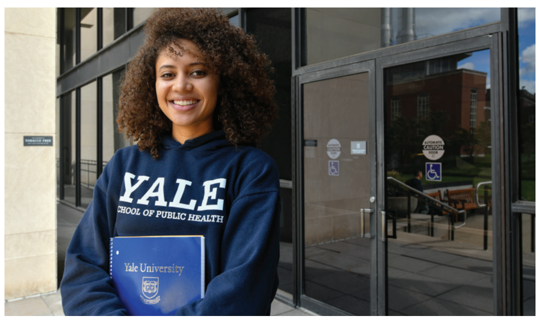
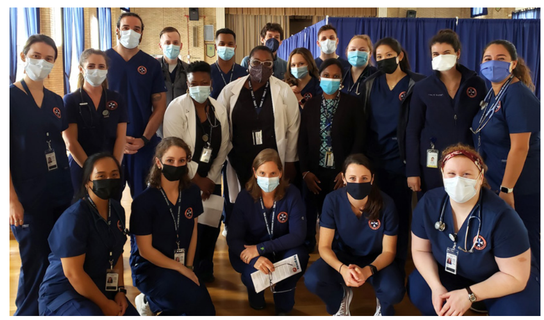
# Financial Report
# 2021–2022
# Yale University



Yale University Financial Report 2021–2022



*Front cover (left column top to bottom, sweeping to right column top to bottom)*

Dr. Brett King, Associate Professor of Dermatology. Photo: Dan Renzetti

A Yale School of Nursing student. Photo: Michael Marsland

A Yale School of Public Health student in front of the entrance to the school's Laboratory for Epidemiology & Public Health. Photo: Bradley E. Clift Photography

Graduates of the Yale School of Public Health's Class of 2022 celebrate commencement. Photo: James R. Anderson Photography

Dr. Akiko Iwasaki, center, instructing in her laboratory. Photo: Robert Lisak

A group of Graduate Entry Pre-Specialty in Nursing students at the Veterans Affairs Stand Down event, where they provided health services and education. Photo: Dr. Jennifer McIntosh

*Back cover (from top, moving counterclockwise)*

Yale School of Public Health students and faculty participating in the IRIS Run-Walk for Refugees 5K. Photo: Courtesy of Virginia Pitzer

A Yale School of Nursing nurse facilitates Covid-19 vaccine administration at Yale's Lanman Center. Photo: Dan Renzetti

Adam Kundishora, a 7th year chief neurological surgery resident at Yale New Haven Hospital received his M.D. from Yale School of Medicine. Photo: Dr. Nanthiya Sujijantarat

# Highlights

| Five-Year Financial Overview ($ in millions) | Fiscal Years 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| **Net Operating Results - Management View** | $ 167 | $ 276 | $ 125 | $ 87 | $ 91 |
| **Financial Position Highlights:** | | | | | |
| Total assets | $ 54,719 | $ 56,223 | $ 44,696 | $ 44,428 | $ 41,873 |
| Total liabilities | 10,025 | 11,931 | 12,964 | 12,186 | 9,616 |
| **Total net assets** | $ 44,694 | $ 44,292 | $ 31,732 | $ 32,242 | $ 32,257 |
| **Endowment:** | | | | | |
| Net investments, at fair value | $ 41,122 | $ 41,913 | $ 30,957 | $ 30,295 | $ 29,445 |
| Total return on investments | 0.8% | 40.2% | 6.8% | 5.7% | 12.3% |
| Spending from endowment | 3.8% | 5.0% | 4.8% | 4.6% | 4.7% |
| **Facilities:** | | | | | |
| Land, buildings and equipment, net of accumulated depreciation | $ 5,598 | $ 5,508 | $ 5,438 | $ 5,251 | $ 5,092 |
| Disbursements for building projects | $ 378 | $ 380 | $ 437 | $ 447 | $ 367 |
| **Debt** | $ 5,164 | $ 5,200 | $ 5,242 | $ 3,775 | $ 3,785 |
| **Statement of Activities Highlights:** | | | | | |
| Operating revenues | $ 4,810 | $ 4,579 | $ 4,247 | $ 4,105 | $ 3,817 |
| Operating expenses | 4,540 | 4,201 | 4,044 | 3,835 | 3,627 |
| **Increase in net assets from operating activities** | $ 270 | $ 378 | $ 203 | $ 270 | $ 190 |

| Five-Year Enrollment Statistics | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| **First-Year Enrollment Class of:** | '25 | '24 | '23 | '22 | '21 |
| First-Year applications | 47,240 | 35,220 | 36,844 | 35,306 | 34,154 |
| First-Year admitted | 2,509 | 2,299 | 2,269 | 2,229 | 2,316 |
| Admissions rate | 5.3% | 6.5% | 6.2% | 6.3% | 6.8% |
| First-Year enrollment | 1,786 | 1,264 | 1,550 | 1,573 | 1,579 |
| Yield | 71.2% | 55.0% | 68.3% | 70.6% | 69.3% |
| **Total Enrollment:** | | | | | |
| Yale College | 6,536 | 4,703 | 6,092 | 5,964 | 5,743 |
| Graduate and professional schools | 8,031 | 7,357 | 7,517 | 7,469 | 7,228 |
| **Total** | 14,567 | 12,060 | 13,609 | 13,433 | 12,971 |
| **Yale College Term Bill and Financial Aid:** | | | | | |
| Yale College term bill | $ 77,750 | $ 74,900 | $ 72,100 | $ 69,430 | $ 66,900 |
| Average grant award for students receiving aid | $ 59,944 | $ 58,340 | $ 59,205 | $ 57,633 | $ 53,703 |

# Message from the President

Dear Members of the Yale Community,

With the availability of vaccines, boosters, and more effective treatments for COVID-19, we have emerged from the pandemic's most severe stage and stepped closer to the end of this public health crisis. As I reflect on the disruptions of recent years, I am grateful to every single one of you for your thoughtful adherence to health guidelines, which has allowed us to ensure the continuity of Yale's educational and research mission, make great strides for the future of Yale, and advance our contributions to the world. As you will see in this report, we have managed our financial resources with great care—and mobilized them to great effect. It is a privilege, therefore, for me to present the 2021-2022 Financial Report, which reflects the dedicated efforts of so many Yale faculty, staff, students, and alumni.

Since the beginning of the pandemic, we have placed the health and well-being of the Yale community, as well as those surrounding it, at the center of our plans and actions. The careful stewardship of Yale's resources has allowed us to create and maintain a public health infrastructure comprised of a rigorous, campus-based outreach program to identify linkages among confirmed cases of COVID-19; widespread testing and isolation of positive cases; scientifically informed guidelines regarding the use of face masks, social distancing, and other mitigation measures; and a robust vaccination program.

Although the pandemic has required much of our focus, it has not slowed our work to realize Yale's academic priorities in science and engineering; empirical, policy-relevant social science research; the arts and humanities; and support for faculty and students. Launched in 2016, these priorities are calibrated to prepare future leaders to serve all sectors of society and create knowledge that will benefit humanity and improve life. I am pleased to offer a few highlights of our progress, which include this year's landmark investments in faculty growth, the development of faculty and staff research and scholarship, and support for the next generation of leaders.

Recruiting and retaining an excellent, diverse faculty underpin every aspect of Yale's academic strategy. In February 2022, we announced landmark investments in the School of Engineering & Applied Science (SEAS) and Faculty of Arts & Sciences (FAS) to add forty-five faculty positions. These expansions complement the annual search activity in which we are already regularly engaged. Across FAS and SEAS, we are recruiting more than 100 positions, some incremental and some recently vacated. This includes searches for nearly thirty FAS ladder faculty positions across the humanities. In addition, FAS is actively searching for more than thirty positions in the social sciences, of which a third are positions focused on hiring faculty engaged in data-intensive social science. This will help Yale bolster its capacity for interdisciplinary analysis across FAS and SEAS. Among FAS and SEAS STEM searches, some thirty-seven openings are in support of the university's science and engineering priorities, which will allow us to make great headway in emerging fields.

As we welcome new scholars and investigators to campus, we are also focused on supporting faculty in driving innovation in education, research, scholarship, and practice.

We launched Yale Ventures this past April to help faculty and students create solutions to local and global problems. Yale Ventures combines several existing university groups that promote innovation and entrepreneurship under one umbrella, with significant new investment. It is growing the ways the university supports faculty and students through grant funding, mentoring, business training, and other areas.

This fall, we officially celebrate the opening of the Humanities Quadrangle (HQ), Yale's new home for humanities faculty, students, and staff at 320 York Street. This spectacular building at the heart of campus represents the centrality of the humanities to Yale as we develop new areas in teaching and scholarship. Already, projects supported by the programming associated with HQ have encouraged faculty to use the new space to leverage connections between their disciplines.

We also have been making strides in addressing global challenges by bringing together the sciences, engineering, arts, humanities, and social science. For example, every part of the university is working together to combat climate change and biodiversity loss, and we have secured historic support for Yale's Planetary Solutions Project. Last year, we launched the Yale Center for Natural Carbon Capture and continue to build new partnerships in pursuit of its ambitious research and educational efforts. In January, we established the new multimillion-dollar Climate Impact Innovation Fund. This new fund enables high-risk, high-reward faculty research projects involving collaborations across disciplines. In early April, we announced the first round of seed grants to twenty-one faculty-led projects that involve multidisciplinary research and demonstrate the depth and breadth of expertise and innovation at Yale.

Of course, our experiences with the pandemic and other public health crises, both past and present, make salient the stark need for leadership in a variety of critical fields, including medicine, nursing, and public health. In response, we are significantly investing in the Yale School of Public Health (YSPH) to help its faculty and staff build on its historic strengths and respond even more effectively to worldwide public health demands. Our investment will take the form of a $100 million contribution to YSPH's endowment to put it on solid financial footing and transition it into an independent school. Yale will also provide $50 million of endowment funds each to the Schools of Medicine, Nursing, and Public Health when each school raises this amount in new endowment gifts.

In addition to the need for medical and scientific interventions around the world, we see the necessity for solutions to violent conflict and political division. The launch of the Yale Jackson School of Global Affairs—the university's first new school since 1976—occurs at a time when division around the globe is stronger than ever. The world has a pressing need for leadership in international affairs. The Yale Jackson School is responding by fostering multidisciplinary scholarship to provide the intellectual foundation for evidence-based policymaking. By convening world leaders and working collaboratively across fields, Yale students and faculty will set the agenda in areas such as global health, political instability, and cyberwarfare.

Yale's initiatives allow the university to extend the frontier of knowledge and tackle the most critical problems facing humanity. Yet none of our work would endure without new generations of scholars and leaders to carry it forward. Therefore, we are focused on increasing financial aid across the university. Last year, Yale enhanced its undergraduate financial aid packages for the fourth time in six years, and we will do more. Yale has participated in a record number of targeted programs to expand our outreach to prospective students with a variety of backgrounds, interests, and perspectives.

Yale's careful financial stewardship and endowment spending practices are more necessary than ever. Our policies insulate us from the economic fluctuations we anticipate ahead and allow us to push forward boldly. Even during this period of uncertainty, for instance, we have introduced meaningful benefits for faculty and staff, including new retirement incentives and an annual childcare subsidy program.

As you will see in the pages that follow, the exceptional circumstances we faced in 2021-2022 did not limit the reach of our work or constrain our aspirations for the future. In fact, in some ways, they served to focus our efforts on the areas of greatest need. I am deeply grateful for the way our community has come together to take care of one another—and to care for our world.

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, 2022, 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 $270 million on a GAAP basis and $167 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.

