Financial Report
2022–2023
Yale University

Yale University Financial Report 2022–2023

Front cover (from top left, moving clockwise)

Brad Erkkila, facility manager for the Yale Analytical and Stable Isotope Center, with the recently installed Mini Carbon Dating System (MICADAS). Photo: Andrew Hurley

Kline Biology Tower. Photo: Lee Faulkner

Anjelica Gonzalez, associate professor of biomedical engineering, and 4th year graduate student Rita Matta working in the lab. Photo: Matt Lavitt

Examining plant specimens. Photo: Michael Marsland

Back cover (from far left, moving clockwise)

Yale Medicine, Pediatrics. (pictured: Nina N. Brodsky) Photo: Allie Barton

Materials research in the university cleanroom. Photo: Dan Renzetti

Students at the Yale Center for Engineering, Innovation, and Design. Photo: Michael Marsland.

Amin Karbasi, associate professor of electrical engineering, computer science, and statistics and data science, took part in a "Faculty Research Blitz" at the launch event. Photo: Dariusz Terepka

Highlights

Five-Year Financial Overview ($ in millions)	Fiscal Years 2023	2022	2021	2020	2019
Net Operating Results - Management View	$ 147	$ 167	$ 276	$ 125	$ 87
Financial Position Highlights:					
Total assets	$ 54,426	$ 54,719	$ 56,223	$ 44,696	$ 44,428
Total liabilities	9,698	10,025	11,931	12,964	12,186
Total net assets	$ 44,728	$ 44,694	$ 44,292	$ 31,732	$ 32,242
Endowment:					
Net investments, at fair value	$ 40,504	$ 41,122	$ 41,913	$ 30,957	$ 30,295
Total return on investments	1.8%	0.8%	40.2%	6.8%	5.7%
Spending from endowment	4.3%	3.8%	5.0%	4.8%	4.6%
Facilities:					
Land, buildings and equipment, net of accumulated depreciation	$ 5,748	$ 5,598	$ 5,508	$ 5,438	$ 5,251
Disbursements for building projects	$ 448	$ 378	$ 380	$ 437	$ 447
Debt	$ 5,138	$ 5,164	$ 5,200	$ 5,242	$ 3,775
Statement of Activities Highlights:					
Operating revenues	$ 5,104	$ 4,810	$ 4,579	$ 4,247	$ 4,105
Operating expenses	4,936	4,540	4,201	4,044	3,835
Increase in net assets from operating activities	$ 168	$ 270	$ 378	$ 203	$ 270

Five-Year Enrollment Statistics	2023	2022	2021	2020	2019
First-Year Enrollment Class of:	'26	'25	'24	'23	'22
First-Year applications	50,060	47,240	35,220	36,844	35,306
First-Year admitted	2,289	2,509	2,299	2,269	2,229
Admissions rate	4.6%	5.3%	6.5%	6.2%	6.3%
First-Year enrollment	1,554	1,786	1,264	1,550	1,573
Yield	67.9%	71.2%	55.0%	68.3%	70.6%
Total Enrollment:					
Yale College	6,645	6,536	4,703	6,092	5,964
Graduate and professional schools	8,161	8,031	7,357	7,517	7,469
Total	14,806	14,567	12,060	13,609	13,433
Yale College Term Bill and Financial Aid:					
Yale College term bill	$ 80,700	$ 77,750	$ 74,900	$ 72,100	$ 69,430
Average grant award for students receiving aid	$ 64,686	$ 59,944	$ 58,340	$ 59,205	$ 57,633

Message from the President

Dear Members of the Yale Community,

On my appointment as president, I described a vision for an ever more accessible, unified, innovative, and excellent Yale. Over the past decade, our university community has made enormous strides toward these objectives, including a succession of milestones in this fiscal year. This progress, described more fully in the pages that follow and at the university initiatives website, has at once transformed teaching and learning at Yale and produced the momentum that will carry our community forward.

To its core, Yale's mission of improving the world today and for future generations through outstanding research and scholarship, education, preservation, and practice is rooted in the belief that a better world is within reach. The university's financial planning and *For Humanity* fundraising campaign enable us to turn that belief into actions, so we can pair our will and our capacity with the resources necessary to realize our mission.

As Yale marches toward a $7 billion campaign goal, we continue to approach financial stewardship prudently, exemplified by an Endowment Spending Policy that insulates us from market swings. We typically pay little attention to short-term results—recent investment returns have ranged from 40.2 percent in fiscal 2021 to 0.8 percent in fiscal 2022—because of the successful application of Yale's smoothing rule, structured to spread the effects of market volatility over several years. Over the decade ending on June 30, 2023, for example, Yale's endowment returned 10.9 percent per annum, surpassing the mean endowment performance for colleges and universities by an estimated 3.0 percent per annum.

Across Yale's campus, we are leveraging the strength of our financial position—growth in endowment spending this year was higher than it has been in two decades—and mobilizing the remarkable support of alumni and friends to advance our mission. Over the last decade, Yale has added approximately 2.2 million square feet of new space dedicated to teaching and research, and we look forward to adding millions more square feet of beautiful, functional, and high-tech facilities. This year alone, we celebrated the opening of Yale's new home for humanities scholarship and teaching, the Humanities Quadrangle; our first new professional school since 1976, the Jackson School of Global Affairs; the Tobin Center for Economic Policy, designed to define and inform policy debate; and Yale Schwarzman Center, a hub for arts, culture, and lively discussion.

This burst of activity reflects our efforts to improve campus infrastructure, including the recent reimagining of Kline Tower, the ongoing renovation of Yale Peabody Museum, and the creation of research and innovation spaces at 100 College Street and 101 College Street that will bring together faculty from the Faculty of Arts and Sciences and the School of Medicine. This year, we also announced a series of investments that will transform the face and trajectory of the School of Engineering and Applied Science. Over the next decade and beyond, Yale will seek to undertake several major construction projects in the lower Hillhouse Avenue area—a platform on which to build a campus for the School of Engineering and Applied Science. Yale Divinity School's Living Village Project, likewise—part of our broader Planetary Solutions initiative—will be a landmark on Yale's campus and a replicable example for divinity schools, places of worship, and academic institutions worldwide.

As we make our physical campus ever more efficient, beautiful, and conducive to innovative teaching and research, we are pleased, too, to help accelerate the renaissance in our home city. In December, I announced the creation of a new scholarship program, the Pennington Fellowship. This new initiative—separate from and incremental to New Haven Promise—supports New Haven public school students who choose to attend HBCUs; strengthens our connections with these institutions; and addresses, in part, historical disparities in educational opportunities. Yale and New Haven officials also launched the Center for Inclusive Growth, which underscores our commitment to bringing the university's scholarly strengths to bear on developing and implementing strategies for growing the city's economy to benefit every neighborhood. In addition, Yale School of Medicine and Yale New Haven Health System are working to strengthen their preexisting alliances for excellence in education, research, and care.

Investments in New Haven complement the university's campus-wide Belonging at Yale initiative for a stronger, more inclusive community. In the past decade, Yale has more than doubled the enrollment of first-generation and Pell-eligible undergraduates and significantly increased the matriculation of those who are from historically underrepresented groups. There are approximately 500 more first-generation students in Yale College today than in 2013, and a full 86 percent of Yale College students graduate debt-free.

To build on these signal advances in affordability and accessibility, we announced this year the historic goal of raising $1.2 billion for student support. As increasing access to Yale is vital to the future of this university and our contributions to the world, this initiative focuses on new giving for scholarships and fellowships across the university. I am pleased to report meaningful progress to date: In February, Yale School of Medicine announced a $25 million gift from The Starr Foundation toward medical student financial aid that has enabled the school to reduce expected student borrowing from $15,000 to $10,000 by replacing the loan with an additional $5,000 in scholarship. Medical school students with demonstrated financial need will be able to graduate with only $40,000 of debt, compared to $200,000 nationally. In that same month, Yale Law School expanded its Hurst Horizon Scholarship Program, significantly increasing the number of students (from 51 to 80-90 students per year) who will receive financial aid for the cost of tuition, health insurance, and fees. Beginning in 2022-2023, Yale Divinity School is meeting the full tuition need of all students receiving financial aid.

Of course, an altogether more excellent institution depends on excellent leadership. To advance this pursuit, Yale has welcomed three new deans out of a total of sixteen as well as two vice presidents in fiscal year 2023—all of whom contribute critically to our university initiatives. Alongside this diverse group of leaders, our support for field-defining faculty—from mentoring and development programs to initiatives that improve faculty life—will reinforce and amplify the university's iconic strengths to propel Yale for years to come.

It is a privilege for me to present the 2022-2023 Financial Report, reflecting the dedicated efforts of so many Yale faculty, staff, students, and alumni. To all those who have helped Yale to achieve transformative outcomes together this year—indeed, over more than a decade in the presidency—I offer my enduring gratitude.

Peter Salovey
President
Chris Argyris Professor of Psychology

Message from the Senior Vice President for Operations and the Vice President for Finance

Financial Results

Yale finished the year ended June 30, 2023, with a surplus from operations on both a generally accepted accounting principles (GAAP) and a Management View basis – the way Yale looks at financial information for internal discussion and decision-making purposes (see page 6 for additional information). The university generated a surplus from operations of $167 million on a GAAP basis and $147 million on a Management View basis.

The university finished the year in a strong financial position, from both an operations and balance sheet perspective, with $44.7 billion in net assets – a reflection of the university's continuing financial strength.

Revenues and Expenses

Operating revenues continued to grow at a robust pace, increasing by 6.1% to $5.1 billion for the year. Spending from the endowment, Yale's largest source of operating revenue, increased by 11.7% over the prior year to $1,752 million. Medical services income, the second largest source of operating revenue, increased by 7.1% over the prior year to $1,422 million. Grant and contract income, the third largest source of operating revenue, increased by 7.9% over the prior year to $1,038 million. Tuition, room and board, net of financial aid, declined by 0.7% as the university continued to enhance its need-based scholarships to increase the affordability of a Yale education to the broadest range of students. The increases in financial aid more than offset increases in the number of students and term bill rates (the "sticker price" before reductions from financial aid).

Operating expenses increased by 8.7% over the prior year. Personnel costs – salaries, wages, and benefits – grew by 6.9%, which was largely attributable to increased headcount and salary and wage inflation, which were partly offset by a 2.0% decrease in the cost of providing employee benefits. Other operating expenditures increased by 13.1%, driven primarily by an increase in non-salary expenses resulting from continued growth in on-campus activity after the pandemic as well as the inflationary environment.

Yale Endowment

The investment return generated by the Yale Endowment was 1.8% for the year, well less than the spending from the endowment of 4.3% based on the market value at the beginning of the year. This caused the market value of the Yale Endowment, net of spending, to *decline by more than $600 million*. This *intentional result* – spending more than the endowment generated for the year – highlights the *importance and efficacy* of the Endowment Spending Policy. Since investment returns can be highly volatile, the smoothing component of the policy (explained more fully in Footnote 1d of the financial statements) guards against drastic fluctuations in spending. Having a stable flow of endowment income – the university's largest source of revenue – is crucial to enabling the university to carry out its mission in a thoughtful, planful, and effective way. The smoothing component helpfully moderates annual changes – up or down – to the amount of support the endowment provides to the operating budget each year.

Capital Spending Highlights

Capital spending for the year totaled $448 million, an increase of 19% from the prior year, with investments in a number of major projects. Work continued on the renovations to 100 College Street which, at the time of writing this letter, is effectively complete. This space now houses the departments of Neuroscience and Psychology, as well as the Wu Tsai Institute. The transformation of Kline Tower, completed over the summer, reintroduced it as a new hub for several departments across the sciences and the newly-formed Institute for Foundations of Data Science. Construction at the Peabody Museum, which began in fall 2020, will conclude this year. The building – including a glass-ceilinged central gallery, additional space for exhibitions, and a new education center – is slated for a grand reopening in 2024, once reinstallation of displays and exhibits is finished. Significant investments also continued in an array of other state-of-the-art facilities for the sciences. This multi-year initiative aims to revolutionize the university's facilities in these areas to accelerate science, reimagine engineering, and advance Yale's historical strength in science. These investments in the university's physical assets are both exciting and crucial for advancing the university's mission in the years to come.

Strategic Alignment of Yale School of Medicine and Yale New Haven Health System

The Yale School of Medicine (YSM), which generates roughly half of the operating revenue for the university, carries out research, teaching, and clinical care in close partnership with the affiliated Yale New Haven Health System (YNHHS), which is a separate entity from the university. Together they form one of the largest academic medical centers in the country. This year, YSM and YNHHS began meaningful conversations and actions to foster greater strategic alignment and integration. Among other objectives, this collaboration is intended to better align the clinical enterprises and clinical strategic plans, improve patient access and experience, implement newly-established funds flow principles, and develop a comprehensive payer strategy. There is much work still to be done, but by leveraging the strengths of both institutions, this initiative will further enhance their collective impact on patient care, education, research, and growth.

Looking Ahead

Yale's strong operating results and net asset position enable the university to continue to support its current faculty, staff, students, and community while simultaneously investing in new areas to advance the university's strategic academic priorities.

We are grateful to all of the faculty, staff, students, alumni, friends, and members of the New Haven community who make it possible for us to carry out the university's mission. The shared commitment to excellence is inspiring. We look forward to another year supporting Yale in its mission to improve the world today and for future generations through outstanding research and scholarship, education, preservation, and practice.

Jack F. Callahan, Jr.
Senior Vice President for Operations and
Chief Operating Officer

Stephen C. Murphy
Vice President for Finance and
Chief Financial Officer

Financial Results

Overview

Yale University ("Yale" or the "university") manages its operations to achieve long-term financial equilibrium. It is committed to sustaining both the programs and the capital assets (endowment and facilities) supporting those programs over multiple generations. Endowment allocation, Yale's largest source of revenue, is allocated to the operating budget based on a spending policy that preserves the endowment asset values for future generations, while providing a robust revenue stream for current programs. Similarly, Yale's operating budget provides the major portion of the funds needed, through the capital replacement charge ("CRC"), to replenish the capital base necessary to ensure that buildings are maintained to support current and future programs.

The consolidated statement of activities in the audited financial statements is presented in accordance with accounting principles generally accepted in the United States of America ("GAAP"). GAAP generally recognizes revenue when earned and expenses when incurred. The Management View, used for internal decision-making, is focused more on resources available and used in the fiscal period presented. Some of the more significant differences between the two views are as follows:

- The Management View does not include certain revenue that will not be received within the next fiscal year, such as pledged contribution revenue.
- The Management View recognizes capital maintenance through a CRC and recognizes equipment purchases as expense in the year acquired versus the historical cost depreciation expense in the consolidated statement of activities.
- The Management View includes the realized gains and losses on interest rate swaps used to manage exposure to interest rate fluctuations. GAAP requires these realized gains and losses to be presented net of related unrealized gains and losses.
- The Management View presents the expenses related to the defined benefit plans differently as compared to GAAP.
- The GAAP financial statements do not present fund balance transfers between the operating, physical, and financial categories as the Management View does.

The Management View presentation, along with a summary of the differences between the university's net operating results from the Management View to the GAAP View, is presented on the following page.

