Advancing Humanity 2022-2023 FINANCIAL REPORT

Carnegie Mellon University At Carnegie Mellon University, we strive every day to be a catalyst for progress around the world and beyond by conducting research that has a real impact in fields from medicine to manufacturing to crisis management. Applying our knowledge, imagination and unquenchable appetite for innovation, we achieve breakthroughs that reimagine what is possible and change lives. It's progress with a purpose, and it's fueled by the crucial support of partners throughout the region and the country. It's all about sharing knowledge. And advancing humanity.

TABLE OF CONTENTS

- 4 Facts and Figures
- 5 Independent Auditors' Report and Consolidated Financial Statements
- 6 Independent Auditors' Report
- 8 Consolidated Statements of Financial Position
- 9 Consolidated Statements of Activities
- 11 Consolidated Statements of Cash Flows
- 12 Notes to Consolidated Financial Statements
- 41 2022–2023 Board of Trustees

FACTS AND FIGURES

Type of University

A private, global research university granting approximately 4,800 bachelor's, master's and doctoral degrees each year. Colleges and Schools:

College of Engineering College of Fine Arts Dietrich College of Humanities and Social Sciences Heinz College of Information Systems and Public Policy Mellon College of Science School of Computer Science Tepper School of Business

Student Community

7,447 undergraduates, 7,031 master's students, 2,175 doctoral students and 126 non-degree students.

World-Class Workforce

6,303 total employees 1,529 faculty 4,774 staff

Engaged Alumni Network

122,906 alumni

Carnegie Mellon Faculty and Alumni Award Highlights

- 20 Nobel Prize Laureates 65 Members, National Academy of Engineering
- 22 Members, National Academy of Sciences
- 6 Members, National Academy of Medicine

 Member, National Academy of Public Administration
 Emmy Award Winners
 Tony Award Winners

- 13 Academy Award Winners 2 Stockholm Prize
- in Criminology Recipients

13 Turing Award Recipients

Tartans Athletics

Carnegie Mellon's teams are "The Tartans;" NCAA Division III classification; founding member of the University Athletic Association with 19 varsity sports teams.

Birthplace of Big Ideas

Carnegie Mellon has been at the forefront of social and technological transformation since its founding and is world-renowned for its entrepreneurial spirit. Carnegie Mellon is the birthplace of technologies like artificial intelligence, autonomous vehicles and Java programming language; the university is also an innovator in academics, as the first American university to confer degrees in drama, the first in the U.S. to offer bachelor's degrees in artificial intelligence, and the first university robotics program in the world.

History of Carnegie Mellon

Founded in 1900 by industrialist and philanthropist Andrew Carnegie as a technical school serving working-class Pittsburgh; became Carnegie Institute of Technology in 1912; merged with the Mellon Institute in 1967 to become Carnegie Mellon University.

Physical Footprint

157.4-acre Pittsburgh campus; 126 campus-owned buildings; two branch campuses.

Part of the Pittsburgh Renaissance

Carnegie Mellon's main campus is approximately five miles east of downtown Pittsburgh, Pennsylvania, bordered by 500-acre Schenley Park and three culturally active residential neighborhoods. CMU has been a key partner in the Pittsburgh region's development as a hub of technological innovation and culture.

Global Impact

Carnegie Mellon is a global university, with students, alumni and faculty from almost every country on the planet and research partnerships worldwide. Carnegie Mellon operates branch campuses in Doha, Qatar, and Silicon Valley, California, and has over a dozen degree-granting locations including Kigali, Rwanda — the only American research university with master's degree programs and full-time faculty, staff and operations on the African continent.

For more information about Carnegie Mellon, please contact:

University Communications & Marketing Carnegie Mellon University 5000 Forbes Avenue Pittsburgh, PA 15213-3890 Phone: 412-268-2900 cmu.edu cmu.edu/news INDEPENDENT AUDITORS' REPORT AND CONSOLIDATED FINANCIAL STATEMENTS



INDEPENDENT AUDITORS' REPORT TO THE BOARD OF TRUSTEES OF CARNEGIE MELLON UNIVERSITY AND ITS SUBSIDIARIES

Opinion

We have audited the consolidated financial statements of Carnegie Mellon University (the University), which comprise the consolidated statements of financial position as of June 30, 2023 and 2022, and the related consolidated statements of activities and cash flows for the years then ended, and the related notes to the consolidated financial statements.

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

Basis for Opinion

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

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 U.S. generally accepted accounting principles, 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 that the consolidated 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 GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that
 raise substantial doubt about the University's ability to continue as a going concern for a reasonable
 period of time.

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



Pittsburgh, Pennsylvania October 13, 2023

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

June 30, 2023 and 2022 (dollars in thousands)

	2023	2022
Assets		
Cash and cash equivalents (<u>Note 2</u>)	\$981,061	\$765,478
Accrued interest and dividends	4,943	2,556
Accounts receivable, net (<u>Note 4</u>)	89,016	94,684
Pledges receivable, net (<u>Note 5</u>)	331,211	238,982
Student loans receivable, net (<u>Note 4</u>)	5,296	6,520
Investments (<u>Note 6</u> and <u>Note 8</u>)	3,966,197	4,004,423
Assets held in trust by others (<u>Note 8</u>)	11,207	11,044
Unexpended bond proceeds (<u>Note 11</u>)	29,952	32,306
Prepaid expenses and other assets (<u>Note 2</u>)	60,274	61,258
Right-of-use assets (<u>Note 9</u>)	60,218	67,593
Land, buildings and equipment, net (<u>Note 10</u>)	1,310,589	1,218,118
Total assets	\$6,849,964	\$6,502,962
Liabilities		
Accounts payable and other liabilities (<u>Note 2</u>)	\$216,789	\$227,917
Deferred revenue (<u>Note 4</u>)	164,464	172,066
Federal student loan funds (<u>Note 2</u>)	5,034	6,299
Present value of split interest agreement obligations (<u>Note 2</u>)	14,446	16,624
Lease obligations (<u>Note 9</u>)	61,307	68,247
Debt obligations (<u>Note 11</u>)	830,815	758,313
Total liabilities	\$1,292,855	\$1,249,466
Net assets		
Without donor restrictions (<u>Note 12</u>)	\$2,265,942	\$2,140,464
With donor restrictions (<u>Note 12</u>)	3,291,167	3,113,032
Total net assets	\$5,557,109	\$5,253,496
Total liabilities and net assets	\$6,849,964	\$6,502,962

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

CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended June 30, 2023 (dollars in thousands)

w	ithout Donor Restrictions	With Donor Restrictions	Total
Revenue and other support			
Tuition and other educational fees revenue, net of financial aid (<u>Note 4</u>)	\$714,396	\$ -	\$714,396
Sponsored projects revenue (<u>Note 4</u>)			
Software Engineering Institute	132,751	-	132,751
Advanced Robotics for Manufacturing Institute	24,318	-	24,318
Other grants and contracts	336,953	-	336,953
Investment income	107,284	15,818	123,102
Contributions revenue (<u>Note 5</u>)	26,556	224,720	251,276
Auxiliary services revenue	72,002	-	72,002
Other revenue sources (<u>Note 2</u>)	70,591	-	70,591
Net assets released from donor restrictions	109,774	(109,774)	-
Total revenue and other support	\$1,594,625	\$130,764	\$1,725,389
Expenses (<u>Note 14</u>)			
Salaries	\$807,236	\$ -	\$807,236
Benefits	174,641	-	174,641
Other operating expenses	388,393	-	388,393
Depreciation and amortization	83,236	-	83,236
Interest expense	22,886	-	22,886
Total expenses	\$1,476,392	\$ -	\$1,476,392
Increase in net assets before nonoperating activities	\$118,233	\$130,764	\$248,997
Nonoperating activities			
Net realized/unrealized (losses) gains on investments (Note 6)	\$(8,204)	\$53,122	\$44,918
Other (<u>Note 2</u>)	5,882	3,360	9,242
Post-retirement plan changes other than net periodic benefit costs (<i>Note 16</i>)	456	-	456
Net assets released from restrictions for capital	9,111	(9,111)	-
Total nonoperating activities	\$7,245	\$47,371	\$54,616
Increase in net assets	\$125,478	\$178,135	\$303,613
Net assets			
Beginning of year	\$2,140,464	\$3,113,032	\$5,253,496
End of year	\$2,265,942	\$3,291,167	\$5,557,109

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

CONSOLIDATED STATEMENT OF ACTIVITIES

Year ended June 30, 2022 (dollars in thousands)

	Without Donor Restrictions	With Donor Restrictions	Total
Revenue and other support			
Tuition and other educational fees revenue, net of financial aid (<u>Note 4</u>)	\$663,879	\$ -	\$663,879
Sponsored projects revenue (<u>Note 4</u>)			
Software Engineering Institute	129,940	-	129,940
Advanced Robotics for Manufacturing Institute	16,140	-	16,140
Other grants and contracts	319,154	-	319,154
Investment income	60,399	12,714	73,113
Contributions revenue (<u>Note 5</u>)	26,962	252,620	279,582
Auxiliary services revenue	67,687	-	67,687
Other revenue sources (<u>Note 2</u>)	93,229	-	93,229
Net assets released from donor restrictions	96,611	(96,611)	-
Total revenue and other support	\$1,474,001	\$168,723	\$1,642,724
Expenses (<u>Note 14</u>)			
Salaries	\$755,436	\$ -	\$755,436
Benefits	162,791	-	162,791
Other operating expenses	333,494	-	333,494
Depreciation and amortization	81,967	-	81,967
Interest expense	13,517	-	13,517
Total expenses	\$1,347,205	\$ -	\$1,347,205
Increase in net assets before nonoperating activities	\$126,796	\$168,723	\$295,519
Nonoperating activities			
Net realized/unrealized losses on investments (<u>Note 6</u>)	\$(69,522)	\$(104,606)	\$(174,128)
Other (<u>Note 2</u>)	10,489	(4,033)	6,456
Post-retirement plan changes other than net periodic benefit costs (<u>Note 16</u>)	7,078	-	7,078
Net assets released from restrictions for capital	7,217	(7,217)	-
Total nonoperating activities	\$(44,738)	\$(115,856)	\$(160,594)
Increase in net assets	\$82,058	\$52,867	\$134,925
Net assets			
Beginning of year	\$2,058,406	\$3,060,165	\$5,118,571
End of year	\$2,140,464	\$3,113,032	\$5,253,496

