 30, 2020.

Notes to Consolidated Financial Statements—Continued

Note 4—Notes and Pledges Receivable

The composition of notes and pledges receivable at June 30, 2020 and 2019 is summarized as follows:

	2020	2019
	(in thou	ısands)
Notes:	•	
Federal student loan programs	\$ 63,134	\$ 74,153
University student loan funds	14,777	15,691
Other	5,664	1,396
	83,575	91,240
Less allowance for uncollectible notes	3,134	3,134
Total notes receivable, net	80,441	88,106
	•	
Gift pledges:		
Capital	119,205	138,983
Operations	186,723	167,350
	305,928	306,333
Less:		
Allowance for uncollectible pledges	7,488	8,137
Unamortized discount to present value	4,444	4,840
Total pledges receivable, net	293,996	293,356
	•	
Total notes and pledges receivable, net	374,437	381,462
Less current portion	98,723	80,035
-	\$ 275,714	\$ 301,427

The principal repayment and interest rate terms of federal and University loans vary considerably. The allowance for uncollectible notes only applies to University funded loans 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.

Notes to Consolidated Financial Statements—Continued

Note 4—Notes and Pledges Receivable—Continued

Payments on pledges receivable at June 30, 2020 are expected to be received in the following years ended June 30 (in thousands):

2021	\$ 82,191
2022	54,970
2023	43,583
2024	54,709
2025	26,012
2026 and after	44,463
	\$ 305,928

Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling \$140,439,000 and \$156,957,000 at June 30, 2020 and 2019, 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.

Notes to Consolidated Financial Statements—Continued

Note 5—Capital Assets

Capital assets activity for the years ended June 30, 2020 and 2019 is summarized as follows:

	2020				
	Beginning			Ending	
	Balance	Additions	Retirements	Balance	
		(in th	nousands)	T	
Land	\$ 153,310		\$ 92	\$ 153,218	
Land improvements	160,301	\$ 3,666	341	163,626	
Infrastructure	264,757	21		264,778	
Buildings	9,412,876	224,134	28,624	9,608,386	
Construction in progress	413,207	222,308		635,515	
Equipment	2,242,493	143,259	144,669	2,241,083	
Library materials	674,491	24,710		699,201	
	13,321,435	618,098	173,726	13,765,807	
Less accumulated depreciation	7,094,466	566,694	168,361	7,492,799	
•	\$ 6,226,969	\$ 51,404	\$ 5,365	\$ 6,273,008	

	2019				
	Beginning			Ending	
	Balance	Additions	Retirements	Balance	
		(in th	nousands)	Т	
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	

The increase in construction in progress of \$222,308,000 in 2020 represents the amount of capital expenditures for new projects of \$501,330,000 net of assets placed in service of \$279,022,000. 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.

Notes to Consolidated Financial Statements—Continued

Note 6—Long-term Debt

Long-term debt at June 30, 2020 and 2019 is summarized as follows:

	2020	2019
	(in thou	ısands)
Commercial paper:		
Tax-exempt, variable rate (0.32%)*	\$ 133,585	\$ 142,990
Taxable, variable rate (0.25%)*	1,720	2,250
General revenue bonds:		
Series 2020A, 4.00% to 5.00% through 2050	138,430	
unamortized premium	37,469	
Series 2020B, taxable, 1.00% to 2.56% through 2050	850,025	
Series 2019A, 5.00% through 2036	140,470	148,330
unamortized premium	23,721	26,936
Series 2019B, taxable, 2.535% to 3.416% through 2029	15,280	16,755
Series 2019C, 4.00% through 2049	61,725	61,725
unamortized premium	5,696	5,949
Series 2018A, 4.00% to 5.00% through 2048	132,640	135,130
unamortized premium	16,941	17,988
Series 2017A, 4.00% to 5.00% through 2047	434,505	447,410
unamortized premium	66,527	72,310
Series 2015, 4.00% to 5.00% through 2046	287,170	294,850
unamortized premium	41,662	44,612
Series 2014A, 4.25% to 5.00% through 2044	72,375	74,250
unamortized premium	5,621	6,056
Series 2014B, taxable, 2.622% to 3.516% through 2024	3,890	4,820
Series 2013A, 2.50% to 5.00% through 2029	42,180	43,575
unamortized premium	1,209	1,424
Series 2012A, variable rate (0.11%)* through 2036	50,000	50,000
Series 2012B, variable rate (0.08%)* through 2042	65,000	65,000
Series 2012D-1, variable rate (0.07%)* through 2025 with partial swap		
to fixed through 2025	52,870	56,635
Series 2012D-2, variable rate (0.11%)* through 2030 with partial swap		
to fixed through 2026	53,750	58,315
Series 2012E**, variable rate (0.40%)* through 2033	94,015	94,525
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
unamortized premium		2,937
Series 2010D, taxable Build America Bonds, 3.456% to 5.333% through 2041	149,755	157,860
Series 2009B, variable rate (0.27%)* through 2039	118,710	118,710
Series 2008A, variable rate (0.11%)* through 2038	57,085	57,085
Series 2008B, variable rate (0.07%)* through 2028 with swap to fixed		
through 2026	59,035	65,070
Other		91
Lace	3,376,171	2,475,028
Less: Commercial paper and current portion of bonds payable	215 650	222.005
Long-term bonds payable subject to remarketing, net	215,658 441,450	232,095 133,616
Long-term bonds payable subject to remarketing, net	\$ 2,719,063	\$ 2,109,317
	φ 4,/17,003	φ 4,103,31/

