

# 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 and its subsidiaries (the "University"), which comprise the consolidated statement of net position as of June 30, 2017, and the related consolidated statements of revenues, expenses and changes in net position and of cash flows for the year then ended.

## MANAGEMENT'S RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

## AUDITORS' RESPONSIBILITY

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

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

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*PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, MI 48226  
T: (313) 394 6000, F: (313) 394 6555 [www.pwc.com/us](http://www.pwc.com/us)*



### 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, 2017, and the changes in their financial position and their cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### EMPHASIS OF MATTER

As discussed in Note 1 to the consolidated financial statements, the University changed the manner in which it accounts for postemployment benefits other than pensions in 2017. Our opinion is not modified with respect to this matter.

### OTHER MATTER

The accompanying management's discussion and analysis on pages 29 through 45 and the accompanying supplemental information on pages 81 through 82 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 audit of the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*PricewaterhouseCoopers LLP*

October 19, 2017

PricewaterhouseCoopers LLP, 500 Woodward Avenue, Detroit, MI 48226  
T: (313) 394 6000, F: (313) 394 6555 www.pwc.com/us

# 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, 2017 and 2016 and its activities for the two fiscal years ended June 30, 2017. 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 61,000 students and approximately 8,000 faculty members on three campuses in southeast Michigan. The University offers a diverse range of degree programs from baccalaureate to post-doctoral levels through 19 schools and colleges, and contributes to the state and nation through related research and public service programs. The University also has a nationally renowned health system which includes the University of Michigan Hospitals, the University's Medical School, Michigan Health Corporation, a wholly-owned corporation created for joint venture and managed care initiatives, and UM Health, a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations. The University's health system currently includes four hospitals as well as numerous health centers and outpatient clinics.

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

On December 15, 2016, the University completed an affiliation with Metropolitan Health Corporation ("Metro Health"), a community health care provider in west Michigan, pursuant to which UM Health became the sole corporate member of Metro Health. In addition to its 208-bed hospital, Metro Health has neighborhood outpatient clinics and offices throughout west Michigan to serve the greater Grand Rapids area. In accordance with Governmental Accounting Standards Board ("GASB") Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, this combination is included in the financial statements as if it occurred at the beginning of the earliest period presented.

## FINANCIAL HIGHLIGHTS

The University's financial position remains strong, with total assets and deferred outflows of \$20.8 billion and total liabilities and deferred inflows of \$7.4 billion at June 30, 2017. Net position, which represents the residual interest in the University's total assets and deferred outflows after total liabilities and deferred inflows are deducted, totaled \$13.4 billion at June 30, 2017. Changes in net position represent the University's results of operations and are summarized for the year ended June 30, 2017 as follows (in millions):

Operating revenues and educational appropriations	\$ 7,480
Private gifts for operating activities	179
Operating and net interest expenses	(7,976)
	(317)
Net investment income	1,415
Endowment, capital gifts and grants, and other	178
Increase in net position	\$ 1,276

# MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

Net position has been restated at July 1, 2016 for the affiliation with Metro Health and the adoption of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* ("GASB 75"), and is summarized as follows (in millions):

Net position at June 30, 2016	\$ 13,001
Affiliation with Metro Health	80
Adoption of GASB 75	(930)
<u>Net position at July 1, 2016, as restated</u>	<u>\$ 12,151</u>

For purposes of management's discussion and analysis, comparative data for the statement of net position has been provided by combining Metro Health with the University and reflecting the adoption of GASB 75 at June 30, 2016. Certain balances as of June 30, 2016 have been reclassified to conform with current year presentations.

The results of operations reflect the University's focus on maintaining its national standards academically, in research and in health care within a competitive recruitment environment for faculty and health care professionals and a period of continued pressure on federal funding for research. At the same time, the University is addressing constrained state appropriations and rising health care, regulatory and facility costs with aggressive cost cutting and productivity gains to help preserve access to affordable higher education for Michigan families. To achieve aggressive and sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to bridge cuts and 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 \$318 million in 2017. The success of the University's long-term investment strategy is evidenced by strong returns over sustained periods of time and the ability to limit losses in the face of challenging markets.

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

## USING THE FINANCIAL STATEMENTS

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

## STATEMENT OF NET POSITION

The statement of net position presents the financial position of the University at the end of the fiscal year and includes all assets, deferred outflows, liabilities and deferred inflows of the University. The difference between total assets and deferred outflows as compared to total liabilities and deferred inflows – net position – is one indicator of the current financial condition of the University, while the change in net position is an indication of whether the overall financial condition has improved or worsened during the year. The University's assets, deferred outflows, liabilities, deferred inflows and net position at June 30, 2017 and 2016 are summarized as follows:

(in millions)	2017	2016
Current assets	\$ 2,696	\$ 2,545
Noncurrent assets:		
Endowment, life income and other investments	11,323	10,109
Capital assets, net	6,045	5,948
Other	439	346
<u>Total assets</u>	<u>20,503</u>	<u>18,948</u>
Deferred outflows	349	30
<u>Total assets and deferred outflows</u>	<u>20,852</u>	<u>18,978</u>
Current liabilities	1,802	1,881
Noncurrent liabilities	5,606	4,946
<u>Total liabilities</u>	<u>7,408</u>	<u>6,827</u>
Deferred inflows	17	
<u>Net position</u>	<u>\$ 13,427</u>	<u>\$ 12,151</u>

The University continues to maintain and protect its strong financial foundation. This financial health, as reflected in the University's net position at June 30, 2017 and 2016, results from the prudent utilization of financial resources including careful cost controls, preservation of endowment funds, conservative utilization of debt and adherence to a long-range capital plan for the maintenance and replacement of the physical plant.

Current assets consist primarily of cash and cash equivalents, operating and capital investments and accounts receivable and totaled \$2.7 billion and \$2.5 billion at June 30, 2017 and 2016, respectively. Cash, cash equivalents and investments for operating activities totaled \$1.4 billion at June 30, 2017, which represents approximately two months of total expenses excluding depreciation.

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, as well as, debt and derivative activity, and Metro Health's defined benefit pension plan. Deferred outflows totaled \$349 million and \$30 million at June 30, 2017 and 2016, respectively.

Current liabilities consist primarily of accounts payable, accrued compensation, unearned revenue, commercial paper, the current portion of bonds payable and net long-term bonds payable subject to remarketing. Current liabilities totaled \$1.8 billion and \$1.9 billion at June 30, 2017 and 2016, respectively.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with Metro Health's defined benefit pension plan. Deferred inflows totaled \$17 million at June 30, 2017.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

## ENDOWMENT, LIFE INCOME AND OTHER INVESTMENTS

The composition of the University's endowment, life income and other investments at June 30, 2017 and 2016 is summarized as follows:

(in millions)	2017	2016
Endowment investments	\$ 10,936	\$ 9,743
Life income investments	132	111
Noncurrent portion of insurance and benefits obligations investments	205	192
Other	50	63
	<u>\$ 11,323</u>	<u>\$ 10,109</u>

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

The University uses its endowment funds to support operations in a way that strikes a balance between generating a predictable stream of annual support for current needs and preserving the purchasing power of the endowment funds for future periods. The major portion of the endowment is maintained in the University Endowment Fund, a unitized pool which represents a collection of approximately 10,500 separate (individual) funds, the majority of which are restricted for specific purposes. The University Endowment Fund is invested in the University's Long Term Portfolio, a single diversified investment pool.

The endowment spending rule provides for distributions from the University Endowment Fund to the entities that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of University Endowment Fund shares. This spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather challenging economic environments while avoiding measures such as faculty hiring freezes, furloughs, program cuts or halting construction.

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

Endowment spending rate distributions totaled \$325 million and withdrawals from funds functioning as endowment totaled \$7 million in 2017. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.2 percent of the current year average fair value of the University Endowment Fund for 2017. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 5.0 percent.

## 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 \$636 million in 2017. Capital asset additions primarily represent renovation and new construction of academic, research, clinical and athletic facilities, as well as significant investments in equipment, including information technology. Current year capital asset additions were primarily funded with net position and gifts designated for capital purposes of \$396 million, as well as debt proceeds of \$222 million and state capital appropriations of \$18 million. Construction in progress, which totaled \$476 million at June 30, 2017, includes important projects for research, instruction, patient care and athletics.

Projects completed in 2017 include significant renovation and new construction of academic and research buildings for business, engineering and natural sciences.

The Ross School of Business completed a comprehensive renovation of Kresge Hall, formerly the Kresge Business Administration Library, and construction of a new academic building to replace the Computer and Executive Education Building, which adds classrooms, study space, and faculty research and office space, as well as space for student life functions, financial aid, admissions and onsite recruiting. In total, this project represents 75,000 gross square feet of renovation and 104,000 gross square feet of new construction. Exterior building finishes were also added to Sam Wyly Hall, the Business Administration Executive Dormitory and the Hill Street Parking Structure to create a welcoming and unified look for the entire Ross School complex of buildings.

The George Granger Brown Memorial Laboratories building, which was originally constructed in 1958, houses the chemical, civil, materials sciences and mechanical engineering departments within the College of Engineering. Renovation of this 220,000 gross square feet building included upgrades to the building's fire detection, alarm and emergency power systems. In addition, infrastructure improvements throughout the building included heating, ventilation, air conditioning, electrical, plumbing, roof, windows and interior finishes. This project also created 25,000 gross square feet of state-of-the-art academic and instructional spaces.

The Science Building on the University's Dearborn campus was originally constructed in 1959. Renovation of this 80,000 gross square foot building provides updated laboratory and classroom space for the Department of Natural Sciences. This project also incorporates an addition of 20,000 gross square feet for state-of-the-art laboratory spaces, a new elevator, loading dock and mechanical penthouse. Infrastructure that is shared with the adjacent Computer Science Building was also upgraded. The renewed facility will help transform science education and facilitate closer academic-industry and student-industry collaboration as well as facilitate collaboration with the College of Engineering in the emerging nano-science area.

Construction in progress at June 30, 2017 includes significant projects for instruction, research, international studies and athletics.