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended June 30, 2023 and 2022 (dollars in thousands)

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

	2023	2022
Cash flows from operating activities	¢202 (12	¢124.025
Increase in net assets Adjustments to reconcile increase in net assets to net cash provided by operating activities:	\$303,613	\$134,925
Realized and unrealized losses (gains) on investments, net	(100,641)	127,511
Depreciation and amortization	83,236	81,967
Amortization of right-of-use assets	14,868	20,775
Amortization of bond premium and bond issuance costs, net	(6,132)	(6,517)
Gifts in kind	(512)	-
Asset dispositions	367	1,300
Contributions for land, buildings, and equipment and endowment	(83,572)	(178,139)
Provision for bad debt and other allowances	6,336	(964)
Assets held in trust by others	60	(187)
(Increase)/Decrease in assets:	(2,207)	(01.2)
Accrued interest and dividends	(2,387)	(813)
Accounts receivable, net	4,933	(6,236)
Pledges receivable, net	(97,831)	43,429
Other assets	(907)	(5,083)
Increase/(Decrease) in liabilities:	(17,000)	(24.025)
Accounts payable and other liabilities	(17,009)	(24,035)
Operating lease obligations Deferred revenue	(14,449)	(19,466)
	(7,603)	(3,010)
Present value of split interest agreements payable	(2,178)	814
Net cash provided by operating activities	\$80,192	\$166,271
Cash flows from investing activities		
Proceeds from sale and maturity of investments	\$1,351,296	\$1,459,525
Purchases of investments	(1,212,653)	(1,709,090)
Purchases of land, buildings and equipment	(169,373)	(129,644)
Federal loan programs	(1,265)	(1,490)
Disbursements of loans to students	(27)	(15)
Repayments of loans from students	1,252	1,586
Net cash used for investing activities	\$(30,770)	\$(379,128)
Cash flows from financing activities		
Proceeds from issuance of debt,	\$90,000	\$190,564
including bond premium		
Repayments of debt obligations	(11,365)	(84,215)
Payment of debt issuance costs	-	(692)
Contributions for land, buildings, and equipment and endowment	85,172	178,669
Net cash provided by financing activities	\$163,807	\$284,326
Net increase in cash and cash equivalents, and restricted cash	\$213,229	\$71,469
Cash, cash equivalents and restricted cash at beginning of year	797,784	726,315
Cash, cash equivalents and restricted cash at end of year	\$1,011,013	\$797,784
Cash and cash equivalents	\$981,061	\$765,478
Unexpended bond proceeds (<u>Note 11</u>)	29,952	32,306
Total cash, cash equivalents and restricted cash	\$1,011,013	\$797,784
Non-cash transactions		
Non-cash gift in kind	\$2,240	\$896
	5,843	8,521
Increase in accounts payable and accrued liabilities for land, buildings and equipment	.,	-,
Non-cash stock contributions	1,200	2,172
Lease obligations arising from obtaining right-of-use assets	7,509	14,863

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. CARNEGIE MELLON

Carnegie Mellon University ("Carnegie Mellon" or "the university") is a private, not-for-profit educational and research institution. Carnegie Mellon currently enrolls approximately 16,800 students and grants approximately 4,800 bachelor's, master's and doctoral degrees per academic year. Approximately 76% of undergraduate students are from the United States of America. International students comprise approximately 24% of undergraduate, 68% of master's and 54% of Ph.D. students.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting and Reporting

The accompanying consolidated financial statements have been prepared on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles ("GAAP") and include the accounts of Carnegie Mellon as well as the Software Engineering Institute ("SEI") and other majority-owned entities. The consolidated entities are Advanced Robotics for Manufacturing Institute ("ARM Institute"), Benjamin Garver Lamme Scholarship Fund, Jack G. Buncher Charitable Fund for Carnegie Mellon, iCarnegie, Inc. and Carnegie Innovations, LLC. All significant inter-entity transactions and balances have been eliminated in consolidation. Carnegie Mellon is a joint sponsor with the University of Pittsburgh in MPC Corporation ("MPC"), a beneficiary of The Dietrich Foundation, and an owner as a tenant in common of the Bellefield Boiler Plant. The activities of MPC, The Dietrich Foundation and the Bellefield Boiler Plant are not consolidated in Carnegie Mellon's consolidated financial statements (see <u>Note 17</u>).

The SEI is a federally funded research and development center (FFRDC) sponsored by the U.S. Department of Defense ("DoD") and operated by the university. The most recent contract provided a five-year initial term ended in June 2020 plus a five-year renewal option, which was exercised in July 2020. In January 2017, the DoD awarded the ARM Institute, a nonprofit venture led by Carnegie Mellon, a seven year contract to launch an advanced robotics manufacturing institute in Pittsburgh.

Carnegie Mellon's net assets and revenues, expenses, gains and losses are classified based on the existence or absence of donor imposed restrictions. Accordingly, net assets and changes therein are classified and reported as follows:

Without Donor Restrictions

Net assets that are not subject to donor imposed stipulations.

With Donor Restrictions

Net assets subject to specific donor-imposed or legal stipulations that can be fulfilled by actions of Carnegie Mellon pursuant to those stipulations or that expire by the passage of time. Also included in this category are net assets subject to donor-imposed stipulations requiring the assets be maintained in perpetuity. Generally, the donors of these assets permit Carnegie Mellon to use all or part of the income earned on the related investments for general or specific purposes. Other restricted items in this category include annuity and life income gifts where the ultimate purpose of the proceeds is donor restricted.

Revenues are reported as increases in net assets without donor restrictions unless use of the related assets is limited by donor imposed restrictions. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by the donor or by law. Expiration or satisfaction of donor restrictions on net assets are reported as net assets released from donor restrictions.

Cash Equivalents

Cash equivalents include highly liquid investments with original maturities of three months or less when purchased. Cash equivalents are recorded at cost, which approximates fair value. These balances are held at the university's custodians, prime brokers, clearing agents and banking institutions for investment and working capital purposes. Cash equivalents held within investments are held for long-term purposes and not considered cash equivalents for purposes of the statements of cash flow.

Investments

All investments held by Carnegie Mellon are reported at fair value. The fair value of marketable debt and equity securities is based on published current market prices in active securities markets. The fair value of certain investments structured as investment companies is based on the net asset value of such investments and generally is estimated by external investment managers.

As a practical expedient, the university is permitted to estimate fair value of an investment in an investment company, at the measurement date, using the reported net asset value (NAV) without further adjustment unless the university expects to sell the investment at a value other than NAV or if the NAV is not calculated in accordance with fair value principles. Investments measured under the net asset value practical expedient primarily consist of the university's ownership in alternative investments (principally limited partnership interests in private equity, real estate, natural resources and hedge funds) and certain investments in commingled funds.

Carnegie Mellon reviews and evaluates the valuation methods and assumptions used by investment managers in determining fair value NAV. Those estimated fair values may differ significantly from values that would result had a ready market for these securities existed. *Note 8* - *Fair Value* provides additional information about inputs used to determine fair value for investments. Investments received as a gift are reflected as contributions at their fair value at the date of the gift.

Gains and losses, dividends and interest income from investments are reported in the consolidated statements of activities. Internal and external investment management fees and expenses are netted against investment returns.

Investment securities, in general, are exposed to various risks, such as interest rate, credit and overall market volatility. Due to the level of risk associated with certain investment securities, changes could materially affect the amounts reported in the Consolidated Statements of Financial Position.

Endowment

Investment policy for endowment assets is the responsibility of the Investment Committee of the Board of Trustees. Substantially all endowment assets are managed by outside investment managers and overseen by the university's Investment Office.

Endowment net assets without donor restrictions include Carnegie Mellon funds, gifts without restrictions from donors and any accumulated income, gains and appreciation thereon, which is intended to remain in the endowment for the long-term support of Carnegie Mellon activities, but may be expended under trustee authorization. Also included is interest and dividend income on donor-restricted endowment assets where distribution of such income is not subject to a donor restriction.

Endowment net assets with donor restrictions include gifts and any accumulated income, gains and appreciation thereon which donor restrictions require to be retained in perpetuity to provide a permanent source of support for the university. Also included are accumulated income, gains and appreciation on endowment assets where distribution/spending of such returns is restricted by the donor. The trustees of Carnegie Mellon must annually authorize release of endowment gains according to Pennsylvania law. This classification also includes term endowments and endowment gifts whereby the donor permits distributions of the principal amount of the gift and accumulated appreciation.

All endowment funds participate in a Carnegie Mellon investment pool. The investment pool provides income to its respective participants. Such income is used for the specific purpose prescribed by the donor or, if the

purpose was not prescribed by the donor, the income is deemed to be without donor restrictions and used for general purposes. New endowment funds or additions to existing funds are assigned shares in the investment pool based upon the per-share market value at the end of the previous month. Income distributions from the investment pool are based upon the number of shares held by each participant and the approved spending rate (see *Note 7*). Income distributions from the investment pool are based upon the return not distributed currently are reinvested in the investment pool and are available for distribution from the endowment assets in future years.

Assets Held in Trust by Others

Assets held in trust by others include the value of Carnegie Mellon's beneficial interest in perpetual trusts and irrevocable trusts held by outside trustees. The present value of the perpetual trusts' estimated future cash receipts, which are measured by the fair value of the assets contributed to the trust, are recognized as assets and contribution revenues at the dates the trusts are established. The assets are adjusted periodically for changes in market values.

Various donors have established irrevocable trusts whereby Carnegie Mellon holds a remainder interest in the trust or is entitled to distributions over the life of the trusts. The present value of the portion of the trusts estimated to be distributable to Carnegie Mellon over the life of the trusts or upon the termination of the trusts are recorded as assets and contribution revenues at the dates the trusts are established. The assets are adjusted periodically for changes in market value.

Unexpended Bond Proceeds

Unexpended bond proceeds in the amount of \$30.0 million and \$32.3 million as of June 30, 2023 and 2022, respectively, represent cash proceeds from the issuance of Series 2022 C bonds in February 2022. The unexpended bond proceeds are held by a trustee under the respective bond indenture for capital expenditures. See <u>Note 11</u> for more information.