^{*} Denotes variable rate at June 30, 2020 ** Denotes variable rate bonds not subject to remarketing

Notes to Consolidated Financial Statements—Continued

Note 6—Long-term Debt—Continued

Certain variable rate bonds have remarketing features which allow bondholders to put debt back to the University. Accordingly, these variable rate bonds are 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 subject to remarketing at June 30, 2020 and 2019 is summarized as follows:

	2020	2019
	(in thousands)	
Variable note hands nevable subject to nemediating	¢ 456 450	¢ 470 015
Variable rate bonds payable subject to remarketing Less:	\$ 456,450	\$ 470,815
Current principal maturities	15,000	14,365
Long-term liquidity agreements:	13,000	14,303
Unsecured lines of credit		275,263
Standby bond purchase agreements		47,571
Long-term bonds payable subject to remarketing, net	\$ 441,450	\$ 133,616

The University's available lines of credit totaled \$1,247,085,000 and \$347,085,000, and were entirely unused at June 30, 2020 and 2019, respectively.

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.

Notes to Consolidated Financial Statements—Continued

Note 6—Long-term Debt—Continued

Long-term debt activity for the years ended June 30, 2020 and 2019 is summarized as follows:

	2020			
	Beginning Balance	Additions (in thou	Reductions isands)	Ending Balance
Commercial paper Bonds Other	\$ 145,240 2,329,697 91	\$ 1,026,022	\$ 9,935 114,853 91	\$ 135,305 3,240,866
	\$ 2,475,028	\$ 1,026,022	\$ 124,879	\$ 3,376,171
	2019			
	Beginning Balance	Additions (in tho	Reductions usands)	Ending Balance
Commercial paper Bonds	\$ 158,460 2,235,374	\$ 260,034	\$ 13,220 165,711	\$ 145,240 2,329,697
Other	174	200,031	83	91
	\$ 2,394,008	\$ 260,034	\$ 179,014	\$ 2,475,028

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 2.9 percent and 3.0 percent in 2020 and 2019, 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.

During 2020, the University issued \$988,455,000 of General Revenue Bonds with a net original issue premium of \$37,567,000, which included \$138,430,000 of fixed rate, tax-exempt bonds Series 2020A and \$850,025,000 of fixed rate, taxable bonds Series 2020B. Total bond proceeds of \$1,026,022,000 were utilized to refund existing bonds of \$26,023,000 and provide \$149,700,000 for capital projects, \$848,063,000 for capital projects, refunding of debt and general purposes, and \$2,236,000 for debt issuance costs.

Notes to Consolidated Financial Statements—Continued

Note 6—Long-term Debt—Continued

The refunded bonds represent the remaining portion of General Revenue Bonds Series 2010C, which had an average interest rate of 4.4 percent and a final maturity date of April 1, 2027. As a result of the refunding, the University reduced its aggregate debt service payments over the next seven years by \$1,047,000, resulting in an economic gain with present value savings of \$1,606,000.

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.

Deferred outflows associated with the University's refunding activity totaled \$6,078,000 and \$10,481,000 at June 30, 2020 and 2019, 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 2050. 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:

-	Principal	Interest* (in thousands)	Total
-			_
2021	\$ 200,340	\$ 103,256	\$ 303,596
2022	66,905	106,201	173,106
2023	81,010	103,735	184,745
2024	95,170	100,624	195,794
2025	198,705	96,836	295,541
2026-2030	593,225	414,297	1,007,522
2031-2035	502,680	305,904	808,584
2036-2040	841,260	205,967	1,047,227
2041-2045	208,590	85,275	293,865
2046-2050	389,440	47,689	437,129
Total payments	3,177,325	\$ 1,569,784	\$ 4,747,109
Plus unamortized premiums	198,846		
=	\$ 3,376,171		

