The Trustees of Columbia University in the City of New York

Consolidated Financial Statements
June 30, 2019 and 2018

Report of Independent Auditors

To The Trustees of Columbia University in the City of New York

We have audited the accompanying consolidated financial statements of The Trustees of Columbia University in the City of New York and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2019 and 2018 and the related consolidated statements of activities for the year ended June 30, 2019 and of cash flows for the years ended June 30, 2019 and 2018.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

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

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

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of The Trustees of Columbia University in the City of New York as of June 30, 2019 and 2018, and the changes in their net assets for the year ended June 30, 2019 and their cash flows for the years ended June 30, 2019 and 2018 in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2 to the consolidated financial statements, the University changed the manner in which it accounts for net assets and reports certain aspects of its financial statements as a not-for-profit entity, and the manner in which it accounts for net periodic benefit cost in 2019. Our opinion is not modified with respect to this matter.

Other Matter

We previously audited the consolidated statement of financial position as of June 30, 2018, and the related consolidated statements of activities and of cash flows for the year then ended (not presented herein), and in our report dated October 9, 2018, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information as of June 30, 2018 and for the year then ended is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

PricewaterhouseCoopers LLP

October 8, 2019

The Trustees of Columbia University in the City of New York
Consolidated Statements of Financial Position
At June 30, 2019 and 2018
(in thousands of dollars)

	June 2019	June 2018
Assets		
Cash and cash equivalents	$814,040	$1,006,998
Accounts receivable, net	569,328	563,214
Receivable for securities sold	60,694	112,837
Cash and securities held in trust by others	36,457	112,071
Pledges receivable, net	664,840	727,213
Investments, at fair value	11,562,591	11,194,432
Institutional real estate	897,719	888,559
Land, buildings, and equipment, net	4,714,266	4,475,642
Other assets	655,944	633,969
Total assets	**$19,975,879**	**$19,714,935**
Liabilities		
Accounts payable and accrued expenses	$373,647	$329,030
Liabilities for securities purchased	4,536	26,010
Deferred revenue and other prepayments	289,643	274,599
Capital lease obligations	126,127	121,283
Conditional asset retirement obligations	118,930	119,249
Accrued employee benefit liabilities	379,651	342,731
Federal student loan funds	79,862	78,720
Bonds and notes payable (including bond premium and issuance costs of $227,079 and $250,334) (see Note 16)	2,000,200	2,084,285
Other long-term liabilities	576,056	543,684
Total liabilities	**3,948,652**	**3,919,591**
Net assets		
Without donor restrictions	7,307,924	7,192,615
With donor restrictions	8,719,303	8,602,729
Total net assets	**16,027,227**	**15,795,344**
Total liabilities and net assets	**$19,975,879**	**$19,714,935**

See accompanying notes to the consolidated financial statements.

The Trustees of Columbia University in the City of New York
Consolidated Statements of Activities
For the Year Ended June 30, 2019, with Summarized Comparative 2018 Totals
(in thousands of dollars)

	Without Donor Restrictions	With Donor Restrictions	June 2019	June 2018
Operating activities				
Revenues and support				
Tuition and fees (net of $461,636 and $433,173 in financial aid grants, respectively)	$ 1,201,922		$ 1,201,922	$ 1,149,377
Government grants and contracts:				
Direct	715,213		715,213	701,731
Indirect	242,234		242,234	230,733
Private gifts, grants and contracts:				
Direct	232,753	213,009	445,762	620,568
Indirect	32,464		32,464	30,213
Revenue from other educational and research activities	239,926		239,926	228,803
Patient care revenue	1,300,863		1,300,863	1,235,032
Investment income and gains utilized	451,160	219,878	671,038	621,254
Sales and services of auxiliary enterprises	191,086		191,086	183,651
Net assets released from restrictions	363,246	(363,246)		
Total operating revenues and support	**4,970,867**	**69,641**	**5,040,508**	**5,001,362**
Expenses				
Instruction and educational administration	1,971,252		1,971,252	1,874,242
Research	639,873		639,873	603,648
Patient care expense	1,099,268		1,099,268	1,025,611
Operation and maintenance of plant	284,831		284,831	269,529
Institutional support	312,613		312,613	307,127
Auxiliary enterprises	166,217		166,217	157,564
Depreciation	289,998		289,998	278,897
Interest	53,507		53,507	54,878
Total expenses	**4,817,559**		**4,817,559**	**4,571,496**
Change in net assets from operating activities	**153,308**	**69,641**	**222,949**	**429,866**
Nonoperating activities				
Endowment gifts		$ 195,766	195,766	331,954
Current year realized and unrealized capital gains (losses)	132,718	225,177	357,895	809,963
Endowment appreciation utilized	(198,292)	(379,796)	(578,088)	(549,350)
Change in net assets held by CPMC Fund, Inc.	(1)	(19,771)	(19,772)	(130)
Change in funds held by others in perpetuity		2,040	2,040	18,703
Present value adjustment to split-interest agreements	854	8,382	9,236	(7,088)
Net periodic benefit cost other than service cost	8,532		8,532	4,183
Changes in pension and post retirement obligations	15,467		15,467	21,852
Other	(442)	18,300	17,858	(3,151)
Reclassification	3,165	(3,165)		
Change in net assets from nonoperating activities	**(37,999)**	**46,933**	**8,934**	**626,936**
Change in net assets	**115,309**	**116,574**	**231,883**	**1,056,802**
Net assets at beginning of year	**7,192,615**	**8,602,729**	**15,795,344**	**14,738,542**
Net assets at end of year	**$7,307,924**	**$8,719,303**	**$16,027,227**	**$15,795,344**

See accompanying notes to the consolidated financial statements.

The Trustees of Columbia University in the City of New York
Consolidated Statements of Cash Flows
For the Years Ended June 30, 2019 and 2018
(in thousands of dollars)

	June 2019	June 2018
Cash flows from operating activities		
(Includes adjustments to reconcile change in net assets to net cash provided by operating activities):		
Change in net assets	$231,883	$1,056,802
Depreciation expense	289,998	278,897
Interest on capital lease obligations and CARO	11,782	11,640
Institutional real estate depreciation	30,379	28,919
Realized and unrealized (gains) losses	(357,895)	(809,963)
Partnership distributions	487,020	506,183
Contributions restricted for permanent investment, plant, and split-interest agreements	(298,232)	(496,606)
Contributions other than cash	(1,422)	(3,461)
Present value adjustments and actuarial liability for split-interest agreements	(9,236)	7,088
Accreted interest on bonds	520	551
Change in unamortized bond premium and issuance costs	(23,256)	51,210
Change in fair value of net assets held by CPMC Fund, Inc.	19,772	130
Change in fair value of interest in perpetual trusts held by others	(2,040)	(18,703)
Change in operating assets and liabilities:		
Accounts receivable, net	(6,114)	20,305
Pledges receivable, net	62,373	121,474
Other assets	(46,793)	(8,632)
Accounts payable and accrued expenses	(1,338)	24,906
Deferred revenue and other prepayments	15,044	15,534
Accrued employee benefit liabilities	36,920	16,988
CARO and other long-term liabilities	10,547	11,833
Net cash provided by operating activities	**449,912**	**815,095**
Cash flows from investing activities		
Proceeds from sales of investments	3,098,952	2,405,773
Purchases of investments	(3,543,285)	(3,420,997)
Collections from student notes	13,268	15,295
Student notes issued	(2,526)	(9,757)
Proceeds from / (Investment in) cash and securities held in trust by others	75,614	(25,021)
Purchases of institutional real estate	(37,568)	(24,307)
Purchases of plant and equipment	(473,233)	(450,597)
Net cash used by investing activities	**(868,778)**	**(1,509,611)**
Cash flows from financing activities		
Proceeds from contributions for:		
Investment in endowment	243,158	418,164
Investment in plant	50,672	51,990
Investment in split-interest agreements	4,402	26,452
Investment income on split-interest agreements	3,753	3,377
Payments on split-interest agreements	(5,550)	(5,347)
Payments on capital lease obligations	(10,320)	(9,819)
Repayment of bonds and notes payable	(61,349)	(248,584)
Proceeds from bond issuance		325,185
Net change in federal student loan funds	1,142	(5,470)
Net cash provided by financing activities	**225,908**	**555,948**
Net change in cash and cash equivalents	(192,958)	(138,568)
Cash and cash equivalents at beginning of year	1,006,998	1,145,566
Cash and cash equivalents at end of year	**$814,040**	**$1,006,998**
Supplemental disclosure of cash flow information:		
Equipment and space acquired through capital leases	$9,689	$2,768
Cash paid during the year for interest	$87,686	$82,481

See accompanying notes to the consolidated financial statements.

1. Organization

The Trustees of Columbia University in the City of New York (the "University") is a private, nonsectarian, nonprofit institution of higher education whose activities are concentrated at two locations in New York City and extend around the globe. The University provides instruction through sixteen undergraduate, graduate, and professional schools. It operates a variety of research institutes and a library system to support its teaching, learning, and research activities. The University performs research, training, and other services under grants and contracts with agencies of the federal government and other sponsoring organizations. The University enrolls approximately 33,032 full-time and part-time students and employs approximately 17,775 full-time employees, including 6,372 full-time faculty members and research staff. Of these, 1,579 hold positions in the arts and sciences, 3,657 hold health science positions, and the remainder hold positions in the other professional schools.

The University is a New York nonprofit corporation recognized as tax exempt under Section 501(c)(3) of the Internal Revenue Code.

Columbia University Irving Medical Center

Columbia University Irving Medical Center ("CUIMC"), a division of the University, located in the Washington Heights section of northern Manhattan, is one of the largest academic medical centers in the United States. It is composed of four schools: Vagelos College of Physicians and Surgeons, Mailman School of Public Health, College of Dental Medicine, and School of Nursing.

CUIMC has three primary areas of focus: patient care, scientific research, and education. CUIMC offers a wide variety of degrees, certifications, and continuing education in health sciences. Faculty patient care services, sponsored research, tuition, endowment income, patent royalties, and gifts provide the majority of CUIMC's revenues. Approximately 4,337 students are enrolled at CUIMC with a full-time faculty of 2,535 of whom approximately 323 are tenured. Additionally, CUIMC's staff includes 2,607 part-time faculty instructors, 1,223 full-time and 259 part-time researchers, 201 post-doctoral research trainees, and 1,370 post-doctoral clinical trainees. Approximately 67 percent of the full-time faculty and 23 percent of the part-time faculty hold clinical appointments and have admitting privileges at New York-Presbyterian ("NYP")/CUIMC Campus.

Patient care activities include patient visits performed by Columbia faculty through its medical faculty practice plan, as well as clinical, educational and administration services provided to hospitals and other health care institutions through contractual agreements for services.

CUIMC maintains several clinical and education affiliation agreements with other organizations. The most significant affiliation agreements are with NYP, Lawrence Hospital, and Harlem Hospital. Certain faculty physicians also provide patient care and supervision of residents at NYP network hospitals and other affiliates. In addition, through interinstitutional professional service agreements and medical service agreements, CUIMC faculty provide patient care in specialty and subspecialty areas at hospitals in the tristate area and occasionally in other parts of the country and the world.

During the year ended June 30, 2019, the clinical faculty handled approximately 2.3 million outpatient and emergency room visits and participated in instruction and supervision of 647 University medical students and 965 residents and fellows at NYP. CUIMC physicians generated approximately 63,000 NYP hospital admissions during the year.

Payments for patient care services provided by the full-time faculty in both institutional and private office settings are derived mainly from third-party payers, including managed care companies (55 percent), Medicare (17 percent), Medicaid (13 percent), commercial insurance (5 percent), and other (1 percent). Direct patient payments comprise 9 percent of total payments.

