2021-2022

ANNUAL FINANCIAL REPORT

Penn
University of Pennsylvania

Contents

UNIVERSITY OF PENNSYLVANIA

FINANCIAL OVERVIEW

From the Interim Vice President for Finance and Treasurer

Russell Di Leo

Throughout Fiscal Year 2022 (FY22), the University of Pennsylvania navigated complex markets to deliver continued positive financial performance. Financial highlights from the fiscal year are included below:

- Consolidated operating revenue increased 14.0%, rising from $12.7 billion in FY21 to $14.4 billion in FY22.
- Consolidated net assets totaled $28.9 billion, an increase of $1.9 billion, or 7.1%, from FY21. These results were primarily driven by strong operating performance led by technology transfer activities.
- Change in net assets from operations totaled $1.7 billion, with contributions coming from positive Academic Component operating performance, largely driven by licensing income, and continued positive operating performance from the University of Pennsylvania Health System (UPHS) during a challenging period.

ENDOWMENT

- Penn's Associated Investment Fund (AIF) returns were flat in FY22, but the AIF increased by $217 million after accounting for spending, new investments and gifts, and other transfers. The total endowment is $20.7 billion as of June 30, 2022.
- Following the University's spending rule formula, Penn allocated a record $877 million in AIF returns to support operational priorities in instruction, health care, financial aid, research, and academic support.

FUNDRAISING

- Contributions, defined as new gifts and pledges, totaled $668.1 million in FY22, including 153 gifts of more than $1 million under Council for Advancement and Support of Education reporting standards.

- FY22's largest contribution was a $125 million gift from Leonard A. Lauder to establish the Leonard A. Lauder Community Care Nurse Practitioner Program. This program is the largest gift ever to an American nursing school and will cover full tuition and fees for an initial cohort of 10 Fellows who commit to providing healthcare in underserved communities after graduation, with a goal of 40 Fellows by 2026.

STUDENTS

- The Class of 2026 is made up of 2,409 students from 85 countries and 49 states, as well as the District of Columbia, Puerto Rico, and the Virgin Islands. 149 first-year students are from Philadelphia. 66% of admitted students matriculated.
- 44.5% of undergraduate students received grant/scholarship aid in FY22, with an average need-based financial aid package for an incoming first-year student of $62,422, including work-study.
- Only 20% of aided undergraduate students borrowed federal loans in FY22, compared to 80% in FY08 when Penn launched its grant-based financial aid program.
- Penn distributed more than $20 million in Higher Education Emergency Relief Fund payments to more than 14,000 graduate and undergraduate students with financial need related to the COVID-19 pandemic.

SOCIAL IMPACT

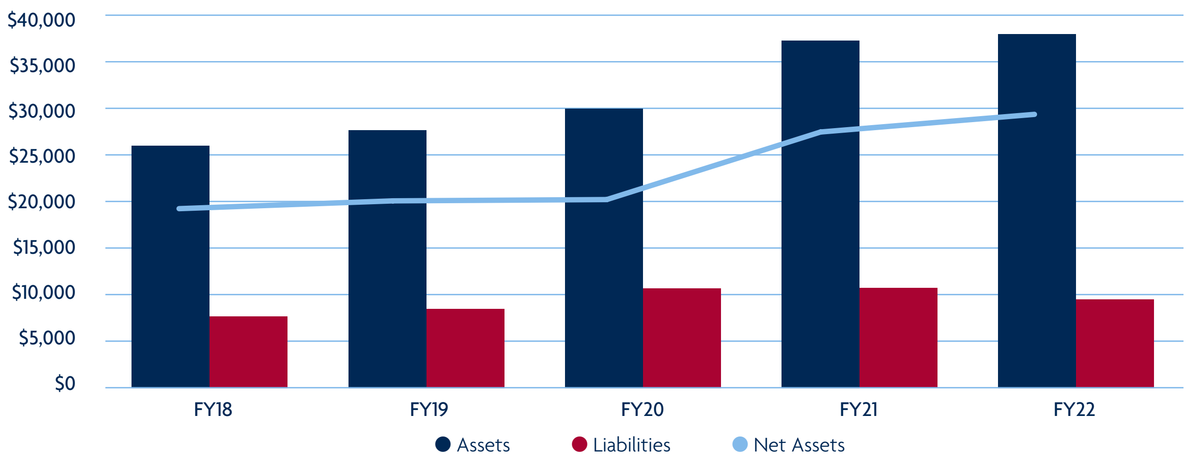
- Penn entered into a partnership with Henry C. Lea Elementary School in West Philadelphia, committing $4.1 million to provide broad support to school initiatives over the next five years. The University also continues its support of the Philadelphia School District through its $100 million pledge, providing $10 million each year, to address environmental remediation.
- Penn launched Fueling Business Growth, a supplier diversity and inclusion campaign, with a mission to strategically increase spend with local, minority, LGBTQ+, veteran, disabled, and women-owned businesses. In FY22, the University spent $134 million with diverse suppliers, with a record $37 million spent with Black-owned businesses.
- Three teams of students, faculty, and staff received up to $100,000 in funding as 2022 Projects for Progress awardees. Projects focused on racially conscious economic justice coaching, decreasing barriers to cancer screening in West Philadelphia, and equity-focused public school infrastructure.

Balance Sheet and Net Assets

Penn ended the fiscal year with total net assets of $28.9 billion, an increase of $1.9 billion, or 7.1%, over prior year. Assets increased by $713 million from $37.8 billion in FY21 to $38.5 billion in FY22, driven primarily by strong operating performance and an increase in cash and cash equivalents from mRNA patent royalties. Liabilities decreased by $1.2 billion from $10.9 billion in FY21 to $9.7 billion in FY22, driven primarily by favorable pension valuation adjustments and repayment of debt obligations.

Since FY18, consolidated net assets have grown by 55.5%, impacted by FY21's historic investment returns, technology transfer revenue, consistently strong operating performance, continued growth in fundraising, and UPHS expansion.

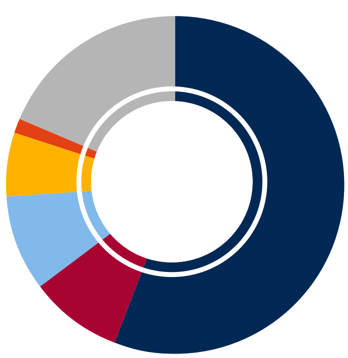
BALANCE SHEET ($ in Millions)



Operating Revenue

Total operating revenue increased by 14%, rising from $12.7 billion in FY21 to $14.4 billion in FY22.

FY22 OPERATING REVENUES BY SOURCE – $14.4 BILLION



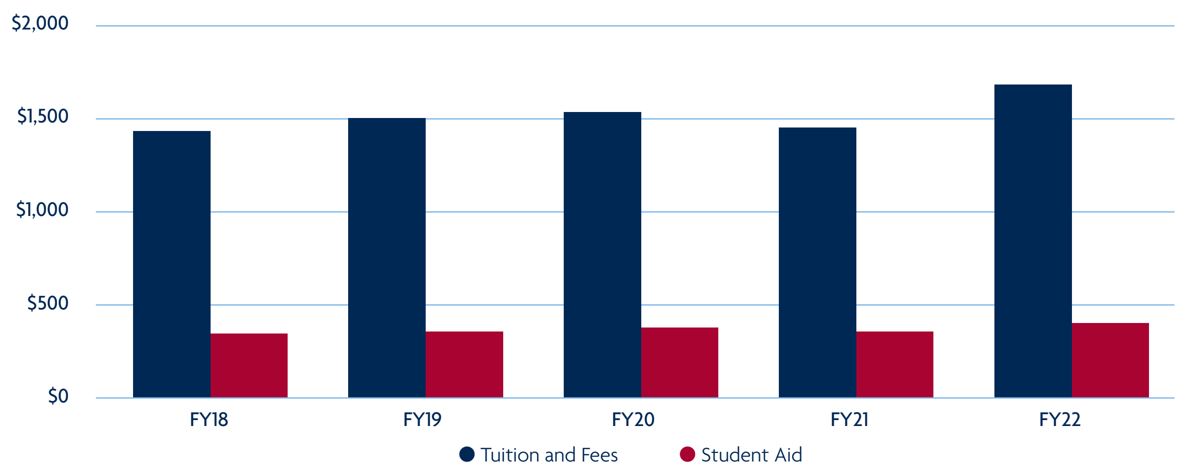
- **56.1%** Net Patient Service Revenue
- **8.8%** Sponsored Program
- **9.1%** Tuition and Fees, Net
- **6.1%** Investment Income
- **1.5%** Contributions and Donor Support
- **18.4%** All Other

TUITION AND FEES

Net tuition and student fee revenue increased 18.6% over FY21 from $1.1 billion in FY21 to $1.3 billion in FY22, representing 9.1% of FY22 total operating revenue. FY22 net tuition and fees are reduced by $375.6 million in undergraduate and graduate financial aid grants and scholarships, which increased by $26 million, or 7.4%, over the prior fiscal year. The increase in tuition and fee revenue is indicative of enrollment that has returned to levels experienced prior to the COVID-19 pandemic, with graduate and professional programs leading this trend.

For more than a decade, Penn has been expanding access to a world-class education for families of all income levels by meeting 100% of undergraduate student demonstrated financial need. To promote inclusion and increased access, Penn provides grant-based undergraduate financial aid packages and adheres to a need-blind admission policy, in which admission decisions are not affected by a student's ability to pay.

TUITION AND FEES ($ in Millions)

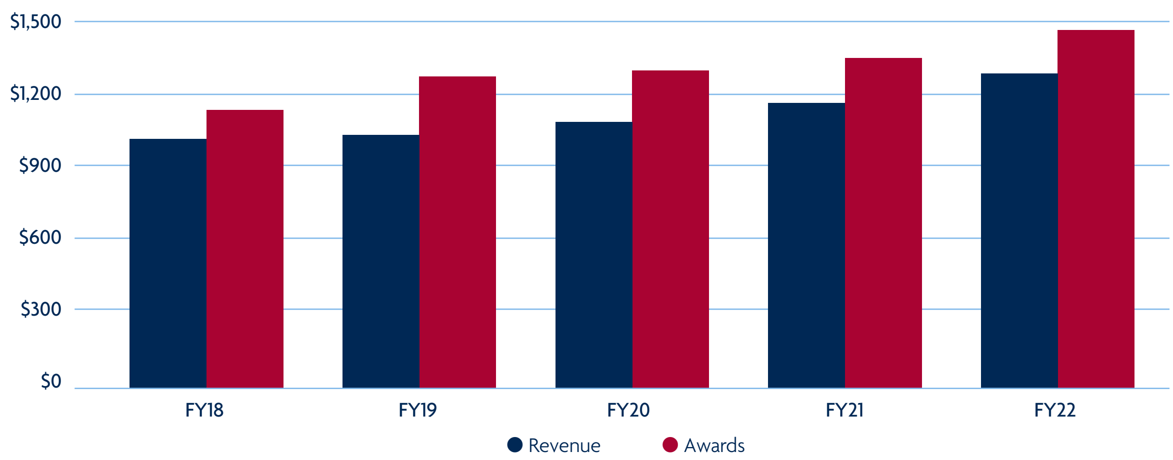


SPONSORED PROGRAMS

Sponsored program revenue, comprising funding from government and private-sponsored grants and contracts, totaled $1.3 billion in FY22, an increase of $120 million, or 10%, over the prior fiscal year. Sponsored program revenue represented 8.8% of total operating revenue.

As one of the nation's top research universities, the funding provided to Penn is vital in generating advances in the physical and social sciences, medicine, and other leading-edge fields. Private sector partnering and commercialization of technologies enabled by innovators across the University are making vital contributions to a growing number of COVID-19 diagnostics, therapeutics, vaccines, clinical interventions, and technical solutions.

SPONSORED PROGRAMS ($ in Millions)



In FY22, a total of $948.5 million, or 64.8%, of Sponsored Program awards came from the federal government, Penn's largest source of research funding. Of the federal funding, $684.4 million, or 72%, came from the National Institutes of Health (NIH). Overall, total federal government awards issued to Penn in FY22 increased by $46.9 million, or 5.2%.

Industry and foundation awards accounted for $464 million, or 31.7%, of total sponsored program awards. Other funding sources accounted for $51 million, or 3.5%, of sponsored program awards.

CONTRIBUTIONS

Contributions, defined as new gifts and pledges, totaled $668.1 million in FY22, a $125.8 million, or 23.2% increase from the FY21 total of $542.3 million. Within the University's academic component, FY22 contributions included $316.9 million to restricted endowment, $240.3 million to support operations, and $90.7 million toward capital, with the remainder of contributions supporting UPHS.

Under Council for Advancement and Support of Education reporting standards, during FY22 Penn received 153 gifts of more than $1 million, with 68 of those coming from first-time donors at that level.

Contributions to The Penn Fund increased 9.2% from $46.7 million in FY21 to $51.0 million in FY22 and annual giving increased by 8.6% from $94.6 million to $102.7 million. Donors established 97 new undergraduate scholarships (88 endowed, 9 term).

INVESTMENT INCOME

Operating investment income, primarily endowment paid out in accordance with Penn's spending rule policy, increased by $19.9 million, or 2.3%, from $853.6 million in FY21 to $873.5 million in FY22. The spending rule policy is described in more detail under the Endowment section later in this report.

OTHER REVENUE SOURCES

Other income increased 48.3% from $1.8 billion in FY21 to $2.6 billion in FY22, primarily driven by mRNA patent royalty revenues and UPHS ambulatory pharmacy revenue. The terms of the Bayh Dole Act require non-profit organizations to reinvest patent revenue arising from federally funded research back into the research enterprise. Commonwealth appropriations, which predominantly provide support for Penn's School of Veterinary Medicine, held steady for FY22 at $35.1 million.

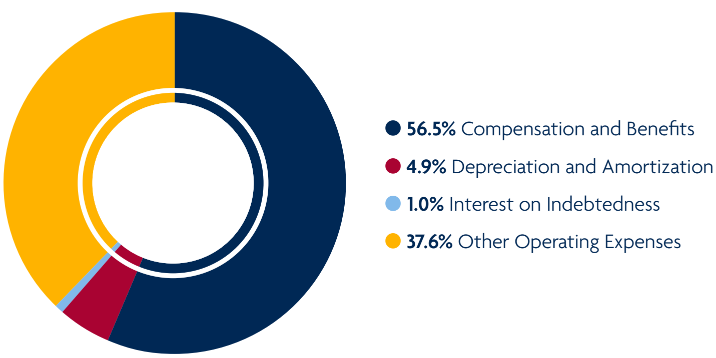
Operating Expense

Total operating expenses increased by 10.1%, rising from $11.6 billion in FY21 to $12.8 billion in FY22. Compensation and benefits—the combination of salary, wages, and employee benefits—is the largest expense component, representing 56.5% of total operating expenses. Salaries and wages increased 10.3%, from $5.2 billion in FY21 to $5.7 billion in FY22, while employee benefits held flat at $1.5 billion.

Depreciation and amortization of $623.5 million, representing 4.9% of total operating expenses, increased 12.8% from FY21. Interest on indebtedness totaled $128 million, accounting for 1.0% of total operating expenses.

Other operating expenses increased 13.2% from $4.2 billion in FY21 to $4.8 billion in FY22 and represented 37.6% of total operating expense. Operating expenses were impacted by costs associated with the majority of staff, faculty, and students returning to campus for full-time or hybrid on-campus work and instruction, as well as inflationary effects on expense categories such as utilities, food services, and capital expenses.