***Revenues and Expenses***

Operating revenues increased by 5.0% to $4.8 billion for the year. Yale's largest source of income, spending from the endowment, increased by 3.7% over the prior year to $1,568 million. The second largest source of income, medical services, increased by 6.2% over the prior year to $1,327 million – a sustained rebound from a decline in the early months of the pandemic. The third largest source of income, grants and contracts, increased by 9.7% over the prior year to $962 million. Net tuition, room and board increased by 55.9% over the prior year to $462 million since the vast majority of students who opted to defer admission or take leaves of absence during the pandemic have now matriculated or rejoined the campus community.

Operating expenses grew by 8.1%. Salaries, wages, and benefits increased by 6% after lifting the hiring and salary freezes instituted during the pandemic and providing enhanced employee benefits during the pandemic. Other operating expenditures increased by 16.3%, impacted by several factors, including pandemic-related expenses such as testing and personal protective equipment, the resumption of travel, and the resurgence of on-campus and other activities. The significant rise of inflation this year applied pressure to costs of various operations at the university, including notably increased food and energy prices.

***Yale Endowment***

The investment return for the Yale Endowment was 0.8% for the year. This result highlights the volatility of investment returns from one year to the next, and the consequent importance of the Endowment Spending Policy. The policy aims to maximize a stable flow of income to the budget while preserving the value of the endowment in real terms to support future generations of students and scholars.

The university aims to spend 5.25% of the endowment's value each year, which means the university needs an endowment return of 8.25% to replenish this outlay (5.25% in spending plus long-term inflation of 3%) to sustain this level of spending for future generations. The 2021-22 investment return was lower than that long-term sustainable return, which might reasonably lead someone to conclude the budget for endowment income needs to be reduced for the next year. In fact, the next budget year will see a healthy *increase* in spending on teaching and research from the endowment because of the smoothing component of the Endowment Spending Policy, explained in Footnote 1d of the financial statements. The smoothing component moderates the impact of recent returns (high and low), which delivers on the goal of a stable flow of income to the budget, a vital element for the successful operation of the university.

***Fundraising and the For Humanity Campaign***

October 2, 2021 marked the launch of the public phase of the For Humanity fundraising campaign to ensure faculty and students at Yale have the support they need to tackle the most critical challenges facing humankind. Guided by Yale's mission to improve the world now and for future generations, and with a goal of raising $7 billion by June 2026, this campaign is the most ambitious fundraising effort in Yale's history. The remarkable generosity of Yale's alumni and friends – including individuals, corporations, and foundations – provides essential funding for student financial aid, investments in research, and every aspect of the university's operations, and this year finished with aggregate contributions of $614 million.

***Capital Spending Highlights***

Capital spending on facilities for this year totaled $378 million. Several major projects underway include the comprehensive renovations to the Peabody Museum – which will feature a K-12 education center, a bright central gallery to host year-round events, and a new outdoor courtyard for community gatherings – and Kline Tower – which will feature open-plan three-story departmental clusters as the new home for the departments of Astronomy, Mathematics, and Statistics and Data Science, as well as the new Kline Tower Institute (KTI) for the Foundations of Data Science. A new building will house the Tobin Center for Economic Policy – which will reduce the time from research to impact by enabling more policy-relevant research. In addition, with the transformation of 100 College Street, it will soon house the departments of Neuroscience and Psychology together with the new Wu Tsai Institute, whose goal is to understand human cognition.

***Supporting the Yale Community***

While the COVID-19 pandemic continued to have an impact on the university's financial results during the 2021-22 financial year, it was significantly less pronounced than the previous two years. Despite three fiscal years which have seen considerable impact on revenues and costs, Yale remains in a strong financial position, and that will enable the university to continue to push forward with exciting investments to further strengthen and advance our mission.

We are grateful for the extraordinary faculty, students, staff, alumni, and friends of the Yale community and their efforts each day "to improve the world 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 expensed in the year acquired versus the historical cost depreciation expensed 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

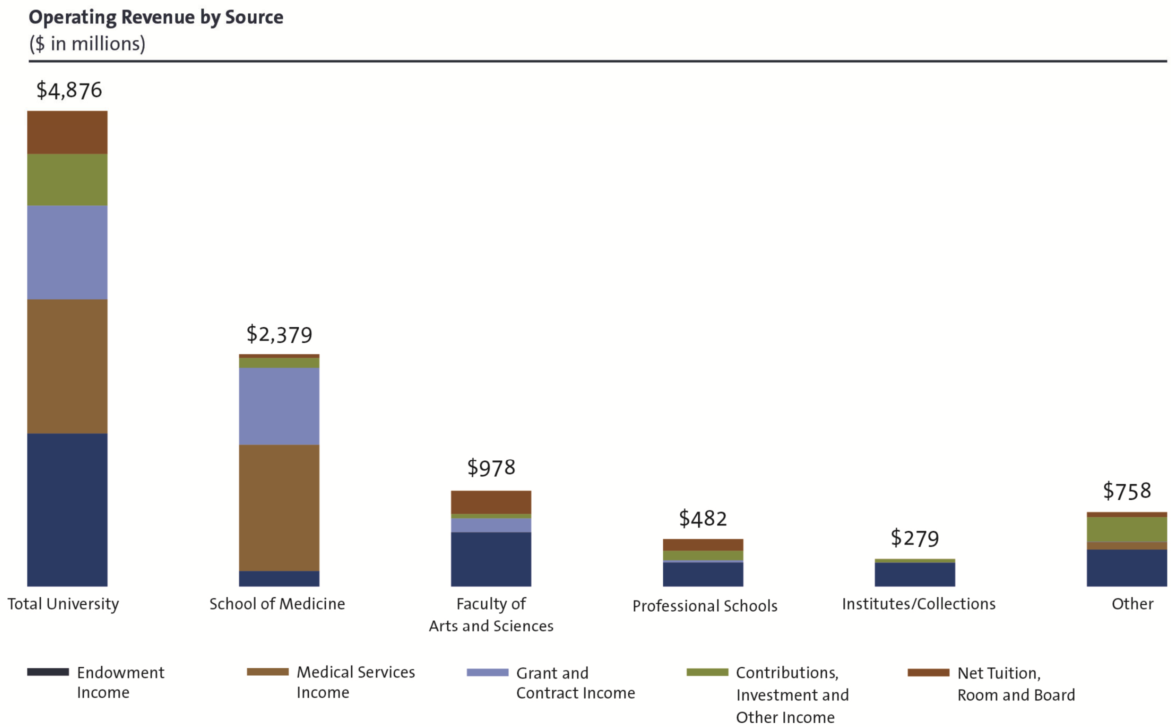
for the years ended June 30, 2022 and 2021 ($ in thousands)

| | June 30, 2022 | June 30, 2021 |
|---|---|---|
| **Revenues:** | | |
| Tuition, room and board - gross | $ 878,158 | $ 650,331 |
| Tuition discount | (432,288) | (357,036) |
| **Tuition, room and board - net** | **445,870** | **293,295** |
| Grants and contract income | 962,088 | 876,936 |
| Medical services income | 1,373,968 | 1,293,680 |
| Contributions | 235,631 | 201,229 |
| Endowment income | 1,567,656 | 1,511,831 |
| Investment and other income | 291,267 | 366,789 |
| **Total external income** | **4,876,480** | **4,543,760** |
| **Expenses:** | | |
| Faculty salaries | 1,182,151 | 1,078,617 |
| All other salaries | 1,020,752 | 963,966 |
| Employee benefits | 767,888 | 698,987 |
| **Total salaries and benefits** | **2,970,791** | **2,741,570** |
| Stipends and fellowships | 123,115 | 110,157 |
| Non-salary expenses | 1,130,790 | 962,729 |
| Interest, CRC and other amortization | 426,382 | 408,440 |
| **Total expenses** | **4,651,078** | **4,222,896** |
| Transfers | (58,902) | (44,972) |
| **TOTAL NET OPERATING RESULTS (MANAGEMENT VIEW)** | **166,500** | **275,892** |
| Summary of differences between the Management View and GAAP presentation of net operating results: | | |
| Operating pledge activity | (2,788) | 46,768 |
| Expenses related to long-term liabilities | (6,834) | (81,264) |
| Capital funding, depreciation and disposals | (6,910) | (30,934) |
| Lease activity | 2,157 | 2,157 |
| Interest rate swaps | 58,792 | 55,344 |
| Deferred investment income | - | 64,627 |
| Funding transfers | 58,902 | 44,972 |
| **INCREASE IN NET ASSETS FROM OPERATIONS PER THE CONSOLIDATED STATEMENT OF ACTIVITIES (GAAP VIEW)** | **$ 269,819** | **$ 377,562** |

**Fiscal Year 2022 Management View Results**

The university budget structure is managed through 49 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 2022.




**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 (29%), BlueCross BlueShield (30%), Medicare (22%), Medicaid (9%), and commercial insurance and others (10%). Additionally, approximately 38% of the School of Medicine's medical services income in 2022 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, 2022, YM included 1,580 full-time and 182 part-time physicians providing services in over 100 specialty and subspecialty areas organized into 21 departments, engaging in research, and participating in teaching approximately 1,412 total students (excluding Ph.D. students) and 916 residents. The School of Medicine performs significant research for federal and state governments, foundations, and corporate entities. Research funded by the federal government represents 81% 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.

**Faculty of Arts and Sciences**

The Faculty of Arts and Sciences includes Yale's undergraduate and graduate programs in the arts and sciences. During the 2021-2022 academic year, 6,536 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. Foreign 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 2021-2022 academic year, 3,309 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, and the School of Management. During the 2021-2022 academic year, 3,499 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 $167 million on the Management View basis. Operating revenues increased 7% and operating expenses, excluding transfers, increased 10% compared to 2021. Net tuition, room, and board grew significantly due to increased enrollment from matriculating students who had deferred admission or taken leaves of absence during the pandemic. Grant and contract income, as well as medical services income, were higher than the prior year due to research and clinical activities continuing to increase post-pandemic. Expenses grew faster than revenue due to increased activity on campus after the acute phase of the pandemic as well as inflation.

# Fiscal Year 2022 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 $462 million in fiscal year 2022, an increase of 56% from 2021, and represented 10% of the university's total operating revenue. Gross tuition, room and board totaled $878 million in 2022, an increase of 35% from 2021 which totaled $650 million. Of this amount, $771 million represents tuition, a 25% increase over 2021 and $107 million represents revenue from room and board, which increased over 200% from 2021. These increases are primarily due to an increase in enrollment as the university returns to a pre-pandemic learning model, a return of students who deferred their studies in 2021 to 2022, and increased enrollment related to the two new residential colleges. In accordance with GAAP, student income is presented net of certain scholarships and fellowships, which totaled $416 million and $354 million for 2022 and 2021, respectively, representing an 18% increase in 2022. Scholarships and fellowships as a percentage of gross tuition, room and board were 47% and 54% for 2022 and 2021, respectively. These amounts fluctuate based on the needs of enrolled students.

Tuition for students enrolled in Yale College was $59,950, and room and board was $17,800, bringing the total term bill to $77,750 for the 2021-2022 academic year. The increase in the Yale College term bill was 4% over the 2020-2021 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.