Other Activities
The University holds a number of limited liability companies, not-for-profit corporations and international organizations, which are established to facilitate various program and research objectives, and the results of which are included in the University's consolidated financial statements, including:

- Columbia Investment Management Company, LLC, a New York limited liability company formed by the University to manage the University's investment assets under the supervision of a Board appointed by the Trustees of the University and subject to the oversight of the Committee on Finance of the Trustees.
- Reid Hall Inc., located in Paris, France, which was donated to the University in 1964. Reid Hall, Inc., a corporation organized under New York membership corporation law as an educational and charitable organization, operates Reid Hall to promote, facilitate, and aid the educational, cultural, and social interests of students studying in France.
- Columbia University Healthcare, Inc., a not-for-profit practice entity in which the University is the sole corporate member.
- Columbia Doctors of New Jersey, P.C, Columbia Doctors of Bergen County, P.C. and Columbia Doctors of Connecticut, which are professional corporations in which the University is the sole corporate member.

The University also provides investment custodial services and manages all of the assets of Columbia Presbyterian Medical Center Fund, Inc. ("CPMC Fund, Inc."), a not-for-profit corporation that was created to hold and receive gifts for the University and NYP. The consolidated financial statements reflect the University's interest in the net assets of CPMC Fund, Inc. as well as the assets and amounts due to NYP.

2. Summary of Significant Accounting Policies

The significant accounting policies of the University are as follows:

Basis of Consolidation
The consolidated financial statements of the University include the accounts of all academic and administrative departments of the University.

All significant intercompany accounts have been eliminated in consolidation.

Basis of Presentation
The University maintains its accounts in accordance with the principles of fund accounting. Under this method of accounting, resources for various purposes are classified into funds that are

consistent with activities or objectives specified by donors. Separate accounts are maintained for each fund.

For reporting purposes, the University prepares its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP"), including the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 958 Not-for-Profit Entities that requires resources be classified for reporting purposes based on the existence or absence of donor-imposed restrictions. Accordingly, the University classifies fund balances as without donor restrictions or with donor restrictions.

The consolidated financial statements of the University have, in all material respects, been prepared on an accrual basis.

Revenues and Expenses

Revenues are reported as increases in net assets without donor restrictions unless the use of those assets is limited by donor-imposed restrictions. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments are reported as increases or decreases in net assets without donor restrictions, unless their use is restricted by explicit donor stipulation or by law.

Revenue Recognition

The University recognizes contributions in accordance with the revenue recognition provisions of ASC Topic 958-605, Not-for-Profit Entities. Revenue is considered a contribution if it is determined not to be an exchange transaction. Revenue related to exchange transactions is recognized under the provisions of the applicable ASC Topic, which is typically ASC Topic 606, Revenue from Contracts with Customers.

ASC Topic 606, Revenue from Contracts with Customers, requires performance of the following steps as part of the revenue recognition assessment:

- Step 1 – Identify the contract(s) with a customer
- Step 2 – Identify the performance obligation(s) in the contract
- Step 3 – Determine the transaction price
- Step 4 – Allocate the transaction price to the performance obligation(s) in the contract
- Step 5 – Recognize revenue when the entity satisfies a performance obligation

Revenue recognition for the University's significant types of revenue is discussed below.

Tuition, Fees, Room and Board, and Financial Aid
Tuition and fees revenue is derived from degree programs and executive and continuing education programs and room and board revenue is derived from the provision of room and board services to students. Tuition and fees are recorded net of scholarships and other discounts and waivers ("Financial aid grants") and displayed in the consolidated statements of activities in "Tuition and fees". Room and board revenues are included as part of "Sales and services of auxiliary enterprises", however the recognition process mirrors that for tuition and fees. Each of these items is supported by separate contracts entered into between the University and the individual student.

Tuition and fees and room and board revenues are recognized as operating revenue in the period in which the University satisfies its performance obligations to its students. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of accounting in ASC Topic 606. The University's performance obligations are to provide education to the student and, in certain instances, other items such as room and board. The University recognizes tuition and fees and room and board on a straight-line basis over each academic session based on gross price, net of explicit price concessions such as financial aid grants which are applied to tuition and fees. The value that is recognized for each performance obligation is set forth in publicly available University price lists and is codified in the individual contracts with each student. Individual contracts for tuition and fees and room and board display the transaction price on a standalone basis for each service to be provided to each specific student. Additionally, the contract will contain the price adjustment in the form of financial aid grants that are being awarded to the student. Given the timing of each year's academic sessions, nearly all performance obligations on behalf of the University are completed within the fiscal year.

The timing(s) of billings, cash collections and revenue recognition results in accounts receivable and deferred revenue and student deposits on the consolidated statements of financial position. Receivables are recognized only to the extent that is it probable that the University will collect substantially all of the consideration to which it is entitled in exchange for goods and services transferred to the student. Receipts received in advance of goods and services performed are recorded as deferred revenue and student deposits.

Contributions and Pledges Receivable
Contributions for University operations and plant, including unconditional promises to give ("pledges"), are recognized as operating revenue in the period earned. Contributions to endowment are recognized as nonoperating revenue in the period earned. Amounts expected to be collected in future years are recorded at the present value of estimated future cash flows, net of an allowance for uncollectable pledges. The discounts on those pledges are computed using an interest rate for the year in which the promise was received and considers market and credit risk as applicable. Subsequent years' accretion of the discount is included in contribution revenue. Conditional promises to give are not recognized as revenue until such time as the conditions are met.

Grant and Contract Income
The University receives sponsored program grant and contract income from governmental and private sources. The funding may represent a nonreciprocal transaction in which the resources provided are for the benefit of the University, the funding organization's mission, or the public at large or it may be a reciprocal transaction in exchange for an equivalent benefit in return.

Revenues from exchange transactions are recognized as performance obligations are satisfied which in most cases mirrors the timing of when related costs are incurred. Revenues from non-exchange transactions may be subject to conditions in the form of both a barrier to entitlement and a refund of amounts paid (or a release from obligation to make future payments). The University recognizes revenue earned from conditional non-exchange transactions when the barrier is satisfied, typically as related costs are incurred. At June 30, 2019, the University has grants or contracts for which it has not yet met all obligations to recognize revenue, or the right to recognize revenue is dependent on future events. These open commitments total $2.7 billion and it is expected that revenue will be recognized as the University fulfills its obligations over several years. In addition, the University has elected the simultaneous release option for conditional contributions that are also subject to purpose restrictions. Under this option, net assets without donor restrictions will include the donor-restricted contributions if the purpose restrictions are met in the same reporting year as the revenue is recognized.

Indirect cost recoveries on federally sponsored programs, such as the recovery of facilities and administrative (F&A) costs, are at reimbursement rates negotiated with the University's cognizant agency, the Department of Health and Human Services. The University and the federal government operated under a provisional agreement that provided for F&A cost rates under federal grants and contracts through October 24, 2017. The provisional rates were based on the agreement that was in place through June 30, 2014. In the fall 2017, the University entered into a new agreement with the federal government which defines the rate at which the University can be reimbursed for F&A costs applicable to federal on-campus research effective July 1, 2018. This agreement will remain in place until such time a new agreement is reached.

Patient Care Revenue and Expense

Patient care activities relate to three distinct areas: medical faculty practice plans, affiliation agreements, and medical and professional service agreements.

Patient care expenses include direct expenses associated with providing patient care services, as well as administrative functions within the University's faculty practice organization. Patient care expense does not include rent or utilities in clinical space, as those costs are aggregated with all University space costs within "Operations and maintenance of plant".

The University provides medical care to patients via its ColumbiaDoctors faculty practice, primarily under agreements with third-party payers. The University determines performance obligations based on the nature of the services provided. Generally these performance obligations, regardless of whether the patient is receiving outpatient or inpatient services, are satisfied when the service is provided. The University bills third-party payers and patients after performance obligations are satisfied. For the limited number of patient service performance obligations that will be satisfied over a period of time, it is expected that these obligations will generally be completed soon after the end of the reporting period and the revenue related to the unsatisfied obligation will be deferred into the following fiscal year.

The University determines transaction price based on gross charges for services provided which are established on an annual basis and uniformly applied. The gross charges may be reduced by explicit price concessions, which include contractual adjustments based on agreements with third-party payers or implicit price concessions provided to uninsured patients. The University determines its estimate of implicit price concessions based on its historical collection experience with these classes of patients using a portfolio approach as a practical expedient to account for patients as a collective group rather than individually. The impact of using this practical expedient does not have a material effect on the financial statements.

The University maintains several clinical and education affiliation agreements with other organizations, the largest of which is with NYP. Under these affiliation agreements, the University has a performance obligation to provide medical, professional, and supervisory staff as well as other technical assistance and clinical services. Additionally, the University operates clinical departments for specific purposes, including administration, supervision, and teaching of the NYP resident staff as well as clinical programs that the University and NYP would like to see developed or expanded. The transaction price for the provision of these services is the result of an annual negotiation between the University and the other parties to the affiliation agreements that takes the form of a joint budget agreement. All material services are performed by the University, based on the terms of the agreements, within the University's fiscal year and the related revenue is recognized accordingly in the financial statements. The revenues and expenses from these agreements are accounted for in patient care and education categories of the operating activity in the consolidated statements of activities.

Research and Development

The University engages in numerous research and development projects, which may be partially or fully sponsored by governmental and private funds. These costs are charged to operating expense as incurred. The University periodically funds and develops patents for certain technologies, then licenses the usage of these patents to companies for a specified period of time. The revenue, net of payments due to third parties, is recorded in "Revenue from other educational and research activities" in the consolidated statements of activities. Costs incurred with developing and maintaining these patents are expensed as incurred.

Institutional Support

Institutional support expense includes central administrative functions and expenses that support the management of the University. This category also includes any net operating surplus or deficit of the University's benefit pool, as recoveries from units across the University may be less than or greater than benefits paid in a given year.

Cash and Cash Equivalents

Cash and cash equivalents are recorded at fair value and include several depository accounts, checking accounts, institutional money market funds, and similar temporary investments with maturities of three months or less at the date of purchase.

Investments

The University's investments, consisting primarily of publicly traded fixed income and equity securities, alternative investments, and cash held for reinvestment, are stated at fair value as of June 30, 2019 and 2018. Alternative investments include investments in absolute return strategy funds, private equity funds, and real asset funds. The management of each respective fund provides the fair value of the investment. The University reflects its share of the partnerships or corporations in the consolidated financial statements.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The University believes that the net asset value of its alternative investments is a reasonable estimate of fair value as of June 30, 2019 and 2018. Because alternative investment funds are not 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 investment existed. Such differences could be material. The amount of gain or loss associated with these investments is reflected in the consolidated financial statements based on the University's proportionate share in the net assets of these investments.

The University's presentation in the consolidated statements of cash flows for limited liability partnerships, limited liability corporations, and other similarly structured investments is consistent with the accounting for equity method investments as it represents the underlying nature of these investments in which the University has a capital account.

The University records purchases and sales of securities on a trade-date basis. Realized gains and losses are determined on the basis of average cost of securities sold and are reflected in the consolidated statements of activities. Dividend income is recorded on the ex-dividend date, and interest income is recorded on an accrual basis.

Split-Interest Agreements
The University's split-interest agreements with donors consist primarily of charitable gift annuities, pooled income funds, and irrevocable charitable remainder trusts for which the University serves as custodian and trustee. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements. In the case of irrevocable split-interest agreements whose assets are held in trusts not administered by the University (third-party charitable trusts), the University will recognize its beneficial interest when it receives sufficient reliable information and documentation that establishes the trust's existence, the University's beneficial interest, and the value of that interest.