FY22 OPERATING EXPENSES BY SOURCE – $12.8 BILLION



Capital Expenditures

Capital expenditures for the Consolidated University decreased from $958 million in FY21 to $868 million in FY22.

This year's decreasing trend stems from the conclusion of several major projects—the New Patient Pavilion and Gutmann College House—and will begin to increase again as the University embarks on an ambitious capital plan starting in FY23, in part from the success of the *Making History* campaign.

In FY22, capital expenditures for the Academic Component of the University totaled $206 million, a decrease of $84 million, or 29.0%, from FY21. Penn's capital plans are outlined in Penn Connects 3.0, a land use and urban design campus plan that advances Penn as a premier urban research university. Penn Connects employs University sustainability goals and objectives to inform future development and balance new construction projects with reinvestments in existing buildings and infrastructure.

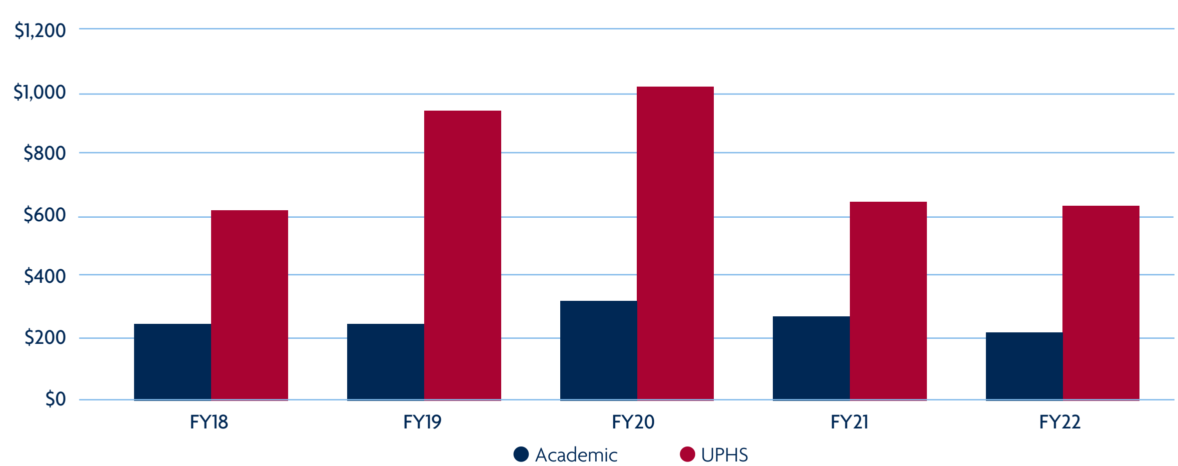
As described later in this report, UPHS invested $662 million in capital projects, with the majority of investment related to the New Patient Pavilion.

PENN'S SUSTAINABILITY COMMITMENT

In October 2019, Penn announced its Climate & Sustainability Action Plan 3.0, outlining the University's goals for improved environmental performance for the next five years. As part of this plan, Penn has committed to achieving 100% carbon neutrality by 2042. Since FY09, Penn has achieved a 45% reduction in overall carbon emissions and a 45% reduction in building-related emissions. As of the end of FY22, there are 43 LEED-certified buildings on Penn's campus.

In FY22, Penn launched its newest sustainability initiative—the Climate Impact Offset (CLIO) charge for business air travel. Through this program, Penn purchases offsets based on air travel carbon emissions for all employee flights. Construction also began on the solar energy facilities that will eventually provide about 70% of all University electricity demand as part of the Power Purchase Agreement signed in 2020.

CAPITAL EXPENDITURES ($ in Millions)



Debt

Consolidated debt totaled $4.5 billion in FY22, a decrease of $115.4 million, or 2.5%, from FY21.

In February 2022, UPHS locked in a 2.25% interest rate for a ten-year term extension of 2015 bonds in the amount of $62.5 million. The extension will begin in August 2022. In May 2022, UPHS issued $109.7 million in bonds to refund 2012 bonds. Interest on the new bonds is fixed with coupons ranging between 0.82% and 2.70%. The bonds were priced in April 2021 as a forward delivery.

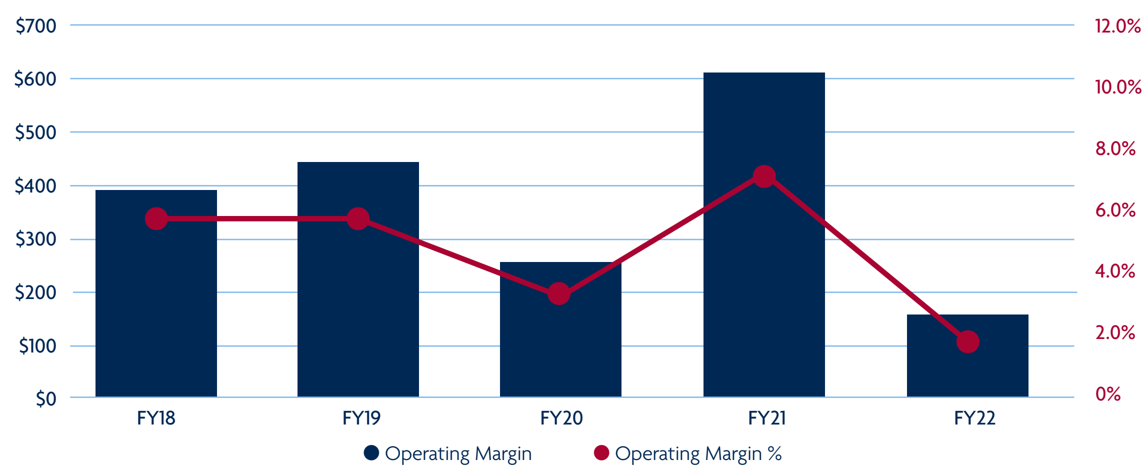
Penn's credit ratings from Moody's Investors Service and S&P Global Ratings are Aa1 and AA+ for the University and Aa3 and AA for UPHS, respectively.

University of Pennsylvania Health System (UPHS)

UPHS includes six major hospitals – the Hospital of the University of Pennsylvania (HUP), Penn Presbyterian Medical Center, Pennsylvania Hospital, Chester County Hospital, Lancaster General Hospital, and the Penn Medicine Princeton Medical Center. UPHS is recognized internationally as a leading healthcare system with the faculty-based Clinical Practices of the University of Pennsylvania, home care and hospice services, and physician practices and facilities in communities throughout the Delaware Valley. The University's Perelman School of Medicine joins with UPHS as a part of Penn Medicine, a world-renowned academic health system with hospitals ranked among the highest in the nation by *U.S. News and World Report*.

UPHS marked its 22nd consecutive year of positive operating performance with a FY22 UPHS operating margin of 1.6%, or $147 million.

UPHS OPERATING MARGIN ($ in Millions)



Total FY22 UPHS operating revenues were $9.2 billion, reflecting a 6.1% increase over the prior year. Net patient services revenue, the largest revenue component at 56.1% of total Consolidated University operating revenue, increased by 7.4% from $7.5 billion in FY21 to $8.1 billion in FY22. The increase was primarily attributed to improved performance from the prior year which was negatively impacted by COVID-19 and the related disruptions to the nation's healthcare systems.

UPHS operating expenses for FY22 were $9.1 billion, an increase of 12.3% over the prior year. The increase in unrestricted net assets for UPHS, including non-operating revenue and realized/unrealized gain on investments, totaled $544 million for FY22, a decrease of $1.6 billion from prior year. The decrease was primarily attributable to the extraordinary financial returns in FY21 and the impacts to FY22 operations resulting from the COVID-19 Omicron wave, lower inpatient surgical activity and labor pressures from staff turnover and wage inflation.

FY22 Days Cash on Hand was 215 days, a decrease of 75 days from the prior year primarily due to scheduled repayment of accelerated Medicare advances and FICA deferrals as part of the CARES Act. Debt-to-capitalization decreased to 25.1% in FY22 from 27.1% in FY21.

UPHS capital expenditures for FY22 were $662 million, a decrease of $6 million over the prior year. The decrease in expenditures was primarily attributable to reduced spending levels on strategic projects including the New Patient Pavilion at the Hospital of the University of Pennsylvania.

The $1.5 billion New Patient Pavilion at the Hospital of the University of Pennsylvania opened on October 30, 2021. The Pavilion supports Penn's world-renowned researchers, clinicians, and faculty, and includes 500 private patient rooms, 50 operating and procedure rooms, and an expanded Emergency Department.

Endowment

The University of Pennsylvania's endowment totaled $20.7 billion as of June 30, 2022, an increase of $201 million over the past year. Penn's endowment comprises over 8,400 individual endowment funds benefiting the University's schools, centers, and Health System.

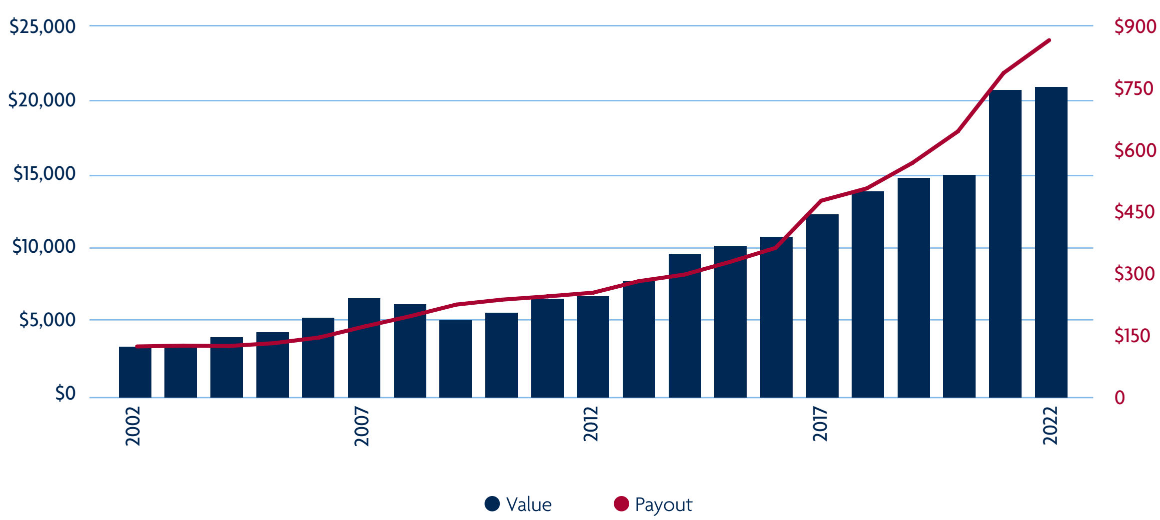
The vast majority of Penn's endowment is invested in the Associated Investments Fund (AIF), a pooled investment vehicle in which the many individual endowments and trusts hold shares or units. An Investment Board appointed by the Trustees of the University oversees the investment of the AIF. The University's Office of Investments is responsible for the day-to-day management of the AIF and implements the policies approved by the Investment Board.

The purpose of Penn's endowment is to provide stable and perpetual support for the mission and programs of the University. Achieving this objective requires an investment and spending program that supports intergenerational equity. The AIF must provide substantial and stable spending today, but it also must preserve purchasing power in order to provide comparable resources to future generations. Penn seeks to resolve the tension between these competing needs by investing in a diversified, equity-oriented portfolio and by adhering to a disciplined spending rule that smooths the impact of changes in AIF value on the operating budget.

The endowment supports a wide range of purposes across the institution, with most funds dedicated to instructional use, health care, and student financial aid.

The University's endowment spending policy balances the objectives of maximizing budgetary support to endowed programs and maintaining purchasing power of the endowment into perpetuity. The actual payout in any given year is determined by a spending rule formula designed to smooth the impact of short-term changes in the AIF's value on spending distributions. For fiscal 2022, AIF spending distribution amounts were the sum of: (i) 70% of the prior fiscal year distribution adjusted by an inflation factor; and (ii) 30% of the lagged fiscal year-end fair market value, multiplied by Penn's 6.0% target spending rate. Typically, Penn uses a target spending rate of 5.0%. In light of pandemic-driven needs and opportunities, the target payout rate was increased to 7.0% for fiscal 2021 and to 6.0% for fiscal 2022, and it will revert to 5.0% for fiscal 2023.

ENDOWMENT GROWTH AND AIF PAYOUT ($ in Millions)



Payouts from the AIF provided $877 million in budgetary support to the University during the fiscal year. Spending support from the AIF for University operations has grown by an annualized 12.6% over the last decade and now represents approximately 17.2% of the University's academic operating budget, up from 9.7% a decade ago.

The endowment supports a wide range of purposes across the institution, with the significant majority of funds dedicated to instructional use and student financial aid.

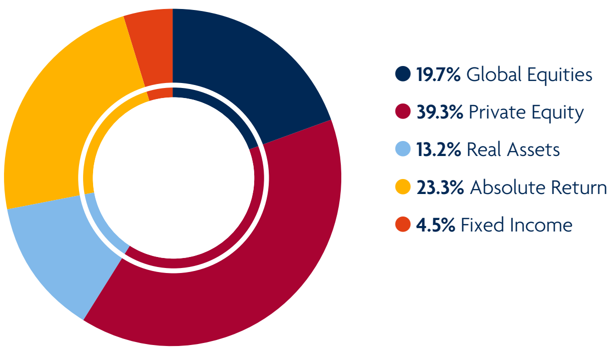
ENDOWMENT BY PURPOSE (As of June 30, 2022)

- **54.5%** Instruction
- **8.2%** Research and Other
- **14.5%** Student Aid
- **22.8%** Health Care

AIF Investment Program

Penn builds its investment program around several simple tenets. First, in order to achieve the high returns necessary to preserve purchasing power after spending, the AIF is invested with a strong equity orientation. With the exception of fixed income, Penn expects that all asset classes in which it invests can earn equity-like returns over long periods of time. Second, Penn builds a portfolio that is diversified across different fundamental drivers of return. The University focuses on areas with the greatest inefficiencies across asset classes, strategies, and geographies. Finally, Penn capitalizes upon the perpetual nature of the University to invest with a long time horizon, creating a significant advantage relative to the many market participants who must focus on near-term certainty instead of long-term attractiveness when evaluating investments.

AIF ASSET ALLOCATION (As of June 30, 2022)



Penn has established a Strategic Asset Allocation (SAA) policy, with asset class target ranges that represent reasonable ranges for the portfolio in most environments. Portfolios within these ranges reflect the broad equity orientation and diversification that Penn seeks. The SAA guidelines consist of ranges rather than point targets to reflect the impossibility of knowing the future investment opportunity set facing the University. Penn uses Interim Policy Portfolio (IPP) targets to guide asset allocation within the SAA ranges over shorter periods.

Penn revisits its asset allocation ranges and targets periodically to ensure that they appropriately reflect both the University's long-term investment needs and Penn's investable opportunity set. The most recent review occurred in June 2022.

The AIF portfolio includes investments in illiquid funds, some of which require Penn to make capital commitments that will be drawn down and invested over a period of time. As of June 30, 2022, the AIF had $5.1 billion in outstanding commitments to various limited partnerships. The AIF maintains a conservative liquidity profile that can accommodate these commitments in both normal environments and periods of market stress or dislocation.