A Biological Science Building of 300,000 gross square feet is being constructed to provide a teaching, research and museum facility for the biological sciences and exhibit museums. Bringing these programs together will create exciting opportunities for interdisciplinary teaching, research and collaboration, and offer a richer experience for museum visitors. The new building will house classrooms, research laboratories, associated support functions, offices and vivarium services, as well as the anthropology, natural history, paleontology and zoology museums currently housed at the Alexander G. Ruthven Museums Building. The structure will also include a connection to the adjacent Life Sciences Institute Building to increase the utilization of its loading dock and vivarium functions. This project is scheduled to be completed in summer 2018.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

An extensive renovation of Weiser Hall, formerly the Dennison Building which was originally constructed in 1963, is underway. Renovation of 106,000 gross square feet vacated by the relocation of the Department of Astronomy to West Hall and the repurposing of classrooms will create spaces that facilitate faculty collaboration and enhance opportunities for graduate and undergraduate students. This project enables the relocation of the International Institute and its associated centers for international studies from the School of Social Work Building, along with other College of Literature, Science, and the Arts centers, institutes and units that have a primary focus on international engagement. In addition, 1,500 gross square feet of space will be added by enclosing an overhang area on the ground floor, and extending windows outward on the tenth floor. This project is scheduled to be completed in summer 2017.

The Athletics South Competition and Performance Project will add 280,000 gross square feet of space for men's and women's track and field, cross country, lacrosse, soccer and women's rowing. This project includes construction of an indoor and outdoor track competition venue, a lacrosse stadium and an indoor rowing tank. The project also includes construction of a performance and team center with specialized spaces for each team and shared resources for all teams, with strength and conditioning, athletic medicine, meeting space and locker rooms. This new center enables consolidation of various team facilities now dispersed across the athletic campus. The facilities will also be available to student-athletes who already practice and compete in that area, as well as students who participate in the University's recreational sports programs. This project is scheduled to be completed in winter 2018.

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 December 2016, Moody's affirmed its highest credit rating (Aaa) for bonds backed by a broad revenue pledge based on the University's ability to translate its international brand into revenue growth, philanthropic support and ongoing superior financial flexibility from robust financial reserves. Standard & Poor's also affirmed its highest credit rating (AAA) based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, excellent balance sheet, exceptional research presence and manageable debt burden.

Long-term debt activity for the year ended June 30, 2017 is summarized as follows (in millions):

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

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

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

The composition of the University's debt at June 30, 2017 and 2016 is summarized as follows:

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

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB Interpretation No. 1, such debt is classified as current unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements, which could refinance the debt on a long-term basis. In the event that variable rate bonds are put back to the University by the debt holder, management believes that the University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time. In addition, the University maintains five 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 2.7 percent in 2017, including the federal subsidies for interest on taxable Build America Bonds. Interest expense net of federal subsidies received for interest on taxable Build America Bonds and interest capitalized during construction totaled \$66 million in 2017.

## OBLIGATIONS FOR DEFINED BENEFIT PENSION PLAN

Metro Health has a noncontributory, defined benefit pension plan, which covered substantially all of its employees prior to being frozen as of December 31, 2007. The plan generally provides benefits based on each employee's years of service and final average earnings, as defined. At June 30, 2017 and 2016, the net pension liability totaled \$3 million and \$29 million, respectively, with the decline in the current year driven primarily by an increase in the investment rate of return assumption due to a change in the plan's asset allocation strategy.

## OBLIGATIONS FOR POSTEMPLOYMENT BENEFITS

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

Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled \$3.2 billion and \$2.8 billion at June 30, 2017 and 2016, respectively. The increase in the reported liability at June 30, 2017 was driven primarily by a decline in the discount rate used in developing the valuation, which under GASB 75, is now based on the Bond Buyer 20-year General Obligation Municipal Bond Index. Since a portion of retiree medical services will be provided by the University's health system, this liability is net of the related margin and fixed costs of providing those services which totaled \$674 million and \$616 million at June 30, 2017 and 2016, respectively.

By implementing a series of health benefit initiatives over the past 12 years, the University has favorably impacted its total liability for postemployment benefits by \$1.5 billion at June 30, 2017. 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)

## 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, 2017 and 2016 is summarized as follows:

(in millions)	2017	2016
Net investment in capital assets	\$ 3,735	\$ 3,715
Restricted:		
Nonexpendable:		
Permanent endowment corpus	1,967	1,816
Expendable:		
Net appreciation of permanent endowments	1,829	1,519
Funds functioning as endowment	2,126	1,942
Restricted for operations and other	699	669
Unrestricted	3,071	2,490
	<u>\$ 13,427</u>	<u>\$ 12,151</u>

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 and inflows 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 totaled \$4.7 billion at June 30, 2017, as compared to \$4.1 billion at June 30, 2016, with the current year increase driven primarily by an increase in net appreciation of permanent endowments resulting from investment income.

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, 2017 totaled \$3.1 billion and included funds functioning as endowment of \$4.9 billion offset by unfunded obligations for postemployment benefits of \$2.9 billion. Unrestricted net position at June 30, 2016 totaled \$2.5 billion and included funds functioning as endowment of \$4.3 billion offset by unfunded obligations for postemployment benefits of \$2.8 billion. Unrestricted net position also includes other net resources which totaled \$1.1 billion and \$1.0 billion at June 30, 2017 and 2016, respectively.

## 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 two years ended June 30, 2017 is summarized as follows:

(in millions)	2017	2016
Operating revenues:		
Net student tuition and fees	\$ 1,240.6	\$ 1,161.7
Sponsored programs	1,180.2	1,107.1
Patient care revenues, net	4,200.1	3,587.3
Other	458.8	421.9
	<u>7,079.7</u>	<u>6,278.0</u>
Operating expenses	7,910.0	7,152.8
Operating loss	<u>(830.3)</u>	<u>(874.8)</u>
Nonoperating and other revenues (expenses):		
State educational appropriations	356.0	345.8
Federal Pell grants	43.8	43.3
Private gifts for operating activities	179.0	167.2
Net investment income (loss)	1,415.2	(129.7)
Interest expense, net	(73.1)	(55.6)
Federal subsidies for interest on Build America Bonds	7.5	7.6
State capital appropriations	18.0	47.6
Endowment and capital gifts and grants	183.0	163.0
Other	(23.2)	(9.0)
Nonoperating and other revenues, net	<u>2,106.2</u>	<u>580.2</u>
Increase (decrease) in net position	1,275.9	(294.6)
Net position, beginning of year	13,001.2	13,295.8
Affiliation with Metro Health and adoption of GASB 75	(850.0)	
Net position, beginning of year, as restated	<u>12,151.2</u>	<u>13,295.8</u>
Net position, end of year	<u>\$ 13,427.1</u>	<u>\$ 13,001.2</u>

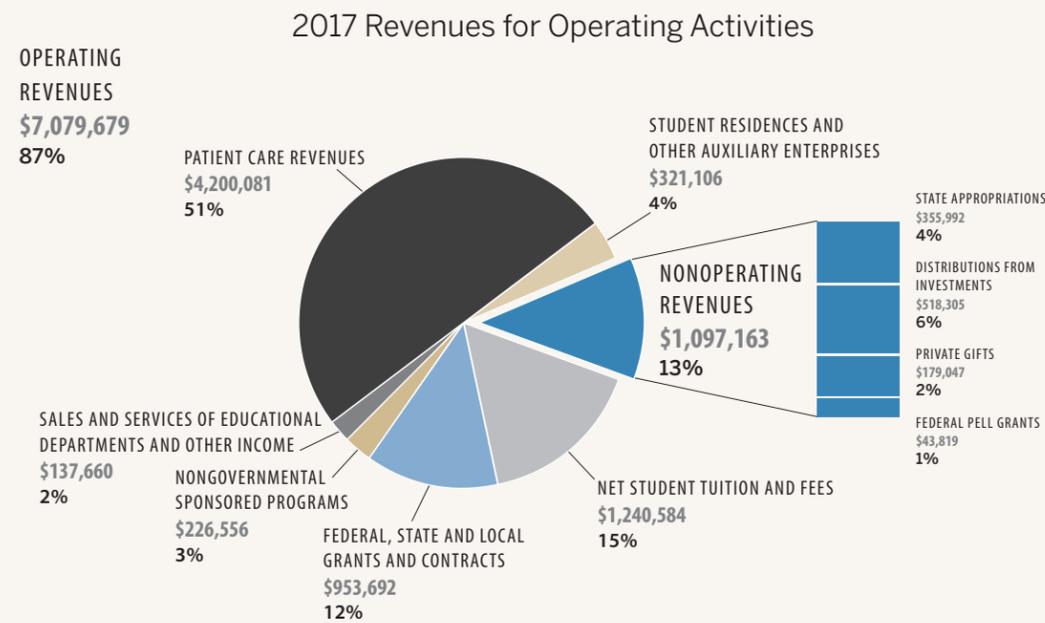
The impact of the Metro Health affiliation and the adoption of GASB 75 has been reflected as of the beginning of the earliest period presented in the financial statements, or July 1, 2016. Therefore, the statement of revenues, expenses and changes in net position presented above for the year ended June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

# MANAGEMENT'S DISCUSSION AND ANALYSIS

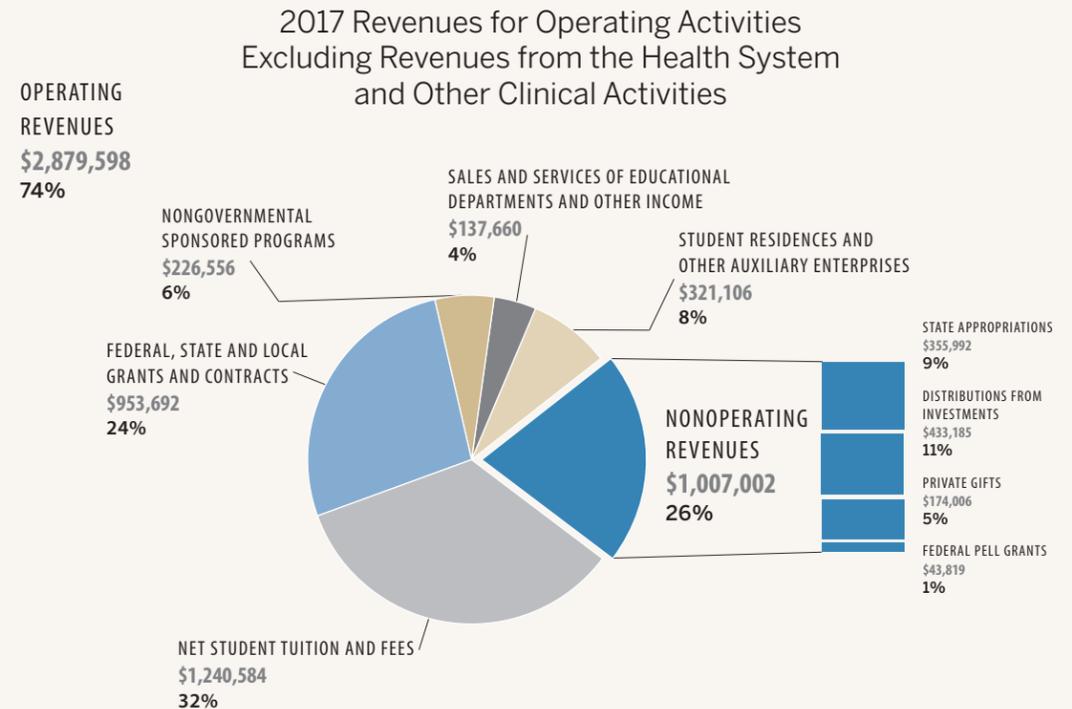
(UNAUDITED)

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, 2017 (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.