Prepaid Expenses and Other Assets

Prepaid expenses represent items such as prepaid insurance, prepaid rentals and other contractual payments made in advance of their use or consumption. Amounts are expensed and amortized over the periods to which the charges relate. Other assets include deferred compensation plan assets, interest rate swap assets and other costs incurred that will result in benefits to future periods.

Right-of-use Assets and Lease Obligations

Operating lease right-of-use ("ROU") assets and operating lease obligations are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. As the university's leases generally do not provide an implicit rate, the university's incremental borrowing rate at commencement date is used to determine the present value of future payments. The operating lease ROU asset also includes any lease payments made and excludes lease incentives and any initial direct costs incurred. The university's operating lease ROU assets and operating lease obligations are calculated including options to extend the lease when it is reasonably certain that the university will exercise that option. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term.

Land, Buildings and Equipment

Land, buildings and equipment are recorded at cost at the date of acquisition or, if acquired by gift, at the fair value as of the date of the gift. Additions to plant assets are capitalized while scheduled maintenance and minor renovations are expensed to operations. Buildings and equipment are reflected net of accumulated depreciation which is calculated on a straight-line basis over the estimated useful lives. Carnegie Mellon capitalizes interest during periods of construction. Carnegie Mellon reviews its land, buildings, equipment and other long-lived assets for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable.

Donated works of art, historical treasures and similar assets have been recognized at their estimated fair value based upon appraisals or similar valuations at the date of acquisition. If purchased, the assets are recognized at cost. The assets are depreciated over 99 years.

Accounts Payable and Other Liabilities

Accounts payable and other liabilities include accounts payable, accrued payroll and benefits, interest rate swap liabilities and other accrued expenses.

Federal Student Loan Funds

This liability represents Perkins loan funds provided to students by the federal government through Carnegie Mellon. Carnegie Mellon is required to collect the loans on behalf of the federal government. The federal government did not renew the Perkins loan program after September 30, 2017, and did not allow disbursements to be made after June 30, 2018. The university has elected to retain the outstanding loans in lieu of assigning the loans to the federal government. The liability will be repaid over the years that loan repayments are received from student borrowers. During the years ended June 30, 2023 and 2022, \$1.3 million and \$1.5 million was repaid to the federal government, respectively. The amounts due from the students are reported in the Consolidated Statements of Financial Position as a component of student loans receivable, net.

Present Value of Split Interest Agreement Obligations

Carnegie Mellon's split interest agreements with donors consist primarily of gift annuities, unitrusts, lead trusts, charitable remainder annuity trusts and life income agreements. Assets held under these agreements are included in investments. Generally, contribution revenues are recognized at the dates the agreements are established, after recording liabilities for the present value of the estimated future payments to be made to the beneficiaries. The liabilities are adjusted during the term of the trusts for changes in the value of the assets, accretion of the discount and other changes in the estimates of future benefits. The discount rates utilized for split interest agreements range from 0.4% to 6.0%. Distributions from the trusts are recorded in accordance with the donor's stipulations as contributions and the carrying value of the assets are adjusted for changes in the fair value of the trust assets.

Operating Activities

Carnegie Mellon's measure of operations without donor restrictions includes revenue from tuition, sponsored projects, investment return distributed according to Carnegie Mellon's spending policy, contributions without donor restrictions, contributions for programs, revenues from auxiliary services and other sources, and net assets released from donor restrictions. Operating expenses are reported by natural classification.

Revenue Recognition from Contracts with Customers

Revenue is recognized when control of the promised goods or services is transferred to customers in an amount that reflects the consideration the university expects to be entitled to receive in exchange for those goods and services.

Contributions Revenue

Contributions include gifts, grants and unconditional promises to give that are recognized as revenue, at fair value, in the period such commitments are received. Conditional promises to give may be subject to both a barrier to entitlement and a right of return of unused funds. Such contributions are recognized as revenue when the barrier is satisfied. Unconditional promises to give to be received in future years are discounted, as of the date of the gift, at a rate commensurate with the pledge payment schedule. A discount rate commensurate with fair value is used. The discount rates utilized for contributions receivable range from 0.0% to 4.5%. An allowance is estimated for uncollectible contributions based upon historical patterns and any known uncollectible accounts or accounts in arrears.

Capital Contributions

Donors' contributions to fund construction projects are classified as net assets with donor restrictions and are released from donor restriction through nonoperating activities when the facility is placed in service. \$9.1 million and \$7.2 million of capital contributions were released from donor restrictions during fiscal years 2023 and 2022, respectively.

Nonoperating Activities

Items presented in the consolidated statements of activities as "Nonoperating activities" include unrealized gains and losses and interest expense related to interest rate swap agreements, losses from adjustments of pledges receivable with donor restrictions, and certain other gains and losses.

Income Taxes

Carnegie Mellon is a nonprofit organization as described in Section 501(c)(3) of the Internal Revenue Code (the "Code") and is generally exempt from income taxes on related income pursuant to Section 501(a) of the Code.

The university accounts for uncertainties in income taxes in accordance with authoritative guidance, which prescribes a recognition threshold of more-likely-than-not to be sustained upon examination by the appropriate taxing authority. Measurement of the tax uncertainty occurs if the recognition threshold has been met. Management determined there were no tax uncertainties that met the recognition threshold at June 30, 2023 and 2022.

The university's Federal Exempt Organization Business Income Tax Returns remain subject to examination by the Internal Revenue Service for the years subsequent to June 30, 2019.

The university's policy is to recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported consolidated financial statements and related accompanying footnote disclosures. Actual results could differ from those estimates and these differences could be material.

Adoption of New Accounting Pronouncements

In March 2020, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (ASU 2020-04). ASU 2020-04 provides optional guidance for a limited period of time to ease the potential burden in accounting for reference rate reform due to the risk of cessation of the London Interbank Offered rate ("LIBOR"). ASU 2020-04 was amended by ASU 2022-06, *Deferral of the Sunset Date of Topic 848*, which extended the period of time that ASU 2020-04 could be applied to December 31, 2024. The amendments in ASU 2020-04 are effective for all entities as of March 12, 2020 through December 31, 2024. The university adopted this standard on July 1, 2022, the result of which did not have a material impact on its consolidated financial statements. See <u>Note 11</u> and <u>Note 13</u> for more information.

3. FINANCIAL ASSETS AND LIQUIDITY RESOURCES

The university continuously monitors liquidity needed to meet its operating activities while prudently investing its available capital. Possible sources of liquidity include cash and cash equivalents, short-term investments, marketable debt and equity securities, two \$50.0 million lines of credit and a \$200.0 million commercial paper program (see *Note 11*). The university also anticipates converting certain receivables to cash within the next 12 months. As of June 30, 2023 and 2022, financial assets available within one year for general expenditure are as follows (*dollars in thousands*):

	2023	2022
Cash and cash equivalents	\$981,061	\$765,478
Accounts receivable, net	89,016	94,684
Pledge receivables donor restricted for operations	11,738	12,385
Short-term working capital investments	180,892	329,989
Subsequent year's approved endowment distributions	149,059	129,906
Subsequent year's approved long-term working capital distributions	17,286	14,548
Total financial assets available within one year	\$1,429,052	\$1,346,990

For purposes of analyzing resources available for general expenditures over a 12-month period, the university considers all expenditures related to its ongoing activities of teaching and research, as well as the conduct of services undertaken to support those activities, to be general expenditures. This includes short-term working capital investments available for construction and plant activity. Long-term working capital investments are included within the university's long-term investments pool. While the university does not intend to spend from these long-term working capital investments other than the amounts appropriated for general expenditure as indicated above, the long-term working capital investments with lock-up provisions that reduce the total investments that could be made available (see *Note 6* and *Note 8*).

4. REVENUE FROM CONTRACTS WITH CUSTOMERS AND ACCOUNTS RECEIVABLE

Tuition Revenue: Tuition revenue is recognized within the fiscal year in which educational services are provided. Revenue related to student services crossing fiscal years is recognized on a pro-rata basis based upon the number of instruction days in each period. Tuition, at published prices, from undergraduate students was \$441.4 million and \$416.8 million for the years ended June 30, 2023 and 2022, respectively. Tuition, at published prices, from graduate students was \$422.5 million and \$396.8 million for the years ended June 30, 2023 and 2022, respectively. Other education related revenue was \$49.0 million and \$40.5 million for the years ended June 30, 2023 and 2022, respectively. Other education related revenue was \$49.0 million and \$40.5 million for the years ended June 30, 2023 and 2022, respectively. The transaction price for tuition revenue may be reduced directly by discounts or scholarships from the amount of the standard rates charged. These discounts are considered financial aid and were \$198.5 million and \$190.2 million for the years ended June 30, 2023 and 2022, respectively. Upon withdrawal, a student may be eligible to receive a refund, or a partial refund, the amount of which is dependent on the timing of the withdrawal during the academic term. The amount of refunds paid is not a significant portion of the university's tuition revenue.

Students are billed prior to the start of each academic term based upon the agreements they signed and payment is due prior to the start of the term. Student receivables are not collateralized; however, credit risk is minimized as a result of the diverse nature of the university's student base. The university establishes an allowance for doubtful accounts based on historical trends and other information.

Sponsored Projects Revenue: The university receives sponsored program funding from various governmental and corporate sources. The funding may represent a reciprocal transaction in exchange for an equivalent benefit in return, or it may be a nonreciprocal transaction in which the resources provided are for the benefit of the university, the funding organization's mission or the public at large.

Revenues from exchange transactions are recognized as performance obligations are satisfied, which in most cases is as related costs are incurred. Revenue from non-exchange transactions (contributions) may be subject to conditions, in the form of both a barrier to entitlement and a refund of amounts paid (or a release from obligation to make future payments). Revenues from conditional non-exchange transactions are recognized when the barrier is satisfied. In addition, the university has elected the simultaneous release option for conditional contributions that are also subject to purpose restrictions. Under this option, net assets without donor restrictions will include the donor-restricted contributions for which the purpose restrictions are met in the same reporting period as the revenue is recognized.

Amounts recognized as sponsored projects revenue are based upon a signed contract for direct costs along with indirect cost recovery. Indirect sponsored projects revenue is recorded at rates established in advance by Carnegie Mellon through negotiations with the United States government and other sponsors based upon direct costs incurred. The actual federal indirect cost rate is audited by the Defense Contracts Audit Agency (DCAA) and a final fixed-rate agreement is signed by the United States government and Carnegie Mellon. The variance between the negotiated fixed and the final audited indirect cost rate results in a carryforward (over or under recovery) that is included in the calculation of negotiated fixed rates in future years.