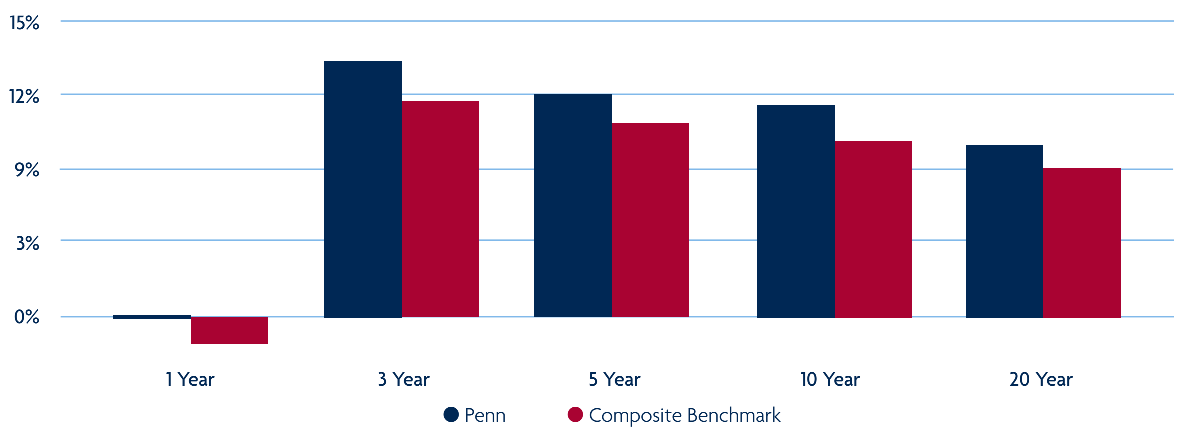
AIF Performance

The AIF returned 0.0% in fiscal 2022; however, the overall AIF increased by $217 million to a total value of $20.1 billion after spending, gifts, and other transfers. The broad endowment ended the year at $20.7 billion, with a similar increase of $201 million.

The AIF's private asset classes made a positive contribution to the overall return in fiscal 2022, while all marketable asset classes made a negative contribution. Outperformance relative to Penn's composite benchmark (a blend of asset class benchmarks) was primarily driven by strong results in the real assets and private equity portfolios.

Over longer periods, Penn's performance has consistently outpaced the composite benchmark. Importantly, Penn's long-term performance has enabled the AIF to exceed its goal of maintaining purchasing power after spending distributions.

COMPARATIVE RETURNS



Future Outlook

Penn has adeptly navigated complex financial markets and a challenging economic climate. Our final results show another strong financial performance and position us well for the years to come. As the University enters into a presidential leadership transition, Penn will continue to benefit from technology transfer revenues and a leading health system, while responding to anticipated inflationary pressures across the Consolidated University. We approach the years ahead with confidence in our financial strategy and leadership. Finally, we wish to acknowledge the outstanding contributions and financial leadership of Penn President Emerita Amy Gutmann and Interim President and former Provost Wendell Pritchett as they transitioned from their leadership positions during FY22. We look forward to a successful FY23.

Statutory Officers

Interim President
Wendell E. Pritchett

Interim Provost
Beth A. Winkelstein

Senior Executive Vice President
Craig R. Carnaroli

Executive Vice President of the University of Pennsylvania for the Health System and Dean, Perelman School of Medicine
J. Larry Jameson

Senior Vice President and Chief of Staff
Gregory S. Rost

Senior Vice President and General Counsel of the University of Pennsylvania and the University of Pennsylvania Health System
Wendy S. White

Senior Vice President for Development and Alumni Relations
John H. Zeller

Senior Vice President for Facilities and Real Estate Services
Anne Papageorge

Senior Vice President for Human Resources
John J. Heuer

Senior Vice President for Information Technology and University Chief Information Officer
Thomas H. Murphy

Senior Vice President for Institutional Affairs and Chief Diversity Officer
Joann Mitchell

Vice President for Audit, Compliance, and Privacy
Gregory J. Pellicano

Vice President, Budget Planning and Analysis
Trevor C. Lewis

Vice President for Business Services
Marie Witt

Interim Vice President for Finance and Treasurer
Russell A. Di Leo

Vice President for Government and Community Affairs
Jeffrey Cooper

Vice President for Institutional Research & Analysis
Stacey J. Lopez

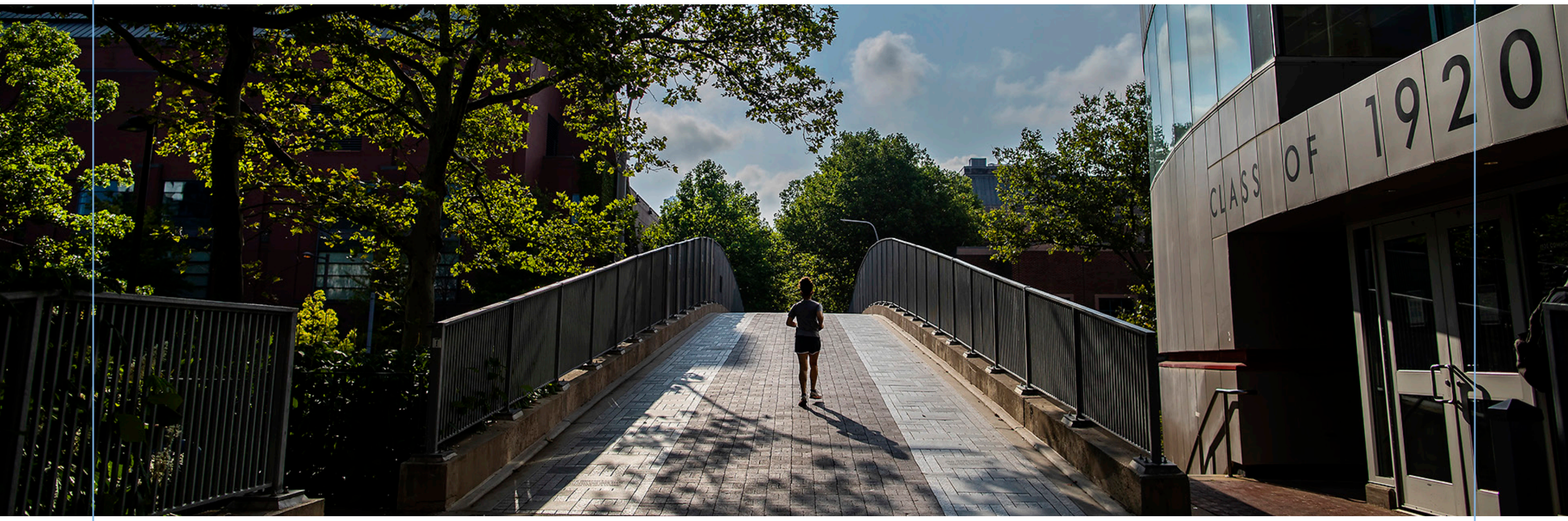
Vice President for Public Safety
Kathleen Shields Anderson

Vice President for Social Equity and Community
Charles L. Howard

Vice President for University Communications
Stephen J. MacCarthy

Vice President and University Secretary
Medha Narvekar

Comptroller
Russell A. Di Leo



As of June 30, 2022

Trustees of the University of Pennsylvania

As of June 30, 2022

University of Pennsylvania

Consolidated Financial Statements
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Report of Independent Auditors

To the Trustees of the University of Pennsylvania

Opinion

We have audited the accompanying consolidated financial statements of University of Pennsylvania (the "University"), which comprise the consolidated statements of financial position as of June 30, 2022 and 2021, and the related consolidated statement of activities and of cash flows for the years then ended, 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 of Pennsylvania as of June 30, 2022 and 2021, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

Responsibilities of Management for the Consolidated Financial Statements

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the 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 financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

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

PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania
September 22, 2022

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

University of Pennsylvania
(in thousands)

	June 30, 2022	June 30, 2021
ASSETS		
Cash and cash equivalents	$ 3,163,942	$ 2,406,233
Accounts receivable, net	1,925,027	1,729,614
Contributions receivable, net	513,788	473,580
Loans receivable, net	59,809	60,953
Other assets	1,011,588	951,435
Investments, at fair value	22,484,283	23,039,002
Property, plant and equipment, net	9,391,124	9,176,028
TOTAL ASSETS	**$ 38,549,561**	**$ 37,836,845**
LIABILITIES		
Accounts payable	$ 393,273	$ 384,829
Accrued expenses and other liabilities	3,847,063	4,126,911
Deferred income	200,658	190,697
Deposits and advances	234,653	215,936
Federal student loan advances	39,894	47,039
Accrued retirement benefits	466,605	1,314,769
Debt obligations	4,492,228	4,607,594
TOTAL LIABILITIES	**9,674,374**	**10,887,775**
NET ASSETS		
Without donor restrictions	17,808,212	15,903,927
With donor restrictions	11,066,975	11,045,143
TOTAL NET ASSETS	**28,875,187**	**26,949,070**
TOTAL LIABILITIES AND NET ASSETS	**$ 38,549,561**	**$ 37,836,845**

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

CONSOLIDATED STATEMENTS OF ACTIVITIES

University of Pennsylvania
for the years ended June 30, 2022 and 2021
(in thousands)

	2022	2021
WITHOUT DONOR RESTRICTIONS:		
REVENUE AND OTHER SUPPORT		
Tuition and fees, net	$ 1,310,603	$ 1,105,104
Commonwealth appropriations	35,144	35,144
Sponsored programs	1,270,036	1,150,055
Contributions and donor support	210,892	202,184
Investment income	873,500	853,555
Net patient service revenue	8,094,673	7,536,453
Other income	2,632,107	1,774,703
TOTAL REVENUE AND OTHER SUPPORT	**14,426,955**	**12,657,198**
EXPENSES		
Compensation and benefits	7,209,286	6,713,886
Depreciation and amortization	623,457	552,935
Interest on indebtedness	127,997	88,036
Other operating expenses	4,807,895	4,246,611
TOTAL EXPENSES	**12,768,635**	**11,601,468**
INCREASE IN NET ASSETS FROM OPERATIONS	**1,658,320**	**1,055,730**
NONOPERATING ACTIVITIES		
Return on investments, net of amounts classified as operating revenue	(662,663)	2,704,552
Pension, OPEB and other, net	854,025	740,871
Contributions and donor support for capital related activities	54,603	36,413
TOTAL NONOPERATING ACTIVITIES	**245,965**	**3,481,836**
INCREASE IN NET ASSETS WITHOUT DONOR RESTRICTIONS	**1,904,285**	**4,537,566**
WITH DONOR RESTRICTIONS:		
Contributions	582,712	460,862
Return on investments, net	3,302	2,903,720
Net assets released from restrictions	(564,182)	(519,347)
INCREASE IN NET ASSETS WITH DONOR RESTRICTIONS	**21,832**	**2,845,235**
INCREASE IN TOTAL NET ASSETS	**1,926,117**	**7,382,801**
Total net assets, beginning of year	26,949,070	19,566,269
TOTAL NET ASSETS, END OF YEAR	**$ 28,875,187**	**$ 26,949,070**

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

University of Pennsylvania
for the years ended June 30, 2022 and 2021
(in thousands)

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Increase in total net assets	$ 1,926,117	$ 7,382,801
Adjustments to reconcile increase in total net assets to net cash provided by operating activities:		
Depreciation and amortization	601,252	533,111
Provision for bad debts	10,655	9,793
Loss (gain) on investments, net	367,312	(5,940,709)
Loss (gain) on disposal of property, plant and equipment	6,338	(13,029)
Donated equipment	(1,113)	(318)
Receipt of contributed securities	(132,109)	(109,309)
Proceeds from contributed securities	31,810	28,426
Receipt of contributions designated for the acquisition of long-lived assets and long-term investment	(285,814)	(246,724)
Pension, OPEB and other, net	(854,025)	(740,871)
Changes in operating assets and liabilities:		
Accounts and loans receivable	(205,196)	(504,074)
Contributions receivable	(39,936)	4,801
Other assets	(49,730)	(24,912)
Accounts payable, accrued expenses and accrued retirement benefits	(356,240)	532,585
Deposits and advances	19,141	(5,880)
Deferred income	9,961	777
NET CASH PROVIDED BY OPERATING ACTIVITIES	**1,048,423**	**906,468**
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of investments	(18,713,752)	(16,837,731)
Proceeds from sale of investments	18,958,408	16,734,521
Purchase of property, plant and equipment	(868,238)	(957,675)
NET CASH USED BY INVESTING ACTIVITIES	**(623,582)**	**(1,060,885)**
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from contributions received designated for the acquisition of long-lived assets and long-term investment	285,815	246,723
Proceeds from contributed securities received designated for the acquisition of long-lived assets and long-term investment	101,799	79,748
Federal student loan advances	(7,145)	(4,783)
Repayment of debt obligations	(214,892)	(234,545)
Proceeds from issuances of debt obligations	125,129	407,000
NET CASH PROVIDED BY FINANCING ACTIVITIES	**290,706**	**494,143**
NET INCREASE IN CASH AND CASH EQUIVALENTS	**715,547**	**339,726**
Cash and cash equivalents, beginning of year	2,457,705	2,117,979
CASH AND CASH EQUIVALENTS, END OF YEAR	**$ 3,173,252**	**$ 2,457,705**
RECONCILIATION TO CONSOLIDATED STATEMENTS OF FINANCIAL POSITION:		
Cash and cash equivalents, Consolidated Statements of Financial Position	$ 3,163,942	$ 2,406,233
Cash included in Investments, at fair value	9,310	51,472
CASH AND CASH EQUIVALENTS, END OF YEAR	**$ 3,173,252**	**$ 2,457,705**
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid for interest, net of amounts capitalized	$ 138,357	$ 97,375
Decrease in accrued plant, property and equipment	(25,198)	(6,946)
Operating cash flows for operating leases	76,260	72,127
Right-of-use assets obtained in exchange for lease liabilities	70,727	64,950

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

1. SIGNIFICANT ACCOUNTING POLICIES

Organization

The University of Pennsylvania ("University"), located in Philadelphia, Pennsylvania, is an independent, nonsectarian, not-for-profit institution of higher learning founded in 1740. The University Academic Component ("Academic Component") provides educational services, primarily for students at the undergraduate, graduate, professional and postdoctoral levels and performs research, training and other services under grants, contracts and similar agreements with sponsoring organizations, primarily departments and agencies of the United States Government. The University also operates an integrated health care delivery system, the University of Pennsylvania Health System ("UPHS"). The University is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and include the accounts of the University and its subsidiaries over which the University has a controlling financial interest or exercises control. All material transactions between the University and its subsidiaries are eliminated in consolidation. Investments in subsidiaries over which the University has the ability to exercise significant influence are reported using the equity method of accounting. Other investments in subsidiaries are reported using the measurement alternative – at cost adjusted for impairment, if any, unless an observable transaction for an identical or similar security occurs.

The net assets of the University are classified and reported as follows:

> Without donor restrictions – includes net assets that are not subject to donor-imposed restrictions.
>
> With donor restrictions – includes net assets that are (i) subject to legal or donor-imposed restrictions that will be met by actions of the University and/or the passage of time, and (ii) the original values of donor restricted net assets, the use of which is limited to investment and can only be appropriated for expenditure by the University in accordance with the Pennsylvania Uniform Principal and Income Act (Pennsylvania Act).