Yale University Operating Results – Management View

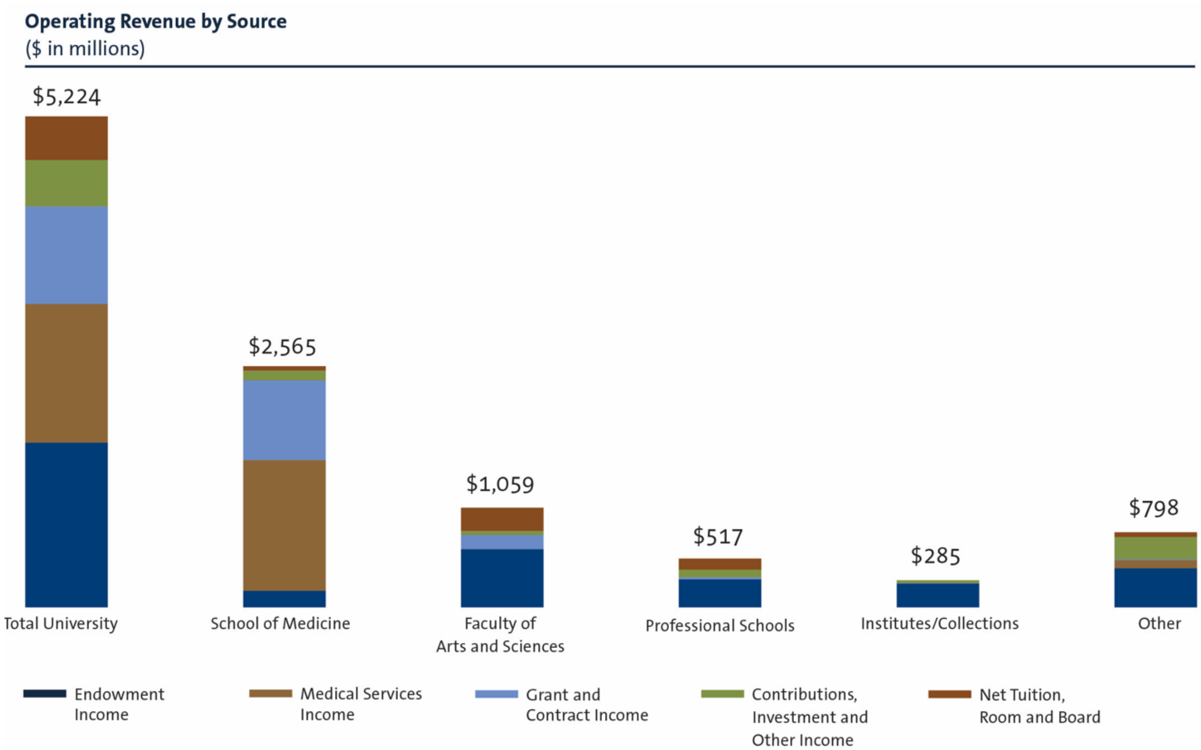
for the years ended June 30, 2023 and 2022 ($ in thousands)

	June 30, 2023	June 30, 2022
Revenues:		
Tuition, room and board - gross	$ 918,415	$ 878,158
Tuition discount	(453,959)	(432,288)
Tuition, room and board - net	**464,456**	**445,870**
Grants and contract income	1,037,423	962,088
Medical services income	1,476,743	1,373,968
Contributions	148,681	235,631
Endowment income	1,751,461	1,567,656
Investment and other income	345,126	291,267
Total external income	**5,223,890**	**4,876,480**
Expenses:		
Faculty salaries	1,303,295	1,182,151
All other salaries	1,114,796	1,020,752
Employee benefits	775,948	767,888
Total salaries and benefits	**3,194,039**	**2,970,791**
Stipends and fellowships	135,167	123,115
Non-salary expenses	1,270,464	1,130,790
Interest, CRC and other amortization	391,001	426,382
Total expenses	**4,990,671**	**4,651,078**
Transfers	(86,404)	(58,902)
TOTAL NET OPERATING RESULTS (MANAGEMENT VIEW)	**146,815**	**166,500**
Summary of differences between the Management View and GAAP presentation of net operating results:		
Operating pledge activity	(14,442)	(2,788)
Changes in other receivables	(17,424)	-
Expenses related to long-term liabilities	(31,865)	(6,834)
Capital funding, depreciation and disposals	(10,428)	(6,910)
Lease activity	2,343	2,157
Interest rate swaps	(1,700)	58,792
Deferred investment income	7,795	-
Funding transfers	86,404	58,902
INCREASE IN NET ASSETS FROM OPERATIONS PER THE CONSOLIDATED STATEMENT OF ACTIVITIES (GAAP VIEW)	**$ 167,498**	**$ 269,819**

Fiscal Year 2023 Management View Results

The university budget structure is managed through 50 separate budget units that are combined into five categories for reporting purposes.

The following table summarizes Management View operating revenue by source in fiscal year 2023.



School of Medicine

The largest unit is the School of Medicine, representing 49% of university total operating revenue. The School of Medicine engages in research, teaching, and clinical practice. Revenues for patient care services, net of contractual adjustments, are primarily based on negotiated contracts with managed care companies, BlueCross BlueShield, Medicare, Medicaid, commercial insurance and others. Additionally, approximately 38% of the School of Medicine's medical services income in 2023 represents revenue recognized as a result of the university's affiliation with Yale New Haven Hospital (the "Hospital"). Yale Medicine ("YM") is one of the largest academic multi-specialty practices in the country and the largest in Connecticut. As of June 30, 2023, YM included 1,597 full-time and 175 part-time physicians providing services in over 100 specialty and subspecialty areas organized into 20 departments, engaging in research, and participating in teaching 1,526 total students (excluding Ph.D. students) and 919 residents. The School of Medicine performs significant research for federal and state governments, foundations, and corporate entities. Research funded by the federal government represents 80% of total research performed at the School of Medicine, with the National Institutes of Health ("NIH") providing 91% of that funding. The university has established policies and procedures to manage and monitor compliance with these important agreements. School of Public Health revenues are included in the figures reported for the School of Medicine.

Arts & Sciences and Engineering

Arts & Sciences and Engineering includes Yale's undergraduate and graduate programs in the arts, humanities, social sciences, sciences, and engineering. During the 2022-2023 academic year, 6,645 undergraduate students were enrolled at Yale College. The undergraduate population is a diverse group attracted from across the United States and from many foreign countries. International students account for approximately 10% of the undergraduate population. Yale College is dedicated to providing undergraduates with a liberal arts education that fosters intellectual curiosity, independent thinking, and leadership abilities. Students learn to think critically and independently and to write, reason, and communicate clearly in preparation for a spectrum of careers and vocations. During the 2022-2023 academic year, 3,311 students were pursuing their studies at the Graduate School of Arts and Sciences. Yale Graduate School of Arts and Sciences considers learning to teach to be an integral part of doctoral education and incorporates training and teaching opportunities into every program. Throughout the unique program of study crafted by graduate students and their faculty advisers, the university provides support that allows Ph.D. students to focus on their scholarship, successfully complete their degrees, and pursue rewarding careers.

Professional Schools

The Professional Schools category includes the Divinity School, the Law School, the School of Art, the School of Music, the School of the Environment, the School of Nursing, the David Geffen School of Drama, the School of Architecture, the School of Management, and Yale's first new professional school since 1976, the Jackson School of Global Affairs. During the 2022-2023 academic year, 3,508 students were pursuing their studies at one of Yale's professional schools.

Institutes/Collections and Other

Institutes and Collections includes the libraries, museums and galleries, and large institutes with significant programmatic and financial activity across multiple academic units. First-hand encounters with Yale's collections are an integral part of teaching and learning across the university, helping students forge creative connections and inspiring tomorrow's leaders. The Other category includes Athletics and various administrative and support units.

The university ended the year with a surplus from operations of $147 million on the Management View basis. Operating revenues increased 7% and operating expenses, excluding transfers, increased 7% compared to 2022.

Fiscal Year 2023 GAAP Results

Operating Revenue

The university derives its operating revenue from the following sources: tuition, room and board (net of certain scholarships and fellowships), grant and contract income, medical services income, allocation of endowment spending from financial capital, contributions, investment income, and other income.

Net Tuition, Room and Board

Net tuition, room and board totaled $458 million in fiscal year 2023, a decrease of 1% from 2022, and represented 9% of the university's total operating revenue. Gross tuition, room and board totaled $918 million in 2023, an increase of 5% from 2022 which totaled $878 million. Of this amount, $804 million represents tuition, a 4% increase over 2022, and $114 million represents revenue from room and board, which increased 7% from 2022. The gross tuition, room and board increases are primarily due to an increase in enrollment and rates. In accordance with GAAP, student income is presented net of certain scholarships and fellowships, which totaled $460 million and $417 million for 2023 and 2022, respectively, representing a 10% increase in 2023. Scholarships and fellowships as a percentage of gross tuition, room and board were 50% and 47% for 2023 and 2022, respectively. These amounts fluctuate based on the needs of enrolled students.

Tuition for students enrolled in Yale College was $62,250, and room and board was $18,450, bringing the total term bill to $80,700 for the 2022-2023 academic year. The increase in the Yale College term bill was 4% over the 2021-2022 academic year.

The university maintains a policy of offering Yale College admission to qualified applicants without regard to family financial circumstances. This "need-blind" admission policy is supported with a commitment to meet the full demonstrated financial need of all students throughout their undergraduate years.

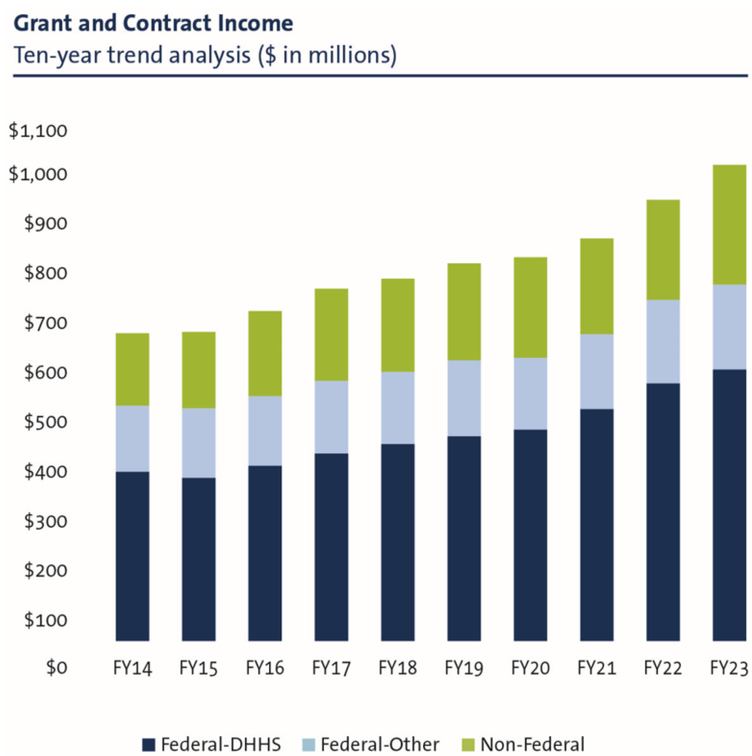
During the 2022-2023 academic year, 55% of Yale College undergraduates received financial aid. In the Graduate School of Arts and Sciences, 99% received financial aid in the form of tuition discounts, stipends, and health insurance. In the professional schools, 84% received financial aid. In all, 74% of total eligible university students enrolled received some form of university-administered student aid in the form of scholarships, loans, or a combination of both scholarships and loans.

Grant and Contract Income

Grant and contract income totaled $1.0 billion in fiscal year 2023, an increase of 8% from 2022, and represented 20% of the university's total operating revenue. The Yale School of Medicine, which recorded 82% of the university's grant and contract income in fiscal year 2023, reported an increase of 8% for 2023, while the remaining university schools and units increased by 9%.

Revenue recognized on grants and contracts from the federal government was $777 million, or 75% of 2023 grant and contract income, supporting Yale's research and training programs. Included in the $777 million is Department of Health and Human Services ("DHHS") funding of $592 million, primarily through the NIH, an increase of 5% compared to the prior year. The university also receives significant research funding from the National Science Foundation, the Department of Energy, and student aid awards from the Department of Education. Non-federal sources, which include foundations, voluntary health agencies, corporations, and the State of Connecticut, provided an additional $261 million in funding for research, training, clinical, and other sponsored agreements during 2023.

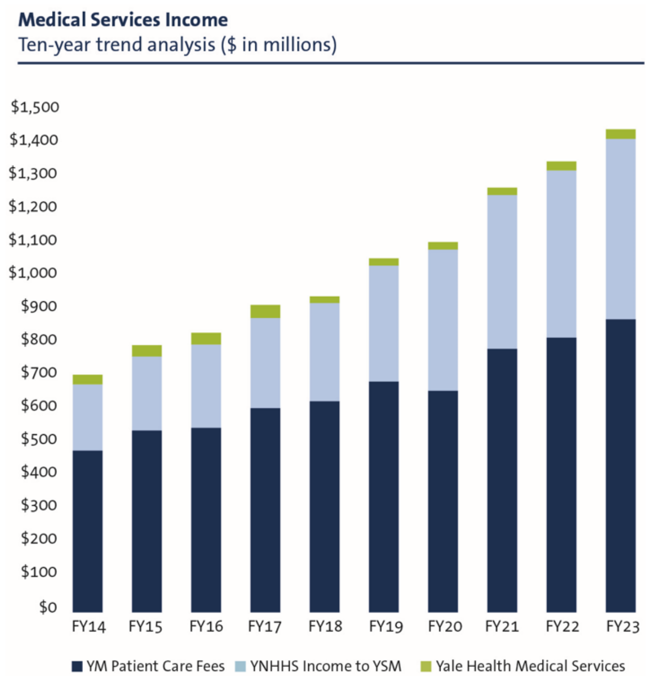
In addition to the reimbursement of direct costs charged to sponsored awards, sponsoring agencies reimburse the university for a portion of its facilities and administrative costs, which include costs related to research laboratory space, facilities, and utilities, as well as administrative and support costs incurred for sponsored activities. These reimbursements for facility and administrative costs amounted to $265 million in 2023 and $245 million in 2022. Recovery of facility and administrative costs associated with federally sponsored awards is recorded at rates negotiated with DHHS, the university's cognizant agency. Yale's current rate agreement is effective through June 30, 2023. New rates for the university's facilities and administrative calculation are currently being negotiated for July 1, 2023 based on actual costs incurred in fiscal year 2022.



Medical Services Income

Medical services income totaled $1.4 billion in fiscal year 2023, an increase of 7% from 2022, and represented 28% of the university's operating revenue. The largest portion of this revenue stream is derived from medical services provided by Yale Medicine ("YM"). The Hospital continued to invest in YM in fiscal year 2023 with support increasing by 8% to a total of $531 million for clinical services, investment in faculty recruitment, and new clinical programs.

Medical services income generated by YM increased by $94 million over 2022, or 7%. Patient care income, which accounts for 54% of medical services income, was up $51 million or 7% due to growth in various specialties across the clinical practice. Ambulatory volume grew 5% and surgical/procedural volume grew 8% year-over-year. Other contributors to the clinical growth include the partnering of Yale New Haven Health System (YNHHS) affiliates with YM to continue practice expansion outside of New Haven County and deepen the relationship with YNHHS delivery network hospitals (Greenwich, Bridgeport, Lawrence + Memorial, and Westerly Hospitals). YNHHS delivery network income grew 11% from 2022 to a total of $74 million.



Contributions

Donations from individuals, corporations, and foundations represent a vitally important source of revenue for the university. Gifts to the university provide necessary funding for current operations, for long-term investments in the university's physical infrastructure, and, in the case of gifts to the endowment, provide permanent resources for core activities for future generations. Gifts of $134 million in 2023 and $233 million in 2022, made by donors to support the operations of the university, are reflected as contribution revenue in the operating section of the consolidated statement of activities, whereas gifts to the university's endowment and for building, construction, and renovation are reflected as contribution revenue in the non-operating section of the consolidated statement of activities. In aggregate, contributions included in the university consolidated financial statements total $459 million in 2023 compared to $614 million in 2022.

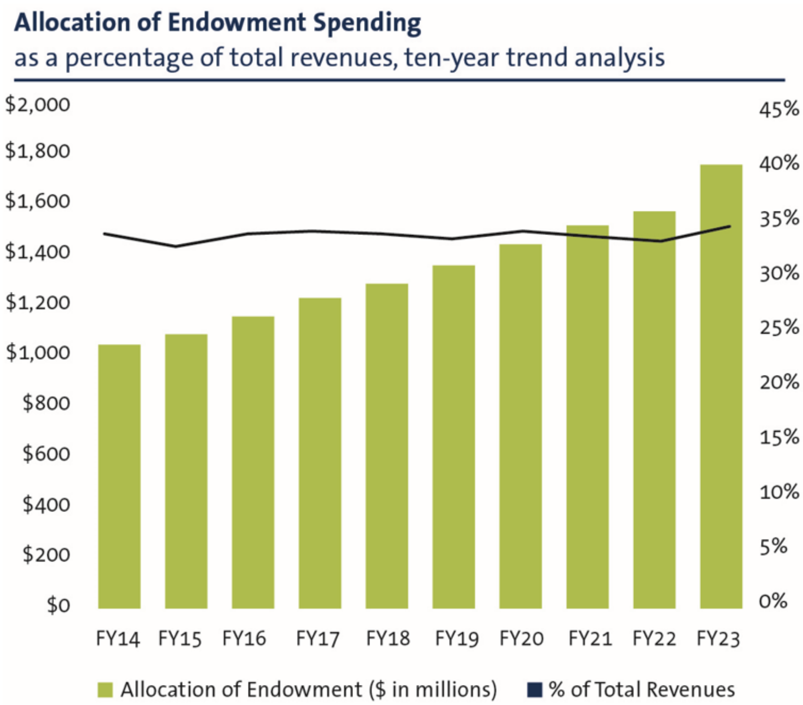
Certain gifts commonly reported in fundraising results are not recognized as contributions in the university's consolidated financial statements. For example, "in-kind" gifts such as works of art and books that will be maintained as part of the university's collections are not recognized as financial transactions in the consolidated financial statements. Grants from private, non-governmental sources (i.e., corporations and foundations) reported as gifts for fundraising purposes are included in the consolidated statement of activities as grant and contract income.