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, 2017 (amounts are presented in thousands of dollars).



Tuition and state appropriations are the primary sources of funding for the University's academic programs. There is a relationship between the growth or reduction in state support and the University's ability to restrain tuition fee increases. Together, net student tuition and fees and state appropriations totaled \$1.6 billion in 2017.

The University has been able to avoid the severe cuts and double digit tuition increases experienced elsewhere in the country due to a prudent long-term plan which anticipated the realities of the state's challenging economy. The University's plan includes an ongoing commitment to cost containment and reallocating resources to the highest priorities to provide support for innovative new initiatives to maintain academic excellence and help students keep pace with the evolving needs of society. In 2017, the University's state educational appropriations totaled \$356 million.

For the year ended June 30, 2017, net student tuition and fees revenue consisted of the following components (in millions):

Student tuition and fees	\$ 1,616.6
Less scholarship allowances	376.0
	\$ 1,240.6

# MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

Tuition rate increases in 2017 were 3.9 percent for resident undergraduate students, 4.4 percent for nonresident undergraduate students and 3.9 percent for most graduate students on the Ann Arbor campus, with a 4.1 percent tuition rate increase for most undergraduate students on both the Dearborn and Flint campuses. During 2017, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to non-resident 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. At the same time, the University has also increased scholarship and fellowship expenses and related allowances to benefit students in financial need.

While tuition and state appropriations fund a large percentage of University costs, private support is also essential to the University's academic distinction. Private gifts for other than capital and endowment purposes totaled \$179 million in 2017.

The University receives revenues for sponsored programs from various government agencies and private sources, which normally provide for both direct and indirect costs to perform these sponsored activities, with a significant portion related to federal research. Revenues for sponsored programs totaled \$1.2 billion in 2017.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities under contractual arrangements with governmental payers (Medicare and Medicaid) and private insurers. The distribution of gross charge activity by primary payer source for the year ended June 30, 2017 is summarized as follows:

Medicare	37%
Medicaid	17%
Blue Cross	29%
Other	17%

Patient care revenues totaled \$4.2 billion in 2017 and reflect growth in patient volume, as well as an increase in revenue per patient case.

Net investment income totaled \$1.4 billion in 2017. The investment environment in 2017 was favorable and all asset classes were positive for the year. The continued low interest rate environment and improving global economic activity helped lift expectations for corporate earnings growth across developed and emerging markets. Equity securities performance was particularly strong in the current year returning 25 percent, while private equity and natural resources led the alternative asset classes with returns of 17 percent. Other alternative investment classes include real estate and venture capital where returns ranged from 6 to 10 percent.

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

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. In 2017, private gifts for permanent endowment purposes totaled \$139 million and capital gifts and grants totaled \$44 million. In recent years, major gifts have been received in support of the University's wide-ranging capital initiatives which include graduate student housing, the health system, Law School, 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 continues to face significant financial pressures, particularly in the areas of compensation and benefits, which represent 63 percent of total expenses, as well as in the areas of energy, technology and ongoing maintenance of facilities and infrastructure.

The University's expenses for the year ended June 30, 2017 are summarized as follows (amounts in millions):

Operating:		
Compensation and benefits	\$ 5,064.4	63%
Supplies and services	2,164.0	27
Depreciation	537.7	7
Scholarships and fellowships	143.9	2
	<u>7,910.0</u>	<u>99</u>
Nonoperating:		
Interest, net	65.6	1
	<u>\$ 7,975.6</u>	<u>100%</u>

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 totaled \$5.1 billion in 2017, which included compensation of \$3.9 billion and employee benefits of \$1.2 billion. During 2017, nursing and other health professionals were added to support higher patient volume levels.

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.

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

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.

The University utilizes a point system to determine retirement eligibility, where points represent the combination of age and years of service for full-time employees. The points needed to retire with health benefits will gradually be increased from 76 in 2013 to 80 in 2021. Over the same period, the University's contribution towards health care benefits will gradually decrease from 87.5 percent for the retiree and 65 percent for any dependents for employees who retire in 2013 to a maximum of 80 percent for the retiree and 50 percent for any dependents for employees who retire in 2021. Employees who retire after December 31, 2020, will need a minimum of 20 years of service to receive the maximum contribution upon retirement. New employees hired after December 31, 2012 will receive a maximum contribution of 68 percent for the retiree and 26 percent for any dependents. These adjustments will keep the University's retiree benefits competitive with peer institutions while producing an estimated \$9 million reduction in annual cash outlay by 2020 and an estimated \$165 million reduction in annual cash outlay by 2040.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

(UNAUDITED)

The University continues to monitor and evaluate the cost of employee and retiree health benefits, following key benchmarks to ensure competitiveness with local and national higher education and health care markets. As the national health care debate continues, the University is closely tracking cost and coverage implications. Careful stewardship of our health benefit plans helps maintain our competitive position while preserving funding for the University's core mission.

In 2017, the University continued to make progress toward improving the health and well-being of faculty and staff, with over 25,000 employees participating in MHealthy programs and services. These initiatives not only help to decrease health risks for faculty and staff, but also improve the overall workplace culture at the University. The impact of these initiatives can also be measured in an overall increase in employee satisfaction, as according to a University-wide random sample survey, 64 percent of faculty and staff agreed that the University's health and well-being initiatives contribute to it being a great place to work.

Supplies and services expenses totaled \$2.2 billion in 2017 and 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 totaled \$538 million in 2017 and reflects the completion of current year capital projects, as well as the impact of a full year of depreciation for the capital projects completed during the prior year. Capital assets placed in service during 2017 include the renovation and an addition to the Ross School of Business, as well as the renovation of the Dearborn Science and Computer Information Science buildings and the George Granger Brown Memorial Laboratories.

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 year ended June 30, 2017 are summarized as follows (amounts in millions):

Operating:		
Instruction	\$ 1,099.8	14%
Research	803.5	10
Public service	187.8	2
Institutional and academic support	646.7	8
Auxiliary enterprises:		
Patient care	3,976.1	50
Other	198.1	2
Operations and maintenance of plant	316.4	4
Depreciation	537.7	7
Scholarships and fellowships	143.9	2
	<u>7,910.0</u>	<u>99</u>
Nonoperating:		
Interest, net	65.6	1
	<u>\$ 7,975.6</u>	<u>100%</u>

Instruction expenses totaled \$1.1 billion in 2017 and reflect the modest level of growth in the related revenue sources offset by cost containment efforts.

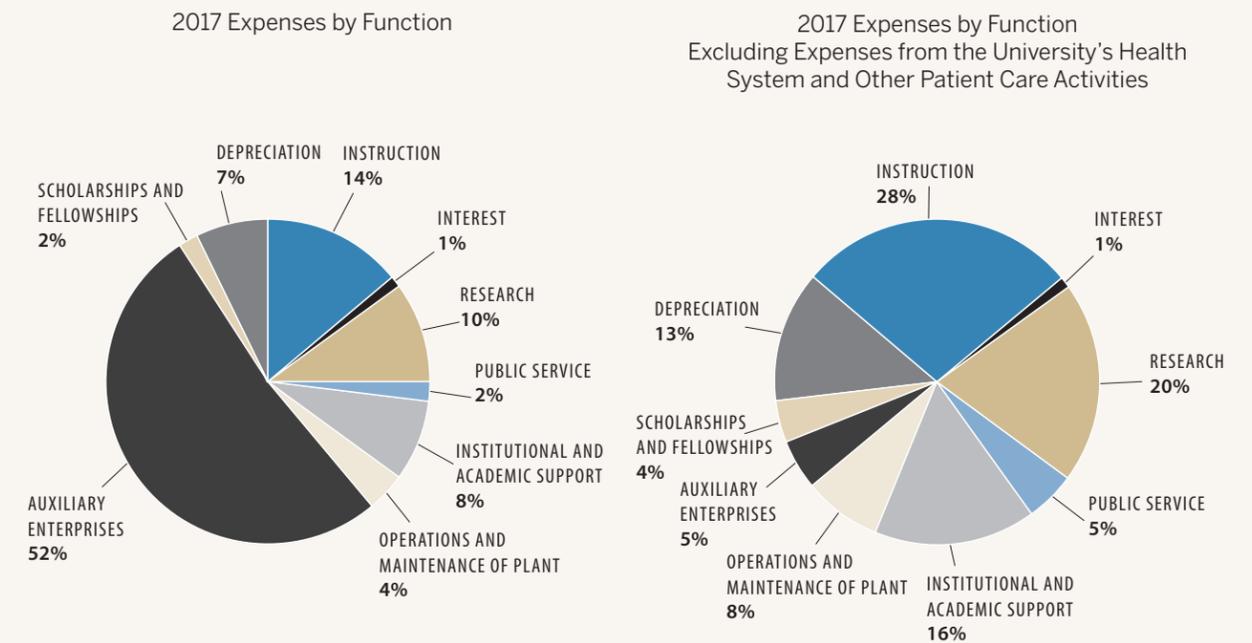
Research expenses totaled \$804 million in 2017, driven by the strength of the University's research enterprise, in spite of continued pressure on federal funding and intense competition for research dollars. To measure its total volume of research expenditures, the University considers research expenses included in the above table, as well as research related facilities and administrative expenses, research initiative and start-up expenses and research equipment purchases. These amounts totaled \$1.5 billion in 2017.

Patient care expenses totaled \$4.0 billion in 2017 and reflect the impact of additional patient care volume, including costs of staffing, medical supplies and pharmaceuticals.