^{*} Interest on variable rate debt is estimated based on rates in effect at June 30, 2020; amounts do not reflect federal subsidies to be received for Build America Bonds interest

Notes to Consolidated Financial Statements—Continued

Note 6—Long-term Debt—Continued

The University maintains certain unsecured lines of credit and standby bond purchase agreements that, in accordance with GASB requirements, do not qualify to support the noncurrent classification of variable rate bonds payable subject to remarketing. If all of the variable rate bonds subject to remarketing were put back to the University and these existing unsecured lines of credit and standby bond purchase agreements were not extended upon their current expiration dates, the total principal payments due in 2021 would decrease to \$185,340,000, total principal payments due in 2022 would decrease to \$51,260,000, total principal payments due in 2023 would increase to \$113,895,000, total principal payments due in 2024 would decrease to \$67,850,000 and total principal payments due in 2025 would increase to \$368,847,000. Accordingly, principal payments due in subsequent years would be increased to \$730,778,000 in 2026 through 2030, and reduced to \$378,475,000 in 2031 through 2035, \$704,545,000 in 2036 through 2040 and \$186,895,000 in 2041 through 2045. Principal payments due in 2046 through 2050 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 investment income or loss.

Notes to Consolidated Financial Statements—Continued

Note 7—Derivative Instruments—Continued

Derivative instruments held by the University at June 30, 2020 and 2019 are summarized as follows:

	20	20
	Notional	
	Amount	Fair Value
	(in tho	usands)
Investment derivative instruments:		
Investment portfolios:		
Futures	\$ 29,957	\$ (6)
Foreign currency forwards:		
Turkish lira	29,798	(8,074)
Brazil real	7,959	5,592
Norwegian krone	73,382	3,050
Indian rupee	30,362	(2,995)
Czech koruna	14,518	2,156
Mexican peso	10,890	(2,035)
All other currencies	542,244	4,431
	709,153	2,125
Other	14,082	(462)
Other	\$ 753,192	\$ 1,657
	\$ 755,172	\$ 1,037
Floating-to-fixed interest rate swaps on debt	\$ 52,760	\$ (7,201)
Effective cash flow hedges:	¢ 71.705	¢ (7.107)
Floating-to-fixed interest rate swaps on debt	\$ 71,795	\$ (7,187)
	20	19
	Notional	_
	Amount	Fair Value
	(in thou	ısands)
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	1 924 020	(14.445)
Ouici	1,834,929 \$ 3,946,642	(14,445)
Effective each flow hadges:	\$ 3,940,042	\$ (6,800)
Effective cash flow hedges: Floating-to-fixed interest rate swaps on debt	\$ 138,900	\$ (13,695)

Notes to Consolidated Financial Statements—Continued

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, 2020 and 2019, the fair value of floating-to-fixed interest rate swaps associated with the University's variable rate debt is (\$14,388,000) and (\$13,695,000), respectively, and is included in the statement of net position as a component of deposits of affiliates and other. The deferred outflows for the fair value of swaps deemed effective cash flow hedges totaled \$5,474,000 and \$4,694,000 at June 30, 2020 and 2019, respectively.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the years ended June 30, 2020 and 2019 is summarized as follows:

	2020	2019
	(in tho	usands)
Investment derivative instruments:		
Investment portfolios:		
Futures	\$ 25,144	\$ 22,332
Foreign currency forwards	53,557	41,907
Other	(28,758)	(117,840)
	\$ 49,943	\$ (53,601)
Floating-to-fixed interest rate swaps on debt	\$ 234	\$ -
Effective cash flow hedges:		
Floating-to-fixed interest rate swaps on debt	\$ (927)	\$ (1,483)

Notes to Consolidated Financial Statements—Continued

Note 7—Derivative Instruments—Continued

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 \$42,320,000 and \$48,355,000 at June 30, 2020 and 2019, 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 the 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, 2020 and 2019 and has a fair value of (\$4,560,000) and (\$3,884,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 2012D-2 General Revenue Bonds has a notional amount of \$29,475,000 and \$34,030,000 at June 30, 2020 and 2019, 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, 2020 and 2019 and has a fair value of (\$2,627,000) and (\$2,376,000), 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, 2020 and 2019, 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. During 2020, this swap was determined to be ineffective and was reclassified from an effective cash flow hedge to an investment derivative instrument. This swap has a fair value of (\$6,858,000) and (\$6,816,000) at June 30, 2020 and 2019, respectively.