Contribution revenues for split-interest agreements are recognized at the dates the agreements are established net of the present value of the estimated future payments to be made to the beneficiaries, if applicable, under these agreements. The discounts on those agreements are computed using an interest rate for the year in which the contribution was received and considers market and credit risk as applicable. Assets related to these agreements are recorded in "Investments, at fair value" and the liability for the present value of the estimated future payments to be made to the beneficiaries is recorded in "Other long-term liabilities" in the consolidated statements of financial position. Adjustments to the fair value of these agreements are recorded in the consolidated statements of activities under "Present value adjustment to split-interest agreements".

Institutional Real Estate
Institutional real estate consists primarily of properties proximate to the University's Morningside and Washington Heights campuses, the primary purpose of which is to house faculty, staff, and graduate students. The income earned on this investment is used primarily to finance operating expenditures. The properties are valued at cost and depreciated over useful lives ranging from twelve and one half to fifty years.

Land, Buildings, and Equipment
Land, buildings, and equipment are stated at cost net of accumulated depreciation. Depreciation is calculated on a straight-line basis over useful lives ranging from ten to one hundred years for buildings and building improvements and two to twenty years for equipment, consistent with the method used for government cost reimbursement purposes. Capitalized software costs are amortized over seven years. Upon disposal of assets, the costs and accumulated depreciation are removed from the accounts, and the resulting gain or loss is included in nonoperating activities.

Collections
Collections at the University include works of art, literary works, historical treasures, and artifacts that are maintained in the University's galleries, libraries, and buildings. These collections are protected and preserved for public exhibition, education, research, and the furtherance of public service and, therefore, are not recognized as assets on the consolidated statements of financial position.

Interest in Perpetual Trusts Held by Others
The University is the beneficiary of certain perpetual trusts administered by others. These trusts are recognized as contributions with donor restrictions when the University receives sufficient reliable information and documentation that establishes the trust's existence, the University's beneficial interest, and the value of that interest. The fair value of the interest in these perpetual trusts is based on the University's proportional share of the fair value of assets reported by the trust, and is recorded in "Other assets" in the accompanying consolidated statements of financial position. Adjustments to the fair value of the University's interest are reported as "Change in funds held by others in perpetuity" in nonoperating activity in the consolidated statements of activities.

Capital Lease Obligations
Capital lease obligations are recognized for equipment and space where substantially all of the risks of ownership have been transferred to the University. The obligations extend up to seven years for equipment and up to fifty years for space.

Conditional Asset Retirement Obligations
Conditional asset retirement obligations ("CARO") are recognized for remediation or disposal of asbestos, underground storage tanks, soil, and radioactive sources and equipment as required by law. The fair value of the liability for a conditional asset retirement obligation is recognized in the period in which it occurred, provided that it can be reasonably estimated.

Other Long-Term Liabilities
Other long-term liabilities are obligations that extend beyond one year, or operating cycle, whichever is longer. The obligations for medical malpractice liabilities, self-insurance reserves, the fixed payer interest rate swap agreement, split-interest agreement liabilities, and other commitments are categorized in other long-term liabilities.

Use of Estimates
The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The most significant estimates include valuation of investments without readily determinable prices in active markets, estimated useful lives of buildings, building improvements, and equipment, actuarially determined costs associated with split-interest agreements, pension, postemployment and postretirement benefits, explicit and implicit price concessions for patient and other receivables, insurance obligations, and conditional asset retirement obligations.

2018 Presentation
While comparative information is not required under GAAP, the University believes that this information is useful and has included comparative financial information from the consolidated

financial statements for 2018. Within the consolidated statements of activities, prior year presentation of net asset categorization has been condensed for comparative purposes.
This summarized information is not intended to be a full presentation in conformity with GAAP, which would require certain additional information. Accordingly, such information should be read in conjunction with the University's audited consolidated financial statements for the year ended June 30, 2018. Certain prior year information has been reclassified to conform to current year presentation.

New Authoritative Pronouncements Adopted by the University
In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs - Contracts with Customers (Subtopic 340-40). This ASU implements a single framework for revenue recognition ensuring that revenue is recognized in a manner which reflects the consideration to which the entity expects to be entitled to in exchange for goods and services. The University adopted ASU 2014-09 in the current year. Adoption did not have a material impact on the University's consolidated financial statements and changes have been applied to the University's financial statements and footnotes on a full retrospective basis.

In August 2016, the FASB issued ASU 2016-14, Not for Profit Entities (Topic 958): Presentation of Financial Statements. The ASU amends the financial reporting requirements in Topic 958, Not-for-Profit Entities. The University adopted ASU-2016-14 in the current year and applied the changes retroactively. The ASU requires the University to reclassify its net assets from three into two categories: without donor restrictions and with donor restrictions. The guidance also requires that external and direct internal investments expenses be netted against investment returns, and also enhances disclosures about the composition of net assets, liquidity, and expenses by both functional and natural classification. Additionally, the University made certain elective modifications to its presentation in the consolidated financial statements, which involve the consolidation of selected line items with other line items of a similar nature. The University adopted ASU 2016-14 in the current year. Adoption did not have a material impact on the University's consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, Compensation Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. The ASU requires the service cost component of net period benefit costs be presented as a part of employee benefit expense. The other components of net periodic benefit cost, including interest, gains or losses, and amortization of other actuarially determined amounts are required to be presented as a nonoperating change in net assets without donor restrictions. The University adopted ASU 2017-07 in the current year and applied it retroactively. Adoption required the University to reclassify non-service related costs in its consolidated statements of activities from operating expenses within "Institutional support" to a separate non-operating line, "Net periodic benefit cost other than service cost". Adoption did not have a material impact on the University's consolidated financial statements.

In June 2018, the FASB issued ASU No. 2018-08, Not-for-Profit Entities (Topic 958), Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made. The ASU provides additional guidance for evaluating whether transactions should be accounted for as contributions (nonreciprocal transactions) or as exchange (reciprocal) transactions subject to other guidance, and for determining whether a contribution is conditional or unconditional. The

University adopted ASU 2018-08 in the current year. Adoption did not have a material impact on the University's consolidated financial statements.

New Authoritative Pronouncements Not Yet Adopted by the University
In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The new ASU establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the statement of financial position for all leases with terms longer than 12 months. This ASU is effective for fiscal years beginning after December 15, 2018 with early adoption permissible. Adoption is expected to result in the recognition of a ROU asset and related liability on the accompanying consolidated statements of financial position, which the University is currently in the process of quantifying.

In August 2016, the FASB issued ASU 2016-15, Classification of Certain Cash Receipts and Cash Payments. The ASU amends the financial reporting requirements in Topic 230, Statement of Cash Flows. Changes include revisions to the presentation of cash flows related to the settlement of debt instruments with coupon rates that are insignificant in relation to the effective interest rate of the borrowing and distributions received from equity method investees. This ASU is effective for fiscal years beginning after December 15, 2018 with early adoption permissible. The University is evaluating the impact of the new standard on the University consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement: Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement (Topic 820). This ASU is effective for fiscal years beginning after December 15, 2019, with early adoption permissible. This ASU removes certain disclosures, modifies certain disclosures and adds additional disclosures related to fair value measurement. The University is evaluating the impact of the new standard on the University consolidated financial statements.

In March 2019, the FASB issued ASU 2019-03, Updating the Definitions of Collections, Not-for-Profit Entities (Topic 958). This ASU is effective for fiscal years beginning after December 15, 2019, with early adoption permissible. This ASU modifies the term "Collections", which in turn may change collection recognition policies, and also adds certain disclosure requirements. The University is evaluating the impact of the new standard on the University consolidated financial statements.

3. Net Assets

The University classifies its net assets as without donor restrictions or with donor restrictions. Periodically, donor redesignations may result in reclassifications of net assets. Descriptions of the two net asset categories and the types of transactions affecting each category follow.

Without Donor Restrictions—Net assets that are not subject to explicit donor-imposed restrictions. This category includes funds designated by the Board of Trustees to function as endowment and other undesignated funds such as tuition and other current funds, gifts without restrictions (including gifts whose donor-imposed restrictions were met during the fiscal year), net investment in plant, and student loan funds.

With Donor Restrictions—Net assets that are subject to explicit donor-imposed stipulations. This includes net assets with donor restrictions that will be satisfied by actions of the University, the passage of time, or both. These net assets include gifts for which the donor-imposed restriction(s) have not been met in the year of receipt (including gifts for capital projects not yet placed in service), pledges, split-interest agreements, and net assets from donor-restricted endowments not yet appropriated for spending. Once the restrictions are satisfied, or have been deemed to have been satisfied, net assets with donor restrictions are reclassified to net assets without donor restrictions.

(in thousands of dollars, unless otherwise noted)

Also included in this category are net assets with donor restrictions that require these to be maintained permanently by the University and invested to provide a perpetual source of income. Net assets with donor restrictions that are permanent include (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) realized and unrealized gains and losses to the permanent endowment when stipulated by the donor gift instrument.

The composition of the University's net assets as of June 30 are as follows:

	2019	2018
With Donor Restrictions		
Endowment funds	$ 7,422,159	$ 7,321,704
Unexpended capital and other [(a)]	523,690	453,137
Pledges receivable	664,840	727,213
Annuity and life income funds	108,614	100,675
Total, Net Assets With Donor Restrictions	8,719,303	8,602,729
Without Donor Restrictions		
Board designated endowment funds	3,528,579	3,547,541
Undesignated	3,779,345	3,645,074
Total, Net Assets Without Donor Restrictions	7,307,924	7,192,615
Total Net Assets	$ 16,027,227	$ 15,795,344

[(a)] Includes capital gifts not yet released from restriction, unspent gift and endowment income balances, and student loan funds.

4. Operating Measurement

The University divides its consolidated statements of activities into operating and nonoperating activities. The operating activities of the University include all income and expenses related to carrying out its educational and research mission. Operating revenues include investment income and endowment appreciation utilized to fund current operations, the largest portion of which is the distribution of funds budgeted in accordance with the endowment spending rule.

Nonoperating activities include current year realized and unrealized gains and losses on investments, including realized gain distributions from fund investments, less amounts withdrawn from endowment appreciation to fund operations. Nonoperating activities also include new gifts to donor-restricted endowments that the University must hold in perpetuity, changes in net assets held by CPMC Fund, Inc., changes in funds held by others in perpetuity, present value adjustments to split-interest agreements, net periodic benefit cost other than service cost, changes in pension and postretirement obligations other items, and reclassifications.

5. Patient Care Revenue

The University's affiliation agreements with area hospitals generated $380.7 million and $349.7 million of revenue for the years ended June 30, 2019 and 2018, respectively. As of June 30, 2019 and 2018, "Accounts receivable, net" includes $111.6 million and $91.4 million, respectively, relating to these agreements.

Medical faculty practice revenue is reported at the estimated net realizable amounts from patients, third-party payers, and others for services rendered. Medical faculty practice revenues are $822.4 million and $795.6 million for the years ended June 30, 2019 and 2018, respectively. As of June 30, 2019 and 2018, patient accounts receivable amounts to $123.0 million and $111.6 million, respectively. Medical service agreements generated $30.0 million and $25.5 million of revenue for the years ended June 30, 2019 and 2018, respectively, and other patient care activities generated $67.1 million and $64.2 million of revenue for the years ended June 30, 2019 and 2018, respectively.