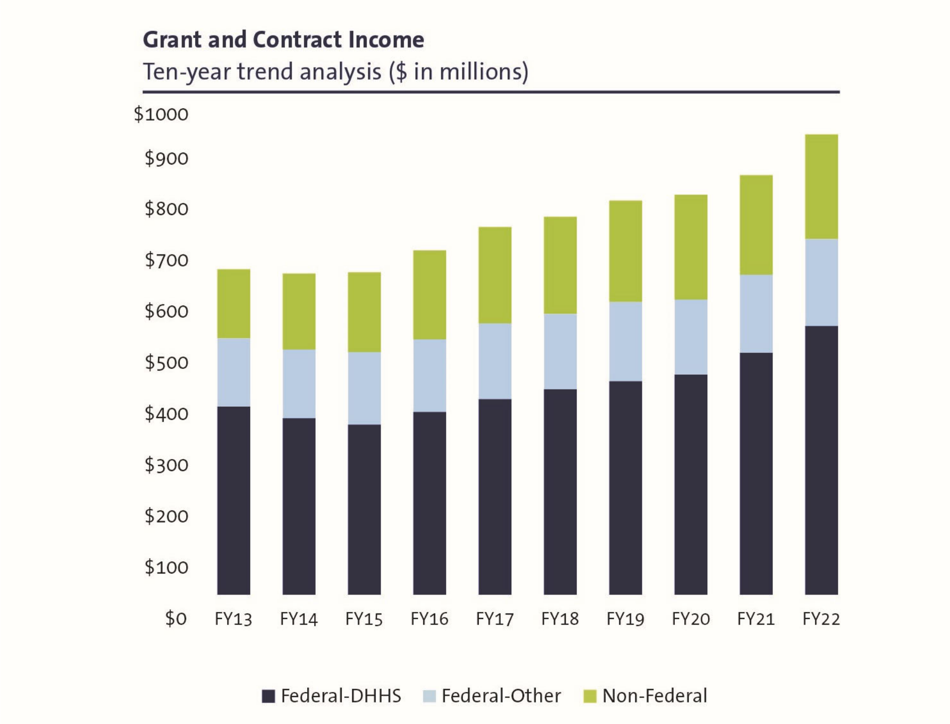
During the 2021-2022 academic year, 54% of Yale College undergraduates received financial aid. In the Graduate School of Arts and Sciences, 99% received financial aid in the form of tuition discounts, stipends, and health insurance. In the professional schools, 83% received financial aid. In all, 74% 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 $962 million in fiscal year 2022, an increase of 10% from 2021, 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 2022, reported an increase of 10% for 2022, while the remaining university units increased by 8%.

Revenue recognized on grants and contracts from the federal government was $743 million, or 77% of 2022 grant and contract income, supporting Yale's research and training programs. Included in the $743 million is Department of Health and Human Services ("DHHS") funding of $561 million, primarily through the NIH, an increase of 11% 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 $219 million in funding for research, training, clinical, and other sponsored agreements during 2022.

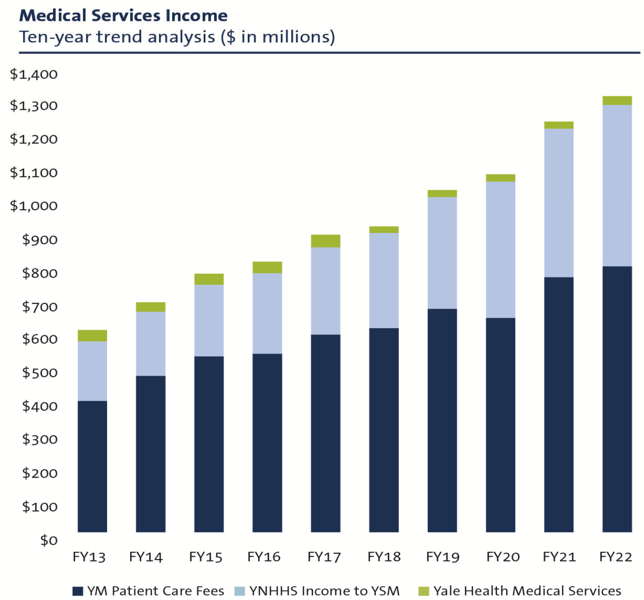
In addition to the reimbursement of direct costs charged to sponsored awards, sponsoring agencies reimburse the university for a portion of its facilities and administrative costs, which include costs related to research laboratory space, facilities, and utilities, as well as administrative and support costs incurred for sponsored activities. These reimbursements for facility and administrative costs amounted to $245 million in 2022 and $230 million in 2021. 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, and the base year for the university's next facilities and administrative calculation is fiscal year 2022.




## Medical Services Income

Medical services income totaled $1.3 billion in fiscal year 2022, an increase of 6% from 2021, and represented 28% of the university's operating revenue. The largest portion of this revenue stream is derived from medical services provided by YM. The Hospital continued to invest in YM in fiscal year 2022 with support increasing by 9% to a total of $492 million for clinical services, investment in faculty recruitment, and new clinical programs. In addition, positive discussions continue around increased support from the Hospital for physician compensation and program development.

Medical services income generated by YM increased by $70 million over 2021, or 6%. Patient care income, which accounts for 54% of medical services income, was up $22 million or 3%. Both ambulatory and surgical volumes experienced growth in fiscal year 2022, despite a temporary dampening to clinical practice volumes in early January 2022 related to reduced surgical procedures that resulted from a recent wave of COVID-19. 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).




**Contributions**

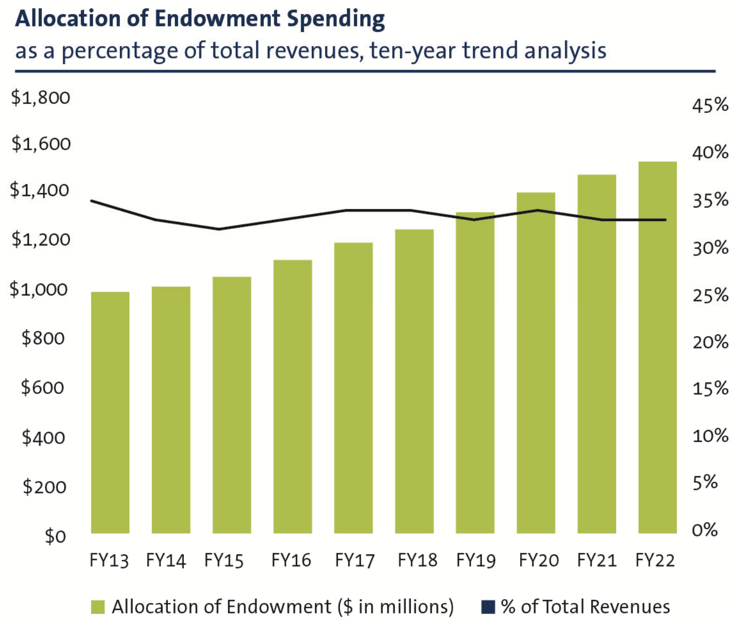
Donations from individuals, corporations, and foundations represent a vitally important source of revenue for the university. Gifts to the university provide necessary funding for current operations, for long-term investments in the university's physical infrastructure, and, in the case of gifts to the endowment, provide permanent resources for core activities for future generations. Gifts of $233 million in 2022 and $247 million in 2021, 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 $614 million in 2022 compared to $946 million in 2021, which was a record-breaking year.

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 33% of total operating revenue in fiscal year 2022, 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 4% in 2022 to $1.6 billion.

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, and application and enrollment fees.

## Operating Expenses

Operating expenses totaled $4.5 billion for 2022, representing an 8% increase over 2021. With 5,086 faculty, 1,501 postdoctoral and postgraduate associates, 5,168 managerial and professional staff ("M&P"), and 5,160 clerical, technical, service, and maintenance personnel, personnel costs are the single largest component (63%) of the university's total operating expenses (counts represent headcount as of fall 2021).

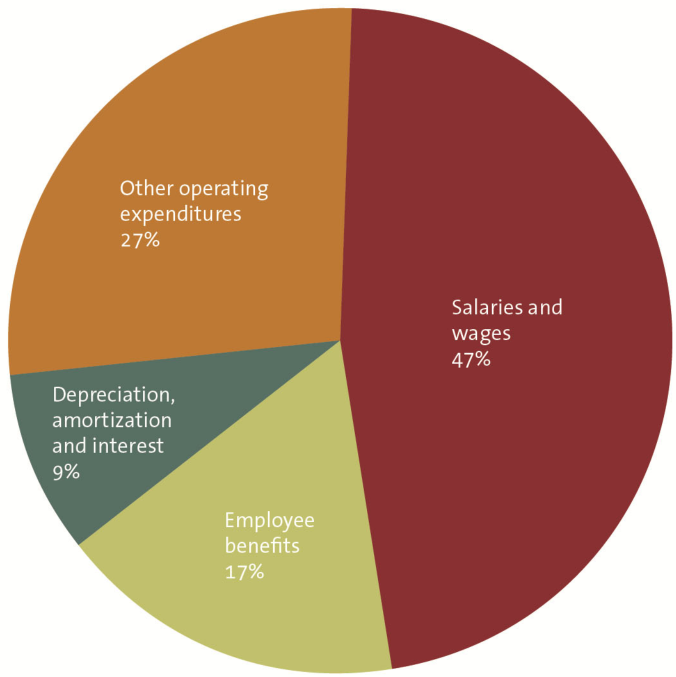
Personnel costs were $2.9 billion in 2022, a 6% increase over 2021. Faculty salary expenses increased 10% which is partly attributable to an increased headcount to support growth in clinical activities. Staff salaries and wages increased 4% from 2021 to 2022, largely due to the lifting of the salary freezes implemented during the pandemic. 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 $760 million for 2022, an increase of 3% from 2021.

Depreciation, amortization, and interest expense remained relatively flat from 2021.

Other operating expenses, including services, materials and supplies, and other expenses, increased 16% from 2021, primarily due to an increase in non-salary expenses in most schools and units, driven by increased activity on campus 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.

**Operating Expenses by Natural Classification**

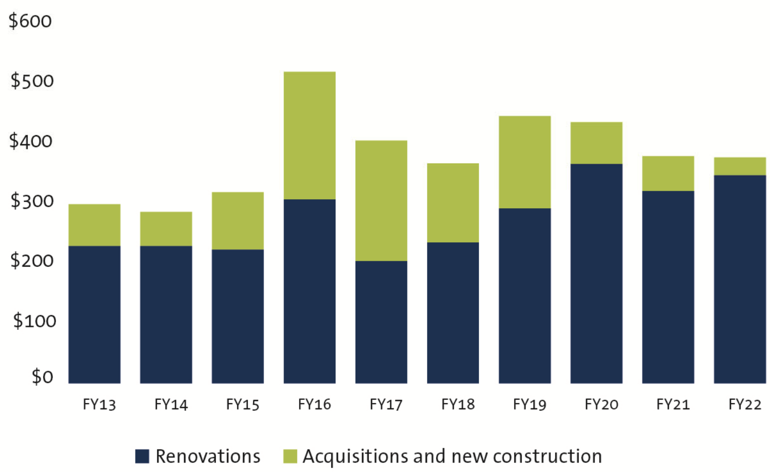



The university spent 69% of its operating resources on programmatic support, 24% on patient care and other related services, and 7% on administration and other institutional support.

## Physical Capital

Capital spending on facilities in fiscal year 2022 totaled $378 million. This represents a decrease of less than 1% from the 2021 spending level.

**Capital Spending by Year**
Ten-year trend analysis (in 2022 dollars, in millions)




The Yale School of Medicine ("YSM") accounted for approximately 21% of the university's 2022 capital expenditures. Investments were made to support a new YSM laboratory and dry research space at 100 College Street, including the renovation and expansion of the existing Yale Animal Resources Center vivarium, and a new centralized research support facility at 750 West Campus Drive. 100 College Street will also be home to the Wu Tsai Institute and faculty from across campus, including the Departments of Psychology and Neuroscience. The remaining expenditures are related to other programmatic renovations, clinical expansion and upgrades, and capital maintenance projects throughout the school.