Expenses are reported as a decrease in net assets without donor restrictions. Gains and losses associated with property, plant and equipment disposals are included in Other income and Other operating expenses, respectively. Gains and losses on investments are included in Return on investments, net and are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor stipulation or by law. Gains or losses associated with all other activities, such as debt retirements and pension and postretirement plan actuarial valuation adjustments, are reported in Pension, other postretirement employee benefits (OPEB) and other, net. Donor-restricted resources intended for the acquisition or construction of long-lived assets are initially reported as net assets with donor restrictions and released from restrictions to net assets without donor restrictions when the asset is placed in service or in accordance with donor-specified terms.

Expirations of restrictions on contributions and investment income, reported as Net assets released from restrictions, and the corresponding amounts are included in the Consolidated Statements of Activities as follows (in thousands):

Net Assets Without Donor Restrictions	**2022**	**2021**
Contributions and donor support	$ 125,506	$ 120,760
Investment income	384,073	362,174
Contributions and donor support for capital related activities	54,603	36,413
Net assets released from restrictions	**$ 564,182**	**$ 519,347**

Net Assets With Donor Restrictions	**2022**	**2021**
Net assets released from restrictions	**$ (564,182)**	**$ (519,347)**

Fair Value

The University values certain financial and non-financial assets and liabilities by applying the Financial Accounting Standards Board (FASB) pronouncement on Fair Value Measurements. The pronouncement defines fair value and establishes a framework for measuring fair value that includes a hierarchy that categorizes and prioritizes the sources used to measure and disclose fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The hierarchy is broken down into three levels based on inputs that market participants would use in valuing the asset or liability and are developed based on market data obtained from sources independent of the University as follows:

Level 1: Unadjusted quoted market prices in active markets for identical assets or liabilities.

Level 2: Unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable.

Level 3: Unobservable inputs for the asset or liability.

Inputs broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, specific and broad credit data, liquidity statistics and other factors. The University is required by the pronouncement to maximize the use of observable inputs (Levels 1 and 2) and minimize the use of unobservable inputs (Level 3). The University considers observable data to be that market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary and provided by independent sources that are actively involved in the relevant market. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of the instrument and does not necessarily correspond to the University's perceived risk of that instrument.

Assets and liabilities are disclosed in the Notes to Consolidated Financial Statements within the hierarchy based on the lowest (or least observable) input that is significant to the measurement. The University's assessment of the significance of an input requires judgment, which may affect the valuation and categorization within the fair value hierarchy. The fair value of assets and liabilities using Level 3 inputs are generally determined by using pricing models or discounted cash flow methods, which all require significant management judgment or estimation.

As a practical expedient, the University is permitted to estimate the fair value of an investment in an investment company at the measurement date using the reported net asset value (NAV). Adjustment is required if the University expects to sell the investment at a value other than NAV or if the NAV is not calculated in accordance with U.S. GAAP. The University holds investments in its portfolio which are generally valued based on the most current NAV. This amount represents fair value of these investments at June 30, 2022 and 2021. Investments reported at NAV, as a practical expedient, are not included within levels 1, 2, or 3 in the fair value hierarchy.

The University performs additional procedures, including due diligence reviews, on its investments in investment companies and other procedures with respect to the capital account or NAV provided to ensure conformity with US GAAP. The University has assessed factors including, but not limited to, managers' compliance with the Fair Value Measurement standard, price transparency and valuation procedures in place.

Cash and Cash Equivalents

Cash equivalents include demand deposits and liquid investments available for current operations with maturities of three months or less, which would be considered Level 1 investments under the fair value hierarchy. All short-term, highly liquid investments, otherwise qualifying as cash equivalents or restricted cash equivalents, included in the University's investments are treated as Investments, at fair value and are therefore excluded from Cash and cash equivalents in the Statements of Cash Flows.

Investments, at Fair Value

The majority of the University's investments are held in the Associated Investments Fund (AIF). The AIF is invested in accordance with the investment policies set out by an Investment Board which has been appointed by the Trustees of the University of Pennsylvania (the Trustees). The Office of Investments is responsible for the day-to-day management of the AIF including identifying, selecting and monitoring a variety of external investment managers to implement the strategic asset allocation set forth by the Investment Board. The AIF may include marketable and not readily marketable securities that it intends to hold for an indefinite period of time. The University also holds other investments which are not invested in the AIF due to various restrictions. The majority of these investments are in highly liquid short-term and equity type investments. Changes in the fair value of investments are reported in Return on investments, net in the Consolidated Statements of Activities. The following is a summary of the investments held in the AIF by asset allocation, as well as investment risk:

Short-Term

Short-term investments include cash equivalents and fixed income investments with maturities of less than one year. Short-term investments are valued using observable market data and are categorized as Level 1 based on quoted market prices in active markets. The majority of these short-term investments are held in a US Treasury money market account.

Equity

Equity investments consist of direct holdings of public securities in managed accounts as well as mutual funds and private funds. The securities held in managed accounts, along with mutual funds, are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1. Private funds are valued at NAV.

Debt

Debt investments consist of direct holdings of securities in managed accounts and private funds. Securities such as US Treasuries, held in managed accounts, are valued based on quoted market prices in active markets and are categorized as Level 1. Securities such as corporate and sovereign bonds, also held in managed accounts, are valued based on quoted market prices or dealer or broker quotations and are categorized as Level 2 or in the cases where inputs are unobservable as Level 3. Private funds are valued at NAV.

Absolute Return

Absolute return investments are made up of allocations to private funds. The fund managers of these private funds invest in a variety of securities, based on the strategy of the fund, which may or may not be quoted in an active market. Private funds are valued at NAV.

Real Estate

Investments in real estate are primarily in the form of private funds. The fund managers of these private funds primarily invest in investments for which there is no readily determinable market value. The fund managers may value the underlying investments based on an appraised value, discounted cash flow, industry comparables or some other method. Private funds are valued at NAV.

Private Equity

Investments in private equity are in the form of close-ended private funds. The fund managers primarily invest in investments for which there is no readily determinable market value. The fund managers may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These private fund investments are valued at NAV.

Natural Resources

Investments in natural resources are made up of private funds and securities in managed accounts. The fund managers of these private funds primarily invest in investments for which there is no readily determinable market value. The fund managers may value the underlying investments based on an appraised value, discounted cash flow, industry comparables or some other method. Private funds are valued at NAV. The securities held in managed accounts are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1.

Derivative Instruments

The University, in the normal course of business, utilizes derivative financial instruments in connection with its investment activity. Derivatives utilized by the University include futures, options, swaps and forward currency contracts and are reflected at fair value following the definition of Level 1 and 2 assets and liabilities as previously described. Investments in derivative contracts are subject to foreign exchange and equity price risks that can result in a loss of all or part of an investment. In addition, the University is also subject to additional counterparty risk should its counterparties fail to meet the terms of their contracts.

Investment Risks

The University’s investing activities expose it to a variety of risks including market, credit and liquidity risks. The University attempts to identify, measure and monitor risk through various mechanisms including risk management strategies and credit policies.

Market risk is the potential for changes in the fair value of the University’s investment portfolio. Commonly used categories of market risk include currency risk (exposure to exchange rate differences between functional currency relative to other foreign currencies), interest rate risk (changes to prevailing interest rates or changes in expectations of futures rates) and price risk (changes in market value other than those related to currency or interest rate risk, including the use of NAV provided).

Credit risk is the risk that one party to a financial investment will cause a financial loss for the other party by failing to discharge an obligation (counterparty risk).

Liquidity risk is the risk that the University will not be able to meet its obligations associated with financial liabilities.

Endowment

The University's endowment consists of 7,486 donor-restricted endowment funds and 981 quasi-endowment funds established by management for a variety of purposes. The University reports all endowment investments at fair value. Most of the endowment funds of the University have been pooled in the University's AIF. The endowment funds not pooled in the AIF are primarily invested in equities and bonds.

The Commonwealth of Pennsylvania has not adopted the Uniform Management of Institutional Funds Act (UMIFA) or the Uniform Prudent Management of Institutional Funds Act (UPMIFA). Rather, the Pennsylvania Act governs the investment, use and management of the University's endowment funds.

The Pennsylvania Act does not require the preservation of the fair value of a donor's original gift as of the gift date of a donor-restricted endowment fund, absent explicit donor stipulations to the contrary. However, based on its interpretation of the Pennsylvania Act and relevant accounting literature, the University classifies the following as net assets with donor restrictions for reporting purposes: (i) the original value of donated assets required to be invested in perpetuity; (ii) the original value of subsequent donated assets required to be invested in perpetuity; (iii) accumulations to the donated assets invested in perpetuity made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund; and (iv) donated assets and accumulations that are subject to legal or donor-imposed restrictions that will be met by actions of the University and/or the passage of time. The Pennsylvania Act allows a nonprofit to elect to appropriate for expenditure between 2% and 7% (increased to 10% for fiscal years 2020 through 2022) of the endowment fair value, determined at least annually and averaged over a period of three or more preceding years, including funds whose fair value is less than the original donated value.

In accordance with the Pennsylvania Act, the University has elected to adopt and follow an investment policy seeking a total return for the investments held by the AIF, whether the return is derived from appreciation of capital or earnings and distributions with respect to capital or both. The endowment spending policy which the Board of Trustees has elected to govern the expenditure of funds invested in the AIF, including funds whose fair value is less than the original donated value, is designed to manage annual spending levels and is independent of the cash yield and appreciation of investments for the year. For fiscal year 2022, the spending rule payout is based on the sum of: (i) 70% of the prior fiscal year distribution adjusted by an inflation factor; and (ii) 30% of the prior fiscal year-end fair value of the AIF, lagged one year, multiplied by a 6% target spending rate for all funds. The payout or allocation to operations exceeded actual income, net of expenses, by $876,619,000 and $797,492,000 in 2022 and 2021, respectively.

Property, Plant and Equipment

Property, plant and equipment (PPE) is reported net of related depreciation. Donated PPE is reported based on estimated fair value at the date of acquisition. All other PPE is reported at cost. Depreciation is computed on the straight-line method over the estimated useful lives of the assets, or the shorter of the lease term or estimated useful life for leased assets. Contributions of library materials, as well as rare books and other collectibles, are not recorded for financial statement presentation, while purchases are recorded as Other operating expenses on the Consolidated Statement of Activities in the period acquired.

Split-Interest Agreements

The University's split-interest agreements with donors consist of irrevocable charitable remainder trusts, charitable gift annuities, pooled income funds, perpetual trusts and charitable lead trusts. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements.

The University recognizes assets contributed to charitable remainder trusts, charitable gift annuities and pooled income funds, where it serves as trustee, at fair value, recognizes a liability to the beneficiaries based on the present value of the estimated future payments to beneficiaries to be made over the estimated remaining life of those beneficiaries using current market rates at the date of the contribution, and recognizes the difference as contribution revenue. Subsequently, the trust assets, invested in equity and debt securities, are measured at fair value at quoted market prices, and are categorized as Level 1, with the changes reported as an adjustment to Investments, at fair value on the Consolidated Statements of Financial Position and Return on investments, net on the Consolidated Statements of Activities. Liabilities to beneficiaries are revalued based on current market rates, and are categorized as Level 2, with the changes reported as an adjustment to Accrued expense and other liabilities on the Consolidated Statements of Financial Position and Return on investments, net on the Consolidated Statements of Activities.

Charitable remainder trust assets, where the University does not serve as trustee, are initially valued using the current fair value of the underlying assets, using observable market inputs based on its beneficial interest in the trust, discounted to a single present value using current market rates at the date of the contribution. The initially contributed assets are categorized as Level 3, and reported as Investments, at fair value on the Consolidated Statements of Financial Position and Contribution revenue on the Consolidated Statements of Activities. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to Investments, at fair value on the Consolidated Statements of Financial Position and Return on investments, net on the Consolidated Statements of Activities. The primary unobservable input used in the fair value measurement of the charitable remainder trust assets is the discount rate.

Perpetual trust assets are initially valued at the current fair value of the underlying assets using observable market inputs based on its beneficial interest in the trust. The initially contributed assets are categorized as Level 3 and are reported as Investments, at fair value on the Consolidated Statements of Financial Position and as Contribution revenue on the Consolidated Statements of Activities. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to Investments, at fair value on the Consolidated Statements of Financial Position and Return on investments, net on the Consolidated Statements of Activities. The primary unobservable inputs used in the fair value measurement of the perpetual trust assets are the underlying securities held by the trust.

The University reports charitable lead trust assets by discounting future cash flows using current market rates at the measurement date, matched to the payment period of the agreement. The initially contributed assets are categorized as Level 3, and reported as Investments, at fair value on the Consolidated Statements of Financial Position and as Contribution revenue on the Consolidated Statements of Activities. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to Investments, at fair value on the Consolidated Statements of Financial Position and Return on investments, net on the Consolidated Statements of Activities. The primary unobservable input used in the fair value measurement of the charitable lead trust assets is the discount rate.

Income Taxes

The University is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code. Most of its activities and income are related to its exempt purposes and are exempt from federal and state income taxes. None of its activities and income is subject to Pennsylvania income tax. Unrelated activities and income are subject to federal "Unrelated Business Income Tax."

The University regularly evaluates its tax position and does not believe it has any uncertain tax positions that require disclosure or adjustment to the consolidated financial statements.

Tuition and Fees

Tuition and fees includes tuition, room and board, and other student fees which are recognized as revenue over time during the fiscal year in which the related academic services are rendered. Tuition and fees received in advance of services to be rendered are reported as Deferred income on the Consolidated Statements of Financial Position. The University maintains a policy of offering qualified undergraduate applicants admission to the University without regard to financial circumstance, as well as meeting in full the demonstrated financial need of those admitted. Tuition and fees have been reduced by certain grants and scholarships in the amount of $375,596,000 and $349,592,000 in 2022 and 2021, respectively.

Sponsored Programs

Sponsored programs includes revenue from exchange and conditional non-exchange agreements with governments, foundations and private sources, generally for research activities. Revenue from exchange agreements is generally recognized at a point in time when performance obligations are met, and revenue from conditional non-exchange agreements is generally recognized as the related costs are incurred. Non-exchange agreements are considered conditional if the terms of the agreement include both a right of return/release of assets received/promised and a barrier. These agreements become unconditional as barriers are met. At June 30, 2022, the University has unrecorded conditional agreements of $2,638,553,000. In 2022 and 2021, sponsored programs revenue earned from governmental sources totaled $927,666,000 and $833,004,000, respectively. Indirect costs recovered on federally-sponsored programs are generally based on predetermined reimbursement rates which are stated as a percentage and distributed based on the modified total direct costs incurred. The University negotiates its federal indirect rates with its cognizant federal agency. Indirect costs recovered on all other grants and contracts are based on rates negotiated with the respective sponsors. Funds received for sponsored research activity are subject to audit. Based upon information currently available, management believes that any liability resulting from such audits will not materially affect the financial position or operations of the University.

Contributions

Contributions are revenues from unconditional non-exchange agreements with private sources and foundations. Contributions are recognized in the period received and reported as increases in the appropriate net asset category based on the presence or absence of donor-imposed restrictions. Non-exchange agreements are considered conditional if the terms of the agreement include both a right of return/release of assets received/promised and a barrier. These agreements become unconditional as barriers are met. Contributions and donor support without donor restrictions also includes net assets released as a result of corresponding expenditures which met donor-imposed restrictions. Contributions designated for the acquisition of long-lived assets and long-term investment are reported in Nonoperating activities.