6. Long-Term Investments and Fair Value

The University values its investments in accordance with GAAP and consistent with the FASB official pronouncement on *Fair Value Measurements* for financial assets and liabilities. The pronouncement defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. GAAP establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the entity's own assumptions about how market participants would value an asset or liability based on the best information available. Valuation techniques used to measure fair value utilize relevant observable inputs and minimize the use of unobservable inputs.

The University follows a fair value hierarchy based on three levels of inputs, described below:

Fair value for Level 1 is based on quoted prices in active markets that the University has the ability to access for identical assets and liabilities. Market price data is generally obtained from exchange or dealer markets. The University does not adjust the quoted price for such assets and liabilities.

Fair value for Level 2 is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, or inputs other than quoted prices that are observable.

Fair value for Level 3 is based on valuation techniques that use significant inputs that are unobservable as they are not actively traded.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. In determining the categorization of the University's investments within the fair value hierarchy, the University has considered market information including observable net asset values and the length of time until the investment will become redeemable. Investments for which fair value is measured using net asset values (NAV) as a practical expedient are excluded from the hierarchy and have been reported separately within the table below. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of that instrument and does not necessarily correspond to the University's perceived risk of that instrument.

From time to time, the University may hold direct real estate investments. These investments are categorized as Level 3 within the fair value hierarchy. Valuation for material directly held real estate investments is determined from periodic valuations prepared by independent appraisers or broker opinions.

The University holds certain investments for which fair value is determined by using the unadjusted net asset value per share (NAV) as provided by the fund management as a practical expedient. Investments categorized as NAV include the University's ownership in funds that invest in alternative assets (i.e. absolute return strategy funds, private equity funds, and real asset funds) and funds that invest in equity and fixed income strategies for which observable net asset values are not available. The value of the University's investments in these funds represents the University's ownership interest in the net asset value of the respective fund. Items classified as NAV do not have a quoted price in an active market place. As a practical expedient, the University is permitted under GAAP to estimate the fair value of an investment at the measurement date using the NAV reported by the fund manager without further adjustment, provided the NAV has been calculated in accordance with or in a manner consistent with GAAP, and provided further that the University does not expect to sell the investment at a value other than NAV. The University has various processes and controls in place to ensure investment fair value is reasonable and performs various due diligence procedures of its investments including an assessment of applicable accounting policies, a review of the valuation procedures employed, and consideration of redemption features and price transparency.

(in thousands of dollars, unless otherwise noted)

The following tables present assets and liabilities measured at fair value and NAV at June 30, 2019 and June 30, 2018.

	2019				
Assets	**Level 1**	**Level 2**	**Level 3**	**NAV**	**Total**
Investments:					
Cash and cash equivalents	$ 691,257	$ 340,676			$ 1,031,933
Global equities	1,086,958	78,814	$ 1,040	$ 1,174,241	2,341,053
Fixed income	1,612	710	4	322,184	324,510
Absolute return strategies	30,275	6,134		3,621,495	3,657,904
Private equity	72,080	-	112,021	2,056,544	2,240,645
Real assets	2,811	(983)	30,300	1,934,418	1,966,546
Investments, at fair value	1,884,993	425,351	143,365	9,108,882	11,562,591
Interest in perpetual trusts held by others			181,115	11,836	192,951
Total assets at fair value	$ 1,884,993	$ 425,351	$ 324,480	$ 9,120,718	$ 11,755,542
Liabilities					
Swaps payable		$ 76,072			$ 76,072
Total liabilities at fair value		$ 76,072			$ 76,072

	2018				
Assets	**Level 1**	**Level 2**	**Level 3**	**NAV**	**Total**
Investments:					
Cash and cash equivalents	$ 554,073	$ 328,231			$ 882,304
Global equities	1,400,143	81,788	$ 1,520	$ 876,462	2,359,913
Fixed income	3,203	1,078	11	287,343	291,635
Absolute return strategies	60,447	7,314		3,494,651	3,562,412
Private equity	1,340		86,055	1,972,357	2,059,752
Real assets	5,004	2,684	27,697	2,003,031	2,038,416
Investments, at fair value	2,024,210	421,095	115,283	8,633,844	11,194,432
Interest in perpetual trusts held by others			178,956	11,955	190,911
Total assets at fair value	$ 2,024,210	$ 421,095	$ 294,239	$ 8,645,799	$ 11,385,343
Liabilities					
Swaps payable		$ 57,107			$ 57,107
Total liabilities at fair value		$ 57,107			$ 57,107

Cash and Cash Equivalents
Cash and cash equivalents include government securities and money market instruments and are valued at amortized cost, which approximates fair value.

Global Equities and Fixed Income
Global equities and fixed income consist of investments in publicly traded U.S. and foreign common and preferred equities, funds that invest in equity and fixed income based strategies, and cash held in separate accounts committed to these strategies. The fair value of these investments is based on quoted market prices. Investments that are listed on an exchange are valued, in general, at the last reported sale price (or, if there is no sales price, at the last reported bid price, or, in the absence of reported bid prices, at the mean between the last reported bid and asked prices thereof). Fund investments in equity and fixed income based strategies are valued in accordance with NAV provided by the investment managers of the underlying funds. If the University has valued the investment based on NAV as a practical expedient, the investment has been excluded from the fair value hierarchy and will be categorized as NAV. If the valuation does not meet the practical expedient criteria and the University has the ability to redeem from a fund up to 180 days beyond the measurement date, the investment is categorized as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3.

Alternative Investments
Alternative investments include interests in absolute return strategy funds, private equity funds, and real asset funds. Private equity funds include large market, leveraged buyout, and venture capital based strategies. The University values these investments in accordance with valuations provided by the investment managers of the underlying funds. These funds may make investments in securities that are publicly traded, which are generally valued based on observable market prices, unless a restriction exists. In addition, interests in a private equity fund may be publicly traded and valued based on observable market prices.

As a general rule, managers of funds invested in alternative investments value those investments based upon the best information available for a given circumstance and may incorporate assumptions that are the investment manager’s best estimates after consideration of a variety of internal and external factors. If no public market exists for the investments, the fair value is determined by the investment manager taking into consideration, among other things, the cost of the investment, prices of recent significant placements of similar investments of the same issuer, and subsequent developments concerning the companies to which the investments relate. The University’s management may consider other factors in assessing the fair value of these investments. If the University has valued these alternative investments based on NAV as a practical expedient, the investment is excluded from the fair value hierarchy and will be categorized as NAV. For absolute return funds, if the valuation does not meet the practical expedient criteria and the University has the ability to redeem from an absolute return strategy fund up to 180 days beyond the measurement date, the investment is categorized as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3. For private equity funds and real asset funds, if the valuation does not meet the practical expedient criteria, the investments are categorized as Level 3 given that the University does not have discretion for timing of withdrawal.

The fair value of the alternative investment funds in the table above represents the amount the University would expect to receive at June 30, 2019 and 2018, if it had liquidated its investments in the funds on these dates. The University has performed due diligence around these investments and believes that the NAV of its alternative investments is a reasonable estimate of fair value as of June

(in thousands of dollars, unless otherwise noted)

30, 2019 and 2018. Alternative investments may allocate a high percentage of their assets in specific sectors of the market in order to achieve a potentially greater investment return. As a result, the investments may be susceptible to economic, political, and regulatory developments in a particular sector of the market, positive or negative, and may experience increased volatility in net asset values.

Absolute return strategies also include separate accounts with direct investments in fixed income (which include mortgage backed securities, collateralized mortgage obligations, and convertible bonds) and cash committed to these strategies. The fair value of these investments is based on the last reported bid price obtained from pricing sources or broker quotes and is categorized as Level 2.

Perpetual Trusts
The fair value of interest in perpetual trusts held by others is based on the University's share of the income generated by the trust, ascribed to the fair value of the assets reported by the trust.

Derivatives
Investment fund managers may invest in derivatives, and the value of these positions is reflected in the NAV of the respective funds. Separately, the University employs derivatives primarily to hedge its risks and to rebalance its market exposures. Derivatives used may include futures, swaps, options, and forward contracts and are reflected at fair value following the definition of Level 1 and Level 2 assets as described above. Certain derivative positions held within the endowment portfolio are subject to master netting agreements included within an International Swap and Derivatives Association, Inc. ("ISDA") master agreement with each of the counterparties.

The following positions are reflected on a net basis within "Investments, at fair value" on the consolidated statements of financial position and are summarized below.

	Notional Exposure		Gross		Net	Collateral
Derivative Instruments	**Long**	**Short**	**Asset**	**Liability**	**Fair Value**	**Posted**
June 30, 2019						
Equity	$ 260,754	$ 57,511	$ 33,713	$ (413)	$ 33,300	$ 7,869
Currency*			6,006	(9,270)	(3,264)	
June 30, 2018						
Equity	$ 284,922		$ 15,907	$ (7,015)	$ 8,892	$ 8,180
Currency*			4,580	(28,034)	(23,454)	

*The University held currency derivative contracts with an aggregate notional amount of $1,220.2 million and $721.6 million as of June 30, 2019 and 2018, respectively.

Outside of the endowment portfolio, the University entered into a fixed payer interest rate swap as described in Note 16. The estimated fair value of the agreement were liabilities of $76.1 million and $57.1 million at June 30, 2019 and 2018, respectively, and is included in "Swaps payable" in tables on the preceding pages. The derivatives are reflected as a receivable or payable, as appropriate, on the consolidated statements of financial position. Unrealized gain or loss from derivative investments is a component of the current year realized and unrealized capital gains (losses) in the consolidated statements of activities.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the University believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

(in thousands of dollars, unless otherwise noted)

The following tables roll forward the amounts reported in the consolidated statements of financial position for financial instruments classified by the University within Level 3 of the fair value hierarchy defined above at June 30, 2019 and 2018.

	June 30, 2018	Transfers In/Out	Purchases	Sales	Realized gain/loss	Unrealized gain/loss	June 30, 2019
Global equities	$ 1,520	$ (456)		$ (413)		$ 389	$ 1,040
Fixed income	11		$ 1	(10)		2	4
Private equity	86,055	(1,741)	13,862	(3,714)	$ 178	17,381	112,021
Real assets	27,697		1,633		(20,080)	21,050	30,300
Total level 3 investments	$ 115,283	$ (2,197)	$ 15,496	$ (4,137)	$ (19,902)	$ 38,822	$ 143,365

	June 30, 2018	Transfers In/Out	Disburse-ments	Realized/ Unrealized gain/loss, net	June 30, 2019
Interest in perpetual trusts held by others	$ 178,956		$ (7,496)	$ 9,655	$ 181,115

	June 30, 2017	Transfers In/Out	Purchases	Sales	Realized gain/loss	Unrealized gain/loss	June 30, 2018
Global equities	$ 1,726		$ 3			$ (209)	$ 1,520
Fixed income	30		1	$ (20)			11
Private equity	92,436		25,941	(27,364)	$ 15,213	(20,171)	86,055
Real assets	13,008	$ (141)	12,281	(1,474)		4,023	27,697
Total level 3 investments	$ 107,200	$ (141)	$ 38,226	$ (28,858)	$ 15,213	$ (16,357)	$ 115,283

	June 30, 2017	Transfers In/Out	Disburse-ments	Realized/ Unrealized gain/loss, net	June 30, 2018
Interest in perpetual trusts held by others	$ 160,732	$ (199)	$ (7,101)	$ 25,524	$ 178,956

All net realized and unrealized gains (losses) in the tables above are reflected in the consolidated statements of activities. Net unrealized gains (losses) relate to those financial instruments held by the University at June 30, 2019 and 2018. The University's policy is to recognize transfers in and transfers out as of the end of the period. Transfers between Level 3 and Level 1, Level 3 and Level 2 as well as between Level 3 and NAV are reported at gross, due to the criteria described above. There were no significant transfers between Level 1 and Level 2 for the years ended June 30, 2019 and 2018.