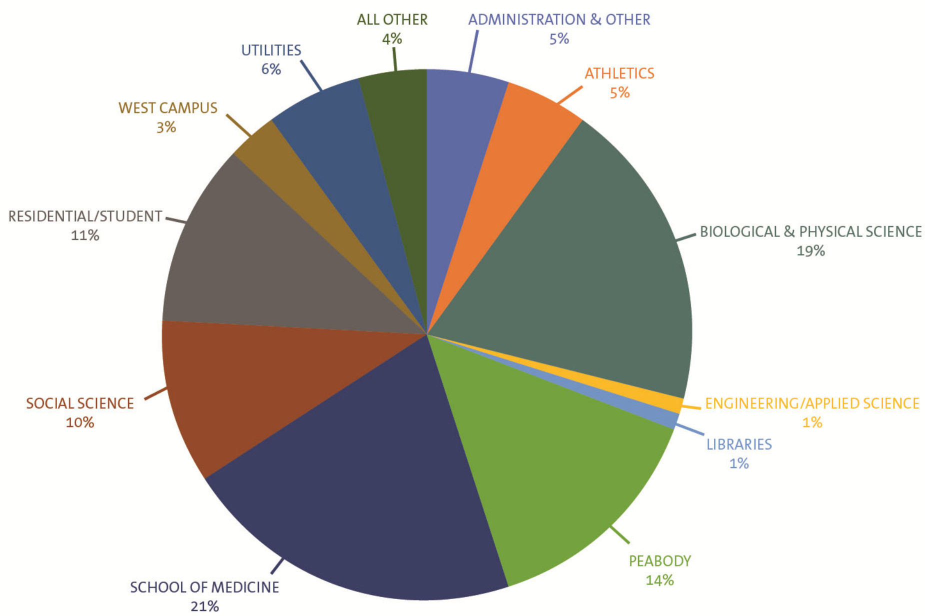
Nineteen percent of the university's capital spending was invested in the sciences on the central campus. Work progressed on the comprehensive renovation of Kline Tower, Yale's tallest building. This renovation will prepare Kline to become the new home for the departments of Astronomy, Mathematics, and Statistics and Data Science, as well as the new Kline Tower Institute ("KTI") for the Foundations of Data Science. Construction began in January 2021 and is scheduled to complete in summer 2023. Investments were also made to support various building code upgrades, and for renovations to support programmatic needs throughout the sciences.

Fourteen 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"). The renovated Museum will feature a new K-12 Education Center with dedicated classrooms for local schoolchildren, a light-filled Central Gallery designed to host outreach events year-round, and a new outdoor courtyard space for community gatherings. In all, the Museum's total gallery space will expand by over 50%. Construction began in October 2020 and is scheduled to complete in March 2023. The Museum's galleries are scheduled to reopen in 2024.

Eleven percent of the university's capital spending went to capital maintenance renovations to interior and exterior building elements on residential colleges that were vacant during the summer months (Trumbull, Branford, and Saybrook), and to the completion of the Yale Schwarzman Center, a university-wide center for student life and the arts. The university also invested 10% of its capital spending in the social sciences.

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 2022 totaled $112 million, which includes gifts to support the comprehensive renovation of the Museum and construction on the Economics Building that will house 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 2022 is $295 million. In 2022, most of this amount was funded with operating funds and capital gifts.

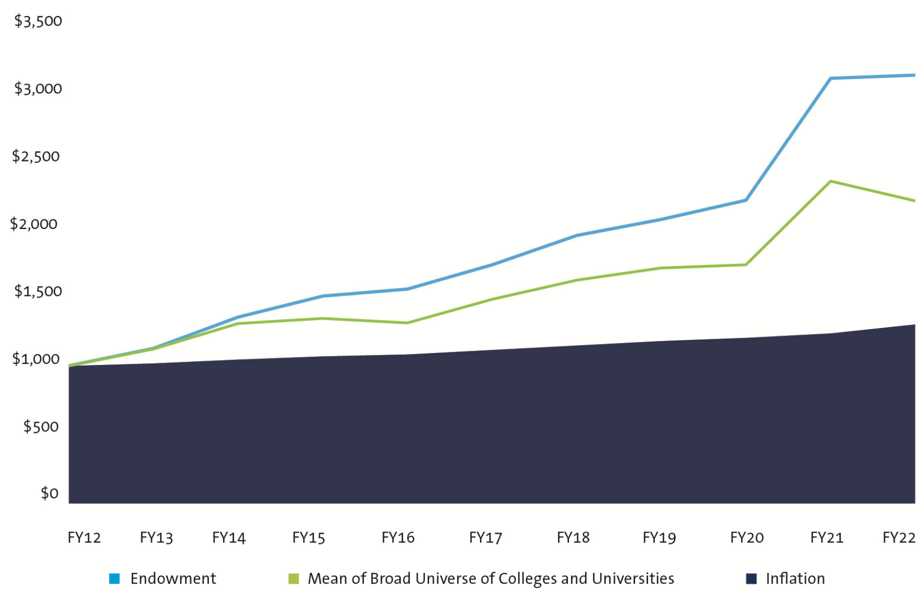
## Endowment

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, 2022, net assets in the endowment totaled approximately $41.4 billion, after the allocation of endowment spending of $1.6 billion to the operating budget during the year.

**Investment Performance**

For the fiscal year ended June 30, 2022, the endowment earned a 0.8% investment return. During the past decade, the endowment earned an annualized 12.0% return, which added $20.6 billion of value relative to a composite passive benchmark and $13.0 billion relative to the mean return of a broad universe of colleges and universities.

**Growth of $1,000 Invested in the Yale Endowment**
2012-2022



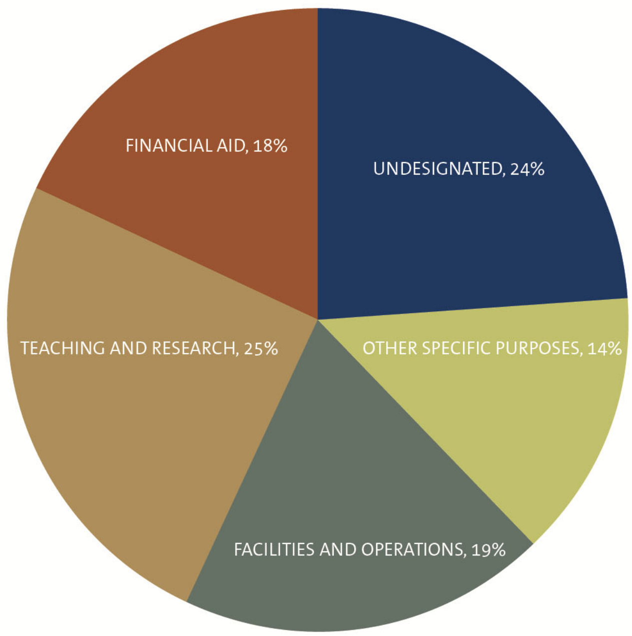

**Endowment Spending**

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 targeted spending rate combined with a smoothing rule, which adjusts spending in any given year gradually in response to changes in endowment market value.

The targeted spending rate approved by the Yale Corporation currently stands at 5.25%. According to the smoothing rule, endowment spending in a given year sums to 80% of the previous year's spending and 20% of the targeted 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, including purposes to 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 equity. In addition, the endowment's vulnerability to inflation directs the university away from fixed income and toward equity instruments. Hence, about 92% of the endowment 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 ("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 Corporation (the "Corporation") 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 Corporation, 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

## 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, 2022 and 2021, and the related consolidated statements of activities for the year ended June 30, 2022, and of cash flows for the years ended June 30, 2022 and 2021, 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 and its subsidiaries as of June 30, 2022 and 2021, the changes in its net assets for the year ended June 30, 2022 and its cash flows for the years ended June 30, 2022 and 2021 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 audits. 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, 2021 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 25, 2021, 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, 2021 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 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 financial statements are issued.

### *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements*

Our objectives are to obtain reasonable assurance about whether the 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 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 University 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 evaluating 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 2021-2022, 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 21, 2022

# Yale University Consolidated Statements of Financial Position

as of June 30, 2022 and June 30, 2021 ($ in thousands)

| | | 2022 | | 2021 |
|---|---|---|---|---|
| **Assets:** | | | | |
| Cash and cash equivalents | $ | 712,614 | $ | 772,593 |
| Accounts receivable, net | | 405,683 | | 397,974 |
| Contributions receivable, net | | 1,020,493 | | 1,197,417 |
| Notes receivable | | 89,912 | | 96,509 |
| Investments, at fair value | | 46,472,072 | | 47,830,139 |
| Right of use assets | | 179,645 | | 182,694 |
| Other assets | | 240,814 | | 238,088 |
| Land, buildings and equipment, net of accumulated depreciation | | 5,598,069 | | 5,507,845 |
| **Total assets** | $ | 54,719,302 | $ | 56,223,259 |
| | | | | |
| **Liabilities:** | | | | |
| Accounts payable and accrued liabilities | $ | 615,340 | $ | 631,093 |
| Advances under grants and contracts and other deposits | | 194,594 | | 174,478 |
| Lease liabilities | | 253,081 | | 254,428 |
| Other liabilities | | 1,368,728 | | 1,957,123 |
| Liabilities under split-interest agreements | | 130,816 | | 149,105 |
| Bonds and notes payable | | 5,164,430 | | 5,199,573 |
| Liabilities associated with investments | | 2,298,288 | | 3,565,475 |
| **Total liabilities** | $ | 10,025,277 | $ | 11,931,275 |
| | | | | |
| **Net Assets:** | | | | |
| Net assets without donor restrictions: Yale University | $ | 8,592,595 | $ | 7,652,769 |
| Net assets without donor restrictions: non-controlling interests | | 1,621 | | 779 |
| Total net assets without donor restrictions | | 8,594,216 | | 7,653,548 |
| Net assets with donor restrictions | | 36,099,809 | | 36,638,436 |
| **Total net assets** | $ | 44,694,025 | $ | 44,291,984 |
| | | | | |
| **Total liabilities and net assets** | $ | 54,719,302 | $ | 56,223,259 |

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

# Yale University Consolidated Statement of Activities

for the year ended June 30, 2022 with summarized comparative totals for the year ended June 30, 2021 ($ in thousands)

| | Without Donor Restrictions | With Donor Restrictions | 2022 | 2021 |
|---|---|---|---|---|
| **Operating** | | | | |
| *Revenues and releases:* | | | | |
| Net tuition, room and board | $ 461,513 | $ - | $ 461,513 | $ 295,972 |
| Grant and contract income, primarily for research and training | 962,088 | - | 962,088 | 876,936 |
| Medical services income | 1,327,268 | - | 1,327,268 | 1,250,086 |
| Contributions | 18,457 | 214,125 | 232,582 | 247,471 |
| Allocation of endowment spending from financial capital | 449,993 | 1,118,449 | 1,568,442 | 1,512,601 |
| Other investment income | 59,158 | 10,573 | 69,731 | 163,076 |
| Other income | 188,447 | 48 | 188,495 | 232,963 |
| **Total revenues** | 3,466,924 | 1,343,195 | 4,810,119 | 4,579,105 |
| Net assets released from restrictions | 1,173,387 | (1,173,387) | - | - |
| **Total revenues and releases** | $ 4,640,311 | $ 169,808 | $ 4,810,119 | $ 4,579,105 |
| *Expenses:* | | | | |
| Salaries and wages | $ 2,114,898 | $ - | $ 2,114,898 | $ 1,971,143 |
| Employee benefits | 759,791 | - | 759,791 | 741,114 |
| Depreciation, amortization and interest | 407,795 | - | 407,795 | 407,673 |
| Other operating expenditures | 1,257,816 | - | 1,257,816 | 1,081,613 |
| **Total expenses** | 4,540,300 | - | 4,540,300 | 4,201,543 |
| **Increase in net assets from operating activities** | 100,011 | 169,808 | 269,819 | 377,562 |
| **Non-operating** | | | | |
| Contributions | 1,625 | 379,910 | 381,535 | 698,720 |
| Total endowment return | 50,332 | 215,548 | 265,880 | 12,052,824 |
| Allocation of endowment spending to operations | (278,461) | (1,289,981) | (1,568,442) | (1,512,601) |
| Other investment income | 501,102 | 755 | 501,857 | 433,841 |
| Change in funding status of defined benefit plans | 503,181 | - | 503,181 | 671,287 |
| Other increases (decreases) | 46,941 | 428 | 47,369 | (60,849) |
| Net assets released from restrictions | 15,095 | (15,095) | - | - |
| **Increase in net assets from non-operating activities** | 839,815 | (708,435) | 131,380 | 12,283,222 |
| **Total increase in net assets - Yale University** | 939,826 | (538,627) | 401,199 | 12,660,784 |
| **Change in non-controlling interests** | 842 | - | 842 | (100,754) |
| **Total increase (decrease) in net assets** | 940,668 | (538,627) | 402,041 | 12,560,030 |
| **Net assets, beginning of year** | 7,653,548 | 36,638,436 | 44,291,984 | 31,731,954 |
| **Net assets, end of year** | $ 8,594,216 | $ 36,099,809 | $ 44,694,025 | $ 44,291,984 |