Allocation of Endowment Spending

Each year a portion of the endowment's market value is allocated to support operational activity. This important source of revenue represents 34% of total operating revenue in fiscal year 2023, and is the largest source of operating revenue for the university. The level of spending is computed in accordance with an endowment spending policy that has the effect of smoothing year-to-year market value swings. Endowment investment returns allocated to operating activities increased by 12% in 2023 to $1.8

billion. The 40% investment return recognized in fiscal year 2021 drove the notable increase in endowment spending this year, which represents the highest year-over-year growth in two decades.

Additional information on Yale's endowment spending policy is provided in the endowment section of this report and in the Notes to Consolidated Financial Statements.



Other Investment Income
Other investment income includes interest, dividends, and gains on non-endowment investments.

Other Income
Other income primarily includes publications income, income from executive education and other non-degree granting programs, royalty income, admissions revenue relating to athletic events and drama productions, parking revenue, special event and seminar fees, application and enrollment fees and reimbursements of COVID-19 testing costs from the Federal Emergency Management Agency ("FEMA").

Operating Expenses

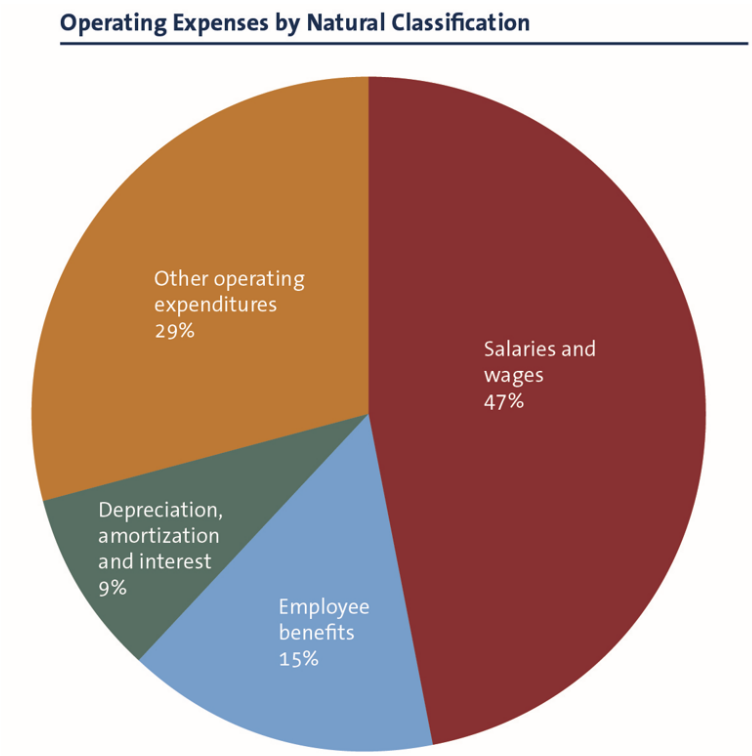
Operating expenses totaled $4.9 billion for 2023, representing a 9% increase over 2022. With 5,251 faculty, 1,635 postdoctoral and postgraduate associates, 5,451 managerial and professional staff ("M&P"), and 5,224 clerical, technical, service, and maintenance personnel, personnel costs are the single largest component (62%) of the university's total operating expenses (counts represent headcount as of fall 2022).

Personnel costs were $3.1 billion in 2023, a 7% increase over 2022. Faculty salary expenses increased 10% which is partly attributable to an increased headcount to support growth in clinical activities. Staff salaries and wages increased 10% from 2022 to 2023, largely due to increased headcount and salary and wage increases. The cost of providing employee benefits, including various pension, post-retirement health, and insurance plans in addition to Social Security and other statutory benefits, totaled $745 million for 2023, a decrease of 2% from 2022.

Depreciation, amortization, and interest expense increased 8% from 2022, primarily as a result of higher depreciation and interest costs in fiscal year 2023.

Other operating expenditures, including services, materials and supplies, and other expenses, increased 13% from 2022, primarily due to an increase in non-salary expenses in most schools and units, driven by increased activity on campus trending back toward pre-pandemic levels and increases in general expenses due to inflation.

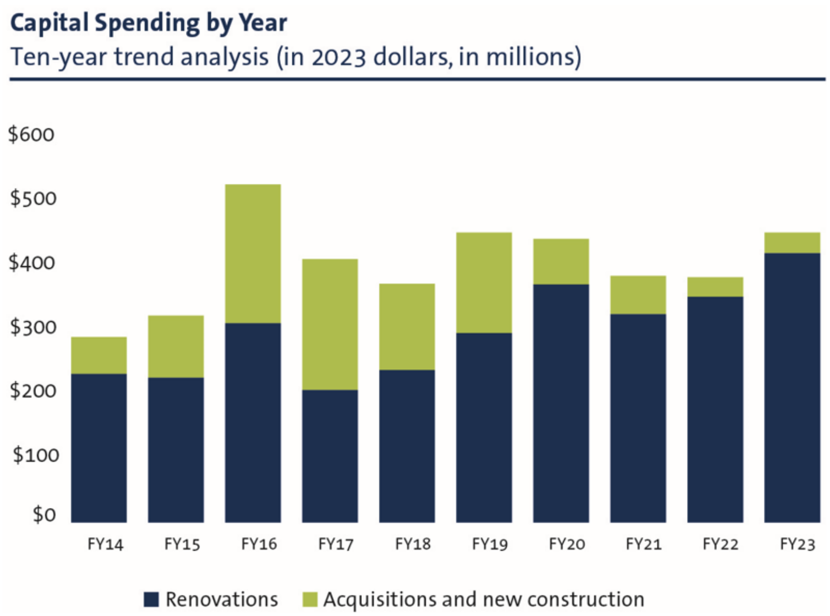
Yale reports its operating expenses by natural classification in the consolidated statement of activities and discloses these operating expenses across functional classification in the Notes to Consolidated Financial Statements in accordance with GAAP.



The university spent 70% of its operating resources on programmatic support, 23% on patient care and other related services, and 7% on administration and other institutional support.

Physical Capital

Capital spending on facilities in fiscal year 2023 totaled $448 million. This represents an increase of 19% from the 2022 spending level.



The Yale School of Medicine ("YSM") accounted for approximately 31% of the university's 2023 capital expenditures as work progressed on a major renovation of the 100 College Street building. This renovation co-locates YSM's Department of Neuroscience and the Arts & Sciences and Engineering's Department of Psychology, enabling ways to think about the brain and human cognition. It is also home to the Wu Tsai Institute, which bridges these disciplines. In addition, construction was completed on a new centralized research support facility at 750 West Campus Drive to support the 100 College Street initiative. The remaining expenditures are related to other programmatic renovation, clinical expansion and upgrades, and capital maintenance projects throughout the school.

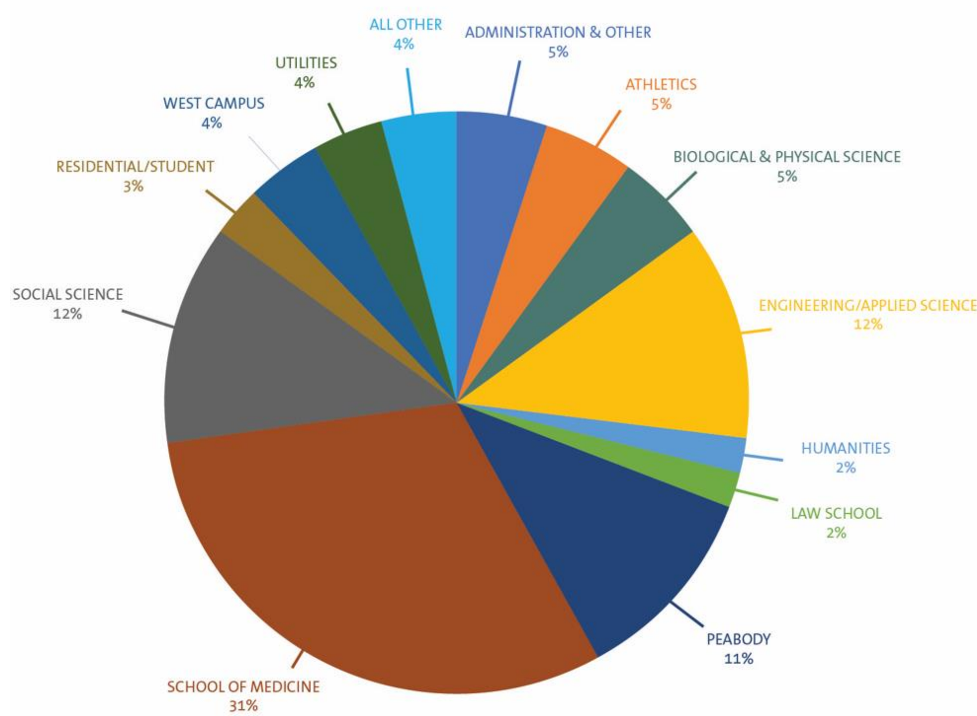
Twelve percent of the university's capital spending was invested in social sciences, primarily to continue renovation of the floors of the 100 College Street building for the Department of Psychology. In 2023, construction was also completed on a new building at 87 Trumbull Street to provide a unified space for the Economics Department and the Tobin Center for Economic Policy.

Twelve percent of the university's capital spending was invested in engineering and the applied sciences. The completion of the Kline Tower renovation will produce a new hub for mathematical, statistical, and data-driven research. It opened in the summer of 2023, and features 186,000 gross square feet (GSF) of open concept programming space, including two new floors on the top of the building that have panoramic views of New Haven and its harbor. The facility is home to the Arts & Sciences and Engineering's Departments of Astronomy, Mathematics, and Statistics and Data Science. It also houses members of the Arts & Sciences and Engineering's Department of Physics and the newly-formed Institute for Foundations of Data Science. A new concourse at the base of the tower will include a dedicated space for quantitatively-focused teaching and learning managed by the Yale Poorvu Center for Teaching and Learning, with flexible seating to accommodate tutoring and small group sessions.

Eleven percent of the university's capital spending was invested in a comprehensive renovation and addition to the Yale Peabody Museum of Natural History (the "Museum"). Construction began in the fall of 2020, and was completed in the spring of 2023. Next, Museum staff will reinstall displays and exhibitions ahead of the Museum's grand reopening in 2024. The combination of new classrooms and newly envisioned galleries will make for enhanced interactivity for research and teaching with Yale's vast collections. The entire building has been reimagined, including a new glass-ceilinged central gallery, more room for exhibitions, and a new education center. The University also made capital investments in various areas throughout the campus to provide for programmatic renovations, capital maintenance projects, and infrastructure support.

The university's renovation and building plans were funded by a combination of gifts, debt, and the operating budget. The university continues to rely heavily on the extraordinary generosity of its alumni and friends. Gifts for facilities in 2023 totaled $94 million, which includes gifts to support the comprehensive renovation of the Museum and construction on the Economics Building that now houses the Tobin Center for Economic Policy.

Capital Spending by Campus Area



A major source of funding for the capital program is debt provided through the Connecticut Health and Facilities Authority ("CHEFA"), which allows the university to borrow at tax-exempt rates. This funding source is critical to keep the cost of funding at low levels, which allows the university to maximize the use of its resources and further advance the fulfillment of its mission of teaching and research. The university continues to receive the highest bond ratings available: AAA from Standard and Poor's Global Rating and Aaa from Moody's Investors Service.

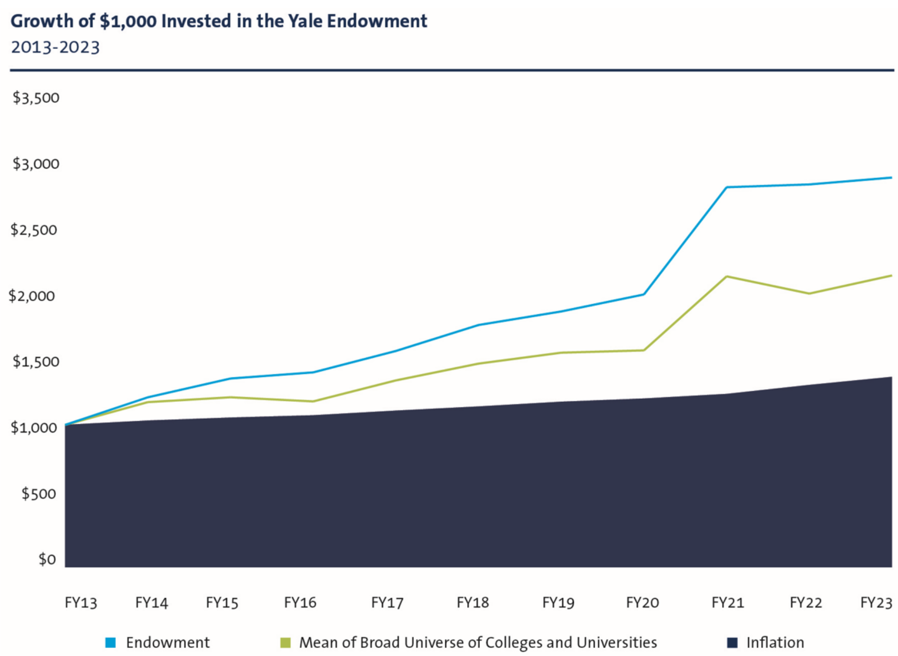
Recognizing the critical importance of maintaining its physical capital over many generations, the university allocates funds directly from the operating budget to a capital maintenance account. The annual equilibrium funding target for internal purposes is an estimate of the amount needed to maintain Yale's facilities in good condition on a consistent basis, thus avoiding deferred maintenance. While not an exact science, an estimate of the full capital replacement equilibrium level for 2023 was $304 million.

Endowment

The endowment provides the largest source of support for the academic programs of the university. To balance current and future needs, Yale employs investment and spending policies designed to preserve endowment asset values while providing a substantial flow of income to the operating budget. At June 30, 2023, net assets in the endowment totaled approximately $40.7 billion, after the allocation of endowment spending of $1.8 billion to the operating budget during the year.

Investment Performance

For the fiscal year ended June 30, 2023, the endowment earned a 1.8% investment return. During the past decade, the endowment earned an annualized 10.9% return, which added $19.2 billion of value relative to a composite passive benchmark and $11.5 billion relative to the mean return of a broad universe of colleges and universities.