Sponsored projects revenue is invoiced per the terms of the contractual agreement. Amounts received from sponsors under agreements that require the exchange of assets, rights or other privileges between Carnegie Mellon and the sponsor are recorded as deferred revenue until the contract terms are fulfilled.

Auxiliary Services Revenue: Carnegie Mellon's auxiliaries exist primarily to furnish goods and services to students, faculty and staff. Managed as essentially self-supporting activities, Carnegie Mellon's auxiliaries consist principally of housing and dining services, parking, retail and other external services. Revenue is recognized as the services are provided based upon published prices and rates, net of any discount.

Other Revenue Sources: Other revenue is comprised of funding received for Carnegie Mellon's international locations, royalty income, licensing revenue, affiliate/membership revenue and other miscellaneous revenues. Other revenue is recognized as services are rendered or over the term of the contract and invoiced based on contractual terms.

The university has elected the practical expedient in ASC 606-10-50-14 to not disclose the information about remaining performance obligations that have original expected durations of one year or less. Federal and other sponsored grants and contracts may include fiscal funding clauses or be subject to annual appropriation. These sponsored research agreements typically span less than five years. The university estimates that its conditional awards outstanding as of June 30, 2023 approximate historical annual sponsored program activity.

Accounts receivable at June 30, 2023 and 2022, consist of the following (dollars in thousands):

	2023	2022
Sponsored project accounts receivable		
Software Engineering Institute	\$82	\$158
Other grants and contracts	64,805	57,772
Total sponsored projects accounts receivable	\$64,887	\$57,930
Student accounts	5,884	4,708
Other	20,302	34,363
Total student accounts and other	\$26,186	\$39,071
Allowance for doubtful accounts	(2,057)	(2,317)
Net accounts receivable	\$89,016	\$94,684

Other accounts receivable relates primarily to Carnegie Mellon's international programs, affiliate and membership agreements, license agreements and other miscellaneous revenue sources.

Deferred revenue at June 30, 2023 and 2022 consists of the following (dollars in thousands):

	2023	2022
Sponsored projects deferred revenue		
Software Engineering Institute	\$11,356	\$7,498
Other contracts and conditional grants	60,117	56,052
Total sponsored projects deferred revenue	\$71,473	\$63,550
Student accounts	25,101	23,689
Other	67,890	84,827
Total deferred revenue	\$164,464	\$172,066

Student Loans Receivable

Net student loans receivable of approximately \$5.3 million and \$6.5 million, as of June 30, 2023 and 2022, respectively, primarily represent student loans made under the Perkins federal loan program. These loans are reported net of an allowance for doubtful accounts of approximately \$0.5 million as of June 30, 2023 and 2022.

5. CONTRIBUTIONS REVENUE AND PLEDGES RECEIVABLE

Conditional promises to give, which depend on the satisfaction of identified barriers such as matching gifts from other donors, are recognized as contributions revenue when the conditions are substantially met. Carnegie Mellon had approximately \$7.4 million and \$13.8 million as of June 30, 2023 and 2022 of conditional pledged contributions outstanding primarily related to capital projects. In addition, the university had approximately \$28.0 million and \$23.0 million related to conditional contributions as of June 30, 2023 and 2022, respectively,

recorded as deferred revenue in the Consolidated Statements of Financial Position. These amounts were not recognized as contributions revenue during the respective fiscal year as the barriers had not been met.

Pledges receivable as of June 30, 2023 and 2022 are due as follows (dollars in thousands):

	2023	2022
In one year or less	\$72,295	\$56,342
Between one year and five years	264,578	150,789
More than five years	48,482	65,523
Pledges receivable, gross	\$385,355	\$272,654
Unamortized discount	(40,344)	(23,715)
Allowance for unfulfilled pledges	(13,800)	(9,957)
Pledges receivable, net of discount and allowance	\$331,211	\$238,982

6. INVESTMENTS

Investments by major class at June 30, 2023 and 2022, are as follows (dollars in thousands):

	2023	2022
Cash equivalents	\$85,895	\$62,800
Short-term fixed income securities	148,569	297,927
Fixed income securities	461,042	470,060
Equity securities	1,013,475	941,440
Alternative investment partnerships	2,257,216	2,232,196
Total investments	\$3,966,197	\$4,004,423

Investments are held for the following purposes (dollars in thousands):

	2023	2022
Endowment	\$3,103,122	\$3,016,724
Reserves for working capital and plant – short-term	180,892	329,989
Reserves for working capital and plant – long-term	559,518	536,297
Other	122,665	121,413
Total investments	\$ 3,966,197	\$4,004,423

Fixed income securities are United States Treasury and Agency obligations, investment grade corporate debt, short-term commercial paper and asset backed securities. Equity securities at June 30, 2023 included 52.3% domestic equities and 47.7% international and emerging market equities. Equity securities at June 30, 2022 included approximately 51.7% domestic equities and 48.3% international and emerging market equities. Alternative investment partnerships are largely investments in buyout, venture capital, real estate, natural resources and hedge funds.

The allocation to each major class in the previous table represents the actual allocation of the short-term and long-term reserves, and other miscellaneous investments on a combined basis. Actual allocations on a combined basis should not be interpreted as an investment allocation policy for a particular investment pool.

Operating investment income as reported in the Consolidated Statements of Activities includes dividends and interest earned on funds without donor restrictions as well as accumulated gains without donor restrictions utilized for current operations in the amounts of \$55.7 million and \$46.7 million for the years ended June 30, 2023 and 2022, respectively. The accumulated gains are reclassified from net realized gains to investment income.

Certain of Carnegie Mellon's outside investment managers are authorized to and do purchase and sell derivative instruments in order to create, increase, decrease or hedge exposures to market position, including to manage risk due to interest rate and foreign currency fluctuations.

Carnegie Mellon's long-term investments are comprised of U.S. domestic and international portfolios. Carnegie Mellon does not hedge international portfolios with respect to foreign currencies. Investment managers of these international portfolios have the discretion to, and certain do, manage foreign currencies through foreign exchange contracts to protect the portfolios from potential foreign currency losses and to benefit from potential gains.

Gains or losses from derivative instruments are reported as realized and unrealized gains or losses in the Consolidated Statements of Activities. The fair value of all derivative instruments is included in the fair value of the investments.

Under the terms of certain limited partnership agreements, Carnegie Mellon is obligated to periodically advance additional funding for venture capital, buyout, real estate and natural resources fund investments. At June 30, 2023 and 2022, Carnegie Mellon had unfunded commitments of approximately \$836.8 million and \$702.3 million, respectively, for which capital calls had not been exercised. Such commitments generally have fixed expiration dates or other termination clauses. Carnegie Mellon maintains sufficient liquidity in its investment portfolio to cover such calls.

	Number of Funds	2023 Fair Value	Number of Funds	2022 Fair Value
ommingled funds	6	\$302,447	6	\$278,840
edge funds	12	298,614	13	239,194
atural resources	20	120,043	21	140,369
ivate equity (buyout) funds	62	349,694	65	297,554
al estate	26	162,956	24	148,704
nture capital	218	1,304,934	203	1,385,667
ther	10	20,975	12	20,708
tal	354	\$2,559,663	344	\$2,511,036

Alternative investments, measured at NAV are less liquid than Carnegie Mellon's other investments. The following tables summarize these investments by strategy type at June 30, 2023 and 2022 (dollars in thousands):

Commingled funds and hedge fund investments held by the university may be subject to restrictions related to the initial investment that limit the university's ability to redeem capital from such investments during a specified period of time subsequent to the university's investment of capital in such funds, typically known as a lock-up period. Capital available for redemption after the lock-up period has expired may also be subject to limits which restrict the available redemption period to semi-monthly, monthly, quarterly, semi-annually, annually or triennially and require 2 – 180 days prior written notice, potentially limiting the university's ability to respond quickly to changes in market conditions. All commingled funds have passed the initial lock-up period as of June 30, 2023.

Natural resources, private equity, real estate, venture capital and other alternative investments cannot be redeemed upon request. Instead, the nature of these investments is that distributions are received through the liquidation of the underlying assets of the fund. It is estimated that the underlying assets of these funds would be liquidated over approximately four to eight years.

7. ENDOWMENTS

The following tables outline the endowment net asset composition by type of fund as of June 30, 2023 and 2022 *(dollars in thousands):*

Total funds	\$507,759	\$2,525,149	\$3,032,908
Board-designated funds	507,759	-	507,759
Donor-restricted endowment funds	\$ -	\$2,525,149	\$2,525,149
2022	Without Donor Restrictions	With Donor Restrictions	Total
Total funds	\$542,852	\$2,575,888	\$3,118,740
Board-designated funds	542,852	-	542,852
Donor-restricted endowment funds	\$ -	\$2,575,888	\$2,575,888
2023	Without Donor Restrictions	With Donor Restrictions	Total

The following tables provide a summary of the changes in value of the endowment net assets excluding endowment pledges for the years ended June 30, 2023 and 2022 (*dollars in thousands*):

2023	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, beginning of year	\$507,759	\$2,525,149	\$3,032,908
Gifts and other additions	\$67,513	\$65,779	\$133,292
Investment income			
Interest and dividends	7,997	12,156	20,153
Net realized gains on sale of securities	2,135	10,619	12,754
Net unrealized gains	9,385	41,140	50,525
Total investment income	\$19,517	\$63,915	\$83,432
Income distributed			
Cash and accrued interest and dividends	\$(7,997)	\$(12,156)	\$(20,153)
Accumulated realized investment gains	(43,940)	(66,799)	(110,739)
Total income distributed	(51,937)	(78,955)	(130,892)
Endowment net assets, end of year	\$542,852	\$2,575,888	\$3,118,740 ¹

⁽¹⁾ Includes \$15.6 million of endowment gifts and other transfers pending investment and other accruals.