Scholarships and fellowships provided to students totaled \$543 million in 2017. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarship and fellowship expenses. Scholarships and fellowships for the year ended June 30, 2017 are summarized as follows (in millions):

Paid directly to students	\$ 143.9
Applied to tuition and fees	376.0
Applied to University Housing	22.7
	<u>\$ 542.6</u>

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)

## 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, 2017 and 2016 are summarized as follows:

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

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

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

## ECONOMIC FACTORS THAT MAY AFFECT THE FUTURE

The University continues to face significant financial challenges to its academic programs, stemming from the State's difficult economic environment. Given these circumstances, it is noteworthy that the University maintains the highest credit ratings of Moody's (Aaa) and Standard & Poor's (AAA). Achieving and maintaining the highest credit ratings provides the University with significant flexibility in securing capital funds on the most competitive terms. This flexibility, along with ongoing efforts toward revenue diversification and cost containment, will enable the University to provide the necessary resources to support a consistent level of excellence in service to students, patients, the research community, the state and the nation.

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

The University's budget for 2018 anticipates a 1.9 percent increase in state educational appropriations, a 2.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 9.5 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 4.5 percent, while most graduate and professional rates will increase 4.1 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 3.7 percent and 4.1 percent, respectively.

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

The University continues to execute its long-range plan to maintain, modernize and expand its complement of older facilities while adding key new facilities for instruction, research, patient care, athletics and residential life. This strategy addresses the University's growth and the continuing effects of technology on teaching, research and clinical activities. Authorized costs to complete construction and other projects totaled \$901 million at June 30, 2017. Funding for these projects is anticipated to include \$797 million from internal sources, gifts, grants and future borrowings, \$6 million from the State Building Authority and \$98 million from the utilization of unexpended bond proceeds.

In addition to strategic capital and technological investments, the University's health system is also focusing on clinical affiliation arrangements to enhance patient care, clinical research, physician recruitment and support services. While the University's health system is well positioned to maintain a strong financial position in the near term, ongoing constraints on revenue are expected due to fiscal pressures from employers and federal and state governments. 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.

U.S. health care reform will also continue to influence benefits planning. Since the Affordable Care Act was signed into law in March 2010 and subsequently affirmed by the Supreme Court, new regulatory requirements continue to affect health plans, providers and employers alike. Beginning in 2011, the University has implemented several initiatives in response to this law including required cost-sharing, eligibility and communications changes. University experts are continuing to assess additional health care reform impacts, including health insurance exchanges for large employers in 2017 and the excise tax on high-cost plans in 2020. The University is working to develop clear strategies and options for the future that will ensure compliance over the coming years of regulatory change.

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

# FINANCIAL STATEMENTS

## CONSOLIDATED STATEMENT OF NET POSITION

(in thousands)	June 30, 2017
<b>Assets and Deferred Outflows</b>	
Current Assets:	
Cash and cash equivalents	\$ 105,127
Investments for operating activities	1,265,208
Investments for capital activities	378,931
Investments for student loan activities	58,836
Accounts receivable, net	639,384
Current portion of notes and pledges receivable, net	76,148
Current portion of prepaid expenses and other assets	127,799
Cash collateral held by agent	44,130
<b>Total Current Assets</b>	<b>2,695,563</b>
Noncurrent Assets:	
Unexpended bond proceeds	98,455
Endowment, life income and other investments	11,322,610
Notes and pledges receivable, net	312,478
Prepaid expenses and other assets	28,740
Capital assets, net	6,045,442
<b>Total Noncurrent Assets</b>	<b>17,807,725</b>
<b>Total Assets</b>	<b>20,503,288</b>
Deferred Outflows	348,691
<b>Total Assets and Deferred Outflows</b>	<b>\$ 20,851,979</b>

### Liabilities, Deferred Inflows and Net Position

Current Liabilities:	
Accounts payable	\$ 328,672
Accrued compensation and other	442,749
Unearned revenue	283,551
Current portion of insurance and benefits reserves	97,799
Current portion of obligations for postemployment benefits	77,374
Commercial paper and current portion of bonds payable	237,243
Long-term bonds payable subject to remarketing, net	202,718
Collateral held for securities lending	44,130
Deposits of affiliates and others	87,811
<b>Total Current Liabilities</b>	<b>1,802,047</b>
Noncurrent Liabilities:	
Accrued compensation	43,904
Insurance and benefits reserves	116,236
Obligations for defined benefit pension plan	3,436
Obligations for postemployment benefits	3,120,953
Obligations under life income agreements	65,897
Government loan advances	88,401
Bonds payable	1,877,554
Deposits of affiliates and other	289,213
<b>Total Noncurrent Liabilities</b>	<b>5,605,594</b>
<b>Total Liabilities</b>	<b>7,407,641</b>
Deferred Inflows	17,281
Net Position:	
Net investment in capital assets	3,735,130
Restricted:	
Nonexpendable	1,966,541
Expendable	4,653,983
Unrestricted	3,071,403
<b>Total Net Position</b>	<b>13,427,057</b>
<b>Total Liabilities, Deferred Inflows and Net Position</b>	<b>\$ 20,851,979</b>

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

# FINANCIAL STATEMENTS

## CONSOLIDATED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

(in thousands)	Year Ended June 30, 2017
<b>Operating Revenues</b>	
Student tuition and fees	\$ 1,616,575
Less scholarship allowances	375,991
Net student tuition and fees	1,240,584
Federal grants and contracts	942,287
State and local grants and contracts	11,405
Nongovernmental sponsored programs	226,556
Sales and services of educational departments	135,212
Auxiliary enterprises:	
Patient care revenues (net of provision for bad debts of \$95,214)	4,200,081
Student residence fees (net of scholarship allowances of \$22,678)	112,478
Other revenues	208,628
Student loan interest income and fees	2,448
<b>Total Operating Revenues</b>	<b>7,079,679</b>
<b>Operating Expenses</b>	
Compensation and benefits	5,064,422
Supplies and services	2,164,018
Depreciation	537,670
Scholarships and fellowships	143,932
<b>Total Operating Expenses</b>	<b>7,910,042</b>
Operating loss	(830,363)
<b>Nonoperating Revenues (Expenses)</b>	
State educational appropriations	355,992
Federal Pell grants	43,819
Private gifts for other than capital and endowment purposes	179,047
Net investment income	1,415,232
Interest expense, net	(73,150)
Federal subsidies for interest on Build America Bonds	7,506
<b>Total Nonoperating Revenues, Net</b>	<b>1,928,446</b>
Income before other revenues (expenses)	1,098,083
<b>Other Revenues (Expenses)</b>	
State capital appropriations	17,965
Capital gifts and grants	43,817
Private gifts for permanent endowment purposes	139,170
Other	(23,150)
<b>Total Other Revenues, Net</b>	<b>177,802</b>
Increase in net position	1,275,885
Net Position, Beginning of Year	13,001,255
Affiliation with Metro Health and Adoption of GASB 75	(850,083)
Net Position, Beginning of Year, as Restated	12,151,172
<b>Net Position, End of Year</b>	<b>\$ 13,427,057</b>

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

## CONSOLIDATED STATEMENT OF CASH FLOWS

(in thousands)	Year Ended June 30, 2017
<b>Cash Flows From Operating Activities</b>	
Student tuition and fees	\$ 1,242,227
Federal, state and local grants and contracts	945,781
Nongovernmental sponsored programs	240,657
Sales and services of educational departments and other	338,496
Patient care revenues	4,200,681
Student residence fees	112,623
Payments to employees	(3,881,649)
Payments for benefits	(1,060,665)
Payments to suppliers	(2,171,333)
Payments for scholarships and fellowships	(143,932)
Student loans issued	(19,675)
Student loans collected	20,730
Student loan interest and fees collected	2,448
<b>Net Cash Used in Operating Activities</b>	<b>(173,611)</b>
<b>Cash Flows From Noncapital Financing Activities</b>	
State educational appropriations	354,143
Federal Pell grants	43,819
Private gifts and other receipts	299,984
Student direct lending receipts	297,406
Student direct lending disbursements	(291,964)
Amounts received for annuity and life income funds	21,243
Amounts paid to annuitants and life beneficiaries and related expenses	(9,142)
<b>Net Cash Provided by Noncapital Financing Activities</b>	<b>715,489</b>

# FINANCIAL STATEMENTS

## CONSOLIDATED STATEMENT OF CASH FLOWS, CONTINUED

### Cash Flows From Capital and Related Financing Activities

State capital appropriations	40,676
Private gifts and other receipts	45,674
Proceeds from issuance of capital debt	573,439
Principal payments on capital debt	(428,828)
Interest payments on capital debt	(88,383)
Federal subsidies for Build America Bonds interest	7,462
Payments for bond refunding and related costs	(1,447)
Purchases of capital assets	(648,245)
Proceeds from sales of capital assets	1,692
<b>Net Cash Used in Capital and Related Financing Activities</b>	<b>(497,960)</b>

### Cash Flows From Investing Activities

Interest and dividends on investments, net	48,375
Proceeds from sales and maturities of investments	5,389,209
Purchases of investments	(5,718,627)
Unexpended capital debt proceeds	(98,455)
Net increase in cash equivalents from noncurrent investments	60,398
Net increase in deposits of affiliates and other	40,714
<b>Net Cash Used in Investing Activities</b>	<b>(278,386)</b>

Net decrease in cash and cash equivalents	(234,468)
Cash and Cash Equivalents, Beginning of Year	285,838
Affiliation with Metro Health	53,757
Cash and Cash Equivalents, Beginning of Year, as Restated	339,595
<b>Cash and Cash Equivalents, End of Year</b>	<b>\$ 105,127</b>

### Reconciliation of operating loss to net cash used in operating activities:

Operating loss	\$ (830,363)
Adjustments to reconcile operating loss to net cash used in operating activities:	
Depreciation expense	537,670
Changes in assets and liabilities:	
Accounts receivable, net	(11,427)
Prepaid expenses and other assets	(10,662)
Accounts payable	(4,103)
Accrued compensation and other	21,952
Unearned revenue	15,716
Insurance and benefits reserves	10,832
Obligations for defined benefit pension plan	(25,742)
Obligations for postemployment benefits	427,401
Changes in deferred outflows	(322,166)
Changes in deferred inflows	17,281
<b>Net cash used in operating activities</b>	<b>\$ (173,611)</b>

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

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

JUNE 30, 2017

## 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 61,000 students on its three campuses. The financial statements include the individual schools, colleges and departments, the University of Michigan Hospitals, 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) and Veritas Insurance Corporation (a wholly-owned captive insurance company). While the University is a political subdivision of the state of Michigan, it is not a component unit of the State in accordance with Governmental Accounting Standards Board ("GASB") Statement No. 14, *The Financial Reporting Entity*. The University is classified as a state instrumentality under Internal Revenue Code Section 115 and a charitable organization under Internal Revenue Code Section 501(c)(3), and is therefore exempt from federal income taxes. Certain activities of the University may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514.