The second floating-to-fixed interest rate swap associated with the Series 2012D-1 General Revenue Bonds has a notional amount of \$8,090,000 and \$11,845,000 at June 30, 2020 and 2019, respectively, covering a portion of the principal outstanding and the notional amount

Notes to Consolidated Financial Statements—Continued

Note 7—Derivative Instruments—Continued

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. During 2020, this swap was determined to be ineffective and was reclassified from an effective cash flow hedge to an investment derivative instrument. This swap has a fair value of (\$343,000) and (\$619,000) at June 30, 2020 and 2019, respectively.

Using rates in effect at June 30, 2020, 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		Rate Bonds Swap Payments,	
	Principal	Interest	Net	Payments
		(in the	ousands)	
2021	\$ 11,045	\$ 96	\$ 2,044	\$ 13,185
2022	11,490	87	1,707	13,284
2023	11,925	76	1,336	13,337
2024	12,410	66	953	13,429
2025	12,940	55	548	13,543
2026-2030	52,975	105	153	53,233
	\$ 112,785	\$ 485	\$ 6,741	\$ 120,011

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, 2020 and 2019, 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 \$366,000 and \$10,227,000 at June 30, 2020 and 2019, respectively, on deposit with its futures broker as collateral.

Notes to Consolidated Financial Statements—Continued

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, 2020 and 2019 are summarized as follows:

	2020	2019
	(in tho	usands)
Balance, beginning of year	\$ 231,912	\$ 235,162
Claims incurred and changes in estimates	825,721	745,730
Claim payments	(754,202)	(748,980)
Balance, end of year	303,431	231,912
Less current portion	144,827	104,235
	\$ 158,604	\$ 127,677

Notes to Consolidated Financial Statements—Continued

Note 9—Pension Plan

Metro Health has a noncontributory, single-employer defined benefit pension plan, which covered substantially all employees prior to being frozen at 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 calculated using the entry age normal level percent 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, 2019 and 2018 were determined based on an actuarial valuation at October 1, 2018 and 2017, respectively. There are no significant changes known which would impact the net pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2019 and 2018 measurement dates, the number of plan participants consisted of the following:

2019

2018

	-017	-010
Active participants	545	574
Vested terminated participants	867	905
Retirees, beneficiaries and disabled participants	405	372
	1,817	1,851

Notes to Consolidated Financial Statements—Continued

Note 9—Pension Plan—Continued

Changes in the reported net pension liability for the years ended June 30, 2020 and 2019 are summarized as follows:

		2020	
	Total Pension	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
		(in thousands)	
Balance, beginning of year	\$ 74,209	\$ 77,127	\$ (2,918)
Interest cost	4,957	Ψ / /,12/	4,957
Changes in assumptions	3,713		3,713
Differences between expected and actual	,		,
plan experience	(124)		(124)
Benefit payments	(6,791)	(6,791)	-
Contributions from the employer		1,244	(1,244)
Net investment income:			
Expected investment earnings		5,205	(5,205)
Differences between expected and actual		126	(426)
investment earnings	\$ 75 OCA	426	(426)
Balance, end of year	\$ 75,964	\$ 77,211	\$ (1,247)
		2019	
	Total Pension	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
		(in thousands)	
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	1 261		1 261
plan experience Benefit payments	1,361 (4,489)	(4,489)	1,361
Contributions from the employer	(4,409)	1,047	(1,047)
Net investment income:		1,047	(1,047)
Expected investment earnings		5,234	(5,234)
Differences between expected and actual		2,22.	(5,25.)
investment earnings		(1,168)	1,168

The plan fiduciary net position as a percentage of the total pension liability was 102 percent and 104 percent at June 30, 2020 and 2019, respectively.

Notes to Consolidated Financial Statements—Continued

Note 9—Pension Plan—Continued

Significant actuarial assumptions used at the June 30, 2019 and 2018 measurement dates are as follows:

	2019	2018
Discount rate	6.5%	7.0%
Inflation	2.0%	2.0%
Investment rate of return	6.5%	7.0%
Mortality table	RP-2014 Employee and Healthy	RP-2014 Employee and Healthy
	Annuitant, Scale MP-2018	Annuitant, Scale MP-2017

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 6.5 percent and 7.0 percent at June 30, 2019 and 2018, respectively, 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:

	2019			2018
	Portfolio	Long-Term	Portfolio	Long-Term
	Allocation	Expected Return	Allocation	Expected Return
U.S. large cap	25.0%	6.4%	25.0%	6.3%
U.S. mid cap	10.5%	7.2%	10.5%	7.1%
U.S. small cap	6.5%	7.8%	6.5%	7.8%
International developed	14.0%	5.1%	14.0%	5.2%
Emerging market	9.0%	5.2%	9.0%	5.1%
STRIPs	7.0%	4.5%	7.0%	4.3%
Corporate 10+ year	28.0%	4.9%	28.0%	5.0%