Certain investments in global equities and alternative investments may be subject to restrictions that (i) limit the University's ability to withdraw capital after such investment and (ii) limit the amount that may be withdrawn as of a given redemption date. The redemption terms of the University's investments in absolute return strategy funds vary from daily to triennial, with a portion of these investments designated as "illiquid" in "sidepockets" and that portion may not be available for withdrawal until liquidated by the investing fund and redemption notice periods range from 0 days to 180 days. Generally, as noted above, the University has no discretion as to withdrawal of its investment in private equity and real asset funds; distributions are made when sales of assets are made within the funds. The remaining life of these private equity and real asset funds is up to 12 years.

The University is obligated under certain investment fund agreements to advance additional funding up to specified levels over a period of several years. These commitments have fixed expiration dates and other termination clauses. At June 30, 2019, the University had unfunded commitments of approximately $2.3 billion as follows:

Asset class ($ in millions)	Remaining life of fund	Unfunded commitments	Timing to draw commitments
Global equities	N/A	$ 13	1 to 8 years
Absolute return strategies	N/A	148	1 to 5 years
Private equity	1 to 12 years	1,197	1 to 12 years
Real assets	1 to 12 years	979	1 to 12 years
Total		$ 2,337	

The University's estimate of the lives of the funds could vary significantly depending on the investment decisions of the external fund managers, changes in the University's portfolio, and other circumstances. Furthermore, the University's obligation to fund the commitments noted above may be waived by the fund manager for a variety of reasons including market conditions and/or changes in investment strategy.

The University has various sources of internal liquidity at its disposal, including cash, cash equivalents, marketable debt and equity securities, and lines of credit, which are available to fund the committed drawdowns.

Investment Return

Investment income and gains utilized on the consolidated statements of activities contains endowment appreciation utilized to fund the spending rule, institutional real estate revenue net of operating expenses and depreciation, and other investment income. Endowment appreciation utilized was $578.1 million and $549.4 million during 2019 and 2018, respectively. Current year realized and unrealized capital gains (losses) reported in nonoperating activities reflect investment returns net of external and direct internal investment costs, reduced by endowment appreciation utilized to fund the spending rule.

7. Endowment Funds

The University's endowment consists of approximately 5,800 separate funds established over many years for a wide variety of purposes, which include support of specific schools or departments of the University, professorships, research, faculty support, scholarships and fellowships, library, building construction, and other purposes. The endowment includes donor-restricted endowments and funds designated by the Board of Trustees to function as endowments. As required by GAAP, net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The University employs a market value unit method of accounting for pooled general investments. Each participating fund enters and withdraws from the pooled investment account based on monthly unit market values. Changes in the market value of investments are distributed proportionately to each fund that participates in the investment pool. Net investment income distributed during the year is allocated on a per unit basis to each participating fund.

Relevant Law
Under NYPMIFA, the University may appropriate so much of a donor-restricted endowment fund as it deems prudent, considering the specific factors set forth in NYPMIFA and subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise in the gift instrument, the earnings in an endowment fund are considered to have donor restrictions until appropriated.

The University continues to classify as net assets with donor restrictions (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. Accumulated appreciation on donor-restricted endowment funds is also included as net assets with donor restrictions until those amounts are appropriated for expenditure by the University in a manner consistent with the standard of prudence prescribed by NYPMIFA.

(in thousands of dollars, unless otherwise noted)

The composition and changes in the University's endowment net assets as of June 30, 2019 and 2018, are as follows:

	2019		
Changes in University endowment net assets	**Without Donor Restrictions**	**With Donor Restrictions**	**Total**
Opening balance - June 30, 2018	$ 3,547,541	$ 7,321,704	$ 10,869,245
Investment return	171,717	246,699	418,416
New gifts	1,483	231,094	232,577
Appropriation for expenditure	(245,084)	(399,376)	(644,460)
Other changes:			
Transfers to create endowments	46,797	28,163	74,960
Other / Reclassifications	6,125	(6,125)	
	52,922	22,038	74,960
Closing balance - June 30, 2019	$ 3,528,579	$ 7,422,159	$ 10,950,738
University endowment composition			
Donor-restricted endowment funds:			
Restricted in perpetuity		$ 3,397,438	$ 3,397,438
Appreciation		3,454,243	3,454,243
Board designated endowment funds:			
Departmental funds	$ 1,414,680	362,378	1,777,058
University funds	1,490,061		1,490,061
Institutional real estate, net	623,838		623,838
CPMC Fund, Inc.		15,149	15,149
Interests in perpetual trusts held by others		192,951	192,951
University's endowment value	$ 3,528,579	$ 7,422,159	$ 10,950,738

Note: The tables above do not include split-interest agreements, net of $114,321 and pledges receivable, net of $349,385.

Reconciliation to Investments, at fair value		
Investments, at fair value		$ 11,562,591
Add:		
Interests in perpetual trusts held by others	192,951	
CPMC Fund, Inc.	15,149	
Institutional real estate, net	623,838	
Investment receivables and payables	73,675	905,613
Subtract:		
Other long-term investments	(1,255,483)	
Split-interest agreements	(175,320)	
Funds held on behalf of others	(86,663)	(1,517,466)
University's endowment value		$ 10,950,738

(in thousands of dollars, unless otherwise noted)

	2018		
Changes in University endowment net assets	**Without Donor Restrictions**	**With Donor Restrictions**	**Total**
Opening balance - June 30, 2017	$ 3,428,651	$ 6,567,945	$ 9,996,596
Investment return	306,593	553,624	860,217
New gifts	27,380	487,028	514,408
Appropriation for expenditure	(267,625)	(359,985)	(627,610)
Other changes:			
Transfers to create endowments	104,144	21,491	125,635
Other / Reclassifications	(51,602)	51,601	(1)
	52,542	73,092	125,634
Closing balance - June 30, 2018	$ 3,547,541	$ 7,321,704	$ 10,869,245
University endowment composition			
Donor-restricted endowment funds:			
Restricted in perpetuity	$ -	$ 3,156,470	$ 3,156,470
Appreciation		3,590,103	3,590,103
Board designated endowment funds:			
Departmental funds	1,423,926	349,299	1,773,225
University funds	1,524,762	-	1,524,762
Institutional real estate, net	598,853	-	598,853
CPMC Fund, Inc.	-	34,921	34,921
Interests in perpetual trusts held by others	-	190,911	190,911
University's endowment value	$ 3,547,541	$ 7,321,704	$ 10,869,245

Note: The tables above do not include split-interest agreements, net of $106,460 and pledges receivable, net of $378,919.

Reconciliation to Investments, at fair value		
Investments, at fair value		$ 11,194,432
Add:		
Interests in perpetual trusts held by others	190,911	
CPMC Fund, Inc.	34,921	
Institutional real estate, net	598,853	
Investment receivables and payables	118,279	942,964
Subtract:		
Other long-term investments	(1,000,797)	
Split-interest agreements	(169,177)	
Funds held on behalf of others	(98,177)	(1,268,151)
University's endowment value		$ 10,869,245

Return Objectives and Risk Parameters
Endowment assets include those assets of donor-restricted funds that the University must hold in perpetuity or for a donor-specified period(s) as well as Board-designated funds. Under the University's investment policies, as approved by the Board of Trustees, the endowment assets are invested in a manner that is intended to produce performance which exceeds that of relevant indices for each asset class while assuming a moderate level of investment risk.

Strategies Employed for Achieving Objectives
The University relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The University targets a diversified asset allocation to achieve its long-term return objectives within prudent risk constraints.

Endowment Spending Rule
The endowment spending rule utilized by the University is designed to be directly responsive to both investment returns and the current level of price inflation. Its long-term objectives are:

- To protect the corpus of the endowment by spending no more than the real investment return;
- To cushion spending against market volatility; and
- To provide specific spending instructions and multiyear spending projections based on explicit future investment return assumptions.

The current endowment spending rule is based on two factors: first, the market value multiplied by a target spending rate that may range from 4.5 to 5.0 percent, which provides a response to investment market conditions; and second, the prior year's spending plus inflation, which ties spending increases to operating needs and cushions spending against market volatility. This allows the University to maintain the purchasing power of the endowment assets held in perpetuity or for a specified term as well as to provide additional real growth through new gifts and investment return.

As a general policy, each fiscal year's distribution is calculated by adding together the following:

a. The market value of the endowment at a point twelve months prior to the beginning of the given fiscal year, multiplied by the target spending rate, multiplied by a 40 percent weighting; and

b. Endowment spending in the year immediately preceding the given fiscal year, grown or reduced by an inflation factor, which is defined as the Higher Education Price Index ("HEPI"), multiplied by a 60 percent weighting.

The Trustees conduct a special review in any year in which either projected endowment distributions are 0.5 percent higher or lower than the target spending rate, or if the increase in endowment distributions over the previous year is more than 3 percentage points higher or lower than HEPI. Additionally, from time to time, management may recommend and the Trustees may approve a temporary override of the spending rule to ensure the University's ability to sustain the permanent nature of the endowment.

In addition to the base spending rate described above, an additional payout component was approved as a temporary measure by the Trustees in 2008. This component is 0.70 percent of the prior year beginning market value for certain endowments in categories key to the University's current development efforts, primarily endowments for purposes core to the University's educational and research mission, including financial aid and faculty support. This is reviewed by the Trustees regularly and has currently been extended through the end of fiscal year 2020.

(in thousands of dollars, unless otherwise noted)

Also, in 2008 the Trustees approved a temporary measure for an increase in annual spending of up to 1.75 percent of the prior year beginning market value of endowments that are designated for undergraduate financial aid support. This increase began in fiscal year 2009 and was phased out in fiscal year 2018, as new endowments substituted for this funding source.

Underwater Endowment Funds
From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the original gift value, which represents the total of the initial and subsequent donor contribution amounts. When this occurs, the deficit is classified as a reduction of donor-restricted net assets. Deficits existed in various donor-restricted endowment funds as of June 30, 2019 which combined had an original gift value of $155.7 million and a current market value of $154.2 million, resulting in a deficiency of $1.5 million. These deficiencies resulted from market fluctuations that occurred after the investment of recent contributions and authorized appropriation from an endowment that was deemed prudent. No deficits existed at June 30, 2018.

8. Accounts Receivable

Accounts receivable, net, consists of the following as of June 30:

	2019	2018
Patient receivables, net of explicit price concessions	$ 196,819	$ 171,926
Government agencies	105,457	134,573
NewYork-Presbyterian Hospital	129,849	107,131
Patent and licensing	7,359	9,379
Student receivables	74,065	68,174
Investment income receivable	6,177	5,384
Other receivables	150,666	152,215
	670,392	648,782
Less: Implicit price concessions	(101,064)	(85,568)
Accounts receivable, net	$ 569,328	$ 563,214

Patient receivables for medical services are net of explicit price concessions for contractual reserves in the amount of $225.1 million and $192.0 million at June 30, 2019 and 2018, respectively.