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, 2022 and 2021 ($ in thousands)

| | 2022 | 2021 |
|---|---|---|
| **Operating activities:** | | |
| Change in net assets | $ 402,041 | $ 12,560,030 |
| Adjustments to reconcile change in net assets to net cash used in operating activities: | | |
| Depreciation and amortization | 340,039 | 332,458 |
| Realized and unrealized gain on other investments | (512,958) | (459,059) |
| Net endowment investment loss (gain) | 106,046 | (11,888,742) |
| Change in non-controlling interests | (842) | 100,754 |
| Change in funding status of defined benefit plans | (503,181) | (671,287) |
| Non-operating contributions | (381,535) | (698,720) |
| Contributed securities | (118,421) | (212,670) |
| Proceeds from sale of donated securities | 44,640 | 38,273 |
| Other adjustments | (9,898) | 74,980 |
| Changes in assets and liabilities that (use) provide cash: | | |
| Accounts receivable | (7,709) | (33,122) |
| Contributions receivable | 3,962 | (46,276) |
| Other operating assets | (1,435) | (7,355) |
| Accounts payable and accrued expenses | (191,042) | 224,342 |
| Advances under grants and contracts and other deposits | 20,116 | (9,899) |
| Other liabilities | 94,516 | 170,986 |
| **Net cash used in operating activities** | (715,661) | (525,307) |
| **Investing activities:** | | |
| Student loans repaid | 12,021 | 13,461 |
| Student loans granted | (5,578) | (5,611) |
| Purchases related to capitalized software costs and other assets | (26,560) | (47,426) |
| Proceeds from sales and maturities of investments | 10,593,403 | 15,468,766 |
| Purchases of investments | (10,189,985) | (15,174,268) |
| Purchases of land, buildings and equipment | (424,953) | (381,017) |
| **Net cash used in investing activities** | (41,652) | (126,095) |
| **Financing activities:** | | |
| Proceeds from restricted contributions | 554,497 | 406,029 |
| Proceeds from sale of contributed securities restricted for endowment | 73,781 | 174,397 |
| Contributions received for split-interest agreements | 9,027 | 4,434 |
| Payments made under split-interest agreements | (15,840) | (17,345) |
| Repayments of long-term debt | (16,489) | (50,966) |
| Repayments to the Federal government for student loans | (2,858) | (3,128) |
| **Net cash provided by financing activities** | 602,118 | 513,421 |
| Net decrease in cash and cash equivalents | (155,195) | (137,981) |
| Cash and cash equivalents, beginning of year | 931,177 | 1,069,158 |
| **Cash and cash equivalents, end of year** | $ 775,982 | $ 931,177 |

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"), 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, twelve 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, 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:

| | | 2022 | 2021 |
|---|---|---|---|
| Total assets, at year end | | $ 54,719,302 | $ 56,223,259 |
| Less nonfinancial assets: | | | |
| | Land, buildings and equipment, net of accumulated depreciation | 5,598,069 | 5,507,845 |
| | Other assets | 240,814 | 238,088 |
| | Right of use assets | 179,645 | 182,694 |
| Financial assets, at year end | | 48,700,774 | 50,294,632 |
| Less those unavailable for general expenditure within one year due to contractual or donor-imposed restrictions: | | | |
| | Restricted by donor with time or purpose restrictions | 914,040 | 1,095,679 |
| | Subject to appropriation and satisfaction of donor restrictions including board-designated endowments | 43,255,859 | 44,779,408 |
| | Other long-term notes receivable | 89,912 | 96,509 |
| Financial assets available to meet cash needs for general expenditures within one year | | $ 4,440,963 | $ 4,323,036 |

The university has $4,441.0 million of financial assets that are available within one year of the date of the 2022 consolidated statement of financial position to meet cash needs for general expenditure consisting of cash of $712.6 million, accounts receivable of $405.7 million, contributions receivable of $106.5 million, and short-term investments of $3,216.2 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 $7,189.6 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 $1,556.3 million and $1,187.9 million at June 30, 2022 and 2021, 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:

| | 2022 | 2021 |
|---|---|---|
| Cash paid during the year for interest | $ 166,862 | $ 170,086 |
| Noncash investing activities: | | |
| Land, buildings and equipment purchases payable to vendor | $ 46,148 | $ 53,568 |

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

| | 2022 | 2021 |
|---|---|---|
| Cash paid for amounts included in measurement of liabilities: | | |
| Operating cash flows from financing leases | $ 7,719 | $ 7,730 |
| Operating cash flows from operating leases | 9,798 | 10,422 |
| Financing cash flows from financing leases | 6,691 | 4,783 |
| Non-cash lease related items: | | |
| ROU assets obtained in exchange for new financing liabilities | $ - | $ 41,561 |
| ROU assets obtained in exchange for new operating liabilities | 20,572 | 3,178 |

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.

| | 2022 | 2021 |
|---|---|---|
| Cash and cash equivalents | $ 712,614 | $ 772,593 |
| Cash included in Investments, at fair value | 63,368 | 158,584 |
| Total cash and cash equivalents shown in the consolidated statements of cash flows | $ 775,982 | $ 931,177 |

### 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, 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. There were no endowment funds in a deficit position at June 30, 2021.

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 2022 and 2021, when measured against the previous year's June 30th endowment fair value, was 3.8% and 5.0%, 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, 2022 and 2021.

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 an 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 14,600 and 12,100 in 2022 and 2021, 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 58.5% and 49.9% of total tuition, room and board revenue in 2022 and 2021, 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 $416.6 million and $354.4 million in 2022 and 2021, 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, 2022 and 2021, the university has research activities which are contractually authorized by the sponsor, but for which costs have not yet been incurred, totaling $1,612.3 million and $1,775.8 million, respectively.

In 2022 and 2021, grant and contract income from the federal government totaled $743.3 million and $668.6 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 will expire on June 30, 2023. New rates will be negotiated 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:

| | | 2022 | | 2021 |
|---|---|---|---|---|
| Gross Revenue | $ | 2,337,674 | $ | 2,257,944 |
| Allowances and discounts | | (1,628,166) | | (1,572,897) |
| Total patient care revenue | $ | 709,508 | $ | 685,047 |

In 2022 and 2021, net patient revenue, included in income from medical services, totaled $515.5 million and $494.5 million from insurance companies, $192.9 million and $182.9 million from Medicare, $74.6 million and $74.0 million from Medicaid, and $88.9 million and $80.9 million from other third parties, 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 Tax Cuts and Jobs Act (the "Act"), enacted on December 22, 2017, impacts the university in several ways, including the introduction of 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. Management will continue to monitor regulatory developments and assess the future impact of the relevant provisions of the Act on the university's consolidated financial statements.

**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, 2020, the university adopted new accounting guidance relating to the accounting for collections. The new guidance provides for an updated definition of collections and was not significant to the university's consolidated financial statements.

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. Reclassifications**

Certain amounts from 2021 have been reclassified to conform to the current year presentation.

**v. Summarized 2021 Financial Information**

The 2022 consolidated financial statements include selected comparative summarized financial information for 2021. 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 2021 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 absolute return (hedge strategies), private equity (venture capital and leveraged buyouts), real estate, and natural resources (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:

| | 2022 | 2021 |
|---|---|---|
| Endowment investments: | | |
| Long-term investment pool | $ 41,059,569 | $ 41,790,089 |
| Other | 62,704 | 122,493 |
| Total net endowment investments | 41,122,273 | 41,912,582 |
| Non-endowment investments: | | |
| Long-term investment pool | 300,000 | 300,000 |
| Fixed income | 1,347,771 | 1,356,965 |
| Derivatives | (75,334) | (628,384) |
| Other | 1,477,453 | 1,322,722 |
| Total non-endowment investments | 3,049,890 | 2,351,303 |
| Net investments, at fair value | $ 44,172,163 | $ 44,263,885 |

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:

| 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 |

| 2021 | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Investments, at fair value: | | | | |
| Cash and short-term investments | $ 1,519,592 | $ - | $ - | $ 1,519,592 |
| Fixed income | 4,305,650 | - | 65 | 4,305,715 |
| Common stock: | | | | |
| Domestic | 943,860 | 13,513 | 3,972 | 961,345 |
| Foreign | 1,427,070 | - | 80,689 | 1,507,759 |
| Total common stock | 2,370,930 | 13,513 | 84,661 | 2,469,104 |
| Other equity investments: | | | | |
| Developed equities | - | - | 1,388 | 1,388 |
| Real assets | - | - | 618,580 | 618,580 |
| Venture capital | - | - | 479,519 | 479,519 |
| Total other equity investments | - | - | 1,099,487 | 1,099,487 |
| Other investments | 160,314 | 325,074 | 303,582 | 788,970 |
| Total leveled investments, at fair value | $ 8,356,486 | $ 338,587 | $ 1,487,795 | 10,182,868 |
| Investments at net asset value | | | | 37,647,271 |
| Total investments | | | | $ 47,830,139 |
| | | | | |
| Liabilities associated with investments: | | | | |
| Securities sold, not yet purchased | $ 787,354 | $ - | $ - | $ 787,354 |
| Other liabilities | 52,339 | 986,705 | 1,739,077 | 2,778,121 |
| Total liabilities associated with investments | $ 839,693 | $ 986,705 | $ 1,739,077 | 3,565,475 |
| Non-controlling interests | | | | 779 |
| Net investments | | | | $ 44,263,885 |

Included within cash and short-term investments are restricted short-term investment balances held as collateral in the amount of $1,493.0 million and $1,029.3 million as of June 30, 2022 and 2021, 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:

| | 2022 | 2021 |
|---|---|---|
| Developed equities | $ 4,455,361 | $ 5,240,678 |
| Emerging equities | 1,648,280 | 1,872,947 |
| Leveraged buyouts | 8,888,559 | 8,758,246 |
| Marketable alternatives | 5,303,852 | 5,210,590 |
| Real assets | 5,488,279 | 4,587,370 |
| Venture capital | 11,004,914 | 11,977,440 |
| Total investments, at NAV | $ 36,789,245 | $ 37,647,271 |

Assets and liabilities of investment companies that are controlled by the university are consolidated for reporting purposes. Certain investment companies are required to be consolidated for financial reporting purposes. 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:

| | 2022 | 2021 |
|---|---|---|
| Consolidated investment company assets | $ 125,108 | $ 135,643 |
| Consolidated investment company liabilities | 4,692 | 4,479 |
| | $ 120,416 | $ 131,164 |

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** | **2022** | **2021** | **Valuation Technique** | **Significant Unobservable Input** | **2022** | **2021** | **2022** | **2021** |
| Emerging equities | $ 58,545 | $ 84,661 | 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 | $ 1,604,274 | $ 1,388 | Carried interest calculation | Fund high water mark | N/A | * | N/A | * |
| | | | Discount for illiquidty | Discount rate | * | 50.0 - 60.0% | * | 55.0% |
| Fixed income | $ 1,185 | $ 65 | Indicative market quotations | Recent funding activity | N/A | N/A | N/A | N/A |
| Real assets | $ 439,971 | $ 618,580 | Discounted cash flow | Discount rate | 8.0 - 12.0% | 8.0 - 12.0% | 10.0% | 10.0% |
| Trusts | $ 208,054 | $ 237,210 | Net present value | Discount rate | 3.7% | 2.3% | 3.7% | 2.3% |
| Venture capital | $ 227,937 | $ 479,519 | Tax analysis | Likelihood of taxation | 0.0% | 0.0% | N/A | N/A |
| Other investments | $ 106,265 | $ 66,372 | Market comparables | Price per acre | $8,834.00 - $9,164.00 | $8,834.00 - $9,164.00 | $9,000.00 | $9,000.00 |
| Liabilities | $ (1,664,611) | $ (1,739,077) | Various methods | University pooled unit market value | $4,885.00 | $5,041.79 | N/A | N/A |

* Valuation technique does not apply to year.