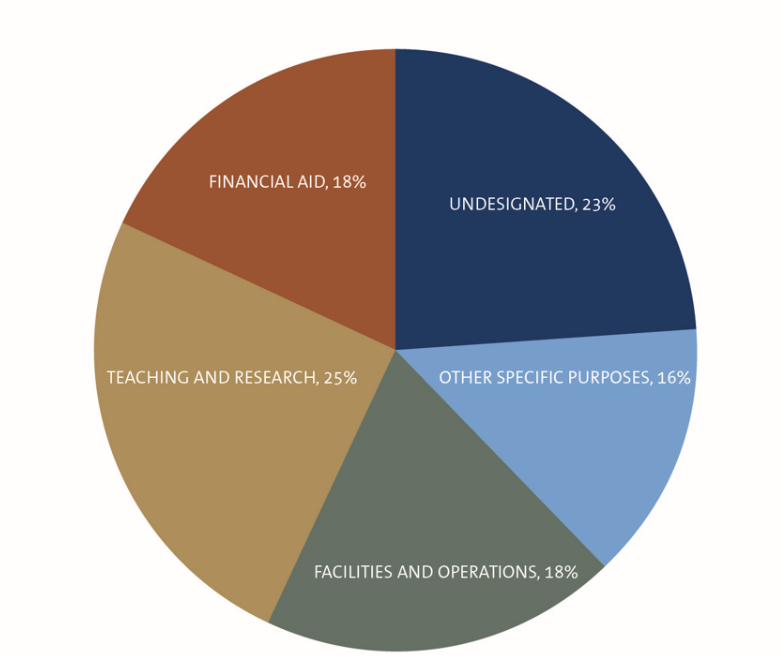
Endowment Spending

The endowment spending policy, which allocates endowment earnings to operations, balances the competing objectives of providing a stable flow of income to the operating budget and protecting the real value of the endowment over time. The spending policy manages the trade-off between these two objectives by using a long-term target spending rate combined with a smoothing rule, which adjusts spending in any given year gradually in response to changes in endowment market value.

The target spending rate approved by the Yale Corporation currently stands at 5.25%. According to the smoothing rule, endowment spending in a given year represents the sum of 80% of the previous year's spending and 20% of the target long-term spending rate applied to the market value at the start of the prior year. The spending amount determined by the formula is adjusted for inflation and an allowance for taxes and constrained so that the calculated rate is at least 4.0% and not more than 6.5% of the endowment's inflation adjusted market value at the start of the prior year. The smoothing rule and the diversified nature of the endowment mitigate the impact of short-term market volatility on the flow of funds to support Yale's operations.

The majority of endowment spending is allocated across multiple purposes, including financial aid and professorships, based on donor restrictions or internal designations by the university. Endowment spending that is neither restricted nor designated provides additional support for budgetary priorities that carry out the university's mission.

Endowment Spending Allocation



Asset Allocation

Asset allocation proves critical to successful endowment performance. Yale's asset allocation policy combines tested theory and informed market judgment to balance investment risks with the desire for high returns.

Both the need to provide resources for current operations and the desire to preserve the purchasing power of assets dictate investing for high returns, which leads the endowment to be weighted toward equities. In addition, the endowment's vulnerability to inflation directs the university away from fixed income instruments. Hence, roughly 94% of the endowment pool is invested in assets expected to produce equity-like returns, through domestic and international securities, real assets, and private equity.

Endowment Summary

Yale continues to rely on the principles of equity orientation and diversification. These principles guide Yale's investment strategy, as equity orientation makes sense for investors with long time horizons and diversification allows the construction of portfolios with superior risk and return characteristics. The university's equity-oriented, well-diversified portfolio positions the endowment for long-term investment success.

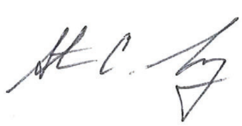
Management's Responsibility for Financial Statements

Management of the university is responsible for the integrity and reliability of the consolidated financial statements. Management represents that, with respect to the university's financial information, the consolidated financial statements in this annual report have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP").

The accompanying consolidated financial statements have been audited by the university's independent auditors, PricewaterhouseCoopers LLP. Their audit opinion, on the following page, expresses an informed judgment as to whether the consolidated financial statements, considered in their entirety, present fairly, in conformity with GAAP, the consolidated financial position and changes in net assets and cash flows.

The university maintains a system of internal controls over financial reporting, which is designed to provide a reasonable assurance to the university's management and the Yale board of trustees regarding the preparation of reliable published financial statements. Such controls are maintained by the establishment and communication of accounting and financial policies and procedures, by the selection and training of qualified personnel, and by an internal audit program designed to identify internal control weaknesses in order to permit management to take appropriate corrective action on a timely basis. There are, however, inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls. Accordingly, even an effective internal control system can provide only reasonable assurance with respect to financial statement preparation. Furthermore, the effectiveness of the internal control system can change with circumstances.

The Yale board of trustees, through its Audit Committee comprised of members not employed by the university, are responsible for engaging the independent auditors and meeting with management, internal auditors, and the independent auditors to independently assess whether each is carrying out its responsibilities. Both the internal auditors and the independent auditors have full and free access to the Audit Committee.



Stephen C. Murphy
Vice President for Finance and
Chief Financial Officer

Shannon N. Smith
University Controller and
Chief Accounting Officer

Report of Independent Auditors

To the President and Fellows of Yale University

Opinion

We have audited the accompanying consolidated financial statements of Yale University and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2023 and 2022, and the related consolidated statements of activities for the year ended June 30, 2023 and of cash flows for the years ended June 30, 2023 and 2022, including the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the University as of June 30, 2023 and 2022, the changes in its net assets for the year ended June 30, 2023, and its cash flows for the years ended June 30, 2023 and 2022 in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

We previously audited the consolidated statement of financial position as of June 30, 2022 and the related consolidated statements of activities and of cash flows for the year then ended (the statement of activities is not presented herein), and in our report dated October 21, 2022, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information for the year ended June 30, 2022 is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

Responsibilities of Management 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, and for 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.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for one year after the date the consolidated financial statements are issued.

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Boston, MA 02210
T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Yale University Financial Report 2022-2023, but does not include the consolidated financial statements and our auditor's report thereon. Our opinion on the consolidated financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the consolidated financial statements or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

PricewaterhouseCoopers LLP

Boston, Massachusetts
October 27, 2023

Yale University Consolidated Statements of Financial Position

as of June 30, 2023 and 2022 ($ in thousands)

		2023		2022
Assets:				
Cash and cash equivalents	$	845,424	$	712,614
Accounts receivable, net		410,200		405,683
Contributions receivable, net		960,379		1,020,493
Notes receivable		84,427		89,912
Investments, at fair value		45,679,156		46,472,072
Right of use assets		272,115		179,645
Other assets		425,957		240,814
Land, buildings and equipment, net of accumulated depreciation		5,747,983		5,598,069
Total assets	$	54,425,641	$	54,719,302

Liabilities:				
Accounts payable and accrued liabilities	$	609,528	$	615,340
Advanced payments and other deposits		219,969		194,594
Lease liabilities		351,122		253,081
Other liabilities		1,219,944		1,368,728
Liabilities under split-interest agreements		132,280		130,816
Bonds and notes payable		5,137,633		5,164,430
Liabilities associated with investments		2,027,204		2,298,288
Total liabilities	$	9,697,680	$	10,025,277

Net Assets:				
Net assets without donor restrictions: Yale University	$	9,140,807	$	8,592,595
Net assets without donor restrictions: non-controlling interests		3,061		1,621
Total net assets without donor restrictions		9,143,868		8,594,216
Net assets with donor restrictions		35,584,093		36,099,809
Total net assets	$	44,727,961	$	44,694,025
Total liabilities and net assets	$	54,425,641	$	54,719,302

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

Yale University Consolidated Statement of Activities

for the year ended June 30, 2023 with summarized comparative totals for the year ended June 30, 2022 ($ in thousands)

	Without Donor Restrictions	With Donor Restrictions	2023	2022
Operating				
Revenues and releases:				
Net tuition, room and board	$ 458,307	$ -	$ 458,307	$ 461,513
Grant and contract income, primarily for research and training	1,038,268	-	1,038,268	962,088
Medical services income	1,421,914	-	1,421,914	1,327,268
Contributions	18,666	115,338	134,004	232,582
Allocation of endowment spending from financial capital	497,194	1,255,181	1,752,375	1,568,442
Other investment income	74,580	7,331	81,911	69,731
Other income	216,895	92	216,987	188,495
Total revenues	3,725,824	1,377,942	5,103,766	4,810,119
Net assets released from restrictions	1,294,808	(1,294,808)	-	-
Total revenues and releases	$ 5,020,632	$ 83,134	$ 5,103,766	$ 4,810,119
Expenses:				
Salaries and wages	$ 2,328,136	$ -	$ 2,328,136	$ 2,114,898
Employee benefits	744,823	-	744,823	759,791
Depreciation, amortization and interest	441,202	-	441,202	407,795
Other operating expenditures	1,422,107	-	1,422,107	1,257,816
Total expenses	4,936,268	-	4,936,268	4,540,300
Increase in net assets from operating activities	84,364	83,134	167,498	269,819
Non-operating				
Contributions	8,316	317,143	325,459	381,535
Total endowment return	74,969	683,715	758,684	265,880
Allocation of endowment spending to operations	(311,275)	(1,441,100)	(1,752,375)	(1,568,442)
Other investment income	197,955	740	198,695	501,857
Change in funding status of defined benefit plans	289,684	-	289,684	503,181
Other increases	37,433	7,418	44,851	47,369
Net assets released from restrictions	166,766	(166,766)	-	-
Increase (decrease) in net assets from non-operating activities	463,848	(598,850)	(135,002)	131,380
Total increase (decrease) in net assets - Yale University	548,212	(515,716)	32,496	401,199
Change in non-controlling interests	1,440	-	1,440	842
Total increase (decrease) in net assets	549,652	(515,716)	33,936	402,041
Net assets, beginning of year	8,594,216	36,099,809	44,694,025	44,291,984
Net assets, end of year	$ 9,143,868	$ 35,584,093	$ 44,727,961	$ 44,694,025

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

Yale University Consolidated Statements of Cash Flows

for the years ended June 30, 2023 and 2022 ($ in thousands)

	2023	2022
Operating activities:		
Change in net assets	$ 33,936	$ 402,041
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Depreciation and amortization	349,607	340,039
Realized and unrealized gain on other investments	(169,278)	(512,958)
Net endowment investment (gain) loss	(319,868)	106,046
Change in non-controlling interests	(1,440)	(842)
Change in funding status of defined benefit plans	(289,684)	(503,181)
Non-operating contributions	(325,459)	(381,535)
Contributed securities	(52,815)	(118,421)
Proceeds from sale of donated securities	13,881	44,640
Other adjustments	25,891	(9,898)
Changes in assets and liabilities that (use) provide cash:		
Accounts receivable	(4,517)	(7,709)
Contributions receivable	19,907	3,962
Other operating assets	84,364	(1,435)
Accounts payable and accrued expenses	(22,142)	(191,042)
Advances under grants and contracts and other deposits	25,375	20,116
Other liabilities	(112,029)	94,516
Net cash used in operating activities	(744,271)	(715,661)
Investing activities:		
Student loans repaid	12,380	12,021
Student loans granted	(6,946)	(5,578)
Purchases related to capitalized software costs and other assets	(44,727)	(26,560)
Proceeds from sales and maturities of investments	7,895,758	10,593,403
Purchases of investments	(6,853,674)	(10,189,985)
Purchases of land, buildings and equipment	(471,490)	(424,953)
Net cash provided by (used in) investing activities	531,301	(41,652)
Financing activities:		
Proceeds from restricted contributions	365,666	554,497
Proceeds from sale of contributed securities restricted for endowment	38,934	73,781
Contributions received for split-interest agreements	8,104	9,027
Payments made under split-interest agreements	(15,905)	(15,840)
Repayments of long-term debt	(19,313)	(16,489)
Repayments to the Federal government for student loans	(2,040)	(2,858)
Net cash provided by financing activities	375,446	602,118
Net increase (decrease) in cash and cash equivalents	162,476	(155,195)
Cash and cash equivalents, beginning of year	775,982	931,177
Cash and cash equivalents, end of year	$ 938,458	$ 775,982

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

Yale University
Notes to Consolidated Financial Statements

1. Significant Accounting Policies

a. General

Yale University ("Yale" or the "university") is a private, not-for-profit institution of higher education located in New Haven, Connecticut. The university is governed by the Yale Corporation (the "Corporation" or the board of trustees), a body comprised of the President, ten appointed Successor Trustees, six elected Alumni Fellows, and the Governor and Lieutenant Governor of Connecticut, who are board members *ex officio*.

The university provides educational services primarily to students and trainees at the undergraduate, graduate and postdoctoral levels, and performs research, training and other services under grants, contracts and other similar agreements with agencies of the federal government and other sponsoring organizations. The university's academic organization includes Yale College, the Graduate School of Arts and Sciences, thirteen professional schools and a variety of research institutions and museums. The largest professional school is the Yale School of Medicine, which conducts medical services in support of its teaching and research missions.

b. Basis of Presentation

The consolidated financial statements of the university include the accounts of academic and administrative departments of the university, and affiliated organizations which are required to be consolidated under the applicable accounting guidance.

The university measures aggregate net assets and net asset activity based on the absence or existence of donor-imposed restrictions. Net assets are reported as without donor restrictions and with donor restrictions and serve as the foundation of the accompanying consolidated financial statements. Brief definitions of the two net asset classes are presented below:

Net Assets Without Donor Restrictions - Net assets derived from tuition and other institutional resources that are not subject to explicit donor-imposed restrictions. Net assets without donor restrictions also include board-designated funds functioning as endowment.

Net Assets With Donor Restrictions - Net assets that are subject to explicit donor-imposed restrictions on the expenditure of contributions, including those given to be maintained in perpetuity; income and gains on contributed assets subject to donor-imposed restrictions not yet appropriated for spending by the Corporation and student loan funds. In addition, net assets with donor restrictions include restricted contributions from donors classified as funds functioning as endowment. Restrictions include support of specific schools or departments of the university, for professorships, research, faculty support, scholarships and fellowships, library and art museums, building construction and other purposes. When time and purpose restrictions expire, net assets with donor restrictions are reclassified to net assets without donor restrictions.

Measure of Operations - The university's measure of operations as presented in the consolidated statement of activities includes revenue from tuition (net of certain scholarships and fellowships) and fees, grants and contracts, medical services, contributions for operating programs, other investment income, the allocation of endowment spending for operations and other income. Operating expenses are reported on the consolidated statement of activities by natural classification.

The university's non-operating activity within the consolidated statement of activities includes contributions to the university's endowment and for building construction and renovation, investment returns and other activities related to endowment, unrealized gains and losses on interest rate swaps and long-term benefit plan obligation funding changes.

Liquidity - The university's financial assets available within one year of the date of the consolidated statement of financial position for general expenditure as of June 30 are as follows, in thousands of dollars:

		2023	2022
Total assets, at year end		$ 54,425,641	$ 54,719,302
Less nonfinancial assets:			
	Land, buildings and equipment, net of accumulated depreciation	5,747,983	5,598,069
	Other assets	425,957	240,814
	Right of use assets	272,115	179,645
Financial assets, at year end		47,979,586	48,700,774
Less those unavailable for general expenditure within one year due to contractual or donor-imposed restrictions:			
	Restricted by donor with time or purpose restrictions	855,395	914,040
	Subject to appropriation and satisfaction of donor restrictions including board-designated endowments	42,273,707	43,255,859
	Other long-term notes receivable	84,427	89,912
Financial assets available to meet cash needs for general expenditures within one year		$ 4,766,057	$ 4,440,963

The university has $4,766.1 million of financial assets that are available within one year of the date of the 2023 consolidated statement of financial position to meet cash needs for general expenditure consisting of cash of $845.4 million, accounts receivable of $410.2 million, contributions receivable of $105.0 million, and short-term investments of $3,405.5 million. In addition to these available financial assets, a significant portion of the university's annual expenditures will be funded by current year operating revenues including tuition, grant and contract income and medical services income. The university has a policy to structure its financial assets to be available as its general expenditures, liabilities, and other obligations come due. As part of its liquidity management, the university invests cash in excess of daily requirements in various short-term investments, including U.S. government instruments.

Additionally, the university has board-designated funds of $7,052.7 million. Although the university does not intend to spend from this endowment, other than amounts appropriated for general expenditure as part of its annual budget approval and appropriation process, amounts from its board-designated funds could be made available if necessary. However, both the board-designated funds and donor-restricted endowments contain investments with lock-up provisions that would reduce the total investments that could be made available, as described in Note 2.

c. Cash and Cash Equivalents

Cash and cash equivalents are recorded at cost, which approximates fair value due to their short-term nature and include institutional money market funds and similar temporary investments with maturities of three months or less at the time of purchase. Cash and short-term investments awaiting investment in the long-term investment pool are reported as investments and totaled $1,210.2 million and $1,556.3 million at June 30, 2023 and 2022, respectively. Short-term investments included in the long-term investment pool which may otherwise qualify as cash equivalents under the university's policy are accounted for as investments by policy and are accordingly not included within these cash disclosures.