The University reports unconditional pledges at fair value by discounting future cash flows using current market rates at the measurement date, ranging from 3.62% to 4.51%, matched to the payment period of the agreement, and accordingly categorizes these assets as Level 3. The primary unobservable input used in the fair value measurement of the University's Contributions receivable is the discount rate. Changes in the fair value of the University’s Contributions receivable due to fluctuations in the discount rate are reported as Contribution revenue on the Consolidated Statements of Activities.

Net Patient Service Revenue

Net patient service revenue is derived from contracts with patients of UPHS in which its performance obligation is to provide health care services. Net patient service revenue is recorded over time during the period these performance obligations are satisfied and at the determined transaction price, which represents the estimated net realizable amounts due from patients, third-party payers and others for health care services rendered. Estimated net realizable amounts represent amounts due, net of implicit and explicit price concessions. Implicit price concessions are based on management's assessment of expected net collections considering economic conditions, historical experience, trends in health care coverage and other collection indicators. After satisfaction of amounts due from insurance and reasonable efforts to collect from patients have been exhausted, UPHS follows established guidelines for placing certain past-due patient balances with collection agencies, subject to terms of certain restrictions on collection efforts as determined by UPHS. Patient receivables are written off after collection efforts have been followed in accordance with UPHS' policy. Certain revenue received from third-party payers is subject to audit and retroactive adjustment. Any changes in estimates under these contracts are recorded in operations currently.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

COVID-19

In response to the COVID-19 pandemic, the federal government passed the Coronavirus Aid, Relief, and Economic Stimulus Act of 2020 (CARES Act) and the American Rescue Plan Act of 2021 (ARP) which made funds available to UPHS and the Academic Component through various provisions of the legislation. The following table summarizes the related impact on the Consolidated Financial Statements as of June 30, 2022 and 2021, and for the years then ended (in thousands):

	Line Item	2022	2021
Consolidated Statements of Activities:			
UPHS CARES Act Provider relief funding	Other income	$ 18,654	$ 201,281
UPHS ARP PA DHS Act 2 funding	Other income	19,239	
Higher Education Emergency Relief funding	Other income	22,494	
Higher Education Emergency Relief funding	Sponsored programs	17,847	
Consolidated Statements of Financial Position:			
UPHS Centers for Medicare and Medicaid Services Accelerated and Advanced Payments Program	Accrued expenses and other liabilities	$ 116,304	$ 535,787
Deferral of Social Security taxes	Accrued expenses and other liabilities	84,991	180,763

Recent Authoritative Pronouncements

Periodically, the FASB issues updates to the Accounting Standards Codification (ASC) which impacts the University's financial reporting and related disclosures. The paragraph that follows summarizes a relevant update.

In March 2020, January 2021, and April 2022, the FASB issued standard updates on Reference Rate Reform in response to the planned discontinuation of the London Inter-Bank Offered Rate (LIBOR), a key interbank reference rate. The standard provides accounting relief to contract modifications and optional expedients for applying U.S. GAAP to contracts and other transactions that reference LIBOR or other reference rates that are expected to be discontinued because of rate reform. The University has determined that the standard will have no material impact on the University's results of operations or financial position.

2. UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM - SUMMARIZED FINANCIAL AND RELATED INFORMATION

The Trustees formed Penn Medicine, the governance structure which oversees the activities of UPHS and the University of Pennsylvania Perelman School of Medicine (PSOM) in order to operate, oversee and coordinate its academic, research and clinical missions.

UPHS is comprised of the following operating entities: Clinical Practices of the University of Pennsylvania; Clinical Care Associates; Hospital of the University of Pennsylvania; Penn Presbyterian Medical Center; Pennsylvania Hospital of the University of Pennsylvania Health System; Chester County Hospital and Health System; Lancaster General Health (LGH); Wissahickon Hospice of the University of Pennsylvania Health System; Princeton HealthCare System (PHCS); Franklin Casualty Insurance Company, a wholly owned Risk Retention Group; and, Quaker Insurance Company Ltd., a wholly owned offshore captive insurance company, (collectively referred to as RRG/Captive).

Throughout the year, certain transactions (primarily billings for allocations of common costs, physicians' salaries and benefits, certain purchased services and support for PSOM) are conducted between UPHS and the University. Nonoperating, net, as shown below, includes transfers from UPHS to the University of $148,317,000 and $181,414,000 in 2022 and 2021, respectively, to further the research and educational activities of PSOM, and $11,027,000 and $61,008,000 in 2022 and 2021, respectively, for other activities. In addition, UPHS recognized operating expenses of $20,588,000 and $21,583,000 in 2022 and 2021, respectively, to support academic operating activities in the clinical departments of PSOM.

The effect of all these transactions is included in the following summarized financial information of UPHS as of and for the years ended June 30, 2022 and 2021 (in thousands):

	2022	2021
Net patient service revenue	$ 8,104,389	$ 7,545,629
Other revenue and support	1,100,018	1,132,479
Total expenses	(9,056,929)	(8,067,225)
Excess of revenue over expenses from operations	147,478	610,883
Nonoperating, net	361,326	1,725,343
Increase in net assets	**$ 508,804**	**$ 2,336,226**
Total current assets	$ 2,240,024	$ 2,478,737
Assets whose use is limited:		
Held by trustees	165,219	186,258
RRG/ Captive	304,256	283,865
Donor restricted and other	820,548	867,329
Designated	4,094,937	3,946,161
Property and equipment, net	5,949,333	5,700,083
Investments and other assets	821,977	1,580,799
Total assets	**$ 14,396,294**	**$ 15,043,232**
Total current liabilities	$ 1,603,575	$ 1,977,367
Long-term debt, net of current portion	2,541,850	2,617,838
Other liabilities	1,634,578	2,340,540
Total liabilities	**$ 5,780,003**	**$ 6,935,745**
Net assets		
Without donor restrictions	$ 7,761,326	$ 7,217,776
With donor restrictions	854,965	889,711
Total net assets	**$ 8,616,291**	**$ 8,107,487**
Total liabilities and net assets	**$ 14,396,294**	**$ 15,043,232**

Net Patient Service Revenue

Net Patient Service Revenue (NPSR) for the years ended June 30, 2022 and 2021 is derived from the following payers:

	2022	2021
Medicare (including Managed Medicare)	33%	32%
Medicaid (including Managed Medicaid)	13%	12%
Managed care	33%	35%
Independence Blue Cross (IBC)	16%	16%
Commercial	4%	4%
Self pay	1%	1%
	100%	100%

Third-party payers

UPHS has agreements with the following third-party payers that provide for payments at amounts that differ from its established rates:

Medicare and Medicaid

Inpatient acute care services and outpatient services rendered to Medicare program beneficiaries are paid at prospectively determined rates. These rates vary according to a patient classification system that is based on clinical, diagnostic, and other factors. Inpatient psychiatric services and medical education costs related to Medicare beneficiaries are paid based on a cost reimbursement methodology. UPHS is reimbursed for cost reimbursable items at a tentative rate with final settlement determined after submission of annual cost reports by each hospital and audits thereof by the Medicare fiscal intermediary.

Inpatient and outpatient services rendered to Medicaid program beneficiaries are paid at prospectively determined rates. Additional amounts are allocated to each hospital for training residents and serving a disproportionate indigent population.

Laws and regulations governing the Medicare and Medicaid programs are extremely complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates will change by a material amount in the near term.

IBC and Commercial

During 2017, UPHS and IBC reached agreement on terms of a five-year agreement. Payments made for inpatient services provided to IBC traditional and managed care subscribers are effected on a per case rate basis for most services. Payment for outpatient services is principally based upon negotiated fee schedules. Hospital and physician rates also provide for annual inflationary increases. In addition, incentives are paid for high performance with regard to clinical outcomes and patient quality. On September 10, 2021, this agreement was extended from June 30, 2022 to June 30, 2025.

During 2015, UPHS and Aetna reached agreement on terms of a five-year agreement. A one-year bridge agreement was initiated effective July 1, 2020, and UPHS and Aetna subsequently extended this agreement through June 30, 2025. The new agreement consolidated all prior existing agreements across all UPHS regions and entities. Further, extensive new value-based payment models were layered on top of the existing fee-for-service framework.

UPHS also has reimbursement agreements with other commercial insurance carriers, health maintenance organizations and preferred provider organizations. The basis for reimbursement under these agreements includes prospectively determined rates per discharge, discounts from established charges and prospectively determined per diem rates.

Charity Care

UPHS provides services to patients who meet certain criteria under its charity care policy without charge or at amounts less than UPHS' established rates. Because UPHS does not pursue collections for these patients, such amounts have been excluded from NPSR. UPHS estimates the costs of providing charity care services based on data derived from a combination of UPHS' cost accounting system and the ratio of costs to charges. Of the Total expenses reported above by UPHS, an estimated $31,336,000 and $27,335,000 were incurred as a result of providing services to charity patients for the years ended June 30, 2022 and 2021, respectively.

Medical Professional Liability Claims

The University is insured for medical professional liability claims through the combination of the Medical Care Availability and Reduction of Error Fund (Mcare), various commercial insurance companies and risk retention programs.

Mcare levies health care provider surcharges, as a percentage of the Pennsylvania Joint Underwriters Association rates for basic coverage, to pay claims and pay administrative expenses of Mcare participants. These surcharges are recognized as expenses in the period incurred. Mcare operates on a pay-as-you-go basis and no provision has been made for any future Mcare assessments in the accompanying financial statements, as the University's portion of the unfunded Mcare liability cannot be estimated.

Anticipated insurance recoveries and estimated liabilities for medical malpractice claims or similar contingent liabilities are presented separately on the Consolidated Statements of Financial Position in Accounts receivable, net and Accrued expenses and other liabilities, respectively. The University accrues for estimated risks arising from both asserted and unasserted medical professional liability claims. The estimate of the gross liability and corresponding receivable for unasserted claims arising from unreported incidents is based on analysis of historical claims data by an independent actuary, which is recorded utilizing a 2.25% to 3.50% discount rate as of June 30, 2022 and 2021. The gross liability recorded under this program is $797,620,000 and $765,755,000 at June 30, 2022 and 2021, respectively, with a corresponding receivable of $119,795,000 and $113,343,000 at June 30, 2022 and 2021, respectively.

3. ACCOUNTS RECEIVABLE

Accounts receivable are reported at their net realizable value. The major components of receivables, net of allowances for doubtful accounts of $31,546,000 and $29,040,000 at June 30, 2022 and 2021, respectively, are as follows (in thousands):

	2022	2021
Patient	$ 1,012,942	$ 927,009
Intellectual property	350,346	321,287
Sponsored research	175,259	149,303
Malpractice	119,795	113,343
Trade	66,726	44,884
Student	33,973	29,150
Other	165,986	144,638
TOTAL ACCOUNTS RECEIVABLE, NET	**$ 1,925,027**	**$ 1,729,614**

4. LOANS RECEIVABLE

Loans receivable, and related allowances for doubtful accounts, consist of the following at June 30, 2022 and 2021 (in thousands):

2022

	Receivable	Allowance	Net
Student Loans:			
Federally-sponsored	$ 35,478		$ 35,478
Other	11,860	$ 2,897	8,963
Total Student loans	$ 47,338	$ 2,897	$ 44,441
Other	15,787	419	15,368
TOTAL	**$ 63,125**	**$ 3,316**	**$ 59,809**

2021

		Receivable		Allowance		Net
Student Loans:						
Federally-sponsored	$	36,974			$	36,974
Other		12,547	$	2,902		9,645
Total Student loans	$	49,521	$	2,902	$	46,619
Other		15,001		667		14,334
TOTAL	**$**	**64,522**	**$**	**3,569**	**$**	**60,953**

Loans receivable primarily consists of student loans. Student loans include federally-sponsored student loans and donor-restricted student loans with mandated interest rates and repayment terms. The federally-sponsored student loans represent amounts due from current and former students under various Federal Government funded loan programs offered to graduate and undergraduate students. Loans disbursed under these programs are able to be assigned to the Federal Government upon default by the borrower; therefore, no related allowance is considered necessary. Funding received under these programs is ultimately refundable to the Federal Government in the event the University no longer participates and accordingly is reported as a liability in Federal student loan advances in the Consolidated Statements of Financial Position. Determination of the fair value of student loans receivable is not practicable.

Loans receivable are reported at their net realizable value. The University regularly assesses the adequacy of the allowances for expected credit losses of its loans by performing ongoing evaluations, including such factors as aging, differing economic risks associated with each loan category, financial condition of specific borrowers, economic environment in which the borrowers operate, level of delinquent loans, value of collateral and existence of guarantees or indemnifications.

5. CONTRIBUTIONS RECEIVABLE

A summary of contributions receivable at June 30, 2022 and 2021, is as follows (in thousands):

		2022		2021
Unconditional promises expected to be collected in:				
Less than one year	$	192,660	$	164,432
One year to five years		282,350		232,207
Over five years		126,151		138,684
		601,161		535,323
Less: Discount		(57,500)		(31,618)
Less: Allowances for doubtful amounts		(29,873)		(30,125)
TOTAL CONTRIBUTIONS RECEIVABLE, NET	**$**	**513,788**	**$**	**473,580**

At June 30, 2022 and 2021, the University has outstanding unrecorded conditional promises to give, including non-legally binding bequests, of $516,618,000 and $512,434,000, respectively. When conditional promises to give become unconditional or non-legally binding bequests cash payments are received, they are recorded and are generally restricted for operations, endowment and capital projects as stipulated by the donors.

6. INVESTMENTS, AT FAIR VALUE

A summary of investments, including the AIF, as of June 30, 2022 and 2021, categorized in accordance with the fair value hierarchy, is as follows (in thousands):

2022	Level 1	Level 2	Level 3	Investments at NAV	Total
Short-term:	$ 1,325,507				$ 1,325,507
Equity:					
US equities	647,907			$ 1,265,830	1,913,737
International equities	183,787			1,153,652	1,337,439
Emerging market equities				1,457,588	1,457,588
Total Equity	831,694			3,877,070	4,708,764
Debt:					
US treasuries	822,001	$ 37,217			859,218
Corporate bonds	101,929	150,064			251,993
Total Debt	923,930	187,281			1,111,211
Split-interest agreements	84,635		$ 350,812		435,447
Absolute return				4,332,605	4,332,605
Real estate		59		1,485,654	1,485,713
Private equity			20,234	7,891,341	7,911,575
Natural resources	148,845		3,547	983,745	1,136,137
Derivative instruments		34,680			34,680
Other			2,644		2,644
TOTAL INVESTMENTS, AT FAIR VALUE	**$ 3,314,611**	**$ 222,020**	**$ 377,237**	**$ 18,570,415**	**$ 22,484,283**

2021	Level 1	Level 2	Level 3	Investments at NAV	Total
Short-term	$ 1,237,141				$ 1,237,141
Equity:					
US equities	1,193,240			$ 1,803,025	2,996,265
International equities	225,447			1,240,442	1,465,889
Emerging market equities	178,608			1,524,253	1,702,861
Total Equity	1,597,295			4,567,720	6,165,015
Debt:					
US treasuries	1,378,651	$ 23,746			1,402,397
Corporate bonds	87,678	236,088			323,766
Total Debt	1,466,329	259,834			1,726,163
Split-interest agreements	103,128		$ 395,694		498,822
Absolute return				4,423,435	4,423,435
Real estate		2,059		1,042,564	1,044,623
Private equity			21,754	6,995,732	7,017,486
Natural resources	175,758			747,025	922,783
Derivative instruments		667			667
Other			2,867		2,867
TOTAL INVESTMENTS, AT FAIR VALUE	**$ 4,579,651**	**$ 262,560**	**$ 420,315**	**$ 17,776,476**	**$ 23,039,002**

Included in Short-term investments is $24,380,000 and $23,259,000 of amounts held by trustees under indenture and escrow agreements at June 30, 2022 and 2021, respectively.