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

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

On December 15, 2016, the University completed an affiliation with Metropolitan Health Corporation ("Metro Health"), a community health care provider in west Michigan, pursuant to which UM Health became the sole corporate member of Metro Health. In accordance with GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, this affiliation is included in the financial statements as if it occurred at the beginning of the earliest period presented. The University recognized, measured and combined the assets, deferred outflows, liabilities and net position of Metro Health based upon GASB accounting principles applied at July 1, 2016.

During 2017, the University adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, ("GASB 75"). This statement supersedes GASB Statement No. 45 and establishes new requirements for calculating and reporting the University's postemployment benefits. The adoption of GASB 75 has been reflected as of the beginning of the earliest period presented in the financial statements, resulting in an increase in obligations for postemployment benefits and a decrease in unrestricted net position of \$930,343,000 at July 1, 2016.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

Net position as of July 1, 2016 was restated for the effects of the University's affiliation with Metro Health and the adoption of GASB 75 as follows (in millions):

	June 30, 2016			July 1, 2016
	As Previously Reported*	Metro Health Affiliation	GASB 75 Adoption	As Restated
Current assets	\$ 2,445	\$ 100		\$ 2,545
Noncurrent assets:				
Endowment, life income and other investments	10,046	63		10,109
Capital assets, net	5,709	239		5,948
Other	337	9		346
Total assets	18,537	411		18,948
Deferred outflows	30			30
Total assets and deferred outflows	18,567	411		18,978
Current liabilities	1,771	113	\$ (3)	1,881
Noncurrent liabilities	3,795	218	933	4,946
Total liabilities	5,566	331	930	6,827
Net position	\$ 13,001	\$ 80	\$ (930)	\$ 12,151

\*Certain balances as of June 30, 2016 have been reclassified to conform with current year presentations.

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 and inflows associated with the acquisition, construction or improvement of those assets.
- Restricted:
  - Nonexpendable* – Net position subject to externally imposed stipulations that it be maintained permanently. Such net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.
  - Expendable* – Net position subject to externally imposed stipulations that can be fulfilled by actions of the University pursuant to those stipulations or that expire by the passage of time. Such net position includes net appreciation of the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently.
- Unrestricted: Net position not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. Substantially all unrestricted net position is designated for various academic programs, research initiatives and capital projects.

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

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

GASB Statement No. 72, *Fair Value Measurement and Application*, ("GASB 72"), 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 marketplace. 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 72 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 as of June 30, 2017. The University may also adjust the fair value of these investments based on market conditions, specific redemption terms and restrictions, risk considerations and other factors. As these investments are not readily marketable, the estimated value is subject to uncertainty, and therefore, may differ from the value that would have been used had a ready market for the investments existed.

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

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

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

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 pay 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 four to forty years. The University does not capitalize works of art or historical treasures that are held for exhibition, education, research or public service. These collections are neither disposed of for financial gain nor encumbered in any way. Accordingly, such collections are not recognized or capitalized for financial statement purposes.

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, as well as, debt and derivative activity, and Metro Health's defined benefit pension plan.

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

Deposits of affiliates and others represent cash and invested funds held by the University as a result of agency relationships with various groups. Noncurrent deposits of affiliates represent 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 Metro Health's defined benefit pension plan.

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 \$1,828,744,000 at June 30, 2017, is recorded in restricted expendable net position. The University's endowment spending rule is further discussed in Note 2.

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

Patient care revenues are reported net of contractual allowances and bad debt expenses. Contractual allowances are estimated based on agreements with third-party payers that provide payments for patient care services at amounts different from established rates. These allowances are subject to the laws and regulations governing the federal and state programs and post-payment audits, and adjusted in future periods as final settlements are determined. Patient care services are primarily provided through the University's health system, which includes the University of Michigan Hospitals, Metro Health, the University of Michigan Medical Group and Michigan Health Corporation. Patient care services are also provided through University Health Services, which provides health care services to students, faculty and staff, and Dental Faculty Associates, which provides 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 \$52,986,000 in 2017.

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 are from exchange transactions.

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

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

## NOTE 2—CASH AND INVESTMENTS

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

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

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

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 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.

**Authorizations:** The University's investment policies are governed and authorized by University Bylaws and the Board of Regents. The approved asset allocation policy for the Long Term Portfolio sets a general target of 80 percent equities and 20 percent fixed income securities, within a permitted range of 65 to 90 percent for equities and 10 to 35 percent for 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 to University entities based on the 90-day U.S. Treasury Bill rate. The University's costs to administer and grow the University Endowment Fund and UIP are funded by investment returns.

**Cash and Cash Equivalents:** Cash and cash equivalents, which totaled \$105,127,000 at June 30, 2017, represent 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 \$61,583,000 at June 30, 2017. The University does not require its deposits to be collateralized or insured.

Cash and cash equivalents include certain securities that are subject to the leveling requirements defined by GASB 72. At June 30, 2017, Level 1 securities, which primarily consist of money market funds and U.S. government securities, totaled \$6,845,000, while Level 2 securities, which primarily consist of U.S. agencies, totaled \$59,900,000.

**Investments:** At June 30, 2017, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows (in thousands):

Cash equivalents, noncurrent	\$ 102,550
Equity securities	1,364,719
Fixed income securities	2,181,020
Commingled funds	3,255,747
Nonmarketable alternative investments	6,112,495
Other investments	9,054
	<u>\$ 13,025,585</u>

GASB 72 establishes a hierarchy that prioritizes inputs to valuation techniques used to measure fair value. At June 30, 2017, the fair value of the University's investments based on the inputs used to value them is summarized as follows (in thousands):

	Level 1	Level 2	Level 3	NAV	Total Fair Value
Cash equivalents, noncurrent	\$ 102,550	-	-	-	\$ 102,550
Equity securities:					
Domestic	446,823		\$ 28,358		475,181
Foreign	888,965		573		889,538
	<u>1,335,788</u>	-	<u>28,931</u>	-	<u>1,364,719</u>
Fixed income securities:					
U.S. Treasury	1,020,420				1,020,420
U.S. government agency		\$ 301,634			301,634
Corporate and other		854,885	4,081		858,966
	<u>1,020,420</u>	<u>1,156,519</u>	<u>4,081</u>	-	<u>2,181,020</u>
Commingled funds:					
Absolute return				\$ 2,036,001	2,036,001
Domestic equities	17,206			274,829	292,035
Global equities	8,896			862,070	870,966
U.S. fixed income	10,938			41,332	52,270
Other	4,475			4,475	4,475
	<u>41,515</u>	-	-	<u>3,214,232</u>	<u>3,255,747</u>
Nonmarketable alternative investments:					
Venture capital				1,430,158	1,430,158
Absolute return				1,299,022	1,299,022
Private equity			207,078	1,271,632	1,478,710
Real estate			8,033	968,849	976,882
Natural resources			176,294	751,429	927,723
	-	-	<u>391,405</u>	<u>5,721,090</u>	<u>6,112,495</u>
Other investments	1,302	(4,036)	11,788	-	9,054
	<u>\$ 2,501,575</u>	<u>\$ 1,152,483</u>	<u>\$ 436,205</u>	<u>\$ 8,935,322</u>	<u>\$ 13,025,585</u>

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. Nonmarketable alternative investments categorized as Level 3 primarily include direct investments which are valued using models that rely on inputs which are unobservable in the market.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 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 Moody's and Standard & Poor'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 Baa by Moody's and BBB by Standard & Poor'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 imbedded options into one number expressed in years that indicates how price-sensitive a security or portfolio of securities is to changes in interest rates. The effective duration of a security or portfolio indicates the approximate percentage change in fair value expected for a one percent change in interest rates. The longer the duration, the more sensitive the security or portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income securities was 5.0 years at June 30, 2017. 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, 2017, which are used to adjust the duration of cash equivalents and the fixed income portion of the portfolios.

The composition of fixed income securities at June 30, 2017, along with credit quality and effective duration measures, is summarized as follows:

(in thousands)	U.S. Government	Investment Grade	Non-Investment Grade	Not Rated	Total	Duration (in years)
U.S. Treasury	\$ 791,194				\$ 791,194	6.2
U.S. Treasury inflation protected	229,226				229,226	2.7
U.S. government agency	301,634				301,634	0.5
Mortgage backed		\$ 64,229	\$ 7,143	\$ 5,159	76,531	1.0
Asset backed		71,441	650	126	72,217	0.7
Corporate and other		695,333	6,975	7,910	710,218	7.2
	\$ 1,322,054	\$ 831,003	\$ 14,768	\$ 13,195	\$ 2,181,020	5.0

Of the University's fixed income securities, 99 percent were rated investment grade or better at June 30, 2017, and 69 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, 2017.

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

Nonmarketable alternative investments consist of limited partnerships and similar vehicles involving an advance commitment of capital called by the general partner as needed and distributions of capital and return on invested capital as underlying strategies are concluded during the life of the partnership. There is not an active secondary market for these alternative investments, which are generally unrated and unregulated, and the liquidity of these investments is dependent on actions taken by the general partner. The University's limited partnerships are diversified in terms of manager selection, industry and geographic focus. At June 30, 2017, 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, 2017 is summarized as follows (amounts in thousands):

	Fair Value	Remaining Life	Outstanding Commitments	Redemption Terms	Redemption Notice
Commingled funds	\$ 3,255,747	N/A		Daily, monthly, quarterly, and annually, with varying notice periods	Lock-up provisions range from none to 3 years
Nonmarketable alternative investments	\$ 6,112,495	1-12 years	\$ 4,766,977	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, 2017, approximately 78 percent are redeemable within one year, with 61 percent redeemable within 90 days under normal market conditions. The remaining amounts are redeemable beyond one year, with redemption of certain funds dependent on disposition of the underlying assets. The University's committed but unpaid obligation to nonmarketable alternative investments is further discussed in Note 14.

The University participates in non-U.S. developed and emerging markets through commingled funds invested in non-U.S./global equities and absolute return strategies. Although substantially 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.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 2—CASH AND INVESTMENTS, CONTINUED

The value of the University's non-U.S. dollar holdings, net of the value of the outstanding forward foreign exchange contracts, totaled \$1,694,128,000 or 13 percent of total investments at June 30, 2017, and are summarized as follows (in thousands):

Euro	\$ 954,456
British pound sterling	230,211
Japanese yen	230,547
Canadian dollar	69,764
Swedish krona	52,440
Swiss franc	45,640
Other	111,070
	<u>\$ 1,694,128</u>

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 \$90,638,000 in securities loans outstanding at June 30, 2017. At loan inception, an approved borrower must deliver collateral of cash, securities or letters of credit to the University's lending agent equal to 102 percent of fair value for domestic securities and 105 percent for foreign securities. Collateral positions are monitored daily to ensure that borrowed securities are never less than 100 percent collateralized. At June 30, 2017, collateral of \$95,679,000 (106 percent of securities on loan) includes invested cash of \$44,130,000 and U.S. government securities of \$51,549,000.