Supplemental disclosures of cash flow information include the following, in thousands of dollars:

		2023		2022
Cash paid during the year for interest	$	119,350	$	166,862
Noncash investing activities:				
Land, buildings and equipment purchases payable to vendor	$	61,359	$	46,148

The following table summarizes supplemental cash flow information related to leases for the year ended June 30, in thousands of dollars:

		2023		2022
Cash paid for amounts included in measurement of liabilities:				
Operating cash flows from financing leases	$	7,462	$	7,719
Operating cash flows from operating leases		12,165		9,798
Financing cash flows from financing leases		8,366		6,691
Non-cash lease related items:				
ROU assets obtained in exchange for new and remeasured financing liabilities	$	120,137	$	-
ROU assets obtained in exchange for new and remeasured operating liabilities		3,237		20,572

The following table provides a reconciliation of amounts reported within the consolidated statements of financial position that sum to the total of the amount shown in the consolidated statement of cash flows for the years ended June 30, in thousands of dollars:

		2023		2022
Cash and cash equivalents	$	845,424	$	712,614
Cash included in investments, at fair value		93,034		63,368
Total cash and cash equivalents shown in the consolidated statements of cash flows	$	938,458	$	775,982

d. Investments

Fair Value - The university's investments are recorded in the consolidated financial statements at fair value.

Fair value is a market-based measurement based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering assumptions, a three-tier fair value hierarchy has been established which categorizes the inputs used in measuring fair value. The hierarchy of inputs used to measure fair value and the primary methodologies used by the university to measure fair value include:

- *Level 1* – Quoted prices for identical assets and liabilities in active markets. Market price data is generally obtained from relevant exchange or dealer markets.
- *Level 2* – Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable.
- *Level 3* – Unobservable inputs for which there is little or no market data, requiring the university to develop its own assumptions.

Assets and liabilities measured at fair value are determined based on the following valuation techniques:

- *Market approach* – Prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities; and/or
- *Income approach* – Techniques to convert future amounts to a single present amount based on market expectations, including present value techniques and option-pricing models.

The fair value of publicly traded fixed income and equity securities is based upon quoted market prices and exchange rates, if applicable. The fair value of direct real estate investments is determined from periodic valuations prepared by independent appraisers.

Investments are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investments, it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect the amounts reported in the university's consolidated financial statements.

Derivatives - Derivative financial instruments in the investment portfolio include interest rate swaps which are recorded at fair value with the resulting gain or loss recognized in the consolidated statement of activities.

Resell and Repurchase Agreements - Cash paid relating to resell agreements is generally collateralized by federal agency and foreign debt securities. The university takes possession of the underlying collateral and monitors the value of the underlying collateral to the amount due under the agreement. Cash received under repurchase agreements is collateralized by investments in asset-backed securities, corporate debt, federal agency debt, and foreign debt securities. Collateral fair value is monitored to the amounts due under the agreements.

Management Fees - The university records the cost of managing its endowment portfolio as a decrease in non-operating activity as a component of total endowment return within the applicable net asset class in the consolidated statement of activities. Management fees consist of the internal costs of the university's Investments Office (the "Investments Office"), outside custodian fees, and fees for external investment managers and general partners.

Total Return - The university invests its endowment portfolio and allocates the related earnings for expenditure in accordance with the total return concept. A distribution of endowment return that is independent of the cash yield and appreciation of investments earned during the year is provided for program support. The university has adopted a current endowment spending policy in accordance with the Uniform Prudent Management of Institutional Funds Act ("UPMIFA") as adopted in the State of Connecticut, designed specifically to stabilize annual spending levels and to preserve the real value of the endowment portfolio over time. The spending policy attempts to achieve these two objectives by using a long-term targeted spending rate combined with a smoothing rule, which adjusts spending gradually to changes in the endowment's fair value. An administrative charge is assessed against the funds when distributed.

To the extent that a donor-restricted endowment fund falls below its historic dollar value a deficit would exist, and it would be reported as a reduction of net assets with donor restrictions. Spending from an endowment fund in a deficit position would continue under the spending policy so long as the fund's value is more than 70% of its historical dollar value. At June 30, 2023, there were 323 endowment funds in a deficit position totaling $14.0 million in aggregate, the fair value of which totaled $512.8 million with a corresponding historic dollar value of $526.8 million. At June 30, 2022, there were 174 endowment funds in a deficit position totaling $5.1 million in aggregate, the fair value of which totaled $214.1 million with a corresponding historic dollar value of $219.2 million.

The university uses a long-term targeted spending rate of 5.25%. The spending amount is calculated using 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the fair value at the start of the prior year. The spending amount determined by the formula is adjusted for inflation and taxes and constrained so that the calculated rate is at least 4.0% and not more than 6.5% of the endowment's fair value as of the start of the prior year. The actual rate of spending for 2023 and 2022, when measured against the previous year's June 30th endowment fair value, was 4.3% and 3.8%, respectively.

The university determines the expected return on endowment investments with the objective of producing a return exceeding the sum of inflation and the target spending rate. Asset allocation is the key factor driving expected return. Yale's asset allocation policy combines tested theory and informed market judgment to balance investment risks with the need for high returns. Both the need to provide resources for current operations and the desire to preserve the purchasing power of assets lead the endowment to be weighted toward equity investments.

The university manages the majority of its endowment in its Long-Term Investment Pool (the "Pool"). The Pool is unitized and allows for efficient investment among a diverse group of funds with varying restricted purposes. In addition to university funds, the Pool includes assets of affiliated entities where the university has established investment management agreements.

e. Leases

At the inception of an arrangement, the university determines if an arrangement is, or contains, a lease based on the unique facts and circumstances present in that arrangement. Lease classification, recognition, and measurement are then determined as of the lease commencement date. For arrangements that contain a lease, the university (i) identifies lease and non-lease components, (ii) determines the consideration in the contract, (iii) determines whether the lease is an operating or financing lease, and (iv) recognizes lease right of use ("ROU") assets and lease liabilities. Lease liabilities and their corresponding ROU assets are recorded based on the present value of lease payments over the expected lease term. The interest rate implicit in lease contracts is typically not readily determinable, and as such, the university uses its incremental borrowing rate based on the information available at the lease commencement date, a rate which represents one that would be incurred to borrow, on a collateralized basis, over a similar term, an amount equal to the lease payments in a similar economic environment. Some leases include options to renew and/or terminate the lease, which can impact the lease term. The exercise of these options is at the university's discretion and the university does not include any of these options within the expected lease term where it is not reasonably certain that these options will be exercised.

Fixed, or in-substance fixed, lease payments on operating leases are recognized over the expected term of the lease on a straight-line basis, while fixed, or in-substance fixed, payments on financing leases are recognized using the effective interest method. Variable lease expenses that are not considered fixed, or in-substance fixed, are recognized as incurred. Fixed and variable lease expense on operating leases is recognized within other operating expenditures in the consolidated statement of activities. Financing lease ROU asset amortization and interest costs are recorded within depreciation, amortization and interest in the consolidated statement of activities. The university has elected the short-term lease exemption and, therefore, does not recognize a ROU asset or corresponding liability for lease arrangements with an original term of 12 months or less.

Operating and financing leases are included in right of use assets and lease liabilities in the university's consolidated statements of financial position as of June 30, 2023 and 2022.

The university leases to others portions of certain buildings owned for retail and research purposes. Leases are generally five-year terms or less and are classified as operating leases. These leasing arrangements are not material to the consolidated financial statements.

f. Land, Buildings and Equipment

Land, buildings, and equipment are generally stated at cost. Annual depreciation is calculated on a straight-line basis over the lesser of the remaining useful lives or the lease term for financing leases, ranging from 15 to 50 years for buildings and improvements and 4 to 15 years for equipment.

g. Other Assets

Other assets include prepaid pension costs, insurance receivables, capitalized software costs, deferred expenses, and inventories. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software, ranging from 5 to 10 years.

h. Collections

Collections at Yale include works of art, literary works, historical treasures, and artifacts that are maintained in the university's museums and libraries. These collections are protected and preserved for public exhibition, education, research, and the furtherance of public service. Collections are not capitalized; purchases of collection items are recorded as expenses in the university's consolidated statement of activities in the period in which the items are acquired.

i. 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 trustee. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements.

Contribution revenue related to charitable gift annuities and charitable remainder trusts is recognized at the date the agreements are established. In addition, the fair value of the estimated future payments to be made to the beneficiaries under these agreements is recorded as a liability. For pooled income funds, contribution revenue is recognized upon establishment of the agreement at the fair value of the estimated future receipts, discounted for the estimated time period until culmination of the agreement.

j. Beneficial Interest in Trust Assets

The university is the beneficiary of certain irrevocable perpetual trusts and charitable remainder trusts held and administered by others. The estimated fair values of trust assets are recognized as assets and as gift revenue when reported to the university.

k. Net Tuition, Room and Board

Tuition, room and board revenue is generated from an enrolled student population of approximately 14,800 and 14,600 in 2023 and 2022, respectively, and is recognized in the period in which it satisfies its performance obligations. Net tuition, room and board revenue from undergraduate enrollment represents approximately 62.5% and 58.5% of total tuition, room and board revenue in 2023 and 2022, respectively.

The university maintains a policy of offering qualified applicants admission to Yale College without regard to financial circumstance, as well as meeting in full the demonstrated financial need of those admitted. Student need in all programs throughout the university is generally fulfilled through a combination of scholarships and fellowships, loans and employment during the academic year. Tuition, room and board revenue has been reduced by certain scholarships and fellowships in the amounts of $460.1 million and $416.6 million in 2023 and 2022, respectively.

l. Contributions

Unconditional promises to give that are expected to be collected within one year are recorded at their net realizable value. Amounts expected to be collected in future years are recorded at the present value of estimated future cash flows, which includes estimates for potential uncollectible receivables. The discount on those contributions is computed using an interest rate that reflects the time value of money applicable to the year in which the promise is received. Amortization of the discount is included in contribution revenue.

Contributions are considered conditional when the underlying agreement includes a performance barrier and a right of return or a right to release promised assets exists. Conditional promises to give are not recognized as revenue until the performance barrier and the right of return or release have been overcome.

m. Grant and Contract Income

The university receives grant and contract income for exchange and non-exchange agreements from both governmental and private sources. Revenue from exchange agreements is recognized when performance obligations are met. Revenue from conditional non-exchange agreements is recognized as performance barriers are overcome and as the university overcomes either a right of return of assets transferred or the right of release of a promisor’s obligation to transfer assets. Grant and contract revenue from conditional non-exchange agreements is generally recognized as qualified costs of sponsored programs are incurred. At June 30, 2023 and 2022, the university has research activities which are contractually authorized by the sponsor, but for which costs have not yet been incurred, totaling $1,649.0 million and $1,612.3 million, respectively.

In 2023 and 2022, grant and contract income from the federal government totaled $776.8 million and $743.3 million, respectively. Recovery of facilities and administrative costs of federally sponsored programs is at rates negotiated with the university's cognizant agency, the Department of Health and Human Services. The current negotiated rates expired on June 30, 2023. New rates are currently being negotiated for July 1, 2023 based on actual costs incurred in fiscal year 2022.

n. Medical Services Income

The university provides medical care to patients primarily under agreements with third-party payors, including health maintenance organizations, that provide payment for medical services at amounts different from standard rates established by the university. The university determines performance obligations based on the nature of the services provided and recognizes revenue as it satisfies those performance obligations. Generally, these performance obligations are satisfied at the point in time the service is provided.

Medical services income is reported net of contractual discounts from third-party payors and implicit price concessions to uninsured patients. The university estimates the discounts based on contractual agreements and estimates the implicit price concessions based on its historical collection experience with these classes of patients.

The following table summarizes patient care revenue for the university, net of allowances and discounts at June 30, in thousands of dollars:

	2023	2022
Gross revenue	$ 2,546,766	$ 2,337,674
Allowances and discounts	(1,788,371)	(1,628,166)
Total patient care revenue	$ 758,395	$ 709,508

In 2023 and 2022, net patient revenue, included in income from medical services, totaled $553.2 million and $515.5 million from insurance companies, $197.4 million and $192.9 million from Medicare, $65.9 million and $74.6 million from Medicaid, and $107.8 million and $88.9 million from other third parties, respectively. In 2023 and 2022, income from medical services is offset by denials, charity care and bad debts of $165.9 million and $162.4 million, respectively.

o. Net Assets Released from Restrictions

Net assets released from restrictions are based upon the satisfaction of the purpose for which the net assets were restricted or the completion of a time stipulation. Restricted operating activity including contributions and net investment return earned, which are restricted, are reported as net assets with donor restrictions and reclassified to net assets without donor restrictions when any donor-imposed restrictions are satisfied. Non-operating restricted net assets associated with building costs are reclassified to net assets without donor restrictions when the capital asset is placed in service.

p. Self-Insurance

The university self-insures at varying levels for unemployment, disability, workers' compensation, property losses, certain healthcare plans, general liability, and professional liability, and obtains coverage through a captive insurance company for medical malpractice and related general liability losses. Insurance is purchased to cover liabilities above self-insurance limits. Estimates of retained exposures are accrued.

q. Tax Status

The university has been granted tax-exempt status under section 501(c)(3) of the Internal Revenue Code.

The university is subject to several provisions of the Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017. Specifically, the Act introduced excise taxes on net investment income and executive compensation, as well as updated rules for calculating unrelated business taxable income. The university records tax assets and liabilities in its consolidated financial statements based on reasonable estimates determined using current guidance, including the U.S. Treasury Department final regulations.

r. Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingencies at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period.

Significant estimates made by management include the valuation of certain investments and interest rate swap agreements, the estimated net realizable value of receivables, estimated asset retirement obligations, liabilities under split interest agreements, estimated tax liabilities, and the actuarially determined employee benefit and self-insurance liabilities. Actual results could differ from those estimates.

s. Related Parties

The university and Yale New Haven Hospital (the "Hospital") are parties to an affiliation agreement that establishes guidelines for the operation of activities between these two separate organizations. These guidelines set forth each organization's responsibility under the common goal of delivering comprehensive patient care services. The university provides professional services from faculty of the Yale School of Medicine and a variety of other administrative and clinical services. See additional disclosures in Notes 3 and 5.

t. Recent Authoritative Pronouncements

On July 1, 2021, the university adopted new accounting guidance related to pension and postretirement plan disclosures. The impact of adopting the new guidance was not significant to the university's consolidated financial statements.

On July 1, 2021, the university adopted new accounting guidance related to credit losses. The impact of adopting the new guidance was not significant to the university's consolidated financial statements.

In June of 2022, the Financial Accounting Standards Board ("FASB") issued new accounting guidance related to the valuation of equity securities subject to contractual sale restrictions. The guidance is required to be implemented in the university's fiscal year 2026 with early adoption permitted. The standard is not expected to have a significant impact to the university's consolidated financial statements.

u. Summarized 2022 Financial Information

The 2023 consolidated financial statements include selected comparative summarized financial information for 2022. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the university's 2022 consolidated financial statements, from which the summarized financial information was derived.

2. Investments

The university endowment maintains a diversified investment portfolio with a strong orientation to equity investments and strategies designed to take advantage of market inefficiencies. The university's investment objectives are guided by its asset allocation policy and are achieved in partnership with external investment managers operating through a variety of investment vehicles, including separate accounts, limited partnerships and commingled funds. The university's heavy allocation to non-traditional asset classes, such as marketable alternative strategies, private equity (venture capital and leveraged buyouts) and real assets (real estate, timber, energy and minerals) generates return potential and diversification in the portfolio.