(in thousands of dollars, unless otherwise noted)

9. Student Loans Receivable and Financial Aid

The University participates in various federal loan programs, in addition to administering institutional loan programs. Loans receivable from students as of June 30 are as follows:

	2019	2018
Government revolving loans	$ 56,043	$ 65,583
Institutional loans	29,521	31,225
Gross student loans	85,564	96,808
Less: Implicit price concessions	(2,177)	(2,679)
Student loans receivable, net	$ 83,387	$ 94,129

Government revolving loans are funded principally with federal advances to the University under the Federal Perkins Loan Program and certain other programs. The Federal Perkins Loan Program expired on September 30, 2017 and no new disbursements were permitted after June 30, 2018, but there are outstanding balances from loans awarded in previous years. Balances under the Federal Perkins Loan Program totaled $65.8 million and $64.8 million and advances under the other federally sponsored loan programs are $14.0 million and $13.9 million as of June 30, 2019 and 2018, respectively. These advances are classified as liabilities on the consolidated statements of financial position. Interest earned on the revolving and institutional loan programs is reinvested to support additional loans. The repayment and interest rate terms of the institutional loans vary considerably.

Management regularly assesses the adequacy of implicit price concessions by performing ongoing evaluation of the student loan and student accounts receivable portfolios. Loans receivable under federally guaranteed student loan programs are subject to significant restrictions.

In addition to the loans identified above, the University processes and authorizes loans to students through the William D. Ford Federal Direct Loan Program. The amounts due under this loan program are not recorded in the University's consolidated financial statements since the University does not guarantee any federal loan funds related to this program. Loans issued under this program were $291.1 million and $306.1 million for the years ended June 30, 2019 and 2018, respectively.

Undergraduate financial aid represents grants and awards for all or part of a student's tuition and fees, and in certain other instances, items such as room and board. Graduate financial aid represents grants and awards for all or part of a student's tuition and fees. Funding from external sources is obtained through government and private grants and contracts as well as private gifts and payout from certain endowment funds.

(in thousands of dollars, unless otherwise noted)

Financial aid granted to students is summarized as follows for the year ending June 30:

	2019			2018		
	University Sources	External Sources	Total Financial Aid	University Sources	External Sources	Total Financial Aid
Undergraduate	$ 130,092	$ 62,501	$ 192,593	$ 131,209	$ 55,025	$ 186,234
Graduate	183,136	85,907	269,043	166,719	80,220	246,939
Total financial aid grants	$ 313,228	$ 148,408	$ 461,636	$ 297,928	$ 135,245	$ 433,173

Agency activities such as tuition aid grants and Federal Pell Grant Program awards are not included in the University's consolidated financial statements. Both receipts and disbursements for these agency transactions were $12.0 million and $11.5 million in years ended June 30, 2019 and 2018, respectively.

10. Pledges Receivable

Unconditional promises to give appear as pledges receivable and revenue of the appropriate net asset category. Pledges are recorded net of an allowance for uncollectible contributions and a discount to reflect the net present value based on projected cash flows. Periodically unconditional promises to give are reviewed for collectability. As a result, the allowance for uncollectible contributions may be adjusted and some contributions may be adjusted or cancelled. Such changes will be reflected in the consolidated financial statements.

Unconditional promises, and their expected collection dates, were as follows at June 30:

	2019	2018
Less than one year	$ 196,233	$ 207,717
One to five years	441,797	488,678
More than five years	159,090	171,850
Total unconditional promises	797,120	868,245
Less: Allowance for doubtful contributions	(31,494)	(30,414)
Less: Net present value discount	(100,786)	(110,618)
Net pledges receivable	$ 664,840	$ 727,213

New pledges recorded in the years ended June 30, 2019 and 2018, were discounted at an average annual rate of 2.03 percent and 3.22 percent, respectively, using a rate that considers market and credit risk. Credit risk is also considered in the allowance for doubtful contributions.

Pledges receivable were intended for the following purposes as of June 30:

	2019	2018
Endowment for educational and general purposes	$ 349,385	$ 378,919
New construction and modernization of plant	136,648	158,583
Support of University operations	178,807	189,711
Net pledges receivable	$ 664,840	$ 727,213

(in thousands of dollars, unless otherwise noted)

The University also has other outstanding pledges of $202.8 million as of June 30, 2019. These pledges represent either gifts with donor-imposed conditions, containing both a barrier and a right of return/release, or other pledges that have not met the requirements for recognition.

11. Land, Buildings, and Equipment

Investments in land, buildings, and equipment, net, consisted of the following at June 30:

	2019			2018		
	Total Land, Buildings, and Equipment	Accumulated Depreciation	Net Land, Buildings, and Equipment	Total Land, Buildings, and Equipment	Accumulated Depreciation	Net Land, Buildings, and Equipment
Land	$ 478,254	$ -	$ 478,254	$ 459,919	$ -	$ 459,919
Building and building improvements	6,463,174	3,048,678	3,414,496	6,130,428	2,811,457	3,318,971
Construction in progress	600,301	-	600,301	488,606	-	488,606
Equipment	583,020	361,805	221,215	533,389	325,243	208,146
Total	$ 8,124,749	$ 3,410,483	$ 4,714,266	$ 7,612,342	$ 3,136,700	$ 4,475,642

The University uses componentized depreciation to calculate depreciation expense for buildings and building improvements for research facilities included in operations. The costs of research facilities are separated into the building shell, building service systems, and fixed equipment, and each component is separately depreciated.

Equipment includes physical assets owned by the University as well as capitalized software costs and moveable equipment acquired through capitalized leases.

Building and building improvements include physical assets owned by the University as well as leasehold improvements, capitalized space leases, and construction in progress. Capitalized space leases at June 30, 2019 and 2018, were $70.7 million and $73.3 million, respectively.

12. Accrued Employee Benefit Liabilities

Accrued employee benefit liabilities arise from employment at the University. These include liabilities for pension, postretirement benefits, postemployment benefits, unused vacation, and deferred compensation.

Postemployment benefits relating to workers' compensation, short-term disability, and continuation of medical benefits for those on long-term disability are provided to former or inactive employees after employment but before retirement. The University records the costs of such benefits on an accrual basis if the employee has provided the services from which those benefits are derived. As of June 30, 2019 and 2018, the actuarially computed liabilities on the University's consolidated statements of financial position are $60.0 million and $56.4 million, respectively.

(in thousands of dollars, unless otherwise noted)

13. Pension and Other Postretirement Benefit Costs

Pension Plan Benefits

The University has four non-contributory pension plans (the "pension plans") for supporting staff employees. All four pension plans are subject to collective bargaining agreements. Until December 31, 2018 the former employees of the Arden Conference Center, which closed in 2005, were covered under a fifth plan. As of January 1, 2019 this plan has been consolidated into the Retirement Plan for Supporting Staff of Columbia University. Two of the plans include defined benefits for past and future service. Two of the pension plans provide defined benefits for service prior to January 1 and July 1, 1976, respectively. For these two pension plans, future benefits are provided by defined contribution plans. Charges to expenditures for the defined contribution segments of the plans amounted to $4.0 million and $5.4 million for the years ended June 30, 2019 and 2018, respectively.

In addition, the University provides retirement benefits for full-time faculty, officers, and certain other employees under a separate defined contribution plan (the "officer plan"). University contributions for the officer plan reported in operating expenses were $151.1 million and $137.3 million for the years ended June 30, 2019 and 2018, respectively.

Postretirement Health Care and Life Insurance Benefits

The University provides postretirement health care and life insurance benefits for certain employees. The University accrues the estimated cost of these benefits over the years that eligible employees render service.

Obligations and Funded Status

The University follows authoritative guidance, which requires recognition on the consolidated statements of financial position of the difference between benefit obligations and any plan assets of the University's defined benefit and other postretirement benefit plans. In addition, the authoritative guidance requires unamortized amounts (e.g., net actuarial gains or losses and prior service cost or credits) to be recognized as changes to net assets without donor restrictions and that those amounts be adjusted as they are subsequently recognized as components of net periodic pension cost.

Amounts recognized in net assets without donor restrictions are as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2019	2018	2019	2018
Net actuarial (gain) / loss	$ 51,647	$ 45,398	$ (55,745)	$ (34,094)
Prior service (credit) / cost	246	311	-	-
Total amount recognized	$ 51,893	$ 45,709	$ (55,745)	$ (34,094)

(in thousands of dollars, unless otherwise noted)

The components of accrued benefit costs for pension benefits and other postretirement benefits are as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2019	**2018**	**2019**	**2018**
Change in benefit obligation:				
Benefit obligation, beginning of year	$ 209,046	$ 210,284	$ 145,152	$ 146,708
Service cost	7,916	8,220	6,241	6,713
Interest cost	9,046	8,514	5,734	5,724
Plan participants' contributions	-	-	6,103	6,050
Actuarial (gain) / loss	16,711	(10,877)	(22,676)	(8,421)
Federal subsidy	-	-	596	200
Net disbursements and transfers	(6,998)	(7,095)	(9,803)	(11,822)
Benefit obligation, end of year	235,721	209,046	131,347	145,152
Change in plan assets:				
Fair value of assets, beginning of year	176,906	165,710	200,805	192,340
Actual return on plan assets	18,846	6,571	14,214	14,237
Employer contributions	10,478	11,720	-	
Plan participants' contributions	-	-	6,103	6,050
Net disbursements and transfers	(6,998)	(7,095)	(9,803)	(11,822)
Fair value of assets, end of year	199,232	176,906	211,319	200,805
Net amount recognized	$ (36,489)	$ (32,140)	$ 79,972	$ 55,653

Weighted-average assumptions used to determine end of year benefit obligation	**2019**	**2018**
Discount rate	3.20% to 3.75%	3.95% to 4.25%
Rate of compensation increase	3.00%	3.25%

The accumulated benefit obligations for the two underfunded pension plans at June 30, 2019 and 2018, were $203.4 and $182.4 million, respectively.

At June 30, 2019 and 2018, the projected benefit obligation exceeded the pension plan assets for two of the four plans. The projected benefit obligation for the pension plans with a benefit obligation in excess of plan assets were as follows:

End of year	**2019**	**2018**
Projected benefit obligation	$ 224,753	$ 202,488
Fair value of plan assets	185,578	166,497

(in thousands of dollars, unless otherwise noted)

The accumulated postretirement benefit obligation for the other postretirement benefit plan and the fair value of plan assets with plan assets in excess of the accumulated postretirement benefit obligation was as follows:

End of year	**2019**	**2018**
Accumulated postretirement benefit obligation	$ 131,347	$ 145,152
Fair value of plan assets	211,319	200,805

A 6.25 percent annual rate of increase in the per capita cost of covered health care benefits for the other postretirement benefit plan was assumed for 2019. The rate was assumed to decrease gradually to 5.00 percent for year ended June 30, 2025 and remain at that level thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effect:

	1-%-point increase	**1-%-point decrease**
Effect on accumulated postretirement benefit obligation	$ 17,562	$ (14,053)

The asset allocation for the two defined benefit plans for both past and future service at June 30, 2019 and 2018, and the target allocation for 2020, by asset category, follows:

	Target allocation	**Percentage of plan assets at year end**	
	2020	**2019**	**2018**
Asset category			
U.S. large cap equity and global equity funds	26%	18%	18%
International equities (non-U.S.)	14%	21%	21%
High yield fixed income securities	10%	10%	10%
U.S. core fixed income	50%	51%	51%
	100%	100%	100%

The asset allocation for the two defined benefit plans for prior service only at June 30, 2019 and 2018, and the target allocation for 2020, by asset category, follows:

	Target allocation	**Percentage of plan assets at year end**	
	2020	**2019**	**2018**
Asset category			
U.S. large cap equity	10%	6%	4%
International equities (non-U.S.)	5%	11%	9%
High yield fixed income securities	5%	1%	11%
U.S. core fixed income	80%	82%	76%
	100%	100%	100%

The retirement plan for the employees of Arden Conference Center was invested in equity securities, including mutual funds, 35 percent, and debt securities, 65 percent as of June 30, 2018. As this plan has been consolidated as of January 1, 2019, the associated asset allocation and target allocation are reflected in the table above at June 30, 2019.