Notes to Consolidated Financial Statements—Continued

Note 9—Pension Plan—Continued

A one-percentage point change in the discount rate would impact the reported net pension liability at June 30, 2020 and 2019 as follows:

	2020		2019	
	1% Decrease	1% Increase	1% Decrease	1% Increase
		(in thou	ısands)	
Net pension liability	\$ 8,757	\$ (7,292)	\$ 8,313	\$ (6,931)

The components of pension expense (income) for the years ended June 30, 2020 and 2019 are summarized as follows:

	2020	2019
	(in tho	ısands)
Interest cost Expected investment earnings Amortization of deferred outflows and deferred	\$ 4,957 (5,205)	\$ 4,930 (5,234)
inflows	817	(7,857)
	\$ 569	\$ (8,161)

Deferred outflows and deferred inflows related to the reported net pension liability at June 30, 2020 and 2019 are summarized as follows:

	2020		2019	
	Deferred	Deferred	Deferred	Deferred
	Outflows	Inflows	Outflows	Inflows
		(in tho	usands)	
Changes in assumptions	\$ 2,119	\$ 44		\$ 330
Differences between expected and				
actual plan experience	217	70	\$ 789	161
Differences between expected and				
actual investment earnings	701	2,069	934	2,724
	3,037	2,183	1,723	3,215
Contributions made after measurement				
date	900		1,244	
	\$ 3,937	\$ 2,183	\$ 2,967	\$ 3,215

Notes to Consolidated Financial Statements—Continued

Note 9—Pension Plan—Continued

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):

2021	\$ 867
2022	(76)
2023	148
2024	(85)
	\$ 854

The inputs used to determine the fair value of the plan's investments reported at June 30, 2020 and 2019 are summarized as follows:

	2020			
	Level 1	Level 2	NAV	Total Fair Value
		(in tho	usands)	
Equity securities Fixed income securities Nonmarketable	\$ 52,917	\$ 22,818		\$ 52,917 22,818
alternative investments			\$ 1,476	1,476
	\$ 52,917	\$ 22,818	\$ 1,476	\$ 77,211
		20	19	
				Total Fair
	Level 1	Level 2	NAV	Value
		(in tho	usands)	
Equity securities Fixed income securities Nonmarketable	\$ 53,515	\$ 22,616		\$ 53,515 22,616
alternative investments			\$ 996	996
	\$ 53,515	\$ 22,616	\$ 996	\$ 77,127

Notes to Consolidated Financial Statements—Continued

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 postemployment benefits 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, 2019 and 2018 were determined based on an actuarial valuation at January 1, 2019 and 2018, 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.

Notes to Consolidated Financial Statements—Continued

Note 10—Postemployment Benefits—Continued

For purposes of the June 30, 2019 and 2018 measurement dates, the number of plan participants consisted of the following:

	2019		2018	
	Retiree Health	Long-term	Retiree Health	Long-term
	and Welfare	Disability	and Welfare	Disability
Active employees	43,380	37,042	42,559	36,331
Retirees receiving benefits	10,785		10,092	
Surviving spouses	898		871	
Participants receiving				
disability benefits		560		578
	55,063	37,602	53,522	36,909

Notes to Consolidated Financial Statements—Continued

Note 10—Postemployment Benefits—Continued

Changes in the reported total liability for postemployment benefits obligations for the years ended June 30, 2020 and 2019 are summarized as follows:

		2020	
	Retiree Health	Long-term	
	and Welfare	Disability	Total
		(in thousands)	
Balance, beginning of year	\$ 2,815,041	\$ 299,014	\$ 3,114,055
Service cost	102,097	32,018	134,115
Interest cost	111,804	12,219	124,023
Changes in assumptions	156,047	(1,270)	154,777
Differences between expected and	ŕ		ŕ
actual plan experience	44,773	(6,543)	38,230
Benefit payments	(56,815)	(30,897)	(87,712)
Balance, end of year	3,172,947	304,541	3,477,488
Less current portion	61,750	30,934	92,684
	\$ 3,111,197	\$ 273,607	\$ 3,384,804
		2019	
	Retiree Health	Long-term	
	and Welfare	Disability	Total
		(in thousands)	
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	(3,7,7,70)	(3,557)	(303,313)
Billerences between expected and	(37),770)	(3,537)	(303,313)
actual plan experience	23,232	(5,697)	17,535
	, ,		, ,
actual plan experience	23,232	(5,697)	17,535
actual plan experience Benefit payments	23,232 (53,974)	(5,697) (33,664)	17,535 (87,638)

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 \$628,624,000 and \$579,735,000 at June 30, 2020 and 2019, respectively.