The components of endowment and non-endowment investments, net of related liabilities at June 30 are presented below, in thousands of dollars:

	2023	2022
Endowment investments:		
Long-term investment pool	$ 40,428,680	$ 41,059,569
Other	75,426	62,704
Total net endowment investments	40,504,106	41,122,273
Non-endowment investments:		
Long-term investment pool	300,000	300,000
Fixed income	1,353,074	1,347,771
Derivatives	109,874	(75,334)
Other	1,381,837	1,477,453
Total non-endowment investments	3,144,785	3,049,890
Net investments, at fair value	$ 43,648,891	$ 44,172,163

As described in Note 1d, investments are recorded at fair value. The following tables summarize the fair values of the university's investments by major type and related liabilities as of June 30, in thousands of dollars:

2023	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	$ 1,261,048	$ -	$ -	$ 1,261,048
Fixed income	3,054,758	1,950	4,335	3,061,043
Common stock:				
Domestic	1,292,811	11,576	1,154	1,305,541
Foreign	281,671	-	42,229	323,900
Total common stock	1,574,482	11,576	43,383	1,629,441
Other equity investments:				
Developed equities	-	-	1,529,689	1,529,689
Real assets	-	-	320,216	320,216
Venture capital	-	-	196,454	196,454
Total other equity investments	-	-	2,046,359	2,046,359
Other investments	50,236	484,940	320,899	856,075
Total leveled investments, at fair value	$ 5,940,524	$ 498,466	$ 2,414,976	8,853,966
Investments at net asset value				36,825,190
Total investments				$ 45,679,156
Liabilities associated with investments:				
Securities sold, not yet purchased	$ 500,356	$ -	$ -	$ 500,356
Other liabilities	37,800	22,656	1,466,392	1,526,848
Total liabilities associated with investments	$ 538,156	$ 22,656	$ 1,466,392	2,027,204
Non-controlling interests				3,061
Net investments				$ 43,648,891

2022		Level 1		Level 2		Level 3		Total
Investments, at fair value:								
Cash and short-term investments	$	1,738,669	$	-	$	-	$	1,738,669
Fixed income		3,385,938		-		1,185		3,387,123
Common stock:								
Domestic		773,049		11,050		1,006		785,105
Foreign		775,418		-		57,539		832,957
Total common stock		1,548,467		11,050		58,545		1,618,062
Other equity investments:								
Developed equities		-		-		1,604,274		1,604,274
Real assets		-		-		439,971		439,971
Venture capital		-		-		227,937		227,937
Total other equity investments		-		-		2,272,182		2,272,182
Other investments		22,732		329,740		314,319		666,791
Total leveled investments, at fair value	$	6,695,806	$	340,790	$	2,646,231		9,682,827
Investments at net asset value								36,789,245
Total investments							$	46,472,072
Liabilities associated with investments:								
Securities sold, not yet purchased	$	186,022	$	-	$	-	$	186,022
Other liabilities		109,697		337,958		1,664,611		2,112,266
Total liabilities associated with investments	$	295,719	$	337,958	$	1,664,611		2,298,288
Non-controlling interests								1,621
Net investments							$	44,172,163

Included within cash and short-term investments are restricted short-term investment balances held as collateral in the amount of $1,117.1 million and $1,493.0 million as of June 30, 2023 and 2022, respectively.

While not part of a leveling category, fair values for certain investments held are based on the net asset value ("NAV") of such investments as determined by the respective external investment managers, including general partners, if market values are not readily ascertainable. These valuations involve assumptions and methods that are reviewed by the Investments Office.

Investments at NAV as of June 30, in thousands of dollars, include:

		2023		2022
Developed equities	$	5,159,727	$	4,455,361
Emerging equities		1,379,524		1,648,280
Leveraged buyouts		10,041,213		8,888,559
Marketable alternatives		5,443,689		5,303,852
Real assets		4,837,564		5,488,279
Venture capital		9,963,473		11,004,914
Total investments, at NAV	$	36,825,190	$	36,789,245

Certain investment companies are required to be consolidated for financial reporting purposes, and the related assets and liabilities of those investment companies have been included in these consolidated financial statements. Where such entities are not wholly owned by the university, the portion of the consolidated entity's net assets that is not owned by the university is reported as a non-controlling interest.

The fair value of consolidated investment company assets and liabilities included in the university's consolidated financial statements, in thousands of dollars, include:

		2023		2022
Consolidated investment company assets	$	90,798	$	125,108
Consolidated investment company liabilities		4,098		4,692
	$	86,700	$	120,416

Level 3 investments are valued by the university or by its external investment managers using valuation techniques standard in the industry in which they operate. The Investments Office reviews these valuation methods and evaluates the appropriateness of these valuations each year. In certain circumstances, when the general partner does not provide a valuation or the valuation provided is not considered appropriate, the Investments Office will determine those values.

The following table summarizes quantitative inputs and assumptions used for Level 3 investments at June 30, for which fair value is based on unobservable inputs that are not developed by external investment managers. Weighted averages were calculated based on relative fair values. Significant increases or decreases in these unobservable inputs may result in significantly higher or lower valuation results.

	Fair Value (in 000s)						Range		Weighted Average	
Asset Class		**2023**		**2022**	**Valuation Technique**	**Significant Unobservable Input**	**2023**	**2022**	**2023**	**2022**
Emerging equities	$	43,383	$	58,545	Calibrated price of recent investment	Calibrated price of recent round in private investment	N/A	N/A	N/A	N/A
					NAV of the underlying fund	NAV of investment holding company	N/A	N/A	N/A	N/A
Developed equities	$	1,529,689	$	1,604,274	Carried interest calculation	Fund high water mark	N/A	N/A	N/A	N/A
Fixed income	$	4,335	$	1,185	Indicative market quotations	Recent funding activity	N/A	N/A	N/A	N/A
Real assets	$	320,216	$	439,971	Discounted cash flow	Discount rate	8.0 - 12.0%	8.0 - 12.0%	10.0%	10.0%
Trusts	$	221,845	$	208,054	Net present value	Discount rate	4.5%	3.7%	N/A	N/A
Venture capital	$	196,454	$	227,937	Tax analysis	Likelihood of taxation	0.0%	0.0%	N/A	N/A
Other investments	$	99,054	$	106,265	Market comparables	Price per acre	$10,822 - $53,288	$8,834 - $9,164	$15,243	$9,000
Liabilities	$	(1,466,392)	$	(1,664,611)	Various methods	University pooled unit market value	$4,757	$4,885	N/A	N/A

The valuation process for investments at NAV and those categorized in Level 3 of the fair value hierarchy includes evaluating the operations and valuation procedures of external investment managers and the transparency of those processes through background and reference checks, attendance at investor meetings, and periodic site visits. In determining the fair value of investments, Investments Office staff reviews periodic investor reports, interim and annual audited financial statements received from external investment managers, and material quarter over quarter changes in valuation; and assesses the impact of macro market factors on the performance. The Investments Office meets with the Corporation's

Investment Committee quarterly to review investment transactions and monitor performance of external investment managers.

Realized and unrealized gains and losses are reported in total endowment return, net of fees. Included in net realized and unrealized gain (loss) in Level 3 reported below were unrealized gains of $15.5 million and unrealized losses of $114.1 million that relate to investments held at June 30, 2023 and 2022, respectively.

The tables below present the change in fair value measurements for the university's Level 3 investments during the years ended June 30, in thousands of dollars:

2023	Developed equities	Real assets	Venture capital	Other	Liabilities	Total
Beginning balance	$ 1,604,274	$ 439,971	$ 227,937	$ 374,049	$ (1,664,611)	$ 981,620
Realized and unrealized gain (loss), net	347,949	(68,141)	2,254	(2,108)	50,347	330,301
Purchases	31,117	-	207	13,605	(55,593)	(10,664)
Sales	(453,651)	(51,614)	(33,944)	(16,929)	203,465	(352,673)
Ending balance	$ 1,529,689	$ 320,216	$ 196,454	$ 368,617	$ (1,466,392)	$ 948,584

2022	Developed equities	Real assets	Venture capital	Other	Liabilities	Total
Beginning balance	$ 1,388	$ 618,580	$ 479,519	$ 388,308	$ (1,739,077)	$ (251,282)
Realized and unrealized (loss) gain, net	(92,809)	189,832	(218,602)	(29,784)	30,998	(120,365)
Purchases	23,117	19,342	3,013	51,161	(74,012)	22,621
Sales	(1,388)	(377,764)	(35,993)	(32,974)	117,480	(330,639)
Transfers in	1,673,966	-	-	-	-	1,673,966
Transfers out	-	(10,019)	-	(2,662)	-	(12,681)
Ending balance	$ 1,604,274	$ 439,971	$ 227,937	$ 374,049	$ (1,664,611)	$ 981,620

Transfers into Level 3 consist primarily of investments reclassified from NAV to Level 3 when the practical expedient is not used, while transfers out of Level 3 consist of investments reclassified from Level 3 to NAV due to the use of the practical expedient.

Agreements with external investment managers include certain redemption terms and restrictions as noted in the following table:

Asset Class	Fair Value (in 000s) 2023	2022	Remaining Life	Unfunded Commitment (in 000s) 2023	2022	Redemption Terms	Redemption Restrictions
Developed equities	$ 6,689,416	$ 6,059,635	No Limit	$ 112,872	$ 82,872	Redemption terms range from monthly with 3 days notice to annually with 90 days notice.	Lock-up provisions range from none to 7 years.
Emerging equities	1,379,524	1,648,280	No Limit	67,650	126,000	Redemption terms range from monthly with 15 days notice to closed end structures not available for redemption.	Lock-up provisions range from none to 7 years.
Leveraged buyouts	10,041,213	8,888,559	1-25 years	4,228,144	4,523,006	Closed end funds not eligible for redemption.	Not redeemable.
Marketable alternatives	5,443,689	5,303,852	No Limit	111,173	115,719	Redemption terms range from monthly with 30 days notice to annually with 90 days notice.	Lock-up provisions range from none to 5 years.
Real assets	5,157,780	5,928,250	1-25 years	1,996,579	2,456,597	Closed end funds not eligible for redemption.	Not redeemable.
Venture capital	10,159,927	11,232,851	1-25 years	2,284,191	2,095,548	Redemption terms range from 2 years with 3 years notice to closed end structures not available for redemption.	Not redeemable.
Total	$ 38,871,549	$ 39,061,427		$ 8,800,609	$ 9,399,742		

The fair value of fixed income securities of $328.4 million and $176.8 million was provided at June 30, 2023 and 2022, respectively, to collateralize securities sold, not yet purchased.

The university may employ derivatives and other strategies to (1) manage against market risks, (2) arbitrage mispricing of related securities, and (3) replicate long or short positions more cost effectively. The fair value of derivative positions held at June 30 and related gain (loss) for the year, in thousands of dollars, were as follows:

2023	Assets	Liabilities	Gain (Loss)
Endowment:			
Other	$ 1	$ 26	$ (275)
	1	26	(275)
Other:			
Interest rate swaps	149,976	48,682	190,978
	149,976	48,682	190,978
Gross value of derivatives	149,977	48,708	$ 190,703
Other-counterparty netting	(14,487)	(14,487)	
Collateral:			
Cash collateral received	22,850	-	
Securities collateral received/(posted)	55,480	(16,994)	
Total net exposure for derivatives	$ 57,160	$ 17,227	

2022

	Assets	Liabilities	Gain
Endowment:			
Other	$ 538	$ 17	$ 181,928
	538	17	181,928
Other:			
Interest rate swaps	31,642	121,154	498,015
	31,642	121,154	498,015
Gross value of derivatives	32,180	121,171	$ 679,943
Other-counterparty netting	(31,642)	(31,641)	
Collateral:			
Securities collateral received/(posted)	-	(88,688)	
Total net exposure for derivatives	$ 538	$ 842	

Derivatives are reported as other investments and other liabilities for fair value leveling purposes. The university initiates derivatives under legally enforceable master netting agreements. The net exposure for derivatives is presented above, net of these master netting agreements and required collateral.

Interest Rate Swaps

Interest rate swaps are used to manage exposure to interest rate fluctuations. The notional amount of contracts that pay based on fixed rates and receive based on variable rates was $2.3 billion for both June 30, 2023 and 2022. The notional amount of contracts that pay based on variable rates and receive based on fixed rates were $500.0 million and $800.0 million at June 30, 2023 and 2022, respectively.

Derivative assets are reported as investments in the consolidated statement of financial position and derivative liabilities are reported as liabilities associated with investments. Gains and losses on derivatives used for investing are reported as part of total endowment return and gains and losses related to university debt management are reported as other investment income in the consolidated statement of activities as non-operating activity.

Derivatives held by limited partnerships and commingled investment trusts in which Yale invests pose no off-balance sheet risk to the university due to the limited liability structure of the investments.

Certain investment transactions, including derivative financial instruments, necessarily involve counterparty credit exposure. Such exposure is monitored regularly by the university's Investments Office in accordance with established credit policies and other relevant criteria.

Endowment investments include beneficial interests in outside trusts of $182.7 million and $168.6 million at June 30, 2023 and 2022, respectively.

The following investments held under split-interest agreements are included in the endowment investment portfolio, in thousands of dollars:

	2023	2022
Charitable gift annuities	$ 277,923	$ 289,105
Charitable remainder trusts	106,666	103,370
Pooled income funds	5,176	5,675
	$ 389,765	$ 398,150

Split-interest liabilities reported in the consolidated statement of financial position totaled $132.3 million and $130.8 million at June 30, 2023 and 2022, respectively, and are recorded at fair value using Level 2 measurements.

The university has agreements with certain affiliates to invest in the Pool. The obligation to these affiliates included in other liabilities within liabilities associated with investments is $1,177.1 million and $1,370.6 million at June 30, 2023 and 2022, respectively. The largest balance recorded is for Yale New Haven Health System (YNHHS), with $849.0 million and $1,037.0 million invested at June 30, 2023 and 2022, respectively.

A summary of the university's total investment return as reported in the consolidated statement of activities is presented below, in thousands of dollars:

	2023	2022
Investment income	$ 438,816	$ 371,926
Realized and unrealized gain (loss), net of investment management fees	319,868	(106,046)
Total endowment return	758,684	265,880
Other investment income	280,606	571,588
	$ 1,039,290	$ 837,468

Endowment investment returns totaling $1,752.4 million and $1,568.4 million were allocated to operating activities in 2023 and 2022, respectively, using the spending policy described in Note 1d.

3. Accounts Receivable

Accounts receivable from the following sources were outstanding at June 30, in thousands of dollars:

	2023	2022
Medical services	$ 320,495	$ 323,304
Grant and contracts	150,998	116,048
Affiliated organizations	115,809	119,644
Publications	6,590	7,267
Other	53,081	73,998
	646,973	640,261
Less: Allowance for doubtful accounts	(236,773)	(234,578)
	$ 410,200	$ 405,683

Medical services receivables are net of discounts and allowances of $220.8 million and $218.5 million at June 30, 2023 and 2022, respectively.

Receivables for medical services, net of contractual adjustments, are primarily based on negotiated contracts with the following:

	2023	2022
Insurance companies	45%	45%
Payments due directly from patients	19%	22%
Medicare	19%	17%
Commercial insurance and others	13%	11%
Medicaid	4%	5%

The university assesses credit losses on accounts receivable on a regular basis to determine the allowance for doubtful accounts.

The net receivable from the Hospital amounted to $107.6 million and $112.9 million at June 30, 2023 and 2022, respectively. Balances are settled in the ordinary course of business. The university recognized $531.8 million and $492.2 million in revenue and incurred $131.8 million and $135.5 million in expenses related to activities with the Hospital during the years ended June 30, 2023 and 2022, respectively.

4. Contributions Receivable

Contributions receivable consist of the following unconditional promises to give as of June 30, in thousands of dollars:

		2023		2022
Purpose:				
Operating programs	$	467,832	$	501,570
Endowment		602,067		636,325
Capital purposes		111,789		107,334
Gross unconditional promises to give		1,181,688		1,245,229
Less: Discount to present value		(108,324)		(111,307)
Allowance for uncollectible accounts		(112,985)		(113,429)
	$	960,379	$	1,020,493
Amounts due in:				
Less than one year	$	423,809	$	418,213
One to five years		483,615		531,880
More than five years		274,264		295,136
	$	1,181,688	$	1,245,229

Discount rates used to calculate the present value of contributions receivable ranged from 0.07% to 7.00% at June 30, 2023 and 2022.

The university had conditional pledges of approximately $12.9 million and $16.4 million at June 30, 2023 and June 30, 2022, respectively, which are subject to donor-imposed conditions.

5. Notes Receivable

Notes receivable at June 30, in thousands of dollars, include:

		2023		2022
Institutional student loans	$	44,042	$	43,465
Federally-sponsored student loans		6,695		10,911
Notes receivable		46,880		48,312
		97,617		102,688
Less: Allowance for doubtful accounts		(13,190)		(12,776)
	$	84,427	$	89,912

Student Loans

Institutional student loans are funded by donor funds restricted for student loan purposes and university funds made available to meet demonstrated need in excess of all other sources of student loan borrowings. Interest accrues at fixed rates upon loan disbursement.