At June 30, 2022 and 2021, Short-term investments include $50,264,000 and $284,569,000, respectively, of outstanding receivables from trading activities. At June 30, 2022 and 2021, Short-term investments also include $23,803,000 and $64,517,000, respectively, of outstanding payables from trading activities.

Liabilities related to equity short positions of $492,721,000 and $389,222,000 at June 30, 2022 and 2021, respectively, are reported in Accrued expenses and other liabilities on the Consolidated Statements of Financial Position. These liabilities are valued using observable market data and are categorized as Level 1 based on quoted market prices in active markets.

Split-interest agreement investments included in Level 1 above are readily marketable assets invested by the University separately from the AIF where the University serves as trustee. These amounts include assets related to the University Academic Component charitable gift annuities totaling $41,332,000 and $49,757,000 at June 30, 2022 and 2021, respectively. Included in these split-interest agreement investments are amounts held to meet legally mandated annuity reserves of $25,853,000 and $28,009,000 as of June 30, 2022 and 2021, respectively, as required by the laws of the following states where certain individual donors reside: California, Maryland, New Jersey and New York. Level 3 split-interest agreement investments are managed and invested outside of the University by external trustees.

A summary of Level 3 assets included in split-interest agreement investments, where the University is not trustee, measured at fair value, as of June 30, 2022 and 2021 is as follows (in thousands):

	2022	2021
Charitable remainder trusts	$ 18,197	$ 18,874
Charitable lead trusts	4,266	6,523
Perpetual trusts	328,349	370,297
Total	**$ 350,812**	**$ 395,694**

Changes to the reported amounts of split-interest agreement investments measured at fair value using unobservable (Level 3) inputs as of June 30, 2022 and 2021 are as follows (in thousands):

	Charitable Remainder Trusts	Charitable Lead Trusts	Perpetual Trusts	Total
June 30, 2021	$ 18,874	$ 6,523	$ 370,297	$ 395,694
Net realized gains (losses)			9,830	9,830
Net unrealized gains (losses)	730	(1,931)	(53,298)	(54,499)
Acquisitions			1,520	1,520
Liquidations	(1,407)	(326)		(1,733)
June 30, 2022	$ 18,197	$ 4,266	$ 328,349	$ 350,812

	Charitable Remainder Trusts	Charitable Lead Trusts	Perpetual Trusts	Total
June 30, 2020	$ 19,487	$ 5,763	$ 300,451	$ 325,701
Net realized gains (losses)			10,170	10,170
Net unrealized gains (losses)	(571)	812	59,647	59,888
Acquisitions			29	29
Liquidations	(42)	(52)		(94)
June 30, 2021	$ 18,874	$ 6,523	$ 370,297	$ 395,694

The following tables set forth the fair value, related gains (losses) and notional amounts of the University's derivative instruments by contract type as of June 30, 2022 and 2021 (in thousands):

2022	Notional Amount	Gross Derivative Assets	Gross Derivative Liabilities	Derivative Gains (Losses)
Foreign currency contracts	$ 145,227		$ 13,948	$ (24,855)
Futures contracts	(529,474)	$ 30,032		75,133
Options contracts	153,941	4,648	446	(533)
Total	**$ (230,306)**	**$ 34,680**	**$ 14,394**	**$ 49,745**

2021	Notional Amount	Gross Derivative Assets	Gross Derivative Liabilities	Derivative Gains (Losses)
Foreign currency contracts	$ 132,341	$ 309	$ 723	$ (5,078)
Futures contracts	(431,857)	166		(225,995)
Options contracts	(101,311)	192	333	4,553
Total	**$ (400,827)**	**$ 667**	**$ 1,056**	**$ (226,520)**

The notional amount is representative of the volume and activity of the respective derivative type during the years ended June 30, 2022 and 2021.

Gross derivative assets and liabilities are shown on the Consolidated Statements of Financial Position in Investments, at fair value and Accrued expenses and other liabilities, respectively. Derivative gains (losses) are shown in Return on investments, net on the Consolidated Statements of Activities, in the appropriate net asset classification.

Details on the fair value, remaining estimated life, outstanding commitments, current redemption terms and restrictions by strategy and type of investment are provided below (in thousands):

Strategy	Fair Value at June 30, 2022	Fair Value at June 30, 2021	Outstanding Commitments	Redemption Terms	Redemption Restrictions
Short-term	$ 1,325,507	$ 1,237,141		Daily	None
Equity:					
Managed accounts	650,227	1,259,520		Daily and semi-annually with varying notice periods	None
Mutual funds	181,468	337,776		Daily	None
Private funds (1)	3,877,069	4,567,719	$ 108,246	Weekly to annually with varying notice periods	Lock-up provisions ranging from 0 to 5 years and side pocket investments (2)
Total Equity	**4,708,764**	**6,165,015**	108,246		
Debt:					
Managed accounts	1,111,211	1,726,163		Daily	None
Total Debt	**1,111,211**	**1,726,163**			
Absolute return	**4,332,605**	**4,423,435**	290,229	Range from monthly to annually and close-ended funds not available for redemption	Lock-up provisions ranging from 0 to 5 years with earlier redemptions subject to redemption fee, close-ended funds not available for redemption, and side pocket investments (2)
Real estate	**1,485,713**	**1,044,623**	1,215,843	Close-ended funds not available for redemption	Close-ended funds not available for redemption
Private equity	**7,911,575**	**7,017,486**	3,244,748	Close-ended funds not available for redemption	Close-ended funds not available for redemption
Natural Resources:					
Managed accounts	152,392	175,758		Daily	None
Private funds (1)	983,745	747,025	249,311	Close-ended funds not available for redemption	Close-ended funds not available for redemption
Total Natural Resources	**1,136,137**	**922,783**	249,311		
Total	**$ 22,011,512**	**$ 22,536,646**	$ 5,108,377		

(1) Private funds consist of close-ended and open-ended funds generally in the form of limited partnerships. Close-ended funds have varying remaining fund terms between 1 to 17 years.

(2) Side pocket investments represent investments designated by a manager that are not available for liquidity in an otherwise liquid fund vehicle.

Invested in the AIF with an aggregate fair value of $217,928,000 and $226,422,000 at June 30, 2022 and 2021, respectively, is a perpetual trust managed by an external trustee who has delegated investment decisions to the University. The University invests the assets of this trust in accordance with its endowment policy.

The University has made investments in various long-lived partnerships and, in other cases, has entered into contractual agreements that may limit its ability to initiate redemptions due to notice periods, lock-ups and gates. The University has also made commitments to various limited partnerships. The University expects these funds to be called over the next 5 years. The total amount of unfunded commitments is $5,108,377,000 which represents 25.3% of the AIF value as of June 30, 2022.

A summary of the University's total investment return, net of external and direct internal investment expenses, for the years ended June 30, 2022 and 2021 is presented below (in thousands):

	2022	2021
AIF investment income	$ 146,425	$ 55,780
AIF realized and unrealized gains (losses)	(99,940)	5,781,692
Total return on AIF	46,485	5,837,472
Other investment gains (losses)	(216,419)	262,182
Total return on investments, net	**$ (169,934)**	**$ 6,099,654**

7. ENDOWMENT

The composition and changes to the amount of the University's endowment at June 30, 2022 are as follows (in thousands):

	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment funds		$ 10,051,459	$ 10,051,459
Quasi-endowment funds	$ 10,672,892		10,672,892
June 30, 2022	**$ 10,672,892**	**$ 10,051,459**	**$ 20,724,351**

	Without Donor Restrictions	With Donor Restrictions	Total
Net assets, June 30, 2021	$ 10,337,266	$ 10,186,280	$ 20,523,546
Investment return	(26,114)	(57,799)	(83,913)
New gifts	9,498	319,291	328,789
Allocation of endowment assets for expenditure	(876,619)		(876,619)
Other investment allocation	(10,097)		(10,097)
Transfers to create board designated funds	810,005		810,005
Donor-imposed income reinvestments		26,629	26,629
Other transfers	41,567	(35,556)	6,011
Released from restriction	387,386	(387,386)	-
Net assets, June 30, 2022	**$ 10,672,892**	**$ 10,051,459**	**$ 20,724,351**

The composition and changes to the amount of the University's endowment as of June 30, 2021 are as follows (in thousands):

	Without Donor Restrictions	With Donor Restrictions	Total
Donor-restricted endowment funds		$ 10,186,280	$ 10,186,280
Quasi-endowment funds	$ 10,337,266		10,337,266
June 30, 2021	**$ 10,337,266**	**$ 10,186,280**	**$ 20,523,546**

	Without Donor Restrictions	With Donor Restrictions	Total
Net assets, June 30, 2020	$ 7,363,736	$ 7,513,627	$ 14,877,363
Investment return	2,974,220	2,848,798	5,823,018
New gifts	7,385	209,055	216,440
Allocation of endowment assets for expenditure	(797,492)		(797,492)
Other investment allocation	(4,239)		(4,239)
Transfers to create board designated funds	380,634		380,634
Donor-imposed income reinvestments		11,371	11,371
Other transfers	50,007	(33,556)	16,451
Released from restriction	363,015	(363,015)	-
Net assets, June 30, 2021	**$ 10,337,266**	**$ 10,186,280**	**$ 20,523,546**

At June 30, 2022 and 2021, the aggregate amount of funds reported in Net assets with donor restrictions for which the fair value was below historic value was $5,636,000 and $0, respectively.

8. PROPERTY, PLANT AND EQUIPMENT, NET

The components of PPE at June 30, 2022 and 2021 are as follows (in thousands):

	Estimated Useful Life in years	2022	2021
Land and land improvements	N/A to 20	$ 447,993	$ 446,746
Buildings and fixed equipment	5 to 50	13,255,569	11,100,395
Moveable equipment and other	4 to 20	2,543,589	2,294,762
Construction-in-progress		420,071	2,043,096
		16,667,222	15,884,999
Less: Accumulated depreciation		(7,276,098)	(6,708,971)
TOTAL PROPERTY, PLANT AND EQUIPMENT, NET		**$ 9,391,124**	**$ 9,176,028**

The University recorded $622,720,000 and $552,221,000 of depreciation expense for the years ended June 30, 2022 and 2021, respectively.

The University capitalized $26,203,000 and $65,649,000 of interest costs for the years ended June 30, 2022 and 2021, respectively.

9. SPLIT-INTEREST AGREEMENTS

Changes in the value of assets, liabilities and net assets pursuant to split-interest agreements as of June 30, 2022 and 2021 are as follows (in thousands):

2022	Assets	Liabilities	Net Assets
June 30, 2021	$ 498,822	$ (53,017)	$ 445,805
New contributions	2,705	(1,903)	802
Investment income	1,957	(1,611)	346
Realized and unrealized loss, net	(57,840)		(57,840)
Payments and settlements	(10,197)	8,374	(1,823)
Actuarial adjustment		1,749	1,749
Net change	**(63,375)**	**6,609**	**(56,766)**
June 30, 2022	$ 435,447	$ (46,408)	$ 389,039

2021	Assets	Liabilities	Net Assets
June 30, 2020	$ 412,786	$ (50,836)	$ 361,950
New contributions	2,505	(4,385)	(1,880)
Investment income	1,984	(1,446)	538
Realized and unrealized gain, net	89,903		89,903
Payments and settlements	(8,356)	9,124	768
Actuarial adjustment		(5,474)	(5,474)
Net change	**86,036**	**(2,181)**	**83,855**
June 30, 2021	$ 498,822	$ (53,017)	$ 445,805

10. CONTINGENCIES, GUARANTEES, AND COMMITMENTS

The University offers various loan programs for students and families to pay tuition, fees and other costs. Certain loans issued by private lending institutions are guaranteed by the University totaling $17,101,000 and $15,341,000 at June 30, 2022 and 2021, respectively. Upon default by the borrower, the University is required to pay all or a portion of the outstanding loan balance. The University recognized a liability totaling $2,648,000 and $2,826,000 at June 30, 2022 and 2021, respectively, to cover both the fair value of the guarantee and any expected defaults in the portfolio of guaranteed loans.

Various lawsuits, claims and other contingent liabilities arise in the ordinary course of the University's education and health care activities. Based upon information currently available, management believes that any liability resulting therefrom will not materially affect the financial position or operations of the University.

The University is currently involved in various projects that have resulted in capital and property acquisition commitments from the University. As of June 30, 2022, approximately $547,594,000 has been committed by the University.

11. PENSION AND OTHER POSTRETIREMENT BENEFITS COSTS

Retirement benefits are principally provided to employees through contributory defined contribution plans. The Academic Component's policy with respect to its contribution is to provide up to 9% of eligible employees' salaries, while the UPHS contribution can be up to 6.5%. The University's contributions to these plans amounted to $266,373,000 and $247,158,000 as of June 30, 2022 and 2021, respectively.

The University also has non-contributory defined benefit pension plans. Benefits under the plans generally are based on the employee's years of service and compensation during the years preceding retirement. Contributions to the plans are made in amounts necessary to at least satisfy the minimum required contributions as specified in the Internal Revenue Service Code and related regulations. The Academic Component's plan was frozen to new full-time entrants effective July 1, 2000 and part-time entrants effective July 1, 2018. UPHS' primary plan was frozen to new entrants effective July 1, 2010; the benefit accruals for all participants of the LGH and PHCS plans were frozen effective June 30, 2013 and December 31, 2011, respectively. During the year ended June 30, 2021, UPHS paid $25,814,000, from plan assets to insurance companies to buy out the total pension benefit for a portion of its retired participants.

The University also has faculty retirement incentive plans which are included in Other retirement programs shown below. The net liability under these plans is $55,413,000 and $95,139,000 as of June 30, 2022 and 2021, respectively, with the decrease primarily attributable to the University's offering of a special one-time faculty retirement plan during the year ended June 30, 2021.

Additionally, the University provides certain healthcare and life insurance benefits (OPEB) for retired employees. Only a limited number of employees may become eligible for such benefits if they reach retirement age while working for the University. These and similar benefits for active and certain retired employees are provided through insurance contracts.

The University uses a measurement date of June 30 for its defined benefit pension and OPEB plans.