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, 2017 is summarized as follows (in thousands):

Patient care	\$ 633,727
Sponsored programs	143,958
State appropriations, educational and capital	65,933
Student accounts	29,544
Other	33,602
	<u>906,764</u>
Less allowance for uncollectible accounts receivable:	
Patient care	258,847
All other	8,533
	<u>\$ 639,384</u>

## NOTE 4—NOTES AND PLEDGES RECEIVABLE

The composition of notes and pledges receivable at June 30, 2017 is summarized as follows (in thousands):

Notes:	
Federal student loan programs	\$ 88,911
University student loan funds	17,563
Other	1,120
	<u>107,594</u>
Less allowance for uncollectible notes	3,100
Total notes receivable, net	<u>104,494</u>
Gift pledges:	
Capital	177,043
Operations	121,047
	<u>298,090</u>
Less:	
Allowance for uncollectible pledges	10,064
Unamortized discount to present value	3,894
Total pledges receivable, net	<u>284,132</u>
Total notes and pledges receivable, net	388,626
Less current portion	76,148
	<u>\$ 312,478</u>

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

Payments on pledges receivable at June 30, 2017 are expected to be received in the following years ended June 30 (in thousands):

2018	\$ 61,113
2019	46,737
2020	37,136
2021	36,942
2022	22,200
2023 and after	93,962
	<u>\$ 298,090</u>

As discussed in Note 1, permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling \$185,551,000 at June 30, 2017, are not recognized as assets in the accompanying financial statements. 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

## NOTE 5—CAPITAL ASSETS

Capital assets activity for the year ended June 30, 2017 is summarized as follows (in thousands):

	Beginning Balance	Additions	Retirements	Ending Balance
Land	\$ 124,207	\$ 2,410		\$ 126,617
Land improvements	125,953	12,152	\$ 124	137,981
Infrastructure	255,921	2,528		258,449
Buildings	8,206,614	430,132	18,369	8,618,377
Construction in progress	456,391	19,733		476,124
Property held for future use	24,502	(24,502)		-
Equipment	2,068,851	167,252	185,255	2,050,848
Library materials	593,768	26,432		620,200
	11,856,207	636,137	203,748	12,288,596
Less accumulated depreciation	5,907,820	537,670	202,336	6,243,154
	\$ 5,948,387	\$ 98,467	\$ 1,412	\$ 6,045,442

The increase in construction in progress of \$19,733,000 in 2017 represents the amount of capital expenditures for new projects of \$563,683,000 net of assets placed in service of \$543,950,000.

## NOTE 6—LONG-TERM DEBT

Long-term debt at June 30, 2017 is summarized as follows (in thousands):

Commercial Paper:	
Tax-exempt, variable rate (.92%)*	\$ 157,160
Taxable, variable rate (1.03%)*	3,885
General Revenue Bonds:	
Series 2017A, 4.00% to 5.00% through 2047	464,750
unamortized premium	84,172
Series 2015, 4.00% to 5.00% through 2046	304,615
unamortized premium	50,686
Series 2014A, 4.25% to 5.00% through 2044	77,825
Series 2014B, 1.771% to 3.516% through 2024	6,625
unamortized premium	6,963
Series 2013A, 2.50% to 5.00% through 2029	46,385
unamortized premium	1,885
Series 2012A, variable rate (.85%)* through 2036	50,000
Series 2012B, variable rate (.70%)* through 2042	65,000
Series 2012D-1, variable rate (.68%)* through 2025 with partial swap to fixed through 2025	63,635
Series 2012D-2, variable rate (.88%)* through 2030 with partial swap to fixed through 2026 and variable rate 2027 through 2030	66,990
Series 2012E**, variable rate (1.34%)* through 2033	95,500
Series 2010A, taxable-Build America Bonds, 4.926% to 5.593% through 2040	163,110
Series 2010C, 3.75% to 5.00% through 2027	61,570
unamortized premium	4,434
Series 2010D, taxable-Build America Bonds, 3.176% to 5.333% through 2041	173,560
Series 2009A, 3.00% to 5.00% through 2019	12,555
unamortized premium	2,991
Series 2009B, variable rate (.87%)* through 2039	118,710
Series 2009D, taxable-Build America Bonds, 5.155% to 6.172% through 2030	89,815
Series 2008A, variable rate (.75%)* through 2038	57,085
Series 2008B, variable rate (.89%)* through 2028 with swap to fixed through 2026	77,185
Series 2005A, 5.00% through 2018	1,065
unamortized premium	17
Series 2002, variable rate (.91%)* through 2018 with swap to fixed through 2018	7,595
Other	1,747
	2,317,515
Less:	
Commercial paper and current portion of bonds payable	237,243
Long-term bonds payable subject to remarketing, net	202,718
	\$ 1,877,554

\* Denotes variable rate at June 30, 2017

\*\* Denotes variable rate bonds not subject to remarketing

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 6—LONG-TERM DEBT, CONTINUED

Certain variable rate bonds have remarketing features which allow bondholders to put debt back to the University. Accordingly, variable rate bonds payable is classified as current unless supported by liquidity agreements, such as lines of credit or standby bond purchase agreements, which can refinance the debt on a long-term basis. The classification of the University's variable rate bonds payable at June 30, 2017 is summarized as follows (in thousands):

Variable rate bonds payable subject to remarketing	\$ 506,200
Less:	
Current principal maturities	21,615
Long-term liquidity agreements:	
Unsecured line of credit	150,000
Standby bond purchase agreements	131,867
Long-term bonds payable subject to remarketing, net	<u>\$ 202,718</u>

The University's available line of credit and standby bond purchase agreements were entirely unused at June 30, 2017.

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

Long-term debt activity for the year ended June 30, 2017 is summarized as follows (in thousands):

	Beginning Balance	Additions	Reductions	Ending Balance
Commercial paper	\$ 159,970	\$ 23,420	\$ 22,345	\$ 161,045
Bonds	2,025,251	550,019	420,547	2,154,723
Other	4,175		2,428	1,747
	<u>\$ 2,189,396</u>	<u>\$ 573,439</u>	<u>\$ 445,320</u>	<u>\$ 2,317,515</u>

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 2.7 percent in 2017, 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 2017, the University issued \$464,750,000 of fixed rate General Revenue Bonds Series 2017A with a net original issue premium of \$85,269,000. Total bond proceeds of \$550,019,000 together with amounts held by trustees under bond indenture of \$12,019,000 were utilized to convert \$12,285,000 of commercial paper to long-term debt, refund \$237,540,000 of existing bonds, and establish an escrow of \$111,752,000 to advance refund existing bonds, as well as provide \$199,014,000 for capital projects and \$1,447,000 for debt issuance costs.

Bond proceeds of \$162,376,000 along with amounts held by trustees under bond indenture of \$12,019,000 were used to refund Metro Health's Series 2005A Revenue Bonds of \$122,945,000 and Series 2012 Variable Rate Demand Revenue and Revenue Refunding Bonds of \$51,450,000, which had average interest rates of 5.99 percent and 3.08 percent, respectively. As a result of these refundings, the University reduced its aggregate debt service payments over the next 24 years by \$68,469,000, resulting in an economic gain with present value savings of \$39,171,000.

Bond proceeds of \$63,145,000 were used to refund a portion of General Revenue Bonds Series 2012C which had an average interest rate of 5.00 percent and a final bullet maturity due April 1, 2017. As a result of the refunding, the University's aggregate debt service payments increased over the next 15 years by \$11,125,000, resulting in an economic gain with present value savings of \$600,000.

The University established an escrow with bond proceeds of \$111,752,000 to advance refund \$35,440,000 of General Revenue Bonds Series 2009A and \$65,915,000 of General Revenue Bonds Series 2010C which had average interest rates of 4.51 percent and 4.64 percent, respectively. These bonds are considered legally defeased as funds were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the refunded bonds. As a result of these advance refundings, the University reduced its aggregate debt service payments over the next 12 years by \$9,490,000, resulting in an economic gain with present value savings of \$8,078,000.

During 2017, the University deferred \$10,397,000 in connection with its refunding activity, which will be amortized into interest expense over the remaining life of the refunded bonds. At June 30, 2017, a total of \$17,011,000 has been deferred in connection with the University's refunding activity.

Debt obligations are generally callable by the University and mature at various dates through fiscal 2047. Principal maturities, including interest on debt obligations, based on scheduled bond maturities for the next five years and in subsequent five-year periods are as follows (in thousands):

	Principal	Interest*	Total
2018	\$ 227,778	\$ 72,567	\$ 300,345
2019	64,968	71,006	135,974
2020	66,596	69,236	135,832
2021	70,190	67,241	137,431
2022	73,325	65,300	138,625
2023-2027	411,050	286,402	697,452
2028-2032	419,130	200,904	620,034
2033-2037	437,005	126,492	563,497
2038-2042	304,820	53,563	358,383
2043-2047	91,505	12,285	103,790
Total payments	2,166,367	\$ 1,024,996	\$ 3,191,363
Plus unamortized premiums	151,148		
	<u>\$ 2,317,515</u>		

\* Interest on variable rate debt is estimated based on rates in effect at June 30, 2017; amounts do not reflect federal subsidies to be received for Build America Bonds interest.

If all variable rate bonds were put back to the University and existing unsecured lines of credit and standby bond purchase agreements were not extended upon their current expiration dates, the total principal payments due in 2018 would increase to \$288,841,000, total principal payments due in 2019 would increase to \$123,517,000, total principal payments due in 2020 would increase to \$105,590,000 and total principal payments due in 2021 would increase to \$86,384,000. Accordingly, principal payments due in subsequent years would be reduced to \$66,725,000 in 2022; \$373,480,000 in 2023 through 2027; \$410,585,000 in 2028 through 2032; \$376,455,000 in 2033 through 2037; \$243,285,000 in 2038 through 2042; and \$91,505,000 in 2043 through 2047. There would not be a material impact on annual interest payments due to the low variable rate of interest on these bonds.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 7—DERIVATIVE INSTRUMENTS

Derivatives held by the University are recorded at fair value in the statement of net position in accordance with GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* ("GASB 53"). For hedging derivative instruments that are effective in significantly reducing an identified financial risk, as defined by GASB 53, the corresponding change in fair value is deferred and included in the statement of net position. For all other derivative instruments, changes in fair value are reported as net investment income (loss).