2022	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, beginning of year	\$567,500	\$2,524,564	\$3,092,064
Gifts and other additions	\$20	\$156,635	\$156,655
Investment income			
Interest and dividends	7,565	11,111	18,676
Net realized gains on sale of securities	28,374	126,223	154,597
Net unrealized losses	(50,160)	(226,496)	(276,656)
Total investment income	\$(14,221)	\$(89,162)	\$(103,383)
Income distributed			
Cash and accrued interest and dividends	\$(7,565)	\$(11,111)	\$(18,676)
Accumulated realized investment gains	(37,975)	(55,777)	(93,752)
Total income distributed	(45,540)	(66,888)	(112,428)
Endowment net assets, end of year	\$507,759	\$2,525,149	\$3,032,908 ¹

⁽¹⁾ Includes \$16.2 million of endowment gifts and other transfers pending investment and other accruals.

Unless the donor specifies that only a certain amount of the endowment may be spent, Pennsylvania Act 141 ("Act 141") allows organizations to choose a total return spending policy strategy, whereby the Board of Trustees may annually elect to spend between 2.0% and 7.0% of the fair market value of the endowment. On July 23, 2020, Pennsylvania 2020 Act 71 ("Act 71") was signed into law. Act 71 modifies Act 141 in that it permits the university's Board of Trustees to spend up to 10% during calendar years 2020, 2021 and 2022, or for the corporation's fiscal years that end during those calendar years. Carnegie Mellon maintains a total return spending policy. Endowment income distributions can consist of dividend and interest income and a withdrawal of accumulated capital gains, when necessary. The main objective of the total return spending policy is to separate spending policy from investment policy. This approach permits asset allocation decisions to be made independently of the need for current income. Carnegie Mellon targets a diversified asset allocation to achieve its long-term objectives with prudent risk constraints. The endowment spending rate is determined annually pursuant to a smoothing formula whereby an approved spending rate percentage is applied to the trailing 36-month average of endowment market values at December 31. For fiscal years 2023 and 2022, the approved spending rate was set at 5.0%. As a result of the spending rate formula, the effective spending rate (defined as the endowment draw totals for the fiscal years 2023 and 2022 divided by the June 30 endowment market values for those fiscal years) was 4.2% for June 30, 2023 and 3.7% for June 30, 2022.

8. FAIR VALUE

ASC Topic 820, *Fair Value Measurement*, establishes a hierarchy to prioritize valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the entity's own assumptions about how market participants would value an asset or liability based on the best information available.

The following is a description of the university's valuation methodologies for assets and liabilities measured at fair value:

Level 1

Based upon quoted or published prices in active markets that the university has the ability to access for identical assets and liabilities. Market price data is generally obtained from exchange or dealer markets. The university does not adjust the quoted price for such assets and liabilities, which include active listed equities, mutual funds, government supported obligations and cash equivalents.

Level 2

Based on quoted or published prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active or assets subject to transfer restrictions. Inputs are obtained from various sources including market participants, dealers and brokers.

Level 3

Based on valuation techniques that use significant inputs that are unobservable as they trade infrequently or not at all.

2023	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investments				
Cash equivalents ^a	\$62,478	\$23,417	\$ -	\$85,895
Equity investments				
U.S. – equity funds and common stocks ^a	520,317	-	9,845	530,162
Mutual funds – international developed	27,081	-	-	27,081
Mutual funds – international emerging	153,785	-	-	153,785
Short-term fixed income	-	148,569	-	148,569
Fixed income funds and securities ^a	461,042	-	-	461,042
· · · · · · · · · · · · · · · · · · ·	\$1,224,703	\$171,986	\$9,845	\$1,406,534
Investments measured under the NAV practical expedient ^b				\$2,559,663
Total investments				\$3,966,197
Assets held in trust by others				
Beneficial interests held by third party	\$ -	\$ -	\$2,746	\$2,746
Perpetual trusts held by third party	-	-	8,461	8,461
Total assets held in trust by others	\$ -	\$ -	\$11,207	\$11,207
Unexpended bond proceeds	\$29,952	\$ -	\$ -	\$29,952
Prepaid expenses and other assets				
Deferred compensation plan assets	\$20,537	\$7,875	\$3,490	\$31,902
Total prepaid expenses and other assets	\$20,537	\$7,875	\$3,490	\$31,902
Total assets at fair value	\$1,275,192	\$179,861	\$24,542	\$4,039,258
Liabilities				
Interest rate swaps payable	\$ -	\$6,917	\$ -	\$6,917
Total liabilities at fair value	\$ -	\$6,917	\$ -	\$6,917

The following tables present the financial instruments carried at fair value as of June 30, 2023 and 2022 by caption in the Consolidated Statements of Financial Position by the valuation hierarchy defined above *(dollars in thousands):*

(a) Presentation as a single class is appropriate based on the nature and risks of these investments.

(b) In accordance with ASC Subtopic 820-10, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the Consolidated Statements of Financial Position. This includes commingled funds of \$302.4 million, and hedge and private equity funds of \$2,257.2 million as of June 30, 2023.

2022	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investments				
Cash equivalents ^a	\$40,121	\$22,679	\$ -	\$62,800
Equity investments				
U.S. – equity funds and common stocks $^{\circ}$	476,322	-	9,637	485,959
Mutual funds – international developed	29,709	-	-	29,709
Mutual funds – international emerging	146,932	-	-	146,932
Short-term fixed income	-	297,927	-	297,927
Fixed income funds and securities ^a	470,060	-	-	470,060
	\$1,163,144	\$320,606	\$9,637	\$1,493,387
Investments measured under the NAV practical expedient ^b				\$2,511,036
Total investments				\$4,004,423
Assets held in trust by others				
Beneficial interests held by third party	\$ -	\$ -	\$2,806	\$2,806
Perpetual trusts held by third party	-	-	8,238	8,238
Total assets held in trust by others	\$ -	\$ -	\$11,044	\$11,044
Unexpended bond proceeds	\$32,306	\$ -	\$ -	\$32,306
Prepaid expenses and other assets				
Deferred compensation plan assets	\$17,881	\$6,515	\$3,526	\$27,922
Total prepaid expenses and other assets	\$17,881	\$6,515	\$3,526	\$27,922
Total assets at fair value	\$1,213,331	\$327,121	\$24,207	\$4,075,695
Liabilities				
Interest rate swaps payable	\$ -	\$14,138	\$ -	\$14,138
Total liabilities at fair value	\$ -	\$14,138	\$ -	\$14,138

(a) Presentation as a single class is appropriate based on the nature and risks of these investments.

(b) In accordance with ASC Subtopic 820-10, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the Consolidated Statements of Financial Position. This includes commingled funds of \$278.9 million, and hedge and private equity funds of \$2,232.1 million as of June 30, 2022. Deferred compensation plan assets are valued using market quotations or prices obtained from independent pricing services (Level 1), market quotations or prices obtained from independent pricing sources who may employ various pricing methods (Level 2), and at contract value (Level 3), which approximates fair value.

Beneficial remainder and lead trusts held by third parties are valued at the present value of the future distributions expected to be received upon termination of the trust or over the term of the trust agreement and approximate fair value. Perpetual trusts are valued based upon the university's percentage interest in the fair value of the underlying trust assets.

Interest rate swaps are valued using observable inputs, such as quotations received from the counterparty, dealers or brokers, whenever available and considered reliable. The valuation methods described above may produce fair value calculations that may not be indicative of net realizable value or reflective of future fair values.

The following table includes a roll forward of the Consolidated Statements of Financial Position amounts for financial instruments classified by the university within Level 3 of the fair value hierarchy (dollars in thousands):

	Deferred Compensation	Common Stock	Trusts Held by Others	Total
Fair value, June 30, 2021	\$3,187	\$58,785	\$12,450	\$74,422
Unrealized gains/(losses)	\$99	\$242	\$(1,406)	\$(1,065)
Purchases	153	610	-	763
Transfers in	87	-	-	87
Transfers out	-	(50,000)	-	(50,000)
Fair value, June 30, 2022	\$3,526	\$9,637	\$11,044	\$24,207
Unrealized gains/(losses)	\$135	-	\$163	\$298
Purchases	159	208	-	367
Transfers in	-	-	-	-
Transfers out	(330)	-	-	(330)
Fair value, June 30, 2023	\$3,490	\$9,845	\$11,207	\$24,542

During the fiscal year ended June 30, 2021, the university recognized \$50.0 million in unrealized gains from the university's investment in Duolingo, Inc., a mobile global learning platform. The university holds this equity investment as a result of a technology license agreement. The unrealized gain reflects the fair value of the university's shares based upon historical data for private offerings of Duolingo's common stock. On July 28, 2021, Duolingo completed an initial public offering (IPO) at a price per share of \$102. As a result of the IPO, the investment in Duolingo is no longer within Level 3 of the fair value hierarchy and is considered a Level 1 instrument.

9. LEASE ARRANGEMENTS

The university has operating leases primarily for campus facilities, student housing and office space. Variable lease payments based on an index or rate, such as the consumer price index, are initially measured using the index or rate in effect at lease commencement. The university has elected the short-term lease exception under Topic 842 for all leases and, as such, leases with an initial term of 12 months or less are not recorded on the Consolidated Statements of Financial Position. The university recognizes lease expense for short-term leases on a straight-line basis over the lease term.

The components of lease cost for the fiscal years ended June 30, 2023 and 2022, respectively, included operating lease costs of \$17.0 million and \$21.7 million and short-term lease costs of \$6.3 million and \$3.7 million. Cash payments for operating leases were \$16.6 million and \$21.3 million for the year ended June 30, 2023 and 2022, respectively. Subsequent to year end, in August 2023, the university commenced a new 15-year leasing agreement for an apartment building to provide student housing. At inception, the present value of the right of use liability was approximately \$74.0 million.