Change in Plan Assets/Obligation and Funded Status

The funded status of the plans is measured as the difference between the plan assets at fair value and the projected benefit obligation (PBO) for Pension Benefits or accumulated postretirement benefit obligation (APBO) for Other Postretirement Benefits. The resulting net liability is recorded in Accrued retirement benefits on the Statements of Financial Position. The following shows changes in the benefit obligation, plan assets and funded status for the years ended June 30, 2022 and June 30, 2021 (in thousands):

2022	Pension Benefits	Other Postretirement Benefits	Total
Change in Benefit Obligation:			
Benefit obligation, beginning of year (PBO/APBO)	$ 4,177,955	$ 1,096,142	$ 5,274,097
Service cost	76,716	43,127	119,843
Interest cost	124,362	35,617	159,979
Plan participants' contributions	156	11,186	11,342
Net actuarial (gain)/loss	(880,613)	(307,658)	(1,188,271)
Benefits paid	(117,908)	(35,594)	(153,502)
Benefit obligation, end of year (PBO/APBO)	$ 3,380,668	$ 842,820	$ 4,223,488
Change in Plan Assets:			
Fair value of plan assets, beginning of year	$ 3,486,533	$ 717,335	$ 4,203,868
University contributions	35,045	32,056	67,101
Plan participants' contributions	156	11,186	11,342
Actual return on plan assets	(165,058)	(12,612)	(177,670)
Benefits paid	(117,908)	(35,594)	(153,502)
Fair value of plan assets, end of year	$ 3,238,768	$ 712,371	$ 3,951,139
Funded status, end of year	**$ 141,900**	**$ 130,449**	**$ 272,349**
Other retirement programs			170,889
			443,238
Plan with fair value of plan assets in excess of PBO*			23,367
ACCRUED RETIREMENT BENEFITS			**$ 466,605**

* Included in Other assets on the Consolidated Statements of Financial Position

2021		Pension Benefits		Other Postretirement Benefits		Total
Change in Benefit Obligation:						
Benefit obligation, beginning of year (PBO/APBO)	$	4,121,716	$	1,090,300	$	5,212,016
Service cost		79,683		41,638		121,321
Interest cost		122,483		35,292		157,775
Plan participants' contributions		144		9,133		9,277
Settlements		(13,366)				(13,366)
Net actuarial (gain)/loss		(12,159)		(38,799)		(50,958)
Benefits paid		(120,546)		(41,422)		(161,968)
Benefit obligation, end of year (PBO/APBO)	$	4,177,955	$	1,096,142	$	5,274,097
Change in Plan Assets:						
Fair value of plan assets, beginning of year	$	2,792,335	$	554,951	$	3,347,286
University contributions		143,707		30,875		174,582
Plan participants' contributions		144		9,133		9,277
Settlements		(13,366)				(13,366)
Actual return on plan assets		684,259		163,798		848,057
Benefits paid		(120,546)		(41,422)		(161,968)
Fair value of plan assets, end of year	$	3,486,533	$	717,335	$	4,203,868
Funded status, end of year	**$**	**691,422**	**$**	**378,807**	**$**	**1,070,229**
Other retirement programs						227,551
						1,297,780
Plans with fair value of plan assets in excess of PBOs*						16,989
ACCRUED RETIREMENT BENEFITS					**$**	**1,314,769**

* Included in Other assets on the Consolidated Statements of Financial Position

The Accumulated Benefit Obligation for the Pension Benefits was $3,137,299,000 and $3,827,175,000 at June 30, 2022 and 2021, respectively.

For the year ended June 30, 2022, the primary drivers of the net actuarial gains in the Benefit Obligations were increases in the weighted average discount rates from 3.04% to 4.74% for Pension and from 3.29% to 4.96% for Other Postretirement. For the year ended June 30, 2021, the primary drivers of the net actuarial gains in the Benefit Obligations were a change in mortality assumptions for Pension and a change in per capita healthcare cost and trend rate assumptions for Other Postretirement.

Net Periodic Benefit Cost

The components of net periodic benefit cost for pension benefits and other postretirement benefits are detailed below (in thousands). In the Consolidated Statements of Activities, service cost is reported as Compensation and benefits while the remaining components of net periodic benefit cost are reported as Pension, OPEB and other, net.

2022		Pension Benefits		Other Postretirement Benefits		Total
Service cost	$	76,716	$	43,127	$	119,843
Interest cost		124,362		35,617		159,979
Expected return on plan assets		(208,682)		(53,884)		(262,566)
Amortization of:						
Net prior service cost/(credit)				(339)		(339)
Net losses		22,643		311		22,954
Net periodic benefit cost	**$**	**15,039**	**$**	**24,832**	**$**	**39,871**

2021		Pension Benefits		Other Postretirement Benefits		Total
Service cost	$	79,683	$	41,638	$	121,321
Interest cost		122,483		35,292		157,775
Expected return on plan assets		(173,940)		(41,671)		(215,611)
Settlement/Curtailment Expense		1,000				1,000
Amortization of:						
Net prior service cost/(credit)				(387)		(387)
Net losses		77,169		9,765		86,934
Net periodic benefit cost	**$**	**106,395**	**$**	**44,637**	**$**	**151,032**

Net Assets Without Donor Restrictions

The University recorded the following year-end valuation adjustments to its Pension and Other Postretirement Benefit Plans in Pension, OPEB and other, net in the Consolidated Statements of Activities (in thousands):

2022		Pension Benefits		Other Postretirement Benefits		Total
Net Assets Without Donor Restrictions:						
Net actuarial (gain)/loss	$	121,815	$	(172,280)	$	(50,465)
Net prior service cost/(credit)				(1,647)		(1,647)
Total	$	121,815	$	(173,927)	$	(52,112)
Adjustment to net assets without donor restrictions (gain)/loss	**$**	**(529,518)**	**$**	**(241,137)**	**$**	**(770,655)**

2021		Pension Benefits		Other Postretirement Benefits		Total
Net Assets Without Donor Restrictions:						
Net actuarial (gain)/loss	$	651,333	$	69,196	$	720,529
Net prior service cost/(credit)				(1,986)		(1,986)
Total	$	651,333	$	67,210	$	718,543
Adjustment to net assets without donor restrictions (gain)/loss	**$**	**(600,589)**	**$**	**(170,303)**	**$**	**(770,892)**

Actuarial Assumptions

The expected long-term rate of return on plan assets is management's best estimate of the average investment return expected to be received on the assets invested in the plan over the benefit period. The expected long-term rate of return on plan assets has been established by considering historical and future expected returns of the asset classes invested in by the pension trust, and the allocation strategy currently in place among those classes.

	Pension Benefits		Other Postretirement Benefits	
Weighted-Average Assumptions Used to Determine Benefit Obligations at Year End	**2022**	**2021**	**2022**	**2021**
Discount rate	4.74%	3.04%	4.96%	3.29%
Salary increase	3.17%	3.20%	N/A	N/A
Weighted-Average Assumptions Used to Determine Net Periodic Benefit Cost				
Discount rate	3.12%	3.05%	3.32%	3.27%
Expected long-term return on plan assets	6.77%	7.14%	7.50%	7.50%
Salary increase	3.21%	3.23%	N/A	N/A
Assumed Health Care Cost Trend Rates				
Initial trend rate	N/A	N/A	6.20%	6.20%
Ultimate trend rate	N/A	N/A	4.70%	4.72%
Fiscal year end that ultimate trend rate is reached	N/A	N/A	2046	2037

Expected Contributions

The University expects to contribute $17,121,000 and $31,831,000 for pension benefits and other postretirement benefits, respectively, during the fiscal year ending June 30, 2023.

Expected Benefits Payments (in thousands):

Expected benefit payments for the year ending:	Pension Benefits	Other Postretirement Benefits before Medicare Part D Subsidy	Medicare Part D Subsidy
June 30, 2023	$ 148,248	$ 31,247	$ 78
June 30, 2024	153,507	33,081	80
June 30, 2025	162,021	35,019	82
June 30, 2026	170,674	36,786	84
June 30, 2027	178,892	38,757	86
June 30, 2028 to June 30, 2032	1,007,162	221,584	439

Plan Assets and Allocations

The principal investment objectives for the pension and other postretirement benefits plans are to ensure the availability of funds to pay pension benefits as they become due under a broad range of future economic scenarios, to maximize long-term investment returns with an acceptable level of risk based on the pension obligations, and to invest the pension trust in a diversified manner.

The University's Office of Investments is responsible for the day-to-day management of the majority of the investments of the pension and other postretirement benefits. The investments are made in accordance with policies set out by the Investment Board which has been appointed by the Trustees. The pension and other postretirement benefit investments are similar in nature to those investments discussed in Notes 1 and 6 – Investments, at Fair Value. However, the actual allocations to specific investments within each asset class may vary due to certain restrictions imposed by investment managers and ERISA regulations.

A summary of plan assets, measured at fair value, as of June 30, 2022 and 2021, is as follows (in thousands):

Pension Benefits:

2022	Level 1	Level 2	Level 3	Investments at NAV	Total
Assets:					
Short-term	$ 267,580				$ 267,580
Equity:					
US equities	43,294			$ 133,219	176,513
International equities	28,495			196,037	224,532
Emerging market equities	901			166,740	167,641
Debt:					
US treasuries	893,167				893,167
Corporate bonds	106,109	$ 21			106,130
Absolute return				662,583	662,583
Real estate				125,024	125,024
Private equity				520,834	520,834
Natural resources	47,628		$ 1,419	45,717	94,764
Fair value of plan assets, end of year	**$ 1,387,174**	**$ 21**	**$ 1,419**	**$ 1,850,154**	**$ 3,238,768**

2021	Level 1	Level 2	Level 3	Investments at NAV	Total
Assets:					
Short-term	$ 155,966				$ 155,966
Equity:					
US equities	288,098	$ 564		$ 224,600	513,262
International equities	159,911			246,411	406,322
Emerging market equities	1,373			224,024	225,397
Debt:					
US treasuries	329,630	7,923			337,553
Corporate bonds	131,152	125,821		230,796	487,769
Absolute return				764,295	764,295
Real estate				88,727	88,727
Private equity	438			382,274	382,712
Natural resources	94,163			30,502	124,665
Total assets	$ 1,160,731	$ 134,308	$ -	$ 2,191,629	$ 3,486,668
Liabilities:					
Derivative instruments		$ 135			$ 135
Total liabilities	$ -	$ 135	$ -	$ -	$ 135
Fair value of plan assets, end of year	**$ 1,160,731**	**$ 134,173**	**$ -**	**$ 2,191,629**	**$ 3,486,533**

Other Postretirement Benefits:

2022	Level 1	Level 2	Level 3	Investments at NAV	Total
Assets:					
Short-term	$ 41,712				$ 41,712
Equity:					
US equities	6,235			$ 52,670	58,905
International equities				82,149	82,149
Emerging market equities				49,845	49,845
Debt:					
US treasuries	17,436				17,436
Corporate bonds					-
Absolute return				213,457	213,457
Real estate				56,894	56,894
Private equity				150,704	150,704
Natural resources	26,751		455	14,192	41,398
Total assets	$ 92,134	$ -	$ 455	$ 619,911	$ 712,500
Liabilities:					
Derivative instruments		$ 129			$ 129
Total liabilities	$ -	$ 129	$ -	$ -	$ 129
Fair value of plan assets, end of year	**$ 92,134**	**$ (129)**	**$ 455**	**$ 619,911**	**$ 712,371**

2021	Level 1	Level 2	Level 3	Investments at NAV	Total
Assets:					
Short-term	$ 44,598				$ 44,598
Equity:					
US equities	12,503			$ 81,196	93,699
International equities				92,334	92,334
Emerging market equities				65,903	65,903
Debt:					
US treasuries	19,821				19,821
Corporate bonds				11,514	11,514
Absolute return				215,675	215,675
Real estate				38,665	38,665
Private equity				95,435	95,435
Natural resources	31,284			8,452	39,736
Total assets	$ 108,206	$ -	$ -	$ 609,174	$ 717,380
Liabilities:					
Derivative instruments		$ 45			$ 45
Total liabilities	$ -	$ 45	$ -	$ -	$ 45
Fair value of plan assets, end of year	**$ 108,206**	**$ (45)**	**$ -**	**$ 609,174**	**$ 717,335**

As of June 30, 2022, the University has unfunded commitments to limited partnerships totaling $503,612,000, which are expected to be called over the next 5 years.

Plan asset allocations by category are as follows:

2022	Pension Benefits		Other Postretirement Benefits	
Allocation of Plan Assets	**Target**	**Actual**	**Target**	**Actual**
Short-term	0.0%	8.3%	0.0%	5.9%
Equity:				
US equities	11.1%	5.4%	10.0%	8.3%
International equities	11.6%	6.9%	12.0%	11.5%
Emerging markets equities	6.5%	5.2%	10.0%	7.0%
Debt:				
US treasuries	21.3%	27.6%	6.0%	2.4%
Corporate bonds	2.5%	3.3%	0.0%	0.0%
Absolute return	26.7%	20.4%	35.0%	30.0%
Real estate	3.2%	3.9%	6.0%	8.0%
Private equity	12.4%	16.1%	15.0%	21.1%
Natural resources	4.7%	2.9%	6.0%	5.8%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

12. DEBT OBLIGATIONS

Debt obligations at June 30, 2022 and 2021 are as follows (in thousands):

	Final Maturity	Effective Interest Rate at June 30, 2022	2022	2021
Academic Component:				
Fixed rate debt obligations:				
The Trustees of the University of Pennsylvania				
Series A of 2020 Taxable Bonds	10/2050	2.40%	$ 300,000	$ 300,000
Series A of 2019 revenue bonds	02/2119	3.61%	300,000	300,000
Series 2012 Taxable Bonds	09/2112	4.67%	300,000	300,000
Pennsylvania Higher Educational Facilities Authority (PHEFA)				
Series B of 2019 revenue bonds	08/2045	2.40% - 2.97%	213,585	213,585
Series A of 2018 revenue bonds	02/2048	2.17% - 4.70%	176,410	183,145
Series A of 2017 revenue bonds	08/2046	2.26% - 3.72%	178,395	178,395
Series A of 2016 revenue bonds	08/2041	1.42% - 2.93%	118,360	119,435
Series A of 2015 revenue bonds	10/2045	1.82% - 2.63%	38,775	43,640
Series B of 2015 revenue bonds	10/2038	1.82% - 3.38%	145,110	153,595
Series C of 2015 revenue bonds	10/2035	3.680%	8,020	8,020
Series A of 2011 revenue bonds	09/2021		-	3,885
Other loans	05/2031	4.50% - 5.53%	19,659	20,703
Variable rate debt obligation:				
Washington County Authority Series of 2004	07/2034	0.80%	43,700	46,500
Total Academic Component outstanding bonds payable			1,842,014	1,870,903
Unamortized issuance costs, premiums and discounts, net			52,562	58,518
Total Academic Component debt obligations			$ 1,894,576	$ 1,929,421
UPHS:				
Fixed rate debt obligations:				
Lancaster County Hospital Authority (LCHA)				
Series A of 2016 revenue bonds	08/2042	1.66% - 3.52%	$ 147,640	$ 152,150
Series B of 2016 revenue bonds	08/2046	1.61% - 3.58%	119,485	128,050
PHEFA				
Series A of 2021 revenue bonds	08/2044	1.61% - 2.11%	79,810	79,810
Series B of 2021 revenue bonds	08/2042	0.82% - 2.70%	109,735	
Series A of 2019 revenue bonds	08/2049	1.67% - 3.22%	534,870	534,870
Series A of 2017 revenue bonds	08/2047	2.60% - 3.68%	400,000	400,000
Series C of 2016 revenue bonds	08/2041	1.29% - 3.08%	127,800	128,125
Series A of 2015 revenue bonds	08/2045	2.01% - 4.00%	209,870	235,055
Series A of 2012 revenue bonds	08/2042	2.69%	8,305	132,140
Series A of 2009 revenue bonds	08/2021		-	1,545
New Jersey Health Care Facilities Financing Authority (NJHCFFA)				
Princeton Healthcare System Series A of 2016	07/2039	2.04% - 3.88%	162,875	168,400
University of Pennsylvania Health System Taxable Note	08/2047	4.01%	200,000	200,000
Lancaster General Hospital 2015 Taxable Note	08/2022	2.66%	62,518	65,193
Mortgages, notes and other	Various	Various	96,591	110,429
Variable rate debt obligations:				
PHEFA Series A of 2008 revenue bonds	01/2038	0.81%	69,995	69,995
NJHCFFA Princeton Healthcare System Series B of 2016	07/2045	1.37%	65,000	65,000
NJHCFFA Princeton Healthcare System Series C of 2016	07/2045	1.38%	20,000	20,000
Total UPHS outstanding bonds payable			2,414,494	2,490,762
Unamortized issuance costs, premiums and discounts, net			183,158	187,411
Total UPHS debt obligations			2,597,652	2,678,173
TOTAL DEBT OBLIGATIONS			**$ 4,492,228**	**$ 4,607,594**

Contractual maturities of debt obligations are as follows (in thousands):

Fiscal Year	Academic Component	UPHS	Total
2023	$ 23,720	$ 55,802	$ 79,522
2024	35,151	60,638	95,789
2025	29,128	64,328	93,456
2026	44,541	67,071	111,612
2027	30,923	69,298	100,221
Thereafter	1,678,551	2,097,357	3,775,908
Total Principal	1,842,014	2,414,494	4,256,508
Unamortized issuance costs, premiums & discounts	52,562	183,158	235,720
TOTAL DEBT OBLIGATIONS	**$ 1,894,576**	**$ 2,597,652**	**$ 4,492,228**

To secure certain self-insured liabilities, the University has letters of credit with various financial institutions totaling $12,557,000 and $12,535,000 at June 30, 2022 and 2021, respectively, of which $4,709,000 and $3,065,000 were issued under a line of credit. The letters of credit have evergreen provisions for automatic renewal. There have been no draws under the letters of credit.