(in thousands of dollars, unless otherwise noted)

The following presents investments of the pension plans as of June 30, 2019. The Plans' investments in mutual funds are included as Level 1 because fair value is based on quoted prices. The Plans' investments in common collective trusts are valued at NAV as a practical expedient and are therefore excluded from the fair value hierarchy and are reported as NAV. Level 3 assets represent fixed income related investment contracts with a major life insurance company.

	Level 1	Level 2	Level 3	NAV	Total
Common collective trust funds					
Global equity				$ 74,390	$ 74,390
Fixed income				122,781	122,781
Fixed income investment contracts			$ 2,061		2,061
Investments, at fair value	$ -		$ 2,061	$ 197,171	$ 199,232

The following table is a roll forward of the amounts for investments classified within Level 3 as described above.

	June 30, 2018	Purchases (Gross)	Sales (Gross)	Investment gain/(loss)	June 30, 2019
Investment contracts	$ 2,113	$ -	$ (165)	$ 113	$ 2,061
Total level 3 investments	$ 2,113	$ -	$ (165)	$ 113	$ 2,061

The following presents investments of the pension plans as of June 30, 2018:

	Level 1	Level 2	Level 3	NAV	Total
Common collective trust funds					
Global equity				$ 64,406	$ 64,406
Fixed income				109,229	109,229
Mutual funds	$ 1,158				1,158
Fixed income investment contracts			$ 2,113		2,113
Investments, at fair value	$ 1,158		$ 2,113	$ 173,635	$ 176,906

The following table is a roll forward of the amounts for investments classified within Level 3 as described above.

	June 30, 2017	Purchases (Gross)	Sales (Gross)	Investment gain/(loss)	June 30, 2018
Investment contracts	$ 2,158	$ 46	$ (154)	$ 63	$ 2,113
Total level 3 investments	$ 2,158	$ 46	$ (154)	$ 63	$ 2,113

(in thousands of dollars, unless otherwise noted)

The asset allocation for the other postretirement benefit plan at June 30, 2019 and 2018, and the target allocation for 2020, by asset category, follows:

	Target allocation	Percentage of plan assets at year's end	
	2020	2019	2018
Asset category			
U.S. large cap equity and global equity funds	52%	49%	49%
International equities (non-U.S.)	16%	19%	19%
U.S. fixed income	32%	32%	32%
	100%	100%	100%

The following presents investments of the other postretirement benefit plan as of June 30, 2019. The Plans' investments in common collective trusts are valued at NAV as a practical expedient and are therefore excluded from the fair value hierarchy and reported as NAV.

	Level 1	Level 2	Level 3	NAV	Total
Common collective trust funds					
Global equity				$ 144,012	$ 144,012
Fixed income				67,307	67,307
Investments, at fair value				$ 211,319	$ 211,319

The following presents investments of the other postretirement benefit plan as of June 30, 2018:

	Level 1	Level 2	Level 3	NAV	Total
Common collective trust funds					
Global equity				$ 136,370	$ 136,370
Fixed income				64,435	64,435
Investments, at fair value				$ 200,805	$ 200,805

Net Periodic Benefit Cost

The components of net periodic benefit cost for pension benefits and other postretirement benefits are as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2019	2018	2019	2018
Components of net periodic benefit cost				
Service cost	$ 7,916	$ 8,220	$ 6,242	$ 6,713
Interest cost on projected benefit obligation	9,045	8,514	5,734	5,724
Expected return on assets	(10,203)	(9,357)	(12,374)	(11,816)
Amortization of prior service cost/(credit)	65	65	-	
Amortization of unrecognized net losses/(gain)	1,820	3,145	(2,619)	(459)
Net periodic benefit cost	8,643	10,587	(3,017)	162

(in thousands of dollars, unless otherwise noted)

Amounts recognized in the Consolidated Statements of Activities

A summary of changes in plan assets and benefit obligations recognized in the consolidated statements of activities is as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2019	**2018**	**2019**	**2018**
Summary of changes in plan assets and benefit obligations recognized in the Consolidated Statements of Activities				
Net periodic benefit cost - service cost	$ 7,916	$ 8,220	$ 6,242	$ 6,713
Total recognized in operating	7,916	8,220	6,242	6,713
Net periodic benefit cost other than service cost	727	2,367	(9,259)	(6,550)
Current year actuarial (gain)/loss	8,069	(8,092)	(24,270)	(11,009)
Amortization of actuarial gain/(loss)	(1,820)	(3,145)	2,619	459
Amortization of prior service credit/(cost)	(65)	(65)		
Total recognized in nonoperating	6,911	(8,935)	(30,910)	(17,100)
Total recognized in operating and nonoperating	$ 14,827	$ (715)	$ (24,668)	$ (10,387)

Amounts in net assets without donor restrictions expected to be recognized in net periodic benefit cost in fiscal year 2020 are as follows:

	Pension Plan Benefits	Other Postretirement Benefits
Actuarial (gain)/loss	$ 2,789	$ (3,467)
Prior service (credit)/cost	65	-
	$ 2,854	$ (3,467)

Weighted-average assumptions used to determine net periodic pension cost	**2019**	**2018**
Discount rate	3.95% to 4.25%	3.35% to 3.95%
Expected return on plan assets	3.75% to 6.50%	3.75% to 6.50%
Rate of compensation increase	3.25%	3.25%

To arrive at assumptions for expected long-term rates of return on assets in the pension plans and the postretirement benefit plan, the University considered historical returns and future expectations for returns in each asset class in the asset allocation for the previously described pension and postretirement benefit portfolios.

Assumed health care cost trend rates have a significant effect on the amounts reported for the other postretirement benefit plan. A one-percentage-point change in the assumed health care cost trend rates would have had the following effect:

	1-% point Increase	1-% point Decrease
Effect on total service and interest cost	$ 2,227	$ (1,720)

(in thousands of dollars, unless otherwise noted)

Expected Cash Flows

Information about the expected cash flows for the plans is as follows:

	Pension Plan Benefits	Other Postretirement Benefits
Expected University contributions		
2020	$ 8,561	$ -
Expected benefit payments		
2020	7,468	5,442
2021	7,926	5,590
2022	8,434	5,698
2023	8,998	5,795
2024	9,587	6,000
2025-2029	56,883	35,062
Total	$ 99,296	$ 63,587

Total benefits expected to be paid include both the University’s share of the benefit cost net of Medicare subsidies and the participants’ share of the cost, which is funded by participant contributions to the other postretirement benefit plan. The University receives a Medicare Part D subsidy from the federal government as reimbursement for certain retiree health benefits paid to plan participants, which was approximately $0.4 million in fiscal year 2019.

(in thousands of dollars, unless otherwise noted)

14. Lease Obligations

The University is the lessee of various equipment and space under noncancelable operating and capital leases. Capital lease obligations at June 30, 2019 and 2018, were $126.1 million and $121.3 million, respectively. Operating lease rental expense for the years ended June 30, 2019 and 2018 was $45.8 million and $40.4 million, respectively. Space leases contain customary escalation clauses, which are included in annual aggregate minimum rentals.

Future aggregate minimum rental payments under operating and capital leases are as follows:

	Operating	Capital
Future minimum rental payments:		
2020	$ 44,144	$ 10,134
2021	38,413	9,776
2022	32,714	8,858
2023	28,194	7,382
2024	27,012	6,327
Thereafter	243,005	216,420
Less: Interest at 1.45 percent to 5.31 percent		(132,770)
Capital lease obligations at June 30, 2019		$ 126,127

15. Conditional Asset Retirement Obligations

Conditional asset retirement obligations are a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditioned on a future event that may or may not be within the control of the University. GAAP requires that the fair value of a liability be recognized in the period in which it occurred if a reasonable estimate of fair value can be made. Uncertainty with respect to the timing and/or method of settlement of the asset retirement obligation does not defer recognition of a liability.

Conditional asset retirement obligations related to remediation or disposal of asbestos, underground storage tanks, soil, radioactive sources, equipment, and miscellaneous other items were $118.9 million and $119.2 million at June 30, 2019 and 2018, respectively.

(in thousands of dollars, unless otherwise noted)

16. Bonds and Notes Payable

Bonds and notes payable outstanding are as follows at June 30:

	2019	2018
Dormitory Authority of the State of New York, tax exempt revenue bonds, Columbia University issues:		
Series 2018 A, 2.45% to 3.41%, maturing FY2029 to FY2049	$ 150,000	$ 150,000
Series 2018 B, 2.98%, maturing FY2039	175,185	175,185
Series 2017 A, 2.40% to 3.49%, maturing FY2028 to FY2048	150,000	150,000
Series 2017 B, 1.96% to 2.61%, maturing FY2025 to FY2030	40,475	40,475
Series 2016 A-1, 1.67%, maturing FY2027	50,000	50,000
Series 2016 A-2, 1.35% to 2.89%, maturing FY2024 to FY2047	130,000	130,000
Series 2016 B, 0.80% to 2.04%, maturing FY2020 to FY2032	168,810	189,715
Series 2015 A, 1.95% to 3.00%, maturing FY2026 to FY2046	92,535	92,535
Series 2015 B, 1.13% to 1.88%, maturing FY2020 to FY2025	32,735	37,930
Series 2012 A, 1.31% to 1.92%, maturing FY2020 to FY2023	126,290	137,935
Series 2011 A, 2.96% to 4.88%, maturing FY2020 to FY2042	270,000	285,000
Series 2009 A, variable rate, 1.60%, maturing FY2039	117,000	117,000
Series 2003 B, variable rate, 1.60%, maturing FY2028	30,000	30,000
Series 2002 C, variable rates, 1.44% to 1.55%, maturing FY2027	23,300	23,300
Taxable Series 2015, 3.46%, maturing FY2046	75,000	75,000
Taxable Series 2012, 3.83%, maturing FY2043	100,000	100,000
New Jersey Economic Development Corporation, tax exempt Series 2002, variable rate, 1.60%, maturing FY2020 to FY2028	4,665	5,110
Medium-Term Notes, Taxable Series C 6.53% to 7.36%, maturing FY2021 to FY2022	13,308	20,567
Empire State Development Corporation issues:		
9.00%, maturing FY2029	5,718	6,099
Interest-free, maturing FY2020	8,100	8,100
Economic Development Corporation Interest-free, maturing FY2020	10,000	10,000
Subtotal, principal payments	1,773,121	1,833,951
Unamortized bond premium	231,758	255,863
Unamortized cost of issuance	(4,679)	(5,529)
Subtotal, bond premium and cost of issuance	227,079	250,334
Total bonds and notes payable	$ 2,000,200	$ 2,084,285

(in thousands of dollars, unless otherwise noted)

Estimated principal payments on bonds and notes payable are summarized below:

Fiscal Year	Principal
2020	$ 81,933
2021	73,326
2022	78,347
2023	81,692
2024	27,875
Thereafter (through 2049)	1,429,948
Total	$ 1,773,121

The University issues most of its tax-exempt debt through the Dormitory Authority of the State of New York ("DASNY"). On May 16, 2018, the University issued $150 million of Series 2018A and $175.2 million of Series 2018B, all tax-exempt fixed rate bonds. Series 2018A was issued at a premium of $41.5 million which will be amortized over 10 and 30 years based on the maturity of the underlying bonds. Series 2018B was issued at a premium of $30.1 million which will be amortized over 10 years based on the optional redemption date. The proceeds from Series 2018A will be used to finance various construction and renovation projects. The proceeds from Series 2018B were used to redeem outstanding Series 2008A Bonds. The redeemed bonds were legally defeased and, as such, are not reflected in "Bonds and notes payable" at June 30, 2018.