The following table displays the undiscounted cash flows due to operating leases as of June 30, 2023 along with a reconciliation to the discounted amount recorded on the June 30, 2023 Consolidated Statements of Financial Position *(dollars in thousands)*:

As of June 30, 2023	
2024	\$14,124
2025	13,229
2026	7,475
2027	6,630
2028	6,615
Thereafter	16,529
Total undiscounted cash flows (weighted average term 7.7 years)	\$64,602
Impact of present value discount (weighted average discount rate 1.8%)	(3,295)
Amount reported on Consolidated Statements of Financial Position	\$61,307

10. LAND, BUILDINGS AND EQUIPMENT

Land, buildings and equipment at June 30, 2023 and 2022, consist of the following (dollars in thousands):

	Useful Lives	2023	2022
Buildings	35-50 years	\$1,735,451	\$1,654,513
Movable equipment	5-20 years	310,057	293,560
Utilities and building-related assets	20 years	129,052	123,726
Land improvements	15 years	19,841	19,841
Software costs	5-10 years	54,615	54,698
Leasehold improvements	2-20 years	37,526	37,203
Subtotal		\$2,286,542	\$2,183,541
Accumulated depreciation		\$(1,225,596)	\$(1,147,583)
Subtotal		\$1,060,946	\$1,035,958
Land		57,776	\$56,256
Construction and equipment in progre	SS	191,867	125,904
Land, buildings and equipment, net		\$1,310,589	\$1,218,118

Carnegie Mellon acquired \$8.1 million and \$13.3 million in equipment through grants for the years ended June 30, 2023 and 2022, respectively.

11. DEBT OBLIGATIONS

Debt obligations consist of the following as of June 30, 2023 and 2022 (dollars in thousands):

	Maturity	Interest %	2023	2022
Allegheny County Higher Education Bui Authority Revenue Bonds	ilding			
Fixed Rate				
Series 2013 Premium, net of debt issuance costs	03/01/43	4.0-5.0%	\$42,250 1,748	\$42,250 2,089
Series 2017 Premium, net of debt issuance costs	08/01/29	5.0%	62,165 7,066	62,165 8,447
Series 2019 A Premium, net of debt issuance costs	08/01/27	5.0%	49,600 5,088	49,600 6,309
Series 2020 A Premium, net of debt issuance costs	02/01/30	5.0%	45,565 9,855	45,565 11,352
Series 2022 B Premium, net of debt issuance costs	08/01/27	5.0%	27,240 4,128	27,240 5,139
Series 2022 C Premium, net of debt issuance costs	02/01/32	5.0%	25,000 6,277	25,000 7,008
Variable Rate				
Series 2008 A Debt issuance costs	12/01/37	2.27%	120,820 (241)	120,820 (257)
Series 2019 B Debt issuance costs	02/01/42	3.47%	60,140 (113)	60,140 (119)
Series 2022 A Debt issuance costs	02/01/33	2.94%	50,230 (191)	50,230 (210)
Taxable Series 2022 Debt issuance costs	02/01/52	3.2%	75,000 (222)	75,000 (230)
Collaborative Innovation Center Tax Increment Financing	11/01/22	8.5%	-	285
Collaborative Innovation Center Mortgage Obligation	03/01/25	6.78%	9,410	10,490
Taxable Senior Notes	02/01/47	3.6%	70,000	70,000
Taxable Senior Notes	02/01/50	3.2%	70,000	70,000
Taxable Senior Notes	11/15/52	5.15%	70,000	-
Taxable Commercial Paper	Rolling, up to 270 days	5.15%	20,000	10,000
Total debt obligations			\$830,815	\$758,313

The university borrows its tax-exempt debt through public conduit issuers. As of June 30, 2023, all of Carnegie Mellon's tax-exempt debt was issued by the Allegheny County Higher Education Building Authority (ACHEBA). The tax-exempt debt represents a general unsecured obligation of the university. Although ACHEBA is the issuer, the university is responsible for the debt service of these bonds.

On September 30, 2014, Carnegie Mellon acquired the Collaborative Innovation Center (CIC) from the Regional Industrial Asset District (RIDC) when Carnegie Mellon and RIDC agreed to terminate the long-term ground lease for the land on which the CIC building was built. The CIC building was originally built and owned by RIDC on land owned and leased by Carnegie Mellon to RIDC pursuant to a long-term ground lease. Prior to the termination of the ground lease, the CIC was recorded as a capital lease by Carnegie Mellon.

As part of the agreement to terminate the ground lease, Carnegie Mellon assumed a \$16.8 million mortgage note. The mortgage note requires monthly principal and interest payments, bears interest at a fixed rate of 6.78% and matures on March 1, 2025. The mortgage note is secured by the CIC building (carrying value of \$23.6 million), the land where CIC is located and rents derived from the operation of CIC.

On November 1, 2022 the Tax Increment Financing (TIF) agreement, in which Carnegie Mellon assumed the sole responsibility to make semi-annual payments of any shortfall between the amount of real estate and parking taxes collected and pledged under the TIF agreement and the debt service and annual cost of the TIF, was satisfied in full. The balance of the outstanding TIF note was \$0 and \$0.3 million at June 30, 2023 and 2022, respectively. The TIF note bore interest at a rate of 8.5% through maturity.

In November 2022, Carnegie Mellon issued a senior note in the amount of \$70.0 million to a life insurance company. The note bears interest at 5.15% payable semi-annually with principal due on November 15, 2052. Proceeds from the issuance of the note may be used to refund outstanding debt, to finance capital projects, and to otherwise support general operations.

In March 2023, the university amended its Series 2019B Bonds to modify the interest rate determination provisions in anticipation of the LIBOR phaseout, which resulted in the Series 2019B Bonds being based on SOFR rather than LIBOR. Utilizing the optional expedient under ASC 848 this amendment is accounted for as a continuation of the existing contract as the modifications are not substantial.

Subsequent to June 30, 2023, Carnegie Mellon issued ACHEBA Carnegie Mellon University Revenue Bonds, Series 2023, in the amount of \$44.0 million bearing interest of 5.0% and maturing on August 1, 2033. The bonds include an original issue premium of \$8.3 million. A portion of the proceeds from the issuance of these notes was used to pay down outstanding commercial paper, while the remainder of the proceeds will be used to redeem the outstanding 2013 bonds on October 17, 2023.

The university maintains a taxable commercial paper program that allows the university to issue in aggregate up to \$200.0 million in commercial paper notes. Proceeds of the notes may be used to refund outstanding debt, finance capital projects, support operations and for any other lawful activity of the university. The notes are sold at a discount to par. The maturities of individual notes cannot exceed 270 days. The university had \$20.0 million in notes outstanding at June 30, 2023.

The university has two \$50.0 million unsecured line of credit agreements that expire October 19, 2023 and May 3, 2026, respectively. No advances were outstanding on either line at June 30, 2023. Advances accrue at a rate based on SOFR.

Interest Expense

Cash paid for interest on debt obligations for the fiscal years ended June 30, 2023 and 2022 totaled \$28.9 million and \$17.8 million, respectively. The university utilizes interest rate swaps to synthetically adjust its exposure to variable rates. Including the swap expense, cash paid for interest for the fiscal years ended June 30, 2023 and 2022 was \$30.4 million and \$22.1 million, respectively. For the fiscal years ended June 30, 2023 and 2022, interest costs of \$0.3 million and \$0.5 million were capitalized related to construction in progress.

Aggregate Maturities

Total	\$777,420
Thereafter	644,100
2028	118,785
2027	5,125
2026	-
2025	8,254
2024	\$1,156

Aggregate maturities of bonds and other debt instruments, for each of the next five years ending June 30, are as follows (*dollars in thousands*):

Debt obligations are reflected in the table above based on stated final maturity dates. The outstanding Series 2008 A bonds are variable rate demand bonds that are subject to daily optional tender by the bondholders. In the event that a bondholder tenders these variable rate demand bonds, the purchase price will be repaid from the remarketing of the bonds to a new investor. However, in the event that none of the bonds could be remarketed, Carnegie Mellon has entered into a Standby Bond Purchase Agreement (SBPA) with a financial institution that will purchase the Series 2008 A Bonds at the amount of the bonds outstanding plus related interest. The bonds would then become bank bonds, payable to the liquidity provider per the terms of the agreement. This SBPA was renewed in January 2021 for a three-year term ending January 12, 2024.

12. NET ASSETS

Net assets consist of gifts and other unexpended revenues and gains and are available for the following purposes supporting the university's educational and research mission as of June 30, 2023 (*dollars in thousands*):

2023	Without Donor Restrictions	With Donor Restrictions	Total
Board-designated endowment funds	\$542,852	\$ -	\$542,852
Reserves for working capital and plant – long-t	erm 559,518	-	559,518
Donor-restricted endowment funds	-	1,370,119	1,370,119
Unexpended endowment gains	-	1,205,769	1,205,769
Capital and other designations	1,161,101	346,311	1,507,412
Pledges and assets held in trust by others	-	342,418	342,418
Split interest agreements and other donor designations	-	12,301	12,301
Term endowments	-	11,589	11,589
Loan funds	2,471	2,660	5,131
Total net assets	\$2,265,942	\$3,291,167	\$5,557,109

Net assets consist of gifts and other unexpended revenues and gains and are available for the following purposes supporting the university's educational and research mission as of June 30, 2022 (*dollars in thousands*):

2022	Without Donor Restrictions	With Donor Restrictions	Total
Board-designated endowment funds	\$507,759	\$ -	\$507,759
Reserves for working capital and plant – long-te	erm 536,297	-	536,297
Donor-restricted endowment funds	-	1,304,343	1,304,343
Unexpended endowment gains	-	1,220,806	1,220,806
Capital and other designations	1,093,931	316,697	1,410,628
Pledges and assets held in trust by others	-	250,026	250,026
Split interest agreements and other donor designations	-	9,420	9,420
Term endowments	-	9,321	9,321
Loan funds	2,477	2,419	4,896
Total net assets	\$2,140,464	\$3,113,032	\$5,253,496

13. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

Carnegie Mellon has entered into the following interest rate swap agreements to adjust the exposure to variable interest rates on long-term debt (*dollars in thousands*):

Swap Agreement	Effective Date	Notional Amount	Rate Paid by CMU	Interest Received	Term (in years)	Termination Date	Cancellation Option
Apr 2006	Dec 2006	\$100,000	3.4 %	67% of 1M LIBOR	22	Dec 2028	Dec 2016
May 2007	Jun 2007	\$5,125	3.8 %	67% of 1M LIBOR	20	Mar 2027	N/A
May 2007	Mar 2012	\$40,325	3.8 %	67% of 1M LIBOR	20	Mar 2032	N/A
Feb 2012	Mar 2012	\$38,000	SIFMA	1.92%	12	Mar 2024	N/A

For the years ended June 30, 2023 and 2022 the interest received rate for Swap agreements based on LIBOR was 67% of the one month LIBOR rate as indicated in the table above. Effective July 1, 2023 the interest received rate for these Swap agreements will be based on SOFR as a result of reference rate reform in accordance with protocols established by the International Swaps and Derivatives Association, Inc. (ISDA). Utilizing the optional expedient under ASC 848, this update is considered to be a continuation of the existing contract as the modifications are not substantial.