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 losses of $114.1 million and unrealized gains of $94.5 million that relate to investments held at June 30, 2022 and 2021, 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:

| 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 gain (loss), 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 |

| 2021 | Developed equities | Real assets | Venture capital | Other | Liabilities | Total |
|---|---|---|---|---|---|---|
| Beginning balance | $ 5,483 | $ 234,977 | $ 342,778 | $ 481,351 | $ (1,443,823) | $ (379,234) |
| Realized and unrealized gain (loss), net | (2,112) | 248,309 | 199,130 | 42,686 | (395,115) | 92,898 |
| Purchases | - | 13,243 | 420 | 20,992 | (63,340) | (28,685) |
| Sales | (1,983) | (47,686) | (62,809) | (7,285) | 163,201 | 43,438 |
| Transfers in | - | 169,737 | - | - | - | 169,737 |
| Transfers out | - | - | - | (149,436) | - | (149,436) |
| Ending balance | $ 1,388 | $ 618,580 | $ 479,519 | $ 388,308 | $ (1,739,077) | $ (251,282) |

Transfers into Level 3 consist primarily of investments reclassified from NAV to level 3 as the practical expedient is not used for certain limited partnership investments. Transfers out of Level 3 consist of investments reclassified from level 3 to NAV due to the use of the practical expedient and investments transferred out as a result of deconsolidation of investment entities.

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

| Asset Class | Fair Value (in 000s) 2022 | Fair Value (in 000s) 2021 | Remaining Life | Unfunded Commitment (in 000s) 2022 | Unfunded Commitment (in 000s) 2021 | Redemption Terms | Redemption Restrictions |
|---|---|---|---|---|---|---|---|
| Developed equities | $ 6,059,635 | $ 5,242,066 | No Limit | $ 82,872 | $ 114,041 | 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 | 1,648,280 | 1,872,947 | No Limit | 126,000 | 110,700 | 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 | 8,888,559 | 8,758,246 | 1-25 years | 4,523,006 | 4,438,331 | Closed end funds not eligible for redemption. | Not redeemable. |
| Marketable alternatives | 5,303,852 | 5,210,590 | No Limit | 115,719 | 268,586 | 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 | 5,928,250 | 5,205,950 | 1-25 years | 2,456,597 | 3,015,820 | Closed end funds not eligible for redemption. | Not redeemable. |
| Venture capital | 11,232,851 | 12,456,959 | 1-25 years | 2,095,548 | 1,524,279 | Redemption terms range from 2 years with 3 years notice to closed end structures not available for redemption. | Not redeemable. |
| Total | $ 39,061,427 | $ 38,746,758 | | $ 9,399,742 | $ 9,471,757 | | |

The fair value of fixed income securities of $176.8 million and $520.5 million was provided at June 30, 2022 and 2021, 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 university does not invest in derivatives for speculation. The fair value of derivative positions held at June 30 and related gain (loss) for the year, in thousands of dollars, were as follows:

| 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) | |
| Net collateral received/(posted) | - | (88,688) | |
| Total net exposure for derivatives | $ 538 | $ 842 | |

2021

| | Assets | Liabilities | (Loss) Gain |
|---|---|---|---|
| Endowment: | | | |
| Other | $ - | $ 45,255 | $ (206,440) |
| | - | 45,255 | (206,440) |
| Other: | | | |
| Interest rate swaps | 27,058 | 672,100 | 423,253 |
| | 27,058 | 672,100 | 423,253 |
| Gross value of derivatives | 27,058 | 717,355 | $ 216,813 |
| Other-counterparty netting | (27,058) | (27,058) | |
| Net collateral received/(posted) | - | (651,036) | |
| Total net exposure for derivatives | $ - | $ 39,261 | |

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 and $2.4 billion at June 30, 2022 and 2021, respectively. The notional amount of contracts that pay based on variable rates and receive based on fixed rates were $800.0 million and $725.0 million at June 30, 2022 and 2021, 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 $168.6 million and $186.8 million at June 30, 2022 and 2021, respectively.

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

| | 2022 | 2021 |
|---|---|---|
| Charitable gift annuities | $ 289,105 | $ 293,211 |
| Charitable remainder trusts | 103,370 | 124,504 |
| Pooled income funds | 5,675 | 5,762 |
| | $ 398,150 | $ 423,477 |

Split-interest liabilities reported in the consolidated statement of financial position totaled $130.8 million and $149.1 million at June 30, 2022 and 2021, 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 $1,370.6 million and $1,464.4 million at June 30, 2022 and 2021, respectively. The largest balance recorded is for the Hospital, with $1,037.0 million and $1,121.4 million invested at June 30, 2022 and 2021, 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:

| | 2022 | 2021 |
|---|---|---|
| Investment income | $ 371,926 | $ 164,082 |
| Realized and unrealized (loss) gain, net of investment management fees | (106,046) | 11,888,742 |
| Total endowment return | 265,880 | 12,052,824 |
| Other investment income | 571,588 | 596,917 |
| | $ 837,468 | $ 12,649,741 |

Endowment investment returns totaling $1,568.4 million and $1,512.6 million were allocated to operating activities in 2022 and 2021, 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:

| | 2022 | 2021 |
|---|---|---|
| Medical services | $ 323,304 | $ 284,411 |
| Grant and contracts | 116,048 | 132,519 |
| Affiliated organizations | 119,644 | 100,965 |
| Publications | 7,267 | 6,294 |
| Other | 73,998 | 78,426 |
| | 640,261 | 602,615 |
| Less: Allowance for doubtful accounts | (234,578) | (204,641) |
| | $ 405,683 | $ 397,974 |

Medical services receivables are net of discounts and allowances of $218.5 million and $188.8 million at June 30, 2022 and 2021, respectively.

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

| | 2022 | 2021 |
|---|---|---|
| Insurance companies | 45% | 47% |
| Payments due directly from patients | 22% | 23% |
| Medicare | 17% | 15% |
| Commercial insurance and others | 11% | 11% |
| Medicaid | 5% | 4% |

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

The net receivable from the Hospital amounted to $112.9 million and $89.3 million at June 30, 2022 and 2021, respectively. Balances are settled in the ordinary course of business. The university recognized $492.2 million and $453.5 million in revenue and incurred $135.5 million and $122.3 million in expenses related to activities with the Hospital during the years ended June 30, 2022 and 2021, respectively.

## 4. Contributions Receivable

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

| | 2022 | 2021 |
|---|---|---|
| Purpose: | | |
| Operating programs | $ 501,570 | $ 512,226 |
| Endowment | 636,325 | 797,637 |
| Capital purposes | 107,334 | 131,250 |
| Gross unconditional promises to give | 1,245,229 | 1,441,113 |
| Less: Discount to present value | (111,307) | (114,403) |
| Allowance for uncollectible accounts | (113,429) | (129,293) |
| | $ 1,020,493 | $ 1,197,417 |
| Amounts due in: | | |
| Less than one year | $ 418,213 | $ 468,030 |
| One to five years | 531,880 | 661,891 |
| More than five years | 295,136 | 311,192 |
| | $ 1,245,229 | $ 1,441,113 |

Discount rates used to calculate the present value of contributions receivable ranged from .07% to 7.00% at June 30, 2022 and 2021.

The university had conditional pledges of approximately $16.4 million and $17.4 million at June 30, 2022 and June 30, 2021, respectively, which are subject to donor-imposed conditions.

## 5. Notes Receivable

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

| | 2022 | 2021 |
|---|---|---|
| Institutional student loans | $ 43,465 | $ 44,187 |
| Federally-sponsored student loans | 10,911 | 14,893 |
| Notes receivable | 48,312 | 49,535 |
| | 102,688 | 108,615 |
| Less: Allowance for doubtful accounts | (12,776) | (12,106) |
| | $ 89,912 | $ 96,509 |

**Student Loans**

Institutional student loans include 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 | 2022 | 2021 |
|---|---|---|---|
| Right of use asset - Operating | Right of use assets | $ 46,506 | $ 41,433 |
| Right of use asset - Financing | Right of use assets | 133,139 | 141,261 |
| Right of use liabilities - Operating | Lease liabilities | 47,304 | 41,959 |
| Right of use liabilities - Financing | Lease liabilities | 205,777 | 212,469 |

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 | 2022 | 2021 |
|---|---|---|---|
| Financing lease cost | | | |
| Amortization of right of use assets | Depreciation, amortization and interest | $ 10,279 | $ 9,404 |
| Interest on lease liabilities | Depreciation, amortization and interest | 7,719 | 7,675 |
| Operating lease cost | Other operating expenses | 10,114 | 10,815 |
| Total lease cost | | $ 28,112 | $ 27,894 |

The following table summarizes maturities of lease liabilities as of June 30, 2022, in thousands of dollars:

| | Financing | Operating | Total |
|---|---|---|---|
| 2023 | $ 14,610 | $ 9,969 | $ 24,579 |
| 2024 | 14,813 | 9,542 | 24,355 |
| 2025 | 15,019 | 7,466 | 22,485 |
| 2026 | 15,228 | 5,799 | 21,027 |
| 2027 | 15,440 | 5,201 | 20,641 |
| Thereafter | 212,266 | 12,755 | 225,021 |
| Undiscounted expected future cash flows | 287,376 | 50,732 | 338,108 |
| Discount | (81,599) | (3,428) | (85,027) |
| Discounted expected future cash flows | $ 205,777 | $ 47,304 | $ 253,081 |

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

| | 2022 | | 2021 | |
|---|---|---|---|---|
| | Financing | Operating | Financing | Operating |
| Weighted-average remaining lease term (years) | 19 | 9 | 19 | 9 |
| Weighted-average discount rate | 3.66% | 1.76% | 3.66% | 2.16% |
| Total undiscounted lease liability | $ 287,376 | $ 50,732 | $ 301,786 | $ 45,720 |

## 7. Other Assets

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

| | | 2022 | | 2021 |
|---|---|---|---|---|
| Insurance receivables | $ | 140,923 | $ | 135,086 |
| Software costs, net of accumulated amortization | | 39,906 | | 42,295 |
| Deferred expenses | | 42,315 | | 44,315 |
| Inventories | | 17,670 | | 16,392 |
| | $ | 240,814 | $ | 238,088 |