Notes to Consolidated Financial Statements—Continued

Note 10—Postemployment Benefits—Continued

The University's liability for postemployment benefits obligations at June 30, 2020 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, 2020 and 2019 as a percentage of covered payroll of \$4,214,627,000 and \$4,013,983,000 was 83 percent and 78 percent, respectively.

Significant actuarial assumptions used at the June 30, 2019 and 2018 measurement dates are as follows:

	2019	2018
Discount rate*	3.50%	3.87%
Inflation rate	2.00%	2.00%
Immediate/ultimate administrative trend rate	0.0%/3.0%	0.0%/3.0%
Immediate/ultimate medical trend rate	6.0%/4.5%	6.5%/4.5%
Immediate/ultimate Rx trend rate	7.5%/4.5%	9.0%/4.5%
Increase in compensation rate	4.00%	4.00%
Mortality table**	PUB-2010 Teachers Head	RP-2014 White Collar Head
	Count Table, Scale MP-2018	Count Table, Scale MP-2017
Average future work life expectancy (years):		
Retiree health and welfare	9.03	9.14
Long-term disability	11.34	11.47

^{*} 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 2015-2019 for the June 30, 2019 measurement date and 2010-2014 for the June 30, 2018 measurement date

Notes to Consolidated Financial Statements—Continued

Note 10—Postemployment Benefits—Continued

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, 2020 and 2019 as follows:

	20	20	20	19
	1% Decrease	1% Increase	1% Decrease	1% Increase
		(in tho	usands)	
Discount rate:				
Retiree health and welfare	\$ 692,685	\$ (534,811)	\$ 604,507	\$ (467,375)
Long-term disability	\$ 10,615	\$ (10,820)	\$ 11,362	\$ (11,012)
Health care trend rates:				
Retiree health and welfare	\$ (588,152)	\$ 793,519	\$ (511,949)	\$ 688,288
Long-term disability	\$ (10,598)	\$ 10,829	\$ (12,311)	\$ 12,540

The components of postemployment benefits expense for the years ended June 30, 2020 and 2019 are summarized as follows:

	2020	
Retiree Health	Long-term	Total
and wellare	(in thousands)	Total
\$ 102,097	\$ 32,018	\$ 134,115
111,804	12,219	124,023
508	2,446	2,954
\$ 214,409	\$ 46,683	\$ 261,092
	2010	
D .1 . XX .1.1		
	•	
and Welfare	•	Total
	(in thousands)	
\$ 112,698	\$ 29,235	\$ 141,933
110,559	11,241	121,800
(21,731)	3,135	(18,596)
\$ 201,526	\$ 43,611	\$ 245,137
	\$ 102,097 111,804 508 \$ 214,409 Retiree Health and Welfare \$ 112,698 110,559 (21,731)	Retiree Health and Welfare Long-term Disability (in thousands) \$ 102,097 111,804 \$ 32,018 12,219 \$ 508 2,446 \$ 214,409 \$ 214,409 \$ 46,683 Retiree Health and Welfare Long-term Disability (in thousands) \$ 112,698 110,559 \$ 29,235 11,241 (21,731) 3,135

Notes to Consolidated Financial Statements—Continued

Note 10—Postemployment Benefits—Continued

Deferred outflows and deferred inflows related to the reported total liability for postemployment benefits obligations at June 30, 2020 and 2019 are summarized as follows:

	20	20	20	19
	Deferred	Deferred	Deferred	Deferred
	Outflows	Inflows	Outflows	Inflows
		(in tho	usands)	
Changes in assumptions Differences between expected	\$ 300,209	\$ 384,678	\$ 189,425	\$ 438,981
and actual plan experience	102,910	10,669	72,475	5,200
and account plant emperiore	403,119	395,347	261,900	444,181
Benefit payments made after	·			
measurement date	92,684		87,712	
	\$ 495,803	\$ 395,347	\$ 349,612	\$ 444,181

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):

2021	\$ 2,954
2022	2,954
2023	2,954
2024	2,954
2025	2,954
2026 and beyond	(6,998)
	\$ 7,772

Notes to Consolidated Financial Statements—Continued

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. 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, 2020 and 2019 are summarized as follows:

	2020	2019
	(in tho	usands)
University contributions	\$ 324,186	\$ 304,344
Employee contributions	\$ 169,014	\$ 158,856
Payroll covered under plan	\$ 4,214,627	\$ 4,013,983
Total payroll	\$ 4,389,523	\$ 4,182,021