Academic Component

On July 14, 2020, the Trustees of the University of Pennsylvania (the "University") issued Taxable Bonds, Series A of 2020 in the aggregate principal amount of $300,000,000. The proceeds of the sale of the Series A of 2020 Bonds will be used by the University for its general corporate purposes, including the financing or refinancing of capital projects and the payment of the cost of issuing the Series A of 2020 Bonds. Interest on the Series A of 2020 is fixed with coupons of 2.396%.

The University has variable rate debt in the amount of $43,700,000 which is subject to optional tender by the holders upon seven days' notice. These bonds are reflected in the table above based on original scheduled maturities. In the event that the University receives notice of any optional tender on its variable rate demand bonds, the purchase price will be repaid from the remarketing of the bonds. However, in the event that the entire remarketing effort were to fail, the University would have the general obligation to purchase the bonds.

On June 14, 2021, the University entered into a new five-year agreement with a financial institution to provide a line of credit in the amount of $100,000,000 for general purposes of the University. The University pays a fee annually on the unused amount of the line of credit. There were no outstanding balances as of June 30, 2022 and 2021.

UPHS

The PHEFA Revenue Bonds, Lancaster County Hospital Authority (LCHA) Revenue Bonds and New Jersey Health Care Facilities Financing Authority (NJHCFFA) Revenue Bonds are secured by master notes issued under the UPHS Master Trust Indenture (MTI). The MTI and related agreements contain certain restrictive covenants which limit the issuance of additional indebtedness, and among other things, require UPHS to meet an annual debt service coverage requirement of "income available for debt service" (excess of revenue over expenses plus depreciation, amortization, interest expense and extraordinary items) at an amount equal to 110% of the annual debt service requirements. If the coverage requirement for a particular year is not met, within six months of the close of that fiscal year, UPHS must retain the services of a consultant to make recommendations to improve the coverage requirement. UPHS must also implement the recommendations of the consultant to the extent that they can be feasibly implemented. UPHS will not be considered to be in default of the provisions of the MTI so long as UPHS has sufficient cash flow to pay total operating expenses and debt service for the fiscal year. In both 2022 and 2021, UPHS met its debt service coverage requirement under the MTI. Additionally, UPHS has pledged its gross revenues to secure its obligation under the MTI.

On May 18, 2022, Pennsylvania Higher Educational Facilities Authority (PHEFA) issued Series B of 2021 Refunding Revenue Bonds (PHEFA 2021B bonds), which was a forward delivery, with an aggregate principal amount of $109,735,000. The proceeds were used to fund an escrow which was used to refund $122,275,000 from the PHEFA Series A of 2012 revenue bonds. The refunded bonds were legally defeased and are no longer included among UPHS' reported liabilities. Interest on the PHEFA 2021B bonds is fixed with coupons ranging between 0.82% and 2.70%. As a result of the legal defeasance of debt associated with the issuance of PHEFA 2021B bonds, the University reported a gain on early extinguishment of debt in Pension, OPEB and other, net on the Consolidated Statement of Activities in the amount of $3,398,000 for the year ended June 30, 2022.

On April 13, 2021, Pennsylvania Higher Educational Facilities Authority (PHEFA) issued Series A of 2021 Refunding Revenue Bonds (PHEFA 2021A bonds) with an aggregate principal amount of $79,810,000. The proceeds were immediately used to fully redeem $100,000,000 from the PHEFA Series A of 2014 revenue bonds. The redeemed bonds are no longer included among UPHS' reported liabilities. Interest on the PHEFA 2021A bonds is fixed with coupons ranging between 1.61% and 2.11%. As a result of the redemption of debt associated with the issuance of PHEFA 2021A bonds, UPHS reported a loss on early extinguishment of debt in Pension, OPEB and other, net on the Consolidated Statements of Activities in the amount of $310,000 for the year ended June 30, 2021.

On February 25, 2022, the University executed a commitment letter and rate-lock agreement to facilitate the extension of the Lancaster General Hospital ("LGH") 2015 Taxable Note with an aggregate principal amount not to exceed $62,525,000. As of August 1, 2022, the LGH 2015 Taxable Note has been extended for a ten-year period with a maturity date of August 1, 2032, with a fixed interest rate of 2.25%.

UPHS has variable rate debt in the amount of $69,995,000 which is subject to optional tender by the holders upon seven days' notice. These bonds are reflected in the debt obligations maturity table above based on original scheduled maturities. In the event that UPHS receives notice of any optional tender on its variable rate demand bonds, the purchase price will be repaid from the remarketing of the bonds. However, in the event that the entire remarketing effort were to fail, UPHS has in place a renewable direct pay letter of credit issued by Bank of America with an expiration date of April 15, 2023. In the event that the letter of credit cannot be drawn upon, UPHS would have the general obligation to purchase the bonds.

UPHS maintains a $100,000,000 line of credit with a maturity date of April 12, 2025 to supplement liquidity and issue letters of credit to cover balances due on construction projects and reinsurance agreements. There were no outstanding balances as of June 30, 2022 and 2021.

Interest Rate Swap Agreements

The University enters into interest rate swap agreements to synthetically modify the interest rate terms of its long-term debt portfolio. These agreements are not entered into for trading or speculative purposes. Fair value of these agreements is determined by obtaining quotes from Goldman Sachs Mitsui Marine Derivative Products, L.P. (GSMMDP) and Merrill Lynch, respectively, which are based on the income approach, using observable market data to discount future net payment streams. Accordingly, the University considers this to be a Level 2 measurement. The quotes provided also represent the amount the University would accept or be required to pay to transfer the agreement to GSMMDP and Merrill Lynch, respectively, or exit price as defined by the Fair Value Measurements standard. The University also takes into account the risk of nonperformance.

The following table summarizes the terms of the University's remaining interest rate swap agreements (in thousands):

	Academic Component	UPHS		
Notional Amounts	$ 101,950	$ 7,225	$ 7,225	$ 20,225
Trade Date	11/6/2007	7/15/2009	1/7/2010	7/28/2006
Maturity Date	7/1/2034	8/15/2023	8/15/2023	7/1/2041
Rates:				
Receive	67% of 1-Month LIBOR	3.184%	2.902%	70% of 1-Month LIBOR
Pay	3.573%	SIFMA Index	SIFMA Index	3.980%

The following table summarizes the fair value of the interest rate swap agreements, not designated as hedging instruments, as of June 30, 2022 and 2021, and the related gains on the interest rate swap agreements, both realized and unrealized, for the years ended June 30, 2022 and 2021 (in thousands):

	Line Item	2022	2021
Consolidated Statements of Financial Position:			
Asset interest rate swaps:			
UPHS	Other assets	$ 110	$ 757
Total asset interest rate swaps		**$ 110**	**$ 757**
Liability interest rate swaps:			
Academic Component	Accrued expenses and other liabilities	$ 10,248	$ 21,372
UPHS	Accrued expenses and other liabilities	3,506	6,517
Total liability interest rate		**$ 13,754**	**$ 27,889**
Consolidated Statements of Activities:			
Academic Component	Return on investments, net	$ 7,934	$ 3,583
UPHS	Return on investments, net	2,264	2,334
Total		**$ 10,198**	**$ 5,917**

13. NET ASSETS

The major components of net assets at June 30, 2022 and 2021 are as follows (in thousands):

2022	Without donor restrictions	With donor restrictions	Total
General operating	$ 7,075,269	$ 744,870	$ 7,820,139
Sponsored programs	53,805		53,805
Capital		216,955	216,955
Student loans	6,246		6,246
Planned giving agreements		53,691	53,691
Quasi-endowment	10,672,892		10,672,892
Endowment, subject to spending rule		5,099,668	5,099,668
Endowment, held in perpetuity		4,951,791	4,951,791
TOTAL NET ASSETS	**$ 17,808,212**	**$ 11,066,975**	**$ 28,875,187**

2021	Without donor restrictions	With donor restrictions	Total
General operating	$ 5,489,628	$ 612,678	$ 6,102,306
Sponsored programs	69,896		69,896
Capital		179,635	179,635
Student loans	7,137		7,137
Planned giving agreements		66,550	66,550
Quasi-endowment	10,337,266		10,337,266
Endowment, subject to spending rule		5,552,009	5,552,009
Endowment, held in perpetuity		4,634,271	4,634,271
TOTAL NET ASSETS	**$ 15,903,927**	**$ 11,045,143**	**$ 26,949,070**

14. OTHER INCOME

The components of Other income for the years ended June 30, 2022 and 2021, are as follows (in thousands):

	2022	2021
Commercialization of intellectual property*	$ 1,258,637	$ 451,736
UPHS ambulatory pharmacy	717,287	594,050
Government relief funding	60,387	201,281
Other	595,796	527,636
TOTAL OTHER INCOME	**$ 2,632,107**	**$ 1,774,703**

*Net of distributions to external parties

15. LEASES

The University leases research labs and office space under operating leases expiring through December 2043. On the Consolidated Statements of Financial Position, lessees are required to record Right-of-Use assets, representing the right to use the underlying assets for the lease term, and Lease liabilities, representing the obligation to make lease payments arising from the lease based on the present value of lease payments over the lease term. The University has made the following elections: (1) to adopt a package of practical expedients relating to reassessment, (2) to exclude leases with a term of less than one year, and (3) to use an incremental borrowing rate for discounting leases, as applicable. At June 30, 2022 and 2021, Right-of-Use assets recorded in Other assets were $489,323,000 and $482,065,000, respectively, and Lease liabilities recorded in Accrued expenses and other liabilities were $503,880,000 and $488,329,000, respectively. At June 30, 2022, the weighted average remaining lease term was 9.2 years and the weighted average discount rate was 2.3%. Rental expense, for the years ended June 30, 2022 and 2021, totaled $148,595,000 and $137,693,000 (including amortizations related to Right-of-Use assets and Lease liabilities of $75,758,000 and $35,931,000), respectively. Rental expense is included in Other operating expenses on the Consolidated Statements of Activities.

Future maturities of lease liabilities at June 30, 2022 are as follows (in thousands):

Year ending June 30,		
2023	$	77,752
2024		79,311
2025		72,742
2026		60,316
2027		49,601
Thereafter		235,515
Total lease payments	$	575,237
Less imputed interest		(71,359)
Total Future lease payments	**$**	**503,878**

16. FUNCTIONAL CLASSIFICATION OF EXPENDITURES

Expenses for the years ended June 30, 2022 and 2021 are categorized on a functional basis as follows (in thousands):

2022	**Instruction, student services & academic support**	**Hospital & physician practices**	**Research**	**Institutional support**	**Enterprises & independent operations**	**Total**
Compensation and benefits	$ 1,108,535	$ 5,053,976	$ 551,364	$ 279,727	$ 215,684	$ 7,209,286
Depreciation and amortization	96,489	387,958	50,769	21,325	66,916	623,457
Interest on indebtedness	17,387	69,468	26,925	185	14,032	127,997
Other operating expense	594,544	3,528,636	422,024	76,664	186,027	4,807,895
Total operating expense	1,816,955	9,040,038	1,051,082	377,901	482,659	12,768,635
Non-service net periodic benefit cost	(12,301)	(56,060)	(6,118)	(3,103)	(2,391)	(79,973)
Total	**$ 1,804,654**	**$ 8,983,978**	**$ 1,044,964**	**$ 374,798**	**$ 480,268**	**$ 12,688,662**

2021	**Instruction, student services & academic support**	**Hospital & physician practices**	**Research**	**Institutional support**	**Enterprises & independent operations**	**Total**
Compensation and benefits	$ 1,194,264	$ 4,526,333	$ 519,713	$ 282,704	$ 190,872	$ 6,713,886
Depreciation and amortization	91,631	333,710	46,595	21,546	59,453	552,935
Interest on indebtedness	15,844	35,597	23,912	184	12,499	88,036
Other operating expense	517,571	3,155,502	382,350	52,108	139,080	4,246,611
Total operating expense	1,819,310	8,051,142	972,570	356,542	401,904	11,601,468
Non-service net periodic benefit cost	5,285	20,031	2,300	1,251	844	29,711
Total	**$ 1,824,595**	**$ 8,071,173**	**$ 974,870**	**$ 357,793**	**$ 402,748**	**$ 11,631,179**

Operation and maintenance of PPE and depreciation are allocated to functional classifications based on square footage. Interest expense is generally allocated to functional classifications of the activity that directly benefited from the proceeds of the debt. Non-service net periodic benefit cost is allocated to functional classifications based on compensation and benefits.

17. LIQUIDITY AND AVAILABILITY

As of June 30, 2022 and 2021, respectively, financial assets and liquidity resources available within one year for general expenditure, such as operating expenses, scheduled principal payments on debt and capital construction costs not financed with debt, were as follows (in thousands):

	2022	2021
Financial assets:		
Cash & cash equivalents	$ 3,163,942	$ 2,406,233
Receivables, net	1,809,271	1,591,996
Pledge payments available for operations	79,634	65,743
Investments	7,657,637	8,823,927
Total financial assets available within one year	**12,710,484**	**12,887,899**
Liquidity resources:		
Bank lines of credit	195,291	196,935
Total financial assets and liquidity resources available within one year	**$ 12,905,775**	**$ 13,084,834**

The University's cash flows have seasonal variations during the year attributable to tuition billing, patient service reimbursement and a concentration of contributions received at calendar and fiscal year-end. To manage liquidity, the University maintains lines of credit with several banks that are drawn upon as needed during the year to manage cash flows. Management has the discretion to utilize the full amount of quasi-endowment funds for general expenditures.

18. SUBSEQUENT EVENTS

The University has evaluated subsequent events for the period from June 30, 2022 through September 22, 2022, the date the consolidated financial statements were issued.