The following fair values of the swap agreements were recorded as accounts payable and other liabilities and other assets in the Consolidated Statements of Financial Position as of June 30, 2023 and 2022 *(dollars in thousands):*

	Derivatives Reported as Assets/(Liabilities)			
Date of Swap Agreement	2023 2022			
Apr 2006	\$(3,559)	\$(8,508)		
May 2007	(158)	(407)		
May 2007	(2,761)	(4,972)		
Feb 2012	(439)	(251)		
Total	\$(6,917)	\$(14,138)		

The fair value of these agreements is estimated to be an amount that Carnegie Mellon would receive or pay (liability) to voluntarily terminate the agreement. Based upon the university's credit rating, the university is required to post collateral equal to the amount by which the liability value exceeds \$30.0 million for each of its counterparties. No collateral was required as of June 30, 2023 and June 30, 2022.

The following interest expense and fair value gains/(losses) were recorded as other sources under nonoperating activities in the Consolidated Statements of Activities for the years ended June 30, 2023 and 2022 (*dollars in thousands*):

Date of Swap Agreement	o Interest (Expense) Income		Fair Value (Loss) Gain		(Lo	Total (Loss) Gain	
Interest rate swaps:	2023	2022	2023	2022	2023	2022	
Apr 2006	\$(817)	\$(3,243)	\$4,949	\$10,495	\$4,132	\$7,252	
May 2007	(61)	(184)	249	483	188	299	
May 2007	(483)	(1,447)	2,211	4,794	1,728	3,347	
Feb 2012	(231)	641	(188)	(1,882)	(419)	(1,241)	
Total	\$(1,592)	\$(4,233)	\$7,221	\$13,890	\$5,629	\$9,657	

Carnegie Mellon utilizes energy forward contracts, which are physically settled, to hedge against the future changes in the cost of electricity and natural gas. These contracts limit Carnegie Mellon's exposure to higher rates; however, they could also limit the benefit of decreases in rates. These contracts qualify for normal purchases and sales exemptions and are not required to be recognized on the statements of financial position at fair value because Carnegie Mellon takes physical delivery of the electricity and natural gas and the gains and losses are already recognized in the cost.

14. EXPENSES BY FUNCTIONAL CATEGORY

Operating expenses by functional category for the year ended June 30, 2023 are as follows (dollars in thousands):

2023	Instruction & Dpt Research	Sponsored Research	SEI/ARM Activities	Admin & Instl Support	Academic Support	Student Services	Auxiliary	Total
Salaries	\$348,334	\$166,005	\$87,993	\$87,954	\$81,255	\$32,994	\$2,701	\$807,236
Benefits	76,456	23,222	22,231	19,750	22,941	9,284	757	174,641
Other Ope Expense	Q	77,031	44,229	52,069	56,877	22,089	42,310	388,393
Depreciatio Amortiz	1	14,893	5,355	5,191	9,877	7,982	9,670	83,236
Interest	7,509	3,695	1,328	1,288	2,451	1,980	4,635	22,886
Total	\$556,355	\$284,846	\$161,136	\$166,252	\$173,401	\$74,329	\$60,073	\$1,476,392

Operating expenses by functional category for the year ended June 30, 2022 are as follows (dollars in thousands):

2022	Instruction & Dpt Research	Sponsored Research	SEI/ARM Activities	Admin & Instl Support	Academic Support	Student Services	Auxiliary	Total
Salaries	\$320,817	\$156,897	\$83,651	\$83,981	\$76,687	\$30,949	\$2,454	\$755,436
Benefits	67,818	19,682	20,251	24,340	21,810	8,233	657	162,791
Other Ope Expense	0 ,	68,771	34,610	49,746	52,320	16,439	39,813	333,494
Depreciatio Amortiza	on and 29,558 ation	14,498	5,519	5,162	9,952	7,923	9,355	81,967
Interest	3,665	1,798	684	640	1,235	982	4,513	13,517
Total	\$493,653	\$261,646	\$144,715	\$163,869	\$162,004	\$64,526	\$56,792	\$1,347,205

Natural expenses attributable to more than one functional expense category are allocated using a variety of cost allocations such as square footage, time and effort.

Total fundraising expense of \$32.1 million and \$28.7 million (\$28.7 million and \$25.6 million in administration and institutional support) is included above for the years ended June 30, 2023 and 2022, respectively.

15. COMMITMENTS AND CONTINGENCIES

Carnegie Mellon is a defendant in a number of legal actions seeking damages and other relief. While the final outcome of each action cannot be determined at this time, management records a reserve in operating activities for those cases in which the loss is both probable and estimable. For the other legal actions that are not reserved, legal counsel and management are of the opinion that the liability, if any, will not have a material effect on Carnegie Mellon's consolidated financial statements.

Carnegie Mellon receives significant financial assistance from the federal government, including the sponsorship of federal research projects. Research grants and contracts normally provide for the recovery of direct and indirect costs. Entitlement to the recovery of the applicable direct and related indirect costs is generally conditional upon compliance with the terms and conditions of the grant agreements and applicable federal regulations, including the expenditure of the resources for eligible purposes. Substantially all grants and Carnegie Mellon's indirect cost rate are subject to financial and compliance reviews and audits by the grantors. In management's opinion, the likelihood of an adverse material outcome upon its financial position from those reviews and audits is remote.

Alternative investment partnership commitments totaled \$836.8 million at June 30, 2023. These funds may be drawn down at the request of the general partners over the course of the next several years. Carnegie Mellon expects to finance these commitments through available cash and expected proceeds from the sales of securities.

At June 30, 2023 and 2022, Carnegie Mellon had contractual obligations of approximately \$65.6 million and \$119.8 million, respectively, in connection with major construction projects.

16. RETIREMENT PLANS AND OTHER POST-EMPLOYMENT BENEFITS

Carnegie Mellon sponsors two defined contribution retirement plans for eligible faculty and staff, health care plans for retirees and participates in a multi-employer pension fund for union staff. Retirement plan expense for the years ended June 30, 2023 and 2022 totaled \$45.1 million and \$41.6 million, respectively. Carnegie Mellon contributed \$1.0 million and \$0.9 million to the Central Pension Fund of the International Union of Operating Engineers, a multi-employer plan in fiscal years 2023 and 2022, respectively. See below for a discussion of the assets held in trust to fund post-retirement health care and other post-employment benefits.

Carnegie Mellon provides certain health care benefits for eligible retired employees. The liability for postretirement benefit obligations is recorded in the Consolidated Statements of Financial Position in accounts payable and other liabilities.

Net periodic benefit costs recognized in the Consolidated Statements of Activities totaled \$1.0 million and \$1.8 million for the years ended June 30, 2023 and 2022, respectively. Other gains/(losses) in benefit obligations recognized in non-operating activities totaled (\$0.5 million) and (\$7.1 million) for the years ended June 30, 2023 and 2022, respectively. Cumulative net actuarial gains of \$18.3 million and \$17.9 million have been recognized as of June 30, 2023 and 2022, respectively.

During fiscal year 2023, amortization of \$1.1 million actuarial gain is expected to be recognized as components of net periodic benefit cost. The discount rate used in determining the net periodic benefit cost was 4.9% and 3.1% for the years ended June 30, 2023 and 2022, respectively.

	2023	2022
Benefit obligation, beginning of year	\$20,151	\$25,879
Service cost	1,071	1,531
Interest cost	1,030	843
Assumption changes and actuarial gain/(loss)	(1,592)	(7,663)
Benefit payments	(482)	(439)
Benefit obligation, end of year	\$20,178	\$20,151
Fair value of plans' assets	-	-
Funded status	\$20,178	\$20,151

The reconciliation of the accumulated benefit obligation and funded status at June 30 2023 is as follows *(dollars in thousands):*

The assumed discount rate used for calculating the benefit obligation for the fiscal years ended June 30, 2023 and 2022 was 5.3% and 4.9%, respectively. An annual rate of increase in the per capita cost of covered health care benefits for the fiscal years ended June 30, 2023 and 2022 of 6.4% and 7.0%, respectively, was assumed. For the fiscal years ended June 30, 2023 and 2022, the rate was assumed to decrease gradually to 5.25% by 2026 and remain at 5.0% thereafter.

Expected benefits to be paid in future fiscal years are as follows (dollars in thousands):

June 30	Retiree Contributions	Employer Payments	Total Expected Benefit Payments
2024	\$824	\$488	\$1,312
2025	1,188	709	1,897
2026	1,544	913	2,457
2027	1,846	1,058	2,904
2028	2,085	1,144	3,229
2029-2032	13,423	6,442	19,865

In conjunction with an agreement made with the federal government, Carnegie Mellon has established a separate trust, which is available to general creditors only in the event of insolvency. Assets in the trust to fund post-retirement health care and other post-employment benefits are \$23.4 million and \$22.7 million as of June 30, 2023 and 2022, respectively. These assets are reflected as investments in the accompanying Consolidated Statements of Financial Position.

17. RELATED PARTY TRANSACTIONS

Sponsored projects revenue for fiscal years 2023 and 2022 includes \$0.7 million and \$3.7 million respectively, received from MPC, a nonprofit related entity of Carnegie Mellon and the University of Pittsburgh. The revenue primarily represents federal funding from various contracts received by MPC, for which MPC has subcontracted to Carnegie Mellon for support of a supercomputer and related activities.

Carnegie Mellon is an owner as a tenant in common of the Bellefield Boiler Plant ("Bellefield") for the purpose of sharing of the steam produced by the plant. Bellefield operates such that all of the operating costs of the plant are passed to the owners in the form of steam prices. Carnegie Mellon is obligated for a percent of liabilities based upon use of steam produced by Bellefield. As of June 30, 2023 and 2022, Carnegie Mellon's percentage obligation was 15.2%. Included in other assets is \$0.4 million and \$0.6 million of advances at June 30, 2023 and 2022, respectively, resulting primarily from historical operating surpluses. Included in occupancy and related expenses is \$4.7 million and \$3.9 million for steam costs paid to Bellefield for the years ended June 30, 2023 and 2022, respectively.