The University recorded amortization of bond premium and issuance costs, net, of $24.1 million and $19.3 million for the years ended June 30, 2019 and 2018, respectively, as a reduction to interest expense.

The University has a $150 million taxable commercial paper program. As of June 30, 2019, and 2018, there was no commercial paper outstanding under this program.

As of June 30, 2019, the University had a $200 million operating line of credit, which expires in October, 2022, as well as a $100 million operating line of credit, which expires in November, 2020. Additionally, as of June 30, 2019, the University had two $100 million standby lines of credit supporting self-liquidity for variable rate debt outstanding, one that expires in January, 2022 and a second that expires in January, 2020. Each of the lines is with a different lending institution and, as of June 30, 2019, no balances were outstanding on the lines of credit.

The University has administrative covenants on its tax-exempt debt and lines of credit, with which it was in compliance as of June 30, 2019 and 2018.

On October 1, 2008, the University entered into a $200 million notional value fixed payer interest rate swap agreement to protect against the risk of interest rate changes. The estimated fair value of the swap liability was $76.1 million and $57.1 million at June 30, 2019 and 2018, respectively. The fair value of the swap is obtained by taking the present value of all future cash flows on the swap implied by the forward curve.

17. Insurance

In connection with managing financial risks through various third-party insurance programs, the University is self-insured in certain areas. Funded self-insurance liabilities primarily cover deductibles on general liability, trustees and officers' liability, and property insurance claims. Self-insurance liabilities are actuarially calculated on an annual basis. The University's core liability coverage is purchased through Pinnacle RRG, a Vermont-based risk retention group with seventeen other universities.

The University obtains medical malpractice insurance through MCIC and MLMIC. MCIC is a group-captive insurance company owned by the University, The Johns Hopkins Hospital, The Johns Hopkins University, University of Rochester Medical Center, Weill Cornell Medical College, Yale New Haven Health, Yale University School of Medicine, and NYP. MLMIC is a mutual company where policyholders are owners with full voting rights to elect the company's Board of Directors, thereby having direct input into vital areas of operation. The governing Board is comprised primarily of practicing physicians, dentists, and hospital administrators. More than 1,900 of the University's faculty physicians and dentists are enrolled in MCIC or MLMIC. The University has recorded self-insurance and medical malpractice liabilities of approximately $306.7 million and $289.0 million as of June 30, 2019 and 2018, respectively in "Other long-term liabilities". The medical malpractice liabilities of approximately $185.1 million and $176.2 million as of June 30, 2019 and 2018, respectively, are reported gross with an offsetting receivable for anticipated recoveries of $126.7 million and $119.5 million, respectively, recorded in "Other assets".

18. Related Party Transactions

The University maintains several clinical and education affiliation agreements with other organizations. Revenues and expenses from these agreements are accounted for in the operating activities section of the consolidated statements of activities. The most significant affiliation agreement is with NYP.

The University receives reimbursement from NYP for the provision of medical, professional, and supervisory staff services as well as other technical assistance. NYP provides funding to clinical departments for specific purposes including administration, supervision, and teaching of the NYP resident staff and salary support for faculty and staff providing services to NYP. In addition, NYP provides funding for clinical programs that the University and NYP would like to see developed or expanded. NYP also provides the departments with certain facilities and services (outpatient faculty practice offices, nursing, telecommunications, etc.) for which the University is invoiced on a monthly basis. Finally, the University and NYP collaborate and fund joint projects for which specific agreements are negotiated.

In addition, the University and NYP negotiate a joint budget, which forms the basis for the affiliation agreement. The fiscal year 2019 joint budget was approximately $363.0 million. The payments to NYP for goods and services were $97.6 million. The majority of revenues received pursuant to this agreement are reflected in the consolidated financial statements as a portion of "Patient care revenue" and the majority of the expenses related to this agreement are reflected in "Patient care expense".

The University records both receivables from and payables to NYP on the consolidated statements of financial position. The University has no liability for obligations and debt incurred by NYP. During fiscal year 2018, the University and NYP collaborated by opening a radiological imaging center, ColumbiaDoctors/NewYork-Presbyterian Imaging, Inc. (CDNYPI). CDNYPI is a not-for-profit membership corporation, which was incorporated to operate pursuant to the terms and provisions of Article 28 of the New York Public Health Law, whereby it provides a full range of general radiology and interventional radiology services. In order to provide for efficient delivery of services and to secure a high level of expertise from existing resources, CDNYPI has entered into clinical and administrative agreements with the University and NYP. The revenue generated from these agreements was $24.1 million and $18.2 million for the years ended June 30, 2019 and 2018, respectively. In addition, the University recorded an interest in CDNYPI in the amount of $9.3 million and $3.3 million as of June 30, 2019 and 2018, respectively.

The University had a financial arrangement with Neurological Associates, P.C., a New York physician professional corporation ("PC"), whereby the University provides facilities and other services to the PC for a negotiated fee. This PC provides clinical services to patients and is owned and controlled by physicians who are also faculty members of the University. The non-controlled PC generated revenue of approximately $41.8 million and $40.3 million for the years ended June 30, 2019 and 2018, respectively, which has not been consolidated into the University's consolidated financial statements.

The University controls a not-for-profit practice entity and three professional corporations and, as such, consolidates these entities into the University's consolidated financial statements.

Pursuant to the consent of the Trustees of the CPMC Fund, Inc., during the year ending June 30 2019, the CPMC Fund, Inc. transferred to the University one endowment previously held by CPMC Fund, Inc. for the University. The value of the endowment at the time of transfer was $18.5 million, with $11.5 million being donor-restricted funds that the University must hold in perpetuity.

(in thousands of dollars, unless otherwise noted)

19. Liquidity and Availability of Resources

The University's financial assets and liquidity resources available for general expenditures within one year of the date of the consolidated statements of financial position are as follows:

	2019	2018
Financial Assets:		
Cash and cash equivalents	$ 814,040	$ 1,006,998
Accounts receivable, net	535,861	529,753
Pledges receivable for operations and plant, net	121,862	120,981
Operating investments	942,388	841,772
Approved endowment payout for subsequent year	563,663	530,852
Other financial assets	52,943	123,109
Total financial assets available within one year	3,030,757	3,153,465
Liquidity resources:		
Taxable commercial paper (unexpended)	150,000	150,000
Bank lines of credit (undrawn)	500,000	500,000
Total financial assets and liquidity resources available within one year	$ 3,680,757	$ 3,803,465

As part of the University's liquidity management, financial assets are structured to be available as its general expenditures, liabilities, and other obligations come due. In addition, the University may invest cash in excess of daily requirements in short-term and/or liquid investments. To further help manage unanticipated liquidity needs, the University has committed lines of credit in the amount of $500 million along with a $150 million taxable commercial paper program. As of June 30, 2019, there are no amounts outstanding under these credit facilities.

Additionally, the University has board-designated funds functioning as endowments of $3.3 billion as of June 30, 2019 and 2018, respectively. Although the University does not intend to spend from these endowments other than amounts appropriated for general expenditure as part of its annual appropriation process, $2.9 billion of these endowments without donor restrictions could be made available if necessary. However, both the funds functioning as endowment and donor-restricted endowments contain investments with lock-up provisions that reduce the total investments that could be made available (see Note 6 for disclosures about investments).

20. Contingencies and Commitments

From time to time, various claims and suits generally incident to the conduct of normal business are pending or may arise against the University.

In the opinion of counsel and management of the University, after taking into account insurance coverage, losses, if any, from the resolution of pending litigation should not have a material effect on the University's financial position or results of operations.

All funds expended in connection with government grants and contracts are subject to audit by government agencies. While the ultimate liability, if any, from audits of government grants and contracts by government agencies, claims, and suits is presently not determinable, it should not, in the opinion of counsel and management, have a material effect on the University's financial position or results of activities.

The University is subject to laws and regulations concerning environmental remediation and will, from time to time, establish reserves for potential obligations that management considers probable and for which reasonable estimates can be made. As of June 30, 2019, the University has recorded $118.9 million for conditional asset retirement obligations. These estimates may change depending upon the nature and extent of contamination, appropriate remediation technologies, and regulatory approvals. The University is not aware of any existing conditions that it currently believes are likely to have a material adverse effect on the University's financial position, changes in net assets, or cash flows.

The University's capital improvement program and related commitments includes projects that address the major strategic objectives of the University. As part of the capital improvement program, the University has entered into contracts to purchase properties with an aggregate value of $72.8 million. As of June 30, 2019, approximately $70.3 million is still outstanding.

The University has made commitments related to its expansion in Manhattanville, certain of which are based upon events in the future which would result in cash and in-kind payments from the University. Those that are estimable have been recorded as liabilities.

(in thousands of dollars, unless otherwise noted)

21. Expenses by Functional and Natural Classification

Expenses are reported for the University's primary program activities. The consolidated statements of activities also report certain categories of expenditures that support more than one major program of the University. These expenses include operation and maintenance of plant, depreciation expense, and interest expense.

Expenses by functional and natural classification for the years ended June 30, 2019 and 2018 are as follows:

2019	Expenses per Statement of Activities	Allocation	Final Allocated Natural Expenses: Compensation and Benefits	Other	Final Allocated Expenses
Instruction and educational administration	$ 1,971,252	$ 292,400	$ 1,510,668	$ 752,984	$ 2,263,652
Research	639,873	101,100	387,610	353,363	740,973
Patient care expense	1,099,268	79,572	924,060	254,780	1,178,840
Operation and maintenance of plant	284,831	(284,831)			
Institutional support	312,613	51,000	216,912	146,701	363,613
Auxiliary enterprise	166,217	104,264	104,130	166,351	270,481
Depreciation expense	289,998	(289,998)			
Interest expense	53,507	(53,507)			
Total operating expenses	4,817,559	-	3,143,380	1,674,179	4,817,559
Net periodic benefit cost other than service cost	(8,532)		(8,532)		(8,532)
Total expenses	$ 4,809,027	$ -	$ 3,134,848	$ 1,674,179	$ 4,809,027

2018	Expenses per Statement of Activities	Allocation	Final Allocated Natural Expenses: Compensation and Benefits	Other	Final Allocated Expenses
Instruction and educational administration	$ 1,874,242	$ 290,129	$ 1,417,743	$ 746,628	$ 2,164,371
Research	603,648	103,886	370,071	337,463	707,534
Patient care expense	1,025,611	75,800	856,576	244,835	1,101,411
Operation and maintenance of plant	269,529	(269,529)			
Institutional Support	307,127	26,352	213,688	119,791	333,479
Auxiliary enterprise	157,564	107,137	98,852	165,849	264,701
Depreciation expense	278,897	(278,897)			
Interest expense	54,878	(54,878)			
Total operating expenses	4,571,496	-	2,956,930	1,614,566	4,571,496
Net periodic benefit cost other than service cost	(4,183)		(4,183)		(4,183)
Total expenses	$ 4,567,313	$ -	$ 2,952,747	$ 1,614,566	$ 4,567,313

The allocation of operation and maintenance of plant is based on square footage occupancy. Depreciation expense includes depreciation of buildings, building improvements, and equipment. The allocation of depreciation on buildings and building improvements is based on square footage occupancy. Depreciation on equipment is allocated to the programs for which the equipment was purchased. Interest expense is allocated according to the same methodologies used for building depreciation.

22. Subsequent Events

The University has performed an evaluation of subsequent events through October 8, 2019, which is the date the consolidated financial statements were issued.

Beginning July 1, 2019, the University assumed control of the Neurosurgical Associates, P.C. and will consolidate the activity of this PC subsequent to this date into the University's consolidated financial statement.