Derivative instruments held by the University at June 30, 2017 are summarized as follows (in thousands):

	Notional Amount	Fair Value
<b>Investment Derivative Instruments:</b>		
<b>Investment portfolios:</b>		
Futures	\$ 242,854	\$ (6,371)
<b>Foreign currency forwards:</b>		
Chinese yuan	332,080	(8,633)
New Zealand dollar	51,891	(4,891)
South African rand	71,852	3,453
Euro	144,951	3,190
Czech koruna	27,072	(2,103)
Swedish krona	82,727	(2,019)
All other currencies	1,057,651	2,066
	1,768,224	(8,937)
<b>Other</b>		
	2,089,063	12,723
	\$ 4,100,141	\$ (2,585)
<b>Floating-to-fixed interest rate swap on debt</b>		
	\$ 7,595	\$ (186)
<b>Effective Cash Flow Hedges:</b>		
Floating-to-fixed interest rate swaps on debt	\$ 166,660	\$ (19,312)

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 various 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 generally represents 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, 2017, the fair value of floating-to-fixed interest rate swaps associated with the University's variable rate debt is a liability of \$19,498,000, 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 \$5,181,000, at June 30, 2017.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the year ended June 30, 2017 is summarized as follows (in thousands):

<b>Investment Derivative Instruments:</b>	
<b>Investment portfolios:</b>	
Futures	\$ 27,627
Foreign currency forwards	57,408
Other	(21,006)
	\$ 64,029
<b>Floating-to-fixed interest rate swap on debt</b>	
	\$ 462
<b>Effective Cash Flow Hedges:</b>	
Floating-to-fixed interest rate swaps on debt	\$ 10,626

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 \$60,470,000 at June 30, 2017, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. Effective April 1, 2008, the University makes payments based on a fixed rate of 3.105 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, until the swap terminates in April 2026. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2017 and has a fair value of (\$5,448,000).

The floating-to-fixed interest rate swap associated with the Series 2005B Hospital Revenue Bonds has a notional amount of \$42,685,000 at June 30, 2017. The Series 2005B Hospital Revenue Bonds were refunded on February 1, 2013, and the swap is now associated with the Series 2012D-2 General Revenue Bonds. Effective December 1, 2005, 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, 2017 and has a fair value of (\$3,564,000).

The floating-to-fixed interest rate swap associated with the Series 2002 General Revenue Bonds has a notional amount of \$7,595,000 at June 30, 2017, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. Effective June 1, 2007, the University makes payments based on a fixed rate of 3.538 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, through April 1, 2009, and 63 percent of the Five-Year USD LIBOR Swap Rate for the balance of the term, through April 1, 2018. 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 not considered an effective hedge at June 30, 2017 and has a fair value of (\$186,000).

The floating-to-fixed interest rate swap associated with the Series 1998A-2 Hospital Revenue Refunding Bonds has a notional amount of \$44,670,000 at June 30, 2017. The Series 1998A-2 Hospital Revenue Refunding Bonds were refunded on January 4, 2013, and the swap is now associated with the Series 2012D-1 General Revenue Bonds. Effective May 14, 1998, the University makes payments based on a fixed rate of 4.705 percent and receives variable rate payments from the swap counterparty based on the floating Securities Industry and Financial Markets Association ("SIFMA") Municipal Index through the final maturity dates of the underlying bonds in December 2024. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2017 and has a fair value of (\$8,663,000).

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 7—DERIVATIVE INSTRUMENTS, CONTINUED

The floating-to-fixed interest rate swap associated with the Series 1998A-1 Medical Service Plan Revenue Refunding Bonds has a notional amount of \$18,835,000 at June 30, 2017. The Series 1998A-1 Medical Service Plan Revenue Refunding Bonds were refunded on January 4, 2013, and the swap is now associated with the Series 2012D-1 General Revenue Bonds. Effective May 14, 1998, the University makes payments based on a fixed rate of 4.685 percent and receives variable rate payments based on the floating SIFMA Municipal Index through the final maturity dates of a portion of the underlying bonds in December 2021. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2017 and has a fair value of (\$1,637,000).

Using rates in effect at June 30, 2017, 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 (in thousands):

	Variable Rate Bonds		Swap	Total
	Principal	Interest	Payments, Net	Payments
2018	\$ 14,020	\$ 1,660	\$ 4,633	\$ 20,313
2019	13,770	1,543	4,256	19,569
2020	14,365	1,428	3,882	19,675
2021	15,000	1,303	3,476	19,779
2022	15,645	1,178	3,067	19,890
2023-2027	108,050	3,135	4,466	115,651
2028-2030	26,960	236		27,196
	\$ 207,810	\$ 10,483	\$ 23,780	\$ 242,073

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 because 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, 2017, 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 \$21,099,000 at June 30, 2017 on deposit with its futures broker as collateral.

## NOTE 8—SELF-INSURANCE

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

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

Changes in the total reported liability for insurance and benefits obligations for the year ended June 30, 2017 are summarized as follows (in thousands):

Balance, beginning of year	\$ 203,203
Claims incurred and changes in estimates	628,681
Claim payments	(617,849)
Balance, end of year	214,035
Less current portion	97,799
	\$ 116,236

## NOTE 9—PENSION PLAN

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

Metro Health's annual pension expense is actuarially determined in accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions an Amendment of GASB Statement No. 27* ("GASB 68"). The net pension liability is calculated using the entry age normal level percentage of pay method. As allowable under the terms of GASB 68, Metro Health has elected to measure the net pension liability one year prior to the fiscal year end reporting date. The net pension liability measured as of June 30, 2016 was determined based on an actuarial valuation as of October 1, 2015. There are no significant changes known which would impact the total pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2016 measurement date, the number of plan participants consisted of the following:

Active participants	685
Vested terminated participants	928
Retirees, beneficiaries and disabled participants	323
	1,936

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 9—PENSION PLAN, CONTINUED

Changes in the net pension liability for the year ended June 30, 2017 are summarized as follows (in thousands):

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

The plan fiduciary net position as a percentage of the total pension liability was 95 percent and 70 percent at June 30, 2017 and July 1, 2016, respectively.

Significant actuarial assumptions used at each respective measurement date are as follows:

	June 30, 2016	July 1, 2015
Discount rate	7.00%	4.75%
Inflation	2.75%	2.75%
Investment rate of return	7.00%	4.75%
Mortality table	RP-2014 Employee and Healthy Annuitant, Scale MP-2015	RP-2014 Employee and Healthy Annuitant, Scale MP-2014

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 minimum contribution projection under provisions of ERISA and Pension Protection Act of 2006 (including MAP-21) for future years. Based on the stated assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the future benefit payments of the current plan members for all projection years. As a result, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments of 7.00 percent at June 30, 2016, 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:

	Portfolio Allocation	Long-Term Expected Return
U.S. large cap	25.0%	7.3%
U.S. mid cap	10.5%	7.5%
U.S. small cap	6.5%	7.8%
International developed	14.0%	6.8%
Emerging market	9.0%	12.6%
STRIPs	7.0%	2.1%
Corporate 10+ year	28.0%	5.1%

A one-percentage point change in the discount rate would have the following impact on the net pension liability at June 30, 2017 (in thousands):

	1% Decrease	1% Increase
Net pension liability	\$ 9,056	\$ (7,470)

The components of pension expense (income) for the year ended June 30, 2017 are summarized as follows (in thousands):

Interest cost	\$ 4,482
Expected investment earnings	(3,166)
Amortization of deferred outflows and inflows:	
Difference between expected and actual plan experience	720
Difference between expected and actual investment earnings	(263)
Changes in assumptions	(8,678)
	\$ (6,905)

Deferred outflows and inflows related to the net pension liability at June 30, 2017 are summarized as follows (in thousands):

	Deferred Outflows	Deferred Inflows
Changes in assumptions		\$ 16,228
Difference between expected and actual plan experience	\$ 1,347	
Difference between expected and actual investment earnings		1,053
	1,347	17,281
Contributions made after measurement date	2,171	
	\$ 3,518	\$ 17,281

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

2018	\$ 8,221
2019	7,187
2020	263
2021	263
	\$ 15,934

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 9—PENSION PLAN, CONTINUED

At June 30, 2017, the reported fair value of the plan's investments based on the inputs used to value them is summarized as follows (in thousands):

	Level 1	Level 2	NAV	Total Fair Value
Equity securities	\$ 49,494			\$ 49,494
Fixed income securities		\$ 19,555		19,555
Nonmarketable alternative investments			\$ 1,483	1,483
	\$ 49,494	\$ 19,555	\$ 1,483	\$ 70,532

## 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.

The University's annual postemployment benefits expense is actuarially determined in accordance with GASB 75. Projections of 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 of 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. As allowable under the terms of GASB 75, the University has elected to measure the total postemployment liability one year prior to the fiscal year end reporting date. There are no significant changes known which would impact the total postemployment liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2016 measurement date, the number of plan participants consisted of the following:

	Retiree Health and Welfare	Long-term Disability
Active employees	39,510	34,496
Retirees receiving benefits	9,099	
Surviving spouses	872	
Participants receiving disability benefits		610
	49,481	35,106

Changes in the total reported liability for postemployment benefits obligations for the year ended June 30, 2017 are summarized as follows (in thousands):

	Retiree Health and Welfare	Long-term Disability	Total
Balance, beginning of year	\$ 2,532,952	\$ 237,974	\$ 2,770,926
Service cost	97,193	24,880	122,073
Interest cost	99,036	9,525	108,561
Changes in assumptions	244,109	10,932	255,041
Differences between expected and actual plan experience	5,259	8,769	14,028
Benefit payments	(47,893)	(24,409)	(72,302)
Balance, end of year	2,930,656	267,671	3,198,327
Less current portion	48,910	28,464	77,374
	\$ 2,881,746	\$ 239,207	\$ 3,120,953

Since a portion of retiree medical services will be provided by the University's health system, the liability for postemployment benefits obligations is net of the related margin and fixed costs of providing those services which totaled \$674,252,000 at June 30, 2017.

In accordance with GASB 75, the University's liability for postemployment benefits obligations at June 30, 2017 is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods. This subsidy would reduce the total postemployment benefits liability by approximately \$427,000,000.