Amortization expense related to other assets included in operating expenses amounted to $14.2 million and $13.3 million in 2022 and 2021, 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:

| | | 2022 | | 2021 |
|---|---|---|---|---|
| Land and real estate improvements | $ | 137,203 | $ | 137,585 |
| Buildings | | 8,380,253 | | 8,163,195 |
| Equipment | | 624,506 | | 641,254 |
| | | 9,141,962 | | 8,942,034 |
| Less: Accumulated depreciation and amortization | | (3,961,507) | | (3,706,913) |
| | | 5,180,455 | | 5,235,121 |
| Construction in progress | | 417,614 | | 272,724 |
| | $ | 5,598,069 | $ | 5,507,845 |

Depreciation expense included in operating expenses amounted to $306.7 million and $301.2 million in 2022 and 2021, 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:

| | | 2022 | | 2021 |
|---|---|---|---|---|
| Employee benefit obligations | $ | 993,684 | $ | 1,503,483 |
| Compensated absences | | 78,275 | | 92,819 |
| Financial aid grant obligations | | 49,674 | | 65,321 |
| Asset retirement obligations | | 38,229 | | 39,422 |
| Other | | 208,866 | | 256,078 |
| | $ | 1,368,728 | $ | 1,957,123 |

Included in employee benefit obligations are defined benefit plan liabilities in excess of plan assets. These liabilities amounted to $743.8 million at June 30, 2022 and $1,247.0 million at June 30, 2021 (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, 2022 | Calendar Year of Maturity | Outstanding Balance 2022 | 2021 |
|---|---|---|---|---|
| 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 | 0.09% | 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 | 1.45% | 2042 | 100,000 | 100,000 |
| Series 2014A | 1.10% | 2048 | 250,000 | 250,000 |
| Series 2015A | 0.38% | 2035 | 300,000 | 300,000 |
| Series 2016A | 1.79% | 2042 | 399,320 | 399,320 |
| Series 2017A | 5.00% | 2042 | 170,920 | 170,920 |
| Series 2017B | 2.44% | 2029/2037 | 194,530 | 194,530 |
| Series 2017C | 5.00% | 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 | 0.29% | 2022 | 500,000 | 500,000 |
| US Department of Energy | 2.70% | 2029 | 24,786 | 31,879 |
| Principal amount | | | 5,095,376 | 5,102,469 |
| Less: Bond issue costs | | | (17,524) | (18,174) |
| Plus: Unamortized premiums and discounts, net | | | 86,578 | 115,278 |
| | | | $ 5,164,430 | $ 5,199,573 |

**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 $14.6 million as of June 30, 2022.

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 $23.3 million as of June 30, 2022.

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. On February 8, 2022, Series U was remarketed from a fixed rate of 2.00% to 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 Series X-2 bonds maturing in July 2037. On February 9, 2021, the bonds were remarketed from a fixed rate of 1.80% to a fixed interest rate of 0.25% through February 8, 2024.

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 has 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. The bonds bear a fixed interest rate of 1.10% through February 6, 2023.

Series 2015A bonds total $300.0 million, maturing in July 2035. In July 2021, the bonds were remarketed from a fixed interest rate of 2.05% to a fixed interest rate of 0.38% through July 11, 2024.

Series 2016A bonds consist of 1) $150.0 million Series 2016A-1 bonds bearing a fixed interest rate of 1.45% through June 30, 2022 and 2) $249.3 million Series 2016A-2 bonds bearing a fixed interest rate of 2.00% through June 30, 2026. Both bond series mature in July 2042. On July 1, 2022, Series 2016A-1was remarketed at a daily variable interest rate. Series 2016A-2 include a net premium of $270 thousand as of June 30, 2022.

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 mature in July 2042 and bear a fixed interest rate of 5.00% through June 30, 2022. On July 1, 2022, both series were remarketed at a weekly variable interest rate.

Series 2017B bonds consist of 1) $82.4 million Series 2017B-1 bonds maturing in July 2029 and 2) $112.1 million Series 2017B-2 maturing in July 2037. In July 2020, Series 2017B-1 bonds (originally issued at a par value of $112.1 million) were remarketed to a fixed interest rate of 5.00% through July 2029 and Series 2017B-2 bonds were remarketed to a term interest rate of 0.55% through July 2023. The Series 2017B-1 bonds include a net premium of $23.1 million as of June 30, 2022.

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 were issued in December 2017 to refund Series 2010A-2 bonds and bear a fixed interest rate of 5.00% through January 2028. These bonds include a net premium of $16.3 million as of June 30, 2022. Series 2017C-2 bonds were issued in December 2017 and bear a fixed interest rate of 5.00% through January 2023. These bonds include a net premium of $4.6 million as of June 30, 2022.

Series 2018A bonds were issued in July 2018 to refund Series 2010A-1 bonds and total $67.6 million maturing in July 2025. The bonds bear a fixed interest rate of 5.00%. These bonds include a net premium of $5.3 million as of June 30, 2022.

**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 $156 thousand as of June 30, 2022.

**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 $783 thousand as of June 30, 2022.

**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:

| | | |
|---|---|---|
| 2023 | $ | 504,835 |
| 2024 | | 4,835 |
| 2025 | | 504,835 |
| 2026 | | 72,445 |
| 2027 | | 4,835 |
| Thereafter | | 4,003,591 |
| Total | $ | 5,095,376 |

Certain CHEFA Series are subject to tender by bondholders. To the extent all bonds subject to tender could not be remarketed, $2.4 billion of bonds scheduled for maturity between 2029 and 2057 would be due when tendered.

Total interest expense incurred on indebtedness was $71 million and $78.5 million in 2022 and 2021, respectively. Interest capitalized to land, buildings and equipment totaled $5.0 million and $5.6 million in 2022 and 2021, respectively. Amortization expense related to bond issue costs included in operating expenses amounted to $3.4 million and $3.3 million in 2022 and 2021, 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 $146.9 million and $136.7 million in 2022 and 2021, respectively.

## 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 liabilities within the consolidated statements of financial position at June 30, in thousands of dollars:

| | Pension | | Postretirement | |
|---|---|---|---|---|
| | 2022 | 2021 | 2022 | 2021 |
| Change in benefit obligation: | | | | |
| Benefit obligation, beginning of year | $ 2,407,762 | $ 2,388,609 | $ 1,708,602 | $ 1,609,298 |
| Service cost | 101,014 | 103,235 | 66,548 | 70,732 |
| Interest cost | 58,060 | 52,013 | 38,456 | 36,007 |
| Benefit payments | (51,846) | (44,391) | (32,101) | (26,668) |
| Assumption changes | (536,173) | (106,864) | (253,543) | (27,063) |
| Actuarial loss (gain) | 4,260 | 15,160 | (118,029) | 46,296 |
| Benefit obligation, end of year | $ 1,983,077 | $ 2,407,762 | $ 1,409,933 | $ 1,708,602 |
| Change in plan assets: | | | | |
| Fair value, beginning of year | $ 2,066,964 | $ 1,593,132 | $ 802,442 | $ 579,458 |
| Actual return on plan assets | (166,373) | 489,569 | (96,185) | 186,277 |
| University contributions | 49,945 | 31,318 | 80,623 | 64,715 |
| Benefits paid | (51,846) | (44,391) | (32,101) | (26,668) |
| Expenses paid | (2,892) | (2,664) | (1,358) | (1,340) |
| Fair value, end of year | $ 1,895,798 | $ 2,066,964 | $ 753,421 | $ 802,442 |
| Funded Status | $ (87,279) | $ (340,798) | $ (656,512) | $ (906,160) |

**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 $1,705.5 million and $2,013.1 million at June 30, 2022 and June 30, 2021, respectively.

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

| | 2022 | 2021 |
|---|---|---|
| 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% |
| Weighted-average increase in future compensation levels | 3.18% | 3.13% |
| Projected health care cost trend rate (pre-65/post-65) | 7.08%/12.73% | 6.22% / 11.83% |
| 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 |

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:

| | 2022 | | 2021 | |
|---|---|---|---|---|
| | Pension | Postretirement | Pension | Postretirement |
| Discount rate | $ (525,707) | $ (411,253) | $ (120,535) | $ (89,438) |
| Inflation | 148 | 9,223 | 637 | 40,920 |
| Turnover rates | - | - | 17,661 | 12,709 |
| Retirement rates | - | - | (4,627) | (6,137) |
| Salary Scale | (10,614) | 726 | - | - |
| Medical trend rates | - | 147,761 | - | 14,883 |
| | $ (536,173) | $ (253,543) | $ (106,864) | $ (27,063) |

**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 | |
|---|---|---|---|---|
| | 2022 | 2021 | 2022 | 2021 |
| Service cost | $ 101,014 | $ 103,235 | $ 66,548 | $ 70,732 |
| Administrative expenses | 2,753 | 2,803 | 1,400 | 1,400 |
| Interest cost | 58,060 | 52,013 | 38,456 | 36,007 |
| Expected return on plan assets | (126,466) | (112,130) | (51,274) | (42,229) |
| Net amortization: | | | | |
| Prior service cost | 2,725 | 2,917 | - | - |
| Net loss | 29,855 | 53,381 | 7,432 | 20,832 |
| Net periodic benefit cost | $ 67,941 | $ 102,219 | $ 62,562 | $ 86,742 |

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 (decreases), 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:

| | 2022 | 2021 |
|---|---|---|
| Weighted-average discount rate - all plans except unused sick pay plan | 2.45% | 2.20% |
| Weighted-average discount rate - unused sick pay plan | 2.15% | 1.90% |
| Expected long-term rate of return | 7.25% | 7.25% |
| Weighted-average compensation increase | 3.13% | 3.14% |
| Health care cost increase (pre-65/post-65) | 6.22%/5.46% | 6.44% / 9.58% |
| Ultimate trend rate (pre-65/post-65) | 4.50%/4.50% | 4.50% / 4.50% |
| Year ultimate trend rate is achieved | 2030 | 2028 |
| 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 | |
|---|---|---|---|---|
| | 2022 | 2021 | 2022 | 2021 |
| Unrecognized net actuarial loss | $ (238,935) | $ (469,283) | $ (224,234) | $ (124,875) |
| Amortization of unrecognized obligation | (32,580) | (56,297) | (7,432) | (20,832) |
| | $ (271,515) | $ (525,580) | $ (231,666) | $ (145,707) |

During fiscal year 2022, the postretirement plans experienced a $118.0 million liability gain largely attributable to claims experience. The pension plan experienced a liability 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 next page, and asset losses of $147.5 million and $292.8 million for the postretirement and pension plans, respectively.