Carnegie Mellon is one of 15 designated institutions of higher learning and other charitable organizations named as beneficiaries of The Dietrich Foundation (the "Foundation") created by William S. Dietrich II pursuant to an Amended and Restated Declaration of Trust dated August 23, 2011. The Foundation came into existence as a Pennsylvania charitable trust on October 6, 2011 and was granted exemption from Federal income tax under section 501(c)(3) of the Internal Revenue Code, specifically as a Type I charitable supporting organization under section 509(a)(3). The Foundation's primary mission is to provide ongoing and increasing financial support to a number of educational institutions, largely in the greater Pittsburgh area, including Carnegie Mellon. The Foundation is governed by a board of nine trustees, of which two are appointed by Carnegie Mellon.

The Foundation is expected to make annual distributions that will be allocated among the pre-specified supported organizations. As of June 30, 2023, Carnegie Mellon's distribution share remained at 53.5%.

The distributions to Carnegie Mellon have been recorded as contribution revenue with donor restrictions as received and held in endowment net assets with donor restrictions designated as Dietrich Foundation Endowment Funds. The endowed funds will be managed in accordance with Carnegie Mellon's generally applicable investment and disbursement policies in effect for its other permanently restricted endowments. Distributions made from the endowed funds will be used for the purposes authorized by the Foundation's trustees. Distributions of \$22.8 million were received in fiscal years 2023 and 2022, respectively.

18. GUARANTEES

In the ordinary course of business, Carnegie Mellon engages in transactions with third parties involving the provision of goods and/or services. The contracts for these transactions may require Carnegie Mellon to indemnify the third party or others under certain circumstances. The terms of indemnity vary from contract to contract. The amount of the liability associated with such indemnification obligations, if any, is not expected to be material.

Carnegie Mellon has contractually agreed to indemnify its trustees and officers, and in some cases its employees and agents, against certain liabilities incurred as a result of their service on behalf of or at the request of Carnegie Mellon and also advances, on behalf of those indemnified, the costs incurred by them in defending certain claims. Carnegie Mellon carries insurance that limits its exposure for this indemnification obligation. The amount of the liability associated with any known pending or threatened claims covered by this indemnification obligation, if any, is not expected to be material.

Carnegie Mellon has contractually agreed to indemnify specified parties in connection with bond offerings in which it has been involved. The indemnification obligation covers losses, claims, damages, liabilities and other expenses incurred by the underwriters as a result of any untrue statements or material omissions made by Carnegie Mellon in connection with the bond offerings. The amount of the liability associated with any known pending or threatened claims covered by this indemnification obligation, if any, is not expected to be material.

19. COVID-19 PANDEMIC

In March 2020, the World Health Organization declared the novel coronavirus ("COVID-19") a pandemic. During fiscal 2021, the university operated under a modified campus posture, utilizing a hybrid education model, de-densified residence and dining facilities, and on-campus core campus-based activities. Beginning July 1, 2021, the university operated under a transitional campus posture, with instruction predominately in person, increased residence and dining facility density, and the transition of other campus-based activities to on campus with flexible arrangements. The university provided emergency financial aid to students under the Coronavirus Aid, Relief and Economic Security Act (CARES Act) totaling \$9.9 million during the year ended June 30, 2022. The university recognized revenue from federal and other governmental funding related to the COVID-19 pandemic totaling \$12.2 million during the year ended June 30, 2022, which is included in other revenue sources on the Consolidated Statement of Activities. The World Health Organization declared an end to the COVID-19 pandemic in May 2023.

20. SUBSEQUENT EVENTS

The university has performed an evaluation of subsequent events through October 13, 2023, the date on which the consolidated financial statements were issued.

2022-2023 BOARD OF TRUSTEES

OFFICERS OF THE CORPORATION

David A. Coulter Chair

Tod S. Johnson Vice Chair

Anne M. Molloy Vice Chair

Farnam Jahanian President

James H. Garrett, Jr. Provost and Chief Academic Officer

Angela Blanton Vice President for Finance and Chief Financial Officer

Gina Casalegno Vice President for Student Affairs and Dean of Students

Mary Jo Dively Vice President and General Counsel, and Secretary of the Corporation

John Dolan Treasurer Charles A. Kennedy Chief Investment Officer

Kate Lippert Assistant Secretary of the Corporation

Scott Mory Vice President for University Advancement

Carrie Nelson Assistant Treasurer

Nicholas Scibetta (through April 25, 2023) Vice President for University Communications and Marketing

Stan Waddell Vice President for Information Technology and Chief Information Officer

Daryl Weinert Vice President for Operations and Interim Vice President for Research

EX OFFICIO TRUSTEES

Neil Donahue Chair, Faculty Senate, Carnegie Mellon University

Brit McCandless Farmer President, Carnegie Mellon Alumni Association

Ed Gainey Mayor, City of Pittsburgh Farnam Jahanian President, Carnegie Mellon University

Theresa Kail-Smith President, Pittsburgh City Council

John Watts President, Andrew Carnegie Society

VOTING TRUSTEES

Joel Adams General Partner, Adams Capital Management

Lane M. Bess Principal and Founder, Bess Ventures and Advisory

Ronald Bianchini, Jr. Distinguished Engineer, Microsoft Corporation

Keith Block Founder and CEO, Smith Point Capital

Darryl Britt President & CEO, Apprio/ApprioHealth

Frank Brunckhorst Boar's Head Provisions Co., Inc.

David A. Coulter Special Limited Partner, Warburg Pincus LLC

Nathalie Cowan Residential Developer, Abergel Homes

Russell Crockett Managing Partner and CEO, Aztlán Chemical; Senior Advisor, RTC Energy LLC

Jeanne Cunicelli President, UPMC Enterprises; Executive Vice President, UPMC

Shrinivas V. Dempo Chairman, Dempo Group of Companies

Francisco D'Souza Co-Founder and Managing Partner, Recognize

Howard Ellin Partner, Skadden Arps Slate Meagher and Flom

Edward H. Frank Co-founder and CEO, Brilliant Lime, Inc.

Yoshiaki Fujimori Chairman of the Board, Oracle Japan Corporation

Eric Giler Founder and Co-CEO, OmniZare Imaging, Inc.

Ajel Gopal President & Chief Executive Officer, ANSYS, Inc.

Edward Grefenstette President and CIO, The Dietrich Foundation **Torrence M. Hunt, Jr.** *The Elmhurst Group; The Roy A. Hunt Foundation*

Larry Jennings, Jr. Senior Managing Director, ValStone Partners, LLC

Tod S. Johnson Executive Chairman, The NPD Group, Inc.

Raymond J. Lane Managing Partner, GreatPoint Ventures

Bruce McWilliams

Anne M. Molloy Executive Director, Posner Fine Arts Foundation

David Porges Retired Chairman and CEO, EQT Corporation

Sam Reiman Director and Trustee, Richard King Mellon Foundation

James E. Rohr Retired Chairman and CEO, The PNC Financial Services Group, Inc.

J. Lea Hillman Simonds Chair, Hillman Family Foundations

Manoj Singh Retired Chief Operating Officer, Deloitte Touche Tohmatsu Limited

Luke Skurman CEO, Niche

Lip-Bu Tan Chairman, Walden International

David Tepper President and Founder, Appaloosa Management L.P.

Thomas Tull Chairman and CEO, Tulco

Tamara Tunie Actor, Singer, Director and Producer

Paula Kauffman Wagner Producer/Owner, Chestnut Ridge Productions

EMERITUS TRUSTEES

John R. Bertucci Chairman, MKS Instruments, Inc.

Carol R. Brown Former President, Pittsburgh Cultural Trust

Robert M. Brown, III Retired Managing Director, Lehman Brothers

Eric Cooper

Erroll B. Davis, Jr. *President and Board Chair, African American Heritage House at Chautauqua Institution*

W. Logan Dickerson President, Lindwood Farm, Inc. & Protos Foods, Inc.

Philip L. Dowd Sherick Enterprises, LLC

Dina Dublon

William B. Ellis Retired Chairman and CEO, Northeast Utilities

Cynthia Friedman *Co-owner, Union Real Estate Company of Pittsburgh*

Henry J. Gailliot (through January 23, 2023; deceased)

Claire W. Gargalli

Richard D. Hamilton Retired Director of Product Supply, Procter and Gamble

Teresa Heinz Chair Emeritus, The Heinz Endowments; Chairman, Heinz Family Philanthropies

T. Jerome Holleran Retired Chairman, Precision Medical Products, Inc.

W. Lee Hoskins Retired Chairman and CEO, The Huntington National Bank

Patricia Askwith Kenner President, Campus Coach Lines David M. Kirr Partner, Kirr, Marbach & Company

Edward E. Lucente Thomas A. McConomy Retired Chairman of the Board, Calgon Carbon Corporation

Jack E. McGrath Retired Senior Vice President, Booz, Allen & Hamilton

Regina Gouger Miller Owner/Artist, Ginger and Spice; Regina Gouger Miller Studio

Alessandro Ovi Executive Vice President, Fondazione Popoli

E. Kears Pollock Retired Executive Vice President, PPG Industries, Inc.

Charles J. Queenan, Jr. Chairman Emeritus, K&L Gates LLP

Joyce Bowie Scott J. Bowie Scott Studio

David S. Shapira Chairman Emeritus, Board of Directors, Giant Eagle, Inc.

Ajit Shetty Retired Chairman of the Board, Janssen Pharmaceutica

Raymond Smith Chairman, Rothschild Continuation Investments

W. Lowell Steinbrenner Retired Chairman, Contours, Ltd.

Donald E. Stitzenberg Principal, CBA Associates

Mary Ann Ulishney

Carnegie Mellon University

5000 Forbes Avenue Pittsburgh, PA 15213

Finance Division

6501 Living Place, Suite #4000 Pittsburgh, PA 15206

cmu.edu/finance fin-comm@andrew.cmu.edu

DESIGNED AND PRODUCED BY University Communications & Marketing

Carnegie Mellon University does not discriminate in admission, employment or administration of its programs or activities on the basis of race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status or genetic information. Furthermore, Carnegie Mellon University does not discriminate and is required not to discriminate in violation of federal, state or local laws or executive orders.

Inquiries concerning the application of and compliance with this statement should be directed to the university ombudsman, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412.268.1018.

Obtain general information about Carnegie Mellon University by calling 412.268.2000. 24-033.