Management regularly assesses the adequacy of the allowance for credit losses for student loans by performing ongoing evaluations of the student loan portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of specific borrowers, the level of delinquent loans, and, where applicable, the existence of any guarantees or indemnifications. Federally-sponsored loans represent amounts due from current and former students under certain federal loan programs. Loans disbursed under these programs can be assigned to the federal government in certain non-repayment situations. In these situations, the federal portion of the loan balance is guaranteed. Federally-sponsored student loans have mandated interest rates and repayment terms subject to restrictions as to their transfer and disposition.

Amounts received from the federal government to fund a portion of the federally-sponsored student loans are ultimately refundable to the federal government and have been reported as part of other liabilities in the consolidated statement of financial position. The recorded value of student loan instruments approximates fair value.

Notes Receivable

The university and the Hospital entered into an agreement under which the Hospital will reimburse the university over a 40-year term for advances made relating to the construction of Hospital facilities. The payment includes interest based on the five-year Treasury bill plus 175 basis points, which resets every five years. In 2020, the interest rate was reset, and the monthly payment was adjusted accordingly.

6. Right of Use Assets and Lease Liabilities

The following table summarizes the university's lease assets and liabilities as of June 30, in thousands of dollars:

Right of use assets and liabilities	Consolidated statement of financial position location	2023	2022
Right of use asset - Operating	Right of use assets	$ 31,703	$ 46,506
Right of use asset - Financing	Right of use assets	240,412	133,139
Right of use liabilities - Operating	Lease liabilities	32,355	47,304
Right of use liabilities - Financing	Lease liabilities	318,767	205,777

The following table summarizes the university's lease related costs for the year ended June 30, in thousands of dollars:

Lease cost	Consolidated statement of activities location	2023	2022
Financing lease cost			
Amortization of right of use assets	Depreciation, amortization and interest	$ 10,279	$ 10,279
Interest on lease liabilities	Depreciation, amortization and interest	7,462	7,719
Operating lease cost	Other operating expenses	12,496	10,114
Total lease cost		$ 30,237	$ 28,112

The following table summarizes maturities of lease liabilities as of June 30, 2023, in thousands of dollars:

	Financing	Operating	Total
2024	$ 153,668	$ 9,065	$ 162,733
2025	10,753	7,052	17,805
2026	10,878	5,960	16,838
2027	11,004	5,259	16,263
2028	11,133	2,264	13,397
Thereafter	193,945	5,236	199,181
Undiscounted expected future cash flows	391,381	34,836	426,217
Discount	(72,614)	(2,481)	(75,095)
Discounted expected future cash flows	$ 318,767	$ 32,355	$ 351,122

The following table summarizes information about financing and operating leases as of June 30, in thousands of dollars:

	2023		2022	
	Financing	Operating	Financing	Operating
Weighted-average remaining lease term (years)	11	7	19	9
Weighted-average discount rate	1.93%	1.53%	3.66%	1.76%
Total undiscounted lease liability	$ 391,381	$ 34,836	$ 287,376	$ 50,732

During the fiscal year ended June 30, 2023 the university committed to exercising a purchase option during the fiscal year ended June 30, 2024 for a building that it currently leases. As part of the remeasurement, the lease classification for all existing operating and financing leases in the building were reassessed and determined to be financing leases.

7. Other Assets

Other assets at June 30, in thousands of dollars, include:

	2023	2022
Prepaid pension costs	$ 168,634	$ -
Insurance receivables	142,042	140,923
Software costs, net of accumulated amortization	53,325	39,906
Deferred expenses	43,955	42,315
Inventories	18,001	17,670
	$ 425,957	$ 240,814

Prepaid pension costs represent the amount by which the fair value of plan assets exceed the defined benefit obligation at June 30, 2023. At June 30, 2022, the defined benefit pension obligation exceeded the fair value of the plan assets, and the funded status is included in other liabilities (see Note 12).

Amortization expense related to other assets included in operating expenses amounted to $14.6 million and $14.2 million in 2023 and 2022, respectively.

8. Land, Buildings and Equipment

Land, buildings and equipment at June 30, less accumulated depreciation and amortization, in thousands of dollars, are as follows:

	2023	2022
Land and real estate improvements	$ 139,394	$ 137,203
Buildings	8,785,418	8,380,253
Equipment	535,769	624,506
	9,460,581	9,141,962
Less: Accumulated depreciation and amortization	(4,146,360)	(3,961,507)
	5,314,221	5,180,455
Construction in progress	433,762	417,614
	$ 5,747,983	$ 5,598,069

Depreciation expense included in operating expenses amounted to $312.4 million and $306.7 million in 2023 and 2022, respectively.

9. Other Liabilities

Other liabilities include obligations of the university that will be paid over extended periods of time and consist of the following as of June 30, in thousands of dollars:

	2023	2022
Employee benefit obligations	$ 860,230	$ 993,684
Compensated absences	82,233	78,275
Financial aid grant obligations	55,825	49,674
Asset retirement obligations	39,727	38,229
Other	181,929	208,866
	$ 1,219,944	$ 1,368,728

Included in employee benefit obligations are defined benefit plan liabilities in excess of plan assets. These liabilities amounted to $572.7 million at June 30, 2023 and $743.8 million at June 30, 2022 (see Note 12).

10. Bonds and Notes Payable

Bonds and notes payable outstanding at June 30, in thousands of dollars, include:

	Interest Rate at June 30, 2023	Calendar Year of Maturity	Outstanding Balance 2023	2022
CHEFA tax-exempt bonds:				
Series S	5.00%	2027	$ 111,205	$ 111,205
Series T	5.00%	2029	93,625	93,625
Series U	1.10%	2033	250,000	250,000
Series V	1.73%	2036	200,000	200,000
Series X	0.25%	2037	125,000	125,000
Series 2010A	0.68%	2049	300,000	300,000
Series 2013A	1.73%	2042	100,000	100,000
Series 2014A	2.80%	2048	250,000	250,000
Series 2015A	0.38%	2035	300,000	300,000
Series 2016A	1.90%	2042	399,320	399,320
Series 2017A	2.28%	2042	170,920	170,920
Series 2017B	2.44%	2029/2037	194,530	194,530
Series 2017C	3.51%	2040/2057	383,380	383,380
Series 2018A	5.00%	2025	67,610	67,610
Total CHEFA bonds			2,945,590	2,945,590
Medium term notes	7.38%	2096	125,000	125,000
Taxable Series 2020A	1.59%	2025/2030/2050	1,500,000	1,500,000
Commercial paper	3.87%	2023	500,000	500,000
US Department of Energy	2.70%	2029	18,526	24,786
Principal amount			5,089,116	5,095,376
Less: Bond issue costs			(16,632)	(17,524)
Plus: Unamortized premiums and discounts, net			65,149	86,578
			$ 5,137,633	$ 5,164,430

CHEFA Tax-Exempt Bonds

The university borrows at tax-exempt rates through the Connecticut Health and Facilities Authority ("CHEFA"), a conduit issuer. CHEFA debt is a general unsecured obligation of the university. Although CHEFA is the issuer, the university is responsible for the repayment of the tax-exempt debt.

Series S bonds total $111.2 million, bear a fixed interest rate of 5.00%, and mature in July 2027. These bonds include a net premium of $11.7 million as of June 30, 2023.

Series T bonds consist of $93.6 million Series T-2 bonds maturing in July 2029. The Series T-2 bonds bear a fixed interest rate of 5.00% through June 2029. These bonds include a net premium of $20.0 million as of June 30, 2023.

Series U bonds consist of 1) $125.0 million Series U-1 bonds and 2) $125.0 million Series U-2 bonds, both maturing in July 2033. After a remarketing on February 8, 2022, Series U bonds bear a fixed interest rate of 1.10% through February 10, 2025.

Series V bonds total $200.0 million, bear interest at a daily rate, and mature in July 2036. The bonds may be converted from a daily rate period to other variable rate modes or to a fixed rate mode at the discretion of the university.

Series X bonds consist of $125.0 million, bear fixed interest rate of 0.25% through February 8, 2024, and mature in July 2037.

Series 2010A bonds consist of 1) $150.0 million Series 2010A-3 and 2) $150 million Series 2010A-4, maturing July 2049. Series 2010A-3 have a fixed rate of 0.25% through February 8, 2024. On February 8, 2022, Series 2010A-4 was remarketed from a fixed rate of 2.00% to a fixed rate of 1.10% through February 10, 2025.

Series 2013A bonds total $100.0 million maturing in July 2042. Series 2013A had a fixed interest rate of 1.45% through June 30, 2022. On July 1, 2022, the Series was remarketed at a daily variable interest rate.

Series 2014A bonds total $250.0 million, maturing in July 2048. On February 7, 2023 the Series was remarketed from a fixed rate of 1.10% to a fixed rate of 2.80% through February 9, 2026.

Series 2015A bonds total $300.0 million and mature in July 2035. After a remarketing in July 2021, the bonds bear a fixed interest rate of 0.38% through July 11, 2024.

Series 2016A bonds consist of 1) $150.0 million Series 2016A-1 bonds that were remarketed on July 1, 2022 from a fixed rate of 1.45% to a daily variable interest rate and 2) $249.3 million Series 2016A-2 bonds bearing a fixed interest rate of 2.00% through June 30, 2026. Series 2016A-2 include a net premium of $203 thousand as of June 30, 2023. Both bond series mature in July 2042.

Series 2017A bonds consist of 1) $85.5 million Series 2017A-1 bonds and 2) $85.5 million Series 2017A-2 bonds. Both bond series were remarketed from a fixed interest rate of 5.00% to a weekly variable interest rate on July 1, 2022. Both bond series mature in July 2042.

Series 2017B bonds consist of 1) $82.4 million Series 2017B-1 bonds that bear a fixed interest rate of 5.00% through July 2029 and mature in July 2029 and 2) $112.1 million Series 2017B-2 bonds that bear a fixed interest rate of 0.55% through July 2023 and mature in July 2037. The Series 2017B-1 bonds include a net premium of $19.8 million as of June 30, 2023. On July 3, 2023, the Series 2017B-2 bonds were remarketed to a fixed rate of 3.2% through June 30, 2026.

Series 2017C bonds consist of 1) $123.3 million Series 2017C-1 bonds maturing in July 2040 and 2) $260.1 million 2017C-2 bonds maturing in July 2057. Series 2017C-1 bonds bear a fixed interest rate of 5.00% through January 2028 and include a net premium of $13.4 million as of June 30, 2023. On February 2, 2023, Series 2017C-2 was remarketed from a fixed interest rate of 5.00% to a fixed interest rate of 2.80% through February 2, 2026.

Series 2018A bonds total $67.6 million, bear a fixed interest rate of 5.00%, and mature in July 2025. These bonds include a net premium of $3.5 million as of June 30, 2023.

Notes Payable

Medium-term notes bear a fixed interest rate of 7.38% and mature in 2096, with an optional redemption provision in the year 2026. The discount associated with these notes was $120 thousand as of June 30, 2023.

Taxable Bonds

Taxable bonds, Series 2020A, in the amount of $1.5 billion were issued on June 9, 2020 consisting of: 2020A-1 in the amount of $500 million bearing a fixed rate of 0.873% through maturity due April 15, 2025, 2020A-2 in the amount of $500 million bearing a fixed rate of 1.48% through maturity due April 15, 2030, and 2020A-3 in the amount of $500 million bearing a fixed rate of 2.40% through maturity due April 15, 2050. The bonds are subject to an optional redemption (in whole or in part) prior to maturity at the written direction of the issuer to the trustee.

Commercial Paper

Commercial paper consists of notes issued in the short-term taxable market and is sold at a discount from par. The maturities of individual notes are issued in ranges from one day to no more than one year and fall, on average, in a range of thirty to sixty days. The discount associated with commercial paper was $3.4 million as of June 30, 2023.

Other Financing Arrangements

The university financed a wind energy project, Record Hill Wind, LLC, through a financing arrangement with the U.S. Department of Energy. The financing arrangement is non-recourse debt to the university and bears interest at rates ranging from 2.24% to 2.78%.

Scheduled maturities of the debt obligations, in thousands of dollars, are as follows:

2024	$	504,835
2025		504,835
2026		72,445
2027		2,601
2028		111,783
Thereafter		3,892,617
Total	$	5,089,116

Certain CHEFA Series are subject to tender by bondholders. To the extent all bonds subject to tender could not be remarketed, $2.0 billion of bonds scheduled for maturity between 2033 and 2057 would be due when tendered.

Total interest expense incurred on indebtedness was $93.8 million and $71.0 million in 2023 and 2022, respectively. Interest capitalized to land, buildings and equipment totaled $5.6 million and $5.0 million in 2023 and 2022, respectively. Amortization expense related to bond issue costs included in operating expenses amounted to $3.6 million and $3.4 million in 2023 and 2022, respectively.

11. Retirement Plans – Defined Contribution

The university maintains defined contribution plans for faculty and certain staff employees. Participants may direct employee and employer contributions to annuities, mutual funds, and other investment options. Retirement expense for these plans amounted to $165.2 million and $146.9 million in 2023 and 2022, respectively, and is included in operating expense.

12. Pension and Postretirement Plans – Defined Benefit

The university has a noncontributory, defined benefit pension plan for staff. The staff pension plan provides payments based on the employee's earnings and years of participation.

In addition, the university provides postretirement benefits including health benefits based on years of service, life insurance, and a pay-out of unused sick time. While the university's subsidy of the cost of comprehensive health care benefits differs among retiree groups, substantially all employees who meet minimum age and service requirements and retire from the university are eligible for these benefits. Non-faculty employees are paid 50% of unused sick time and receive life insurance benefits upon retirement from active status.

The university uses a June 30 measurement date for its defined benefit plans.

The following table sets forth the pension and postretirement plans' funded status that is reported in other assets or other liabilities within the consolidated statements of financial position at June 30, in thousands of dollars:

	Pension		Postretirement	
	2023	2022	2023	2022
Change in benefit obligation:				
Benefit obligation, beginning of year	$ 1,983,077	$ 2,407,762	$ 1,409,933	$ 1,708,602
Service cost	69,846	101,014	56,129	66,548
Interest cost	73,438	58,060	53,227	38,456
Benefit payments	(57,895)	(51,846)	(31,966)	(32,101)
Assumption changes	(280,114)	(536,173)	(133,597)	(253,543)
Actuarial loss (gain)	17,875	4,260	93,617	(118,029)
Benefit obligation, end of year	$ 1,806,227	$ 1,983,077	$ 1,447,343	$ 1,409,933
Change in plan assets:				
Fair value, beginning of year	$ 1,895,798	$ 2,066,964	$ 753,421	$ 802,442
Actual return on plan assets	127,016	(166,373)	54,152	(96,185)
University contributions	13,169	49,945	100,457	80,623
Benefits paid	(57,895)	(51,846)	(31,966)	(32,101)
Expenses paid	(3,227)	(2,892)	(1,466)	(1,358)
Fair value, end of year	$ 1,974,861	$ 1,895,798	$ 874,598	$ 753,421
Funded Status	$ 168,634	$ (87,279)	$ (572,745)	$ (656,512)

Benefit Obligation

The benefit obligation represents the actuarial present value of expected future payments to plan participants for services rendered prior to that date, based on the pension benefit formula. In calculating the value, the participants' compensation levels are projected to retirement.

The accumulated benefit obligation differs from the benefit obligation above in that it does not consider assumptions about future compensation levels. It represents the actuarial present value of future payments to plan participants using current and past compensation levels. The accumulated benefit obligation for the pension plan was $1,586.5 million and $1,705.5 million at June 30, 2023 and June 30, 2022, respectively.