During fiscal year 2021, the postretirement plans experienced a $46.3 million liability loss largely attributable to an increase in prescription drug claims cost. The pension plan experienced a liability loss of $15.2 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 gains of $144.1 million and $377.4 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 | |
|---|---|---|---|---|
| | 2022 | 2021 | 2022 | 2021 |
| Unrecognized net actuarial loss | $ 18,748 | $ 287,538 | $ 33,355 | $ 265,027 |
| Unrecognized prior service cost | 5,059 | 7,784 | - | - |
| | $ 23,807 | $ 295,322 | $ 33,355 | $ 265,027 |

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, 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 staff pension plan at June 30, 2021 in thousands of dollars:

| 2021 | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Investments, at fair value: | | | | |
| Cash and short-term investments | $ 89,308 | $ - | $ - | $ 89,308 |
| US government securities | 169,332 | - | - | 169,332 |
| Common stock: | | | | |
| Domestic | 28,482 | - | - | 28,482 |
| Foreign | 13,483 | - | - | 13,483 |
| Total common stock | 41,965 | - | - | 41,965 |
| Other equity investments: | | | | |
| Real assets | - | - | 21,364 | 21,364 |
| Total other equity investments | - | - | 21,364 | 21,364 |
| Other investments | 663 | - | - | 663 |
| Total leveled investments, at fair value | $ 301,268 | $ - | $ 21,364 | 322,632 |
| Investments at net asset value | | | | 1,741,952 |
| Total investments | | | | 2,064,584 |
| Liabilities associated with investments | $ 1,262 | $ 134 | $ - | 1,396 |
| Net investments | | | | 2,063,188 |
| Benefit payable | | | | 3,776 |
| Fair value, end of year | | | | $ 2,066,964 |

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 following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, 2021 in thousands of dollars:

| 2021 | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Investments, at fair value: | | | | |
| Cash and short-term investments | $ 35,927 | $ - | $ - | $ 35,927 |
| US government securities | 72,994 | - | - | 72,994 |
| Common stock: | | | | |
| Domestic | 32,663 | - | - | 32,663 |
| Foreign | 13,806 | - | - | 13,806 |
| Total common stock | 46,469 | - | - | 46,469 |
| Other investments | 338 | - | - | 338 |
| Total leveled investments, at fair value | $ 155,728 | $ - | $ - | 155,728 |
| Investments at net asset value | | | | 649,081 |
| Total Investments | | | | 804,809 |
| Liabilities associated with investments | $ 596 | $ 83 | $ - | 679 |
| Net investments, at fair value | | | | 804,130 |
| Receivable | | | | 1,688 |
| Fair value, end of year | | | | $ 802,442 |

The table below represents the change in fair value measurements for Level 3 investments held by the staff pension plan and the retiree health plan for the plans' year ended June 30, in thousands of dollars:

| | Pension | | Postretirement | |
|---|---|---|---|---|
| | 2022 | 2021 | 2022 | 2021 |
| Beginning balance | $ 21,364 | $ 15,124 | $ - | $ 93 |
| Unrealized gain/ (loss) | 13,727 | 6,899 | - | (48) |
| Purchases | 1,512 | 1,037 | - | - |
| Sales | (4,269) | (1,696) | - | (45) |
| Ending balance | $ 32,334 | $ 21,364 | $ - | $ - |

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 | |
|---|---|---|---|---|
| | 2022 | 2021 | 2022 | 2021 |
| Developed equities | 28.3% | 26.6% | 33.8% | 32.1% |
| Emerging equities | 4.9% | 8.7% | 7.5% | 10.8% |
| Marketable alternatives | 16.1% | 13.8% | 16.3% | 13.2% |
| Fixed income | 7.0% | 8.2% | 8.6% | 9.1% |
| Leveraged buyouts | 14.2% | 12.7% | 8.9% | 8.2% |
| Venture capital | 17.5% | 18.2% | 14.0% | 15.7% |
| Real assets | 10.5% | 7.6% | 9.0% | 6.7% |
| Cash | 1.5% | 4.2% | 1.9% | 4.2% |

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 pension plan and retiree health plan in fiscal year 2023 are $48.4 million and $73.3 million, respectively.

**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 |
|---|---|---|---|
| 2023 | $ 59,291 | $ 36,991 | $ 96,282 |
| 2024 | 64,772 | 40,914 | 105,686 |
| 2025 | 70,053 | 45,503 | 115,556 |
| 2026 | 75,637 | 49,857 | 125,494 |
| 2027 | 80,849 | 53,192 | 134,041 |
| 2028-2032 | 478,380 | 310,974 | 789,354 |
| | $ 828,982 | $ 537,431 | $ 1,366,413 |

## 13. Net Assets

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

| | 2022 | 2021 |
|---|---|---|
| With Donor Restrictions: | | |
| Donor-restricted endowments, perpetual in nature | $ 5,530,421 | $ 5,229,165 |
| Student loans, perpetual in nature | 52,999 | 52,226 |
| Donor-restricted endowments, subject to spending policy and appropriation | 28,663,194 | 29,724,341 |
| Board designated endowment, subject to spending policy and appropriation | 298,908 | 281,249 |
| Unexpended gift balances | 1,554,287 | 1,351,455 |
| Total net assets with donor restrictions | $ 36,099,809 | $ 36,638,436 |
| Without Donor Restrictions: | | |
| Board designated endowment, subject to spending policy and appropriation | $ 6,890,737 | $ 7,048,097 |
| Funded status of defined benefit plans | (743,791) | (1,246,958) |
| Derivatives | (75,334) | (628,384) |
| Undesignated | 2,520,983 | 2,480,014 |
| Non-controlling interest | 1,621 | 779 |
| Total net assets without donor restrictions | 8,594,216 | 7,653,548 |
| Total net assets | $ 44,694,025 | $ 44,291,984 |

Yale's endowment consists of approximately 8,000 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:

| 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 |

| 2021 | Without Donor Restrictions | With Donor Restrictions | Total |
|---|---|---|---|
| Donor-restricted endowment | $ - | $ 34,953,506 | $ 34,953,506 |
| Board-designated endowment | 7,048,097 | 281,249 | 7,329,346 |
| | $ 7,048,097 | $ 35,234,755 | $ 42,282,852 |

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

| | 2022 | 2021 |
|---|---|---|
| Undesignated | $ 9,437,657 | $ 9,790,997 |
| Teaching and research | 10,105,276 | 10,312,979 |
| Facilities and operations | 7,463,516 | 7,647,723 |
| Financial aid | 7,369,578 | 7,446,749 |
| Other specific purposes | 7,007,233 | 7,084,404 |
| | $ 41,383,260 | $ 42,282,852 |

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

| 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 |

| 2021 | Without Donor Restrictions | With Donor Restrictions | Total |
|---|---|---|---|
| Endowment net assets, beginning of year | $ 5,146,647 | $ 26,055,039 | $ 31,201,686 |
| Investment return: | | | |
| Investment income | 27,612 | 136,470 | 164,082 |
| Net appreciation | 2,057,487 | 9,831,255 | 11,888,742 |
| Total investment return | 2,085,099 | 9,967,725 | 12,052,824 |
| Contributions | 1,079 | 635,040 | 636,119 |
| Allocation of endowment spending | (274,465) | (1,238,136) | (1,512,601) |
| Other increases (decreases) | 89,737 | (184,913) | (95,176) |
| Endowment net assets, end of year | $ 7,048,097 | $ 35,234,755 | $ 42,282,852 |

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

| 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 |
| Non-operating expenses | 33,338 | (6,420) | (3,888) | 23,030 |
| | $ 3,162,706 | $ 1,076,003 | $ 324,621 | $ 4,563,330 |

| 2021 | Programmatic support | Patient care and other related services | Administration and other institutional support | Total |
|---|---|---|---|---|
| Salaries and wages | $ 1,241,664 | $ 578,994 | $ 150,485 | $ 1,971,143 |
| Employee benefits | 482,490 | 189,055 | 69,569 | 741,114 |
| Depreciation, amortization and interest | 367,915 | 14,375 | 25,383 | 407,673 |
| Other operating expenditures | 764,322 | 251,880 | 65,411 | 1,081,613 |
| Total operating expenses | 2,856,391 | 1,034,304 | 310,848 | 4,201,543 |
| Non-operating expenses | 63,031 | 4,714 | 5,689 | 73,434 |
| | $ 2,919,422 | $ 1,039,018 | $ 316,537 | $ 4,274,977 |

## 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 $540.2 million at June 30, 2022. 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, 2022, through October 21, 2022, 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

*President*
Peter Salovey, A.B., A.M., Ph.D.

*Fellows*
His Excellency the Governor of Connecticut, *ex officio*

Her Honor the Lieutenant Governor of Connecticut, *ex officio*

Joshua Bekenstein, B.A., M.B.A.
Wayland, Massachusetts

Michael James Cavanagh, B.A., J.D.
Philadelphia, Pennsylvania

Charles Waterhouse Goodyear IV, B.S., M.B.A.
New Orleans, Louisiana

Catharine Bond Hill, B.A., B.A., M.A., Ph.D.
Bronx, New York

William Earl Kennard, B.A., J.D.
Charleston, South Carolina

Frederic David Krupp, B.S., J.D.
Norwalk, Connecticut

Maurie Dee McInnis, B.A., M.A., Ph.D.
Setauket, New York

Reiko Ann Miura-Ko, B.S., Ph.D.
Menlo Park, California

Carlos Roberto Moreno. B.A., J.D.
Los Angeles, California

Emmett John Rice, Jr., B.A., M.B.A.
Bethesda, Maryland

Joshua Linder Steiner, B.A., M.St.
New York, New York

David Li Ming Sze, B.A., M.B.A.
Hillsborough, California

Marta Lourdes Tellado, B.A., Ph.D.
New York, New York

David Anthony Thomas, B.A., M.A., M.A., Ph.D.
Atlanta, Georgia

Kathleen Elizabeth Walsh, B.A., M.P.H.
Boston, Massachusetts

Michael James Warren, B.A., B.A.
Washington, D.C.

## The Officers of Yale University

*President*
Peter Salovey, A.B., A.M., Ph.D.

*Provost*
Scott Allan Strobel, B.A., Ph.D.

*Vice President for Information Technology and Chief Information Officer*
John Barden, B.A., M.B.A.

*Vice President for Facilities and Campus Development*
Jack Michael Bellamy, B.S., M.S.

*Senior Vice President for Operations*
Jack Francis Callahan, Jr., B.A., M.B.A.

*Senior Vice President for Institutional Affairs and General Counsel*
Alexander Edward Dreier, A.B., M.A., J.D.

*Secretary and Vice President for University Life*
Kimberly Midori Goff-Crews, B.A., J.D.

*Vice President for Finance and Chief Financial Officer*
Stephen Charles Murphy, B.A.

*Vice President for Alumni Affairs and Development*
Joan Elizabeth O'Neill, B.A.

*Interim Vice President for Communications*
Karen Peart, B.A., M.S., J.D.

*Vice President for Human Resources*
John Whelan, B.A., J.D.

In 2015, President Peter Salovey announced Yale alumnus Stephen A. Schwarzman, B.A. ’69, intended to donate $150 million to renovate the university’s Commons and Memorial Hall into what would become known as the Yale Schwarzman Center. In 2021, the newly renovated Schwarzman Center officially opened its doors as a center for student life and the arts that encourages social cohesion, creativity, and self-expression. The Commons area, pictured above, dates to 1901 and sits at the heart of the Schwarzman Center. Here, an expanded servery offers a variety of cuisines to both students and the broader Yale community.

The Schwarzman Center now includes a new dance studio built below the Beinecke Plaza. The Annex is another new addition, featuring study alcoves, meeting rooms and offices. Renovations on The Dome, a transformed performance and event space, include theatrical lighting, a sprung floor, and updated infrastructure to support projections and videography.

In addition to the meals offered at Commons, there are two cafes, Elm and Ivy, as well as a pub known as The Well. The Bow Wow convenience shop carries an array of snacks and caters to students on-the-go.

The Schwarzman Center offers students and faculty from all of Yale’s schools a central location where they can freely collaborate and partake in many compelling events and gatherings.

*Photo: Francis Dzikowski*


The Tsai Center for Innovative Thinking at Yale ("Tsai CITY") recently opened its new building, shown above, thanks in part to a gift from the Joe and Clara Tsai Foundation. The purpose of this center is to foster entrepreneurship and innovation by providing a space for students from diverse backgrounds and disciplines to connect and develop ideas. Programs, events, and workshops hosted at Tsai CITY allow students to engage with people of varying experience levels and perspectives.

Challenges taken on by students here include developing approaches to global dilemmas such as climate change and civil engagement. It is also a space that nurtures students' ideas and supports the growth of their visions throughout the many phases of growing a business or non-profit. Support provided by Tsai CITY may include concept development, grant funding, mentorship, and networking.

Summer 2022 marks the five-year anniversary of the founding of Tsai CITY. To date, it has assisted approximately 1,100 students per year and supported over 400 projects, with the prospect of supporting many more in the years to come.

*All photos by Dan Renzetti, except top right by Nashirra Best*


Yale

your.yale.edu/fr21-22