Notes to Consolidated Financial Statements—Continued

Note 12—Net Position

The composition of net position at June 30, 2020 and 2019 is summarized as follows:

	2020	2019
	 (in thou	usands)
Net investment in capital assets	\$ 3,767,199	\$ 3,742,630
Restricted:		
Nonexpendable:		
Permanent endowment corpus	2,483,225	2,328,667
Expendable:		
Net appreciation of permanent endowments	2,055,430	2,144,532
Funds functioning as endowment	2,259,664	2,382,037
Restricted for operations and other	851,709	685,988
Unrestricted	3,109,773	3,520,054
	\$ 14,527,000	\$ 14,803,908

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, 2020 and 2019, substantially all of the unrestricted net position has been designated for various academic programs, research initiatives and capital projects.

Note 13—Federal Direct Lending Program

The University distributed \$316,410,000 and \$279,638,000 during the years ended June 30, 2020 and 2019, 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 \$1,604,000 and \$2,514,000 at June 30, 2020 and 2019, respectively, for DoED funding received subsequent to distribution.

Notes to Consolidated Financial Statements—Continued

Note 14—Commitments and Contingencies

Authorized expenditures for construction and other projects unexpended at June 30, 2020 were \$1,502,391,000. Of these expenditures, the University expects that \$1,301,089,000 will be funded by internal sources, gifts, grants and proceeds from borrowings; \$75,397,000 by the State Building Authority and the remaining \$125,905,000 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, 2020, the University had committed, but not paid, a total of \$5,386,280,000 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):

2021	\$ 1,896,940
2022	1,244,995
2023	888,355
2024	452,971
2025	319,703
2026 and beyond	583,316
	\$ 5,386,280

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:

	Capital	Operating
	(in thou	ısands)
2021	\$ 10,079	\$ 47,342
2022	10,241	42,247
2023	10,361	36,790
2024	8,981	32,505
2025	8,933	28,826
2026-2030	46,249	51,269
2031-2035	44,572	11,130
2036-2039	13,248	
	152,664	\$ 250,109
nting interest	66,132	
ise payments	\$ 86,532	

Less amount representing interest Present value of minimum lease payments

Notes to Consolidated Financial Statements—Continued

Note 14—Commitments and Contingencies—Continued

Operating lease expenses totaled \$49,215,000 and \$47,572,000 in 2020 and 2019, 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.

The University has been served with complaints (or waived service) in cases brought by plaintiffs who allege that Robert Anderson, a former University doctor who died in 2008, sexually assaulted them decades ago. The extent of the impact to the University's financial position and results of operations arising from these complaints cannot be fully determined at this time.

The COVID-19 pandemic and related actions taken by federal and state governments in response may materially impact the University's financial position and its results of operations, including those related to instruction, research, patient care and other auxiliary activities. While the University continues to design and execute plans to mitigate these risks, the extent of the impact to the University will depend on future developments beyond its control, including the overall duration and spread of the outbreak, and cannot be fully determined at this time.

Notes to Consolidated Financial Statements—Continued

Note 15—Operating Expenses by Function

Operating expenses by functional classification for the years ended June 30, 2020 and 2019 are summarized as follows:

			2020		
	Compensation	Supplies		_	
	and	and	Di-4i	and	Т-4-1
	Benefits	Services	Depreciation (in thousands)	Fellowships	Total
Instruction	\$ 1,074,171	\$ 130,602			\$ 1,204,773
Research	603,920	258,893			862,813
Public service	137,962	68,472			206,434
Academic support	294,759	65,199			359,958
Student services	106,563	25,959			132,522
Institutional support	209,173	78,203			287,376
Operations and maintenance of					
plant	91,458	232,618			324,076
Auxiliary enterprises	3,531,907	1,714,668			5,246,575
Depreciation			\$ 566,694		566,694
Scholarships and fellowships				\$ 173,073	173,073
	\$ 6,049,913	\$ 2,574,614	\$ 566,694	\$ 173,073	\$ 9,364,294

	2019					
	Compensation	Supplies		Scholarships		
	and	and		and		
	Benefits	Services	Depreciation	Fellowships	Total	
			(in thousands)			
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	

Notes to Consolidated Financial Statements—Continued

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, 2020 and 2019 is as follows:

	2020 (in thou	2019
Condensed Statement of Net Position	(iii tiloti	sanus)
Assets:		
Current assets	\$ 128,493	\$ 78,296
Noncurrent assets	265,182	258,841
Total assets	393,675	337,137
Deferred outflows	5,535	5,479
Total assets and deferred outflows	\$ 399,210	\$ 342,616
Liabilities:		
Current liabilities	\$ 86,184	\$ 49,389
Noncurrent liabilities	220,892	208,875
Total liabilities	307,076	258,264
Deferred inflows	4.662	5,860
·	,	- ,
Net position:	21 220	10.765
Net investment in capital assets Restricted:	31,229	19,765
Nonexpendable	682	3,881
Expendable	14,252	13,567
Unrestricted	41,309	41,279
Total net position	87,472	78,492
Total liabilities, deferred inflows and net position	\$ 399,210	\$ 342,616
Condensed Statement of Revenues, Expenses and Changes in Net Position		
Operating revenues	\$ 465,138	\$ 472,905
Operating expenses other than depreciation expense	439,535	438,974
Depreciation expense	21,195	22,028
Operating income	4,408	11,903
Nonoperating revenues (expenses), net	9,144	(6,966)
Other expenses, net	(4,572)	(4,986)
Increase (decrease) in net position	8,980	(49)
Net position, beginning of year	78,492	78,541
Net position, end of year	\$ 87,472	\$ 78,492
Condensed Statement of Cash Flows		
Net cash provided by operating activities	\$ 71,492	\$ 15,865
Net cash provided by (used in) noncapital financing activities	36,339	(1,033)
Net cash used in capital and related financing activities	(44,128)	(53,924)
Net cash (used in) provided by investing activities	(1,220)	23,942
Net increase (decrease) in cash and cash equivalents	62,483	(15,150)
Cash and cash equivalents, beginning of year	6,177	21,327
Cash and cash equivalents, end of year	\$ 68,660	\$ 6,177

Required Supplementary Information (Unaudited)

Pension Plan

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

	2020	2019	2018	2017
Total Pension Liability				
Interest cost	\$ 4,957	\$ 4,930	\$ 5,013	\$ 4,482
Changes in assumptions	3,713	(273)	(822)	(24,906)
Differences between expected and actual				
plan experience	(124)	1,361	(767)	2,067
Benefit payments	(6,791)	(4,489)	(4,712)	(4,089)
Net change in total pension liability	1,755	1,529	(1,288)	(22,446)
Total pension liability, beginning of year	74,209	72,680	73,968	96,414
Total pension liability, end of year	\$ 75,964	\$ 74,209	\$ 72,680	\$ 73,968
Plan Fiduciary Net Position				
Benefit payments	\$ (6,791)	(4,489)	(4,712)	(4,089)
Contributions from the employer	1,244	1,047	2,171	2,903
Net investment income:				
Expected investment earnings	5,205	5,234	4,848	3,166
Differences between expected and actual				
investment earnings	426	(1,168)	3,664	1,316
Net change in plan fiduciary net position	84	624	5,971	3,296
Plan fiduciary net position, beginning of year	77,127	76,503	70,532	67,236
Plan fiduciary net position, end of year	\$ 77,211	\$ 77,127	\$ 76,503	\$ 70,532
Net pension liability, end of year	\$ (1,247)	\$ (2,918)	\$ (3,823)	\$ 3,436
Plan fiduciary net position as a percentage of			4.0 :	0.55
the total pension liability	102%	104%	105%	95%

Required Supplementary Information (Unaudited)—Continued

Pension Plan—Continued

Mortality

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

	Employer	Actuarially Determined	(Deficient) Excess
	Contributions*	Contributions	Contributions
		(in thousands)	
2020	\$ 900	\$ 1,336	\$ (436)
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 $8\frac{1}{2}$ 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
	2020	3.92%	5.52%	6.29%	5.73%
	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%

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)—Continued

Postemployment Benefits

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

_	2020	2019	2018	2017
Service cost Interest cost Changes in assumptions Differences between expected and	\$ 134,115 124,023 154,777	\$ 141,933 121,800 (383,315)	\$ 143,787 94,153 (107,874)	\$ 122,073 108,561 255,041
actual plan experience Benefit payments	38,230 (87,712)	17,535 (87,638)	52,721 (77,374)	14,028 (72,302)
Net change	\$ 363,433	\$ (189,685)	\$ 105,413	\$ 427,401
Total liability, end of year Covered employee payroll Total liability, as a percentage of covered	\$ 3,477,488 \$ 4,214,627	\$ 3,114,055 \$ 4,013,983	\$ 3,303,740 \$ 3,792,553	\$ 3,198,327 \$ 3,568,918
employee payroll	83%	78%	87%	90%

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

2020	3.50%
2019	3.87%
2018	3.58%
2017	2.85%
2016	3.80%