Assumptions used in determining the year end obligation of the pension and postretirement plans are:

	2023	2022
Weighted-average discount rate - all plans except unused sick pay plan	4.65%	3.75%
Weighted-average discount rate - unused sick pay plan	4.85%	3.75%
Weighted-average increase in future compensation levels	3.19%	3.18%
Projected health care cost trend rate (pre-65/post-65)	6.82%/13.02%	7.08%/12.73%
Ultimate trend rate (pre-65/post-65)	5.00%/5.00%	5.00%/5.00%
Year ultimate trend rate is achieved	2033	2031
Mortality	RP2014 Collar Adj., Scale MP2019	RP2014 Collar Adj., Scale MP2019

Changes in assumptions during the year resulted in a net decrease to the pension benefit obligation and postretirement benefit obligation at June 30, as follows, in thousands of dollars:

	2023		2022	
	Pension	Postretirement	Pension	Postretirement
Discount rate	$ (280,114)	$ (217,182)	$ (525,707)	$ (411,253)
Inflation	-	-	148	9,223
Medicare Part B reimbursement trends	-	(2,694)	-	-
Medicare Advantage and EGWP trends	-	86,279	-	-
Salary scale	-	-	(10,614)	726
Medical trend rates	-	-	-	147,761
	$ (280,114)	$ (133,597)	$ (536,173)	$ (253,543)

Net Periodic Benefit Cost

Net periodic benefit cost for the plans includes the following components for the year ended June 30, in thousands of dollars:

	Pension		Postretirement	
	2023	2022	2023	2022
Service cost	$ 69,846	$ 101,014	$ 56,129	$ 66,548
Administrative expenses	2,967	2,753	1,400	1,400
Interest cost	73,438	58,060	53,227	38,456
Expected return on plan assets	(135,690)	(126,466)	(59,348)	(51,274)
Net amortization:				
Prior service cost	1,663	2,725	-	-
Net loss	-	29,855	-	7,432
Net periodic benefit cost	$ 12,224	$ 67,941	$ 51,408	$ 62,562

The service cost component of net periodic benefit cost is included in employee benefits as a part of operating expenses in the consolidated statement of activities. The components of net periodic benefit cost other than service cost, are included in other increases, which is reported as non-operating activity in the consolidated statement of activities.

Assumptions used in determining the net periodic benefit cost of the pension and postretirement plans are:

	2023	2022
Weighted-average discount rate - all plans except unused sick pay plan	3.75%	2.45%
Weighted-average discount rate - unused sick pay plan	3.75%	2.15%
Expected long-term rate of return	7.25%	7.25%
Weighted-average compensation increase	3.18%	3.13%
Health care cost increase (pre-65/post-65)	7.08%/11.68%	6.22%/5.46%
Ultimate trend rate (pre-65/post-65)	5.00%/5.00%	4.50%/4.50%
Year ultimate trend rate is achieved	2031	2030
Mortality	RP2014 Collar Adj., Scale MP2019	RP2014 Collar Adj., Scale MP2019

The funded status consists of the cumulative unfunded net periodic benefit cost and the cumulative change in funded status of defined benefit plans. The components of the change in funded status of defined benefit plans, which is reported in non-operating results, for the year ended June 30, in thousands of dollars, include:

	Pension		Postretirement	
	2023	2022	2023	2022
Unrecognized net actuarial loss	$ (253,304)	$ (238,935)	$ (34,717)	$ (224,234)
Amortization of unrecognized obligation	(1,663)	(32,580)	-	(7,432)
	$ (254,967)	$ (271,515)	$ (34,717)	$ (231,666)

During fiscal year 2023, the postretirement plans experienced a $93.6 million actuarial loss largely attributable to a change in retiree cost sharing for healthcare coverage for Medicare-eligible former hourly employees. The pension plan experienced an actuarial loss of $17.9 million largely attributable to updated census information. At the same time, both plans experienced assumption change gains as summarized on the prior page, and asset losses of $5.2 million and $8.7 million for the postretirement and pension plans, respectively.

During fiscal year 2022, the postretirement plans experienced a $118.0 million actuarial gain largely attributable to claims experience. The pension plan experienced an actuarial loss of $4.3 million largely attributable to updated census information. At the same time, both plans experienced assumption change gains as summarized on the prior page, and asset losses of $147.5 million and $292.8 million for the postretirement and pension plans, respectively.

The cumulative amounts of these adjustments reported as deductions to net assets in the consolidated statement of financial position at June 30, in thousands of dollars, include:

	Pension		Postretirement	
	2023	2022	2023	2022
Unrecognized net actuarial (gain) loss	$ (234,556)	$ 18,748	$ (1,362)	$ 33,355
Unrecognized prior service cost	3,396	5,059	-	-
	$ (231,160)	$ 23,807	$ (1,362)	$ 33,355

Actuarial gains or losses and prior service costs resulting from plan amendments are amortized over the average remaining years of service of active participants.

Plan Assets

The defined benefit plan assets are valued utilizing the same fair value hierarchy as the university's investments as described in Note 1d.

The following table summarizes the fair values of investments by major type held by the staff pension plan at June 30, 2023 in thousands of dollars:

2023	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	$ 30,081	$ -	$ -	$ 30,081
US government securities	96,681	-	-	96,681
Common stock:				
Domestic	49,313	-	-	49,313
Foreign	1,484	-	-	1,484
Total common stock	50,797	-	-	50,797
Other equity investments:				
Real assets	-	-	23,918	23,918
Total other equity investments	-	-	23,918	23,918
Other investments	419	-	-	419
Total leveled investments, at fair value	$ 177,978	$ -	$ 23,918	201,896
Investments at net asset value				1,785,610
Total investments				1,987,506
Liabilities associated with investments	$ 17,360	$ 196	$ -	17,556
Net investments				1,969,950
Benefit payable				4,911
Fair value, end of year				$ 1,974,861

The following table summarizes the fair values of investments by major type held by the staff pension plan at June 30, 2022 in thousands of dollars:

2022	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	$ 32,537	$ -	$ -	$ 32,537
US government securities	132,298	-	-	132,298
Common stock:				
Domestic	35,849	-	-	35,849
Foreign	1,926	-	-	1,926
Total common stock	37,775	-	-	37,775
Other equity investments:				
Real assets	-	-	32,334	32,334
Total other equity investments	-	-	32,334	32,334
Other investments	299	-	-	299
Total leveled investments, at fair value	$ 202,909	$ -	$ 32,334	235,243
Investments at net asset value				1,656,228
Total investments				1,891,471
Liabilities associated with investments	$ 141	$ 280	$ -	421
Net investments				1,891,050
Benefit payable				4,748
Fair value, end of year				$ 1,895,798

The following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, 2023 in thousands of dollars:

2023	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	$ 40,873	$ -	$ -	$ 40,873
US government securities	52,491	-	-	52,491
Common stock:				
Domestic	31,060	-	-	31,060
Foreign	14,761	-	-	14,761
Total common stock	45,821	-	-	45,821
Other investments	334	-	-	334
Total leveled investments, at fair value	$ 139,519	$ -	$ -	139,519
Investments at net asset value				744,468
Total investments				883,987
Liabilities associated with investments	$ 6,865	$ 69	$ -	6,934
Net investments, at fair value				877,053
Receivable				2,455
Fair value, end of year				$ 874,598

The following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, 2022 in thousands of dollars:

2022	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Cash and short-term investments	$ 16,845	$ -	$ -	$ 16,845
US government securities	64,605	-	-	64,605
Common stock:				
Domestic	21,826	-	-	21,826
Foreign	15,397	-	-	15,397
Total common stock	37,223	-	-	37,223
Other investments	164	-	-	164
Total leveled investments, at fair value	$ 118,837	-	$ -	118,837
Investments at net asset value				636,672
Total investments				755,509
Liabilities associated with investments	$ 87	$ 178	$ -	265
Net investments, at fair value				755,244
Receivable				1,823
Fair value, end of year				$ 753,421

The table below represents the change in fair value measurements for Level 3 investments held by the staff pension plan for the plan's year ended June 30, in thousands of dollars. There are no Level 3 investments held by the retiree health plan:

	Pension	
	2023	2022
Beginning balance	$ 32,334	$ 21,364
Unrealized (loss) / gain	(4,622)	13,727
Purchases	-	1,512
Sales	(3,794)	(4,269)
Ending balance	$ 23,918	$ 32,334

The investment objective for the pension and retiree health plans seeks a positive long-term total return after inflation to meet the university's current and future plan obligations. Asset allocations for both plans combine tested theory and informed market judgment to balance investment risks with the need for high returns. Actual plan asset allocations by category at June 30 are as follows:

	Pension		Retiree Health	
	2023	2022	2023	2022
Developed equities	38.4%	28.3%	44.7%	33.8%
Emerging equities	2.5%	4.9%	4.0%	7.5%
Marketable alternatives	16.4%	16.1%	16.7%	16.3%
Fixed income	4.9%	7.0%	6.0%	8.6%
Leveraged buyouts	15.6%	14.2%	8.9%	8.9%
Venture capital	12.2%	17.5%	8.8%	14.0%
Real assets	8.8%	10.5%	6.8%	9.0%
Cash	1.2%	1.5%	4.1%	1.9%

The pension and retiree health long-term rate of return assumption is determined by adding expected inflation to expected long-term real returns of various asset classes, considering expected volatility and correlation between the returns of various asset classes.

Contributions

Annual contributions for the pension and retiree health plans are determined by the university considering calculations prepared by the plans' actuary as well as other factors. Expected contributions on a cash basis to the retiree health plan in fiscal year 2024 are $121.2 million. There are no contributions expected to the pension plan in fiscal year 2024.

Benefit Payments

The following estimated benefit payments, which reflect expected future service, are expected to be paid out of the plans, in thousands of dollars:

Fiscal year	Pension	Postretirement	Total
2024	$ 68,133	$ 44,431	$ 112,564
2025	72,319	48,926	121,245
2026	76,759	52,297	129,056
2027	81,388	56,362	137,750
2028	86,098	60,794	146,892
2029-2033	502,324	368,925	871,249
	$ 887,021	$ 631,735	$ 1,518,756

13. Net Assets

The university's net assets as of June 30, in thousands of dollars, includes:

	2023	2022
With Donor Restrictions:		
Donor-restricted endowments, perpetual in nature	$ 5,883,346	$ 5,530,421
Student loans, perpetual in nature	52,850	52,999
Donor-restricted endowments, subject to spending policy and appropriation	27,810,806	28,663,194
Board designated endowment, subject to spending policy and appropriation	327,357	298,908
Unexpended gift balances	1,509,734	1,554,287
Total net assets with donor restrictions	$ 35,584,093	$ 36,099,809
Without Donor Restrictions:		
Board designated endowment, subject to spending policy and appropriation	$ 6,725,358	$ 6,890,737
Funded status of defined benefit plans	(404,111)	(743,791)
Derivatives	109,874	(75,334)
Undesignated	2,709,686	2,520,983
Non-controlling interest	3,061	1,621
Total net assets without donor restrictions	9,143,868	8,594,216
Total net assets	$ 44,727,961	$ 44,694,025

Yale’s endowment consists of approximately 8,500 funds established for a variety of purposes.

The endowment includes both donor-restricted and board-designated endowment funds. Board designated endowment funds are designated by the Corporation to function as endowments and include funds that have donor-imposed purpose restrictions. The university endowment fund composition by fund type as of June 30, in thousands of dollars, includes:

2023	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment	$ -	$ 33,694,152	$ 33,694,152
Board-designated endowment	6,725,358	327,357	7,052,715
	$ 6,725,358	$ 34,021,509	$ 40,746,867

2022	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment	$ -	$ 34,193,615	$ 34,193,615
Board-designated endowment	6,890,737	298,908	7,189,645
	$ 6,890,737	$ 34,492,523	$ 41,383,260

The classification of endowment net assets by purpose as of June 30, in thousands of dollars, is as follows:

	2023	2022
Undesignated	$ 9,070,176	$ 9,437,657
Teaching and research	9,957,821	10,105,276
Facilities and operations	7,426,505	7,463,516
Financial aid	7,278,778	7,369,578
Other specific purposes	7,013,587	7,007,233
	$ 40,746,867	$ 41,383,260

Changes in endowment net assets for the fiscal year ended June 30, in thousands of dollars, were:

2023	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, beginning of year	$ 6,890,737	$ 34,492,523	$ 41,383,260
Investment return:			
Investment income	74,679	364,137	438,816
Net appreciation	290	319,578	319,868
Total investment return	74,969	683,715	758,684
Contributions	8,316	283,574	291,890
Allocation of endowment spending	(311,275)	(1,441,100)	(1,752,375)
Other increases	62,611	2,797	65,408
Endowment net assets, end of year	$ 6,725,358	$ 34,021,509	$ 40,746,867

2022	Without Donor Restrictions		With Donor Restrictions		Total	
Endowment net assets, beginning of year	$	7,048,097	$	35,234,755	$	42,282,852
Investment return:						
Investment income		62,511		309,415		371,926
Net depreciation		(12,179)		(93,867)		(106,046)
Total investment return		50,332		215,548		265,880
Contributions		1,625		299,730		301,355
Allocation of endowment spending		(278,461)		(1,289,981)		(1,568,442)
Other increases		69,144		32,471		101,615
Endowment net assets, end of year	$	6,890,737	$	34,492,523	$	41,383,260

14. Functional and Natural Classification of Expenses

The consolidated financial statements report certain categories of expenses that are attributable to one or more program or supporting functions of the university. Expenses reported by functional categories include allocations of costs for the operation and maintenance of plant, interest on indebtedness and depreciation and amortization expense. The university applies various methods to allocate costs among the program and support functions, the most significant of which is based on the amount of building space utilized.

Operating expenses by functional and natural classification for the fiscal year ended June 30, in thousands of dollars, were:

2023	Programmatic support		Patient care and other related services		Administration and other institutional support		Total	
Salaries and wages	$	1,459,902	$	698,754	$	169,480	$	2,328,136
Employee benefits		499,294		175,040		70,489		744,823
Depreciation, amortization and interest		410,799		11,770		18,633		441,202
Other operating expenditures		1,077,892		247,447		96,768		1,422,107
Total operating expenses	$	3,447,887	$	1,133,011	$	355,370	$	4,936,268

2022	Programmatic support		Patient care and other related services		Administration and other institutional support		Total	
Salaries and wages	$	1,324,115	$	635,674	$	155,109	$	2,114,898
Employee benefits		500,771		185,671		73,349		759,791
Depreciation, amortization and interest		365,717		17,061		25,017		407,795
Other operating expenditures		938,765		244,017		75,034		1,257,816
Total operating expenses	$	3,129,368	$	1,082,423	$	328,509	$	4,540,300

15. Commitments and Contingencies

The university is involved in various legal actions arising in the normal course of activities and is also subject to periodic audits and inquiries by various regulatory agencies. Although the ultimate outcome is not determinable at this time, management, after taking into consideration advice of legal counsel, believes that the resolution of these pending matters should not have a material adverse effect upon the university's financial position.

The university has outstanding commitments on contracts to construct campus facilities in the amount of $393.2 million at June 30, 2023. Funding for these projects is expected to come from capital replacement reserves, gifts, and debt.

16. Subsequent Events

Management has evaluated subsequent events for the period after June 30, 2023, through October 27, 2023, the date the consolidated financial statements were issued. Other than what has been disclosed in Note 10, there were no subsequent events that occurred after the balance sheet date that have a material impact on the university’s consolidated financial statements.

The President and Fellows of Yale University

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Fellows
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Photos: Dan Renzetti, John Hassett, and Tony Fiorini

In July 2022, Yale University opened the Jackson School of Global Affairs—the first new professional school created at the university in more than four decades. Hundreds gathered in Woolsey Hall on October 15, 2022, for an opening celebration and dedication ceremony to mark the milestone.

The Jackson School is home to Yale's master in public policy in global affairs, a master of advanced study in global affairs and the undergraduate major in global affairs. Jackson's interdisciplinary academic programs inspire and prepare Yale students for global leadership and service.

Prior to becoming a stand-alone professional school, the Jackson School was known as the Jackson Institute for Global Affairs, founded in 2010 after a transformative gift from John W. '67 and Susan G. Jackson in 2009.

In 2017, the provost named an advisory committee of eight senior faculty members to assess whether the Jackson Institute should be converted into an independent professional school. The committee issued a report recommending that the institute be made into a school of global affairs that provides the "intellectual underpinning for evidence-based policymaking" and is "oriented around the principle that solutions to global policy challenges are attainable and that scholarly research at Yale can change the world."

In 2019, the Yale Board of Trustees approved plans to expand the institute into a professional school. In January 2022, the university announced that the $200 million fundraising target for the school's endowment had been reached and that the school opening would take place in Fall 2022.

Yale

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