The University does not maintain a separate legal trust to house assets used to fund postemployment benefits, has no obligation to make contributions in advance of when insurance premiums or claims are due for payment and currently pays for postemployment benefits on a pay-as-you-go basis. The University's reported postemployment benefits obligations at June 30, 2017 as a percentage of covered payroll of \$3,568,918,000 was 90 percent.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 10—POSTEMPLOYMENT BENEFITS, CONTINUED

Significant actuarial assumptions used at each respective measurement date are as follows:

	June 30, 2016	July 1, 2015
Discount rate*	2.85%	3.80%
Inflation rate	2.75%	2.75%
Immediate/ultimate administrative trend rate	0.0%/3.0%	0.0%/3.0%
Immediate/ultimate medical trend rate	7.0%/4.5%	7.0%/4.5%
Immediate/ultimate Rx trend rate	10.0%/4.5%	10.5%/4.5%
Increase in compensation rate	4.00%	4.00%
Mortality table**	RP-2014 White Collar Head Count Table, Scale MP-2015	RP-2014 White Collar Head Count Table, Scale MP-2014
Average future work life expectancy (years):		
Retiree health and welfare	9.54	N/A
Long-term disability	11.90	N/A

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

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

A one-percentage point change in the discount rate and assumed health care cost trend rates would have the following impact on the liability for postemployment benefits obligations at June 30, 2017 (in thousands):

	1% Decrease	1% Increase
Discount Rate:		
Retiree health and welfare	\$ 672,064	\$ (516,547)
Long-term disability	\$ 9,360	\$ (8,600)
Health Care Trend Rate:		
Retiree health and welfare	\$ (570,224)	\$ 776,594
Long-term disability	\$ (9,402)	\$ 9,661

The components of postemployment benefits expense for the year ended June 30, 2017 are summarized as follows (in thousands):

	Retiree Health and Welfare	Long-term Disability	Total
Service cost	\$ 97,193	\$ 24,880	\$ 122,073
Interest cost	99,036	9,525	108,561
Amortization of deferred outflows	26,139	1,656	27,795
	\$ 222,368	\$ 36,061	\$ 258,429

Deferred outflows related to postemployment benefits obligations at June 30, 2017 are summarized as follows (in thousands):

Changes in assumptions	\$ 228,534
Difference between expected and actual plan experience	12,740
	241,274
Benefit payments made after measurement date	77,374
	\$ 318,648

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

2018	\$ 27,795
2019	27,795
2020	27,795
2021	27,795
2022	27,795
2023 and beyond	102,299
	\$ 241,274

## NOTE 11—RETIREMENT PLAN

The University has a defined contribution retirement plan for all qualified employees through the Teachers Insurance and Annuity Association - College Retirement Equities Fund ("TIAA-CREF") 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-CREF, or accounts with FMTC, and are fully vested.

For payroll covered under the plan, eligible employees generally contribute 5 percent of their pay and the University generally contributes 10 percent of employees' pay to the plan, while certain employees of the University's health system generally contribute 4.5 percent of their pay, with the University contributing 9 percent of those employees' pay to the plan. The University contribution commences after an employee has completed one year of employment. Participants may elect to contribute additional amounts to the plans within specified limits that are not matched by University contributions. Contributions and covered payroll under the plan (excluding participants' additional contributions) for the year ended June 30, 2017 are summarized as follows (in thousands):

University contributions	\$ 271,669
Employee contributions	\$ 142,539
Payroll covered under plan	\$ 3,568,918
Total payroll	\$ 3,727,646

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 12—NET POSITION

The composition of net position at June 30, 2017 is summarized as follows (in thousands):

Net investment in capital assets	\$ 3,735,130
Restricted:	
Nonexpendable:	
Permanent endowment corpus	1,966,541
Expendable:	
Net appreciation of permanent endowments	1,828,744
Funds functioning as endowment	2,126,286
Restricted for operations and other	698,953
Unrestricted	3,071,403
	<u>\$ 13,427,057</u>

Unrestricted net position, as defined by GASB, 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, 2017, 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 \$291,964,000 during the year ended June 30, 2017, for student loans through the U.S. Department of Education (“DoED”) federal direct lending program. These distributions and related funding sources are not included as expenses and revenues in the accompanying financial statements. The statement of net position includes a receivable of \$2,429,000 at June 30, 2017, for DoED funding received subsequent to distribution.

## NOTE 14—COMMITMENTS AND CONTINGENCIES

Authorized expenditures for construction and other projects unexpended as of June 30, 2017 were \$901,039,000. Of these expenditures, the University expects that \$796,450,000 will be funded by internal sources, gifts, grants and future borrowings, \$6,134,000 by the State Building Authority and the remaining \$98,455,000 will be funded using unexpended bond proceeds.

Under the terms of various limited partnership agreements approved by the Board of Regents or by 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. As of June 30, 2017, the University had committed, but not paid, a total of \$4,766,977,000 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):

2018	\$ 1,645,335
2019	1,124,702
2020	774,249
2021	444,811
2022	298,685
2023 and beyond	479,195
	<u>\$ 4,766,977</u>

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

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

	Capital	Operating
2018	\$ 10,718	\$ 45,271
2019	11,175	40,092
2020	10,589	37,319
2021	10,053	31,898
2022	10,211	28,343
2023-2027	46,267	84,848
2028-2032	47,139	8,300
2033-2037	32,022	88
2038-2039	6,624	
	184,798	<u>\$ 276,159</u>
Less amount representing interest	87,538	
Present value of minimum lease payments	<u>\$ 97,260</u>	

Operating lease expenses totaled \$50,409,000 in 2017.

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.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 15—OPERATING EXPENSES BY FUNCTION

Operating expenses by functional classification for the year ended June 30, 2017 are summarized as follows (in thousands):

	Compensation and Benefits	Supplies and Services	Depreciation	Scholarships and Fellowships	Total
Instruction	\$ 939,548	\$ 160,206			\$ 1,099,754
Research	538,613	264,980			803,593
Public service	120,755	67,010			187,765
Academic support	237,819	60,278			298,097
Student services	87,885	24,075			111,960
Institutional support	181,106	55,556			236,662
Operations and maintenance of plant	40,575	275,789			316,364
Auxiliary enterprises	2,918,121	1,256,124			4,174,245
Depreciation			\$ 537,670		537,670
Scholarships and fellowships				\$ 143,932	143,932
	\$ 5,064,422	\$ 2,164,018	\$ 537,670	\$ 143,932	\$ 7,910,042

## NOTE 16—UM HEALTH

Condensed financial information for UM Health, a blended component unit, before the elimination of certain intra-University transactions, as of and for the year ended June 30, 2017 is as follows (in thousands):

### Condensed Statement of Net Position

Assets:	
Current assets	\$ 142,403
Noncurrent assets	258,190
Total assets	400,593
Deferred outflows	7,851
Total assets and deferred outflows	\$ 408,444
Liabilities:	
Current liabilities	\$ 56,449
Noncurrent liabilities	229,256
Total liabilities	285,705
Deferred inflows	20,258
Net position:	
Net investment in capital assets	18,691
Restricted:	
Nonexpendable	177
Expendable	11,569
Unrestricted	72,044
Total net position	102,481
Total liabilities, deferred inflows and net position	\$ 408,444

### Condensed Statement of Revenues, Expenses and Changes in Net Position

Operating revenues	\$ 377,202
Operating expenses other than depreciation expense	367,561
Depreciation expense	20,952
Operating loss	(11,311)
Nonoperating expenses, net	(9,512)
Other expenses, net	(1,974)
Net expenses before transfers	(22,797)
Transfers from other University units	45,000
Increase in net assets	22,203
Net position, beginning of year	80,278
Net position, end of year	\$ 102,481

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 16—UM HEALTH, CONTINUED

### Condensed Statement of Cash Flows

Net cash provided by operating activities	\$ 16,916
Net cash provided by noncapital financing activities	38,113
Net cash used in capital and related financing activities	(63,550)
Net cash used in investing activities	(529)
Net decrease in cash and cash equivalents	(9,050)
Cash and cash equivalents, beginning of year	53,773
Cash and cash equivalents, end of year	\$ 44,723

# REQUIRED SUPPLEMENTARY INFORMATION

(UNAUDITED)

## PENSION PLAN

Changes in the net pension liability for the year ended June 30, 2017 are summarized as follows (in thousands):

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

The plan fiduciary net position as a percentage of the total pension liability was 95 percent and 70 percent at June 30, 2017 and July 1, 2016, respectively.

Employer contributions in relation to actuarially determined contributions for the year ended June 30, 2017 are as follows (in thousands):

Employer contributions*	\$ 2,171
Actuarially determined contributions	1,754
Excess contributions	\$ 417

\* Reflects no employer contributions after April 30, 2017

# REQUIRED SUPPLEMENTARY INFORMATION

(UNAUDITED)

## PENSION PLAN, CONTINUED

Significant methods and assumptions used to calculate the actuarially determined contributions are as follows:

<i>Actuarially determined contributions</i>	The plan is subject to funding requirements under the provisions of ERISA and the Pension Protection Act of 2006 (including MAP-21). The actuarially determined contributions represent the IRC Section 430 minimum required contributions.
<i>Contributions in relation to actuarially determined contributions</i>	Under IRC Section 430, the due date to pay minimum required contributions for the plan year is generally 8 ½ months after the end of the plan year. For the plan year ended September 30, 2016, contributions are due by June 15, 2017.
<i>Actuarial cost method</i>	Unit Credit method
<i>Asset valuation method</i>	24-month smoothed value of assets
<i>Interest rate</i>	First segment rate: 4.43%; Second segment rate: 5.91%; Third segment rate: 6.65%; Effective rate: 6.13%
<i>Mortality</i>	Prescribed by the Secretary of Treasury and described in Treasury regulation 1.430(h)(3)-1. Based on the RP-2000 sex distinct table that reflects projected mortality improvements 15 years into the future from the valuation date for non annuitants and 7 years into the future for annuitants.

## POSTEMPLOYMENT BENEFITS

The historical reconciliation of the total reported liability for postemployment benefits obligations for the year ended June 30, 2017 is summarized as follows (amounts in thousands):

Service cost	\$ 122,073
Interest cost	108,561
Changes in assumptions	255,041
Differences between expected and actual plan experience	14,028
Benefit payments	(72,302)
<u>Net changes</u>	<u>\$ 427,401</u>
Total liability, beginning of year	\$ 2,770,926
Total liability, end of year	\$ 3,198,327
Covered employee payroll	\$ 3,568,918
Total liability as a percentage of covered employee payroll	90%

Discount rates used in determining the total reported liability for postemployment benefits obligations were 2.85 percent and 3.80 percent at June 30 2017 and 2016, respectively.