CARNEGIE INSTITUTION FOR SCIENCE

Financial Statements

June 30, 2021 and 2020

(With Independent Auditors' Report Thereon)

KPMG LLP
Suite 12000
1801 K Street, NW
Washington, DC 20006

Independent Auditors' Report

The Audit Committee
Carnegie Institution of Washington:

We have audited the accompanying financial statements of Carnegie Institution of Washington (d/b/a Carnegie Institution for Science), which comprise the statements of financial position as of June 30, 2021 and 2020, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly in, all material respects, the financial position of Carnegie Institution of Washington as of June 30, 2021 and 2020, 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.

Other Matters

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The supplementary information included in the accompanying schedules of expenses is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

KPMG LLP

Washington, District of Columbia
December 21, 2021

CARNEGIE INSTITUTION FOR SCIENCE

Statements of Financial Position

June 30, 2021 and 2020

(Dollars in 000's)

Assets		2021	2020
Cash and cash equivalents	$	36,238	30,125
Contributions receivable, net (note 2)		3,571	3,728
Accounts receivable and other assets, net		7,807	9,265
Bond proceeds (note 7)		54,817	120,582
Investments (notes 3 and 15)		1,173,771	917,741
Property and equipment, net (notes 4 and 5)		108,591	118,276
Assets held for sale, net (note 4)		7,056	—
Long term deferred asset (note 6)		61,596	61,596
Total assets	$	1,453,447	1,261,313
Liabilities and Net Assets			
Liabilities:			
Accounts payable and accrued expenses (note 7)	$	10,262	11,403
Deferred revenue (note 5)		26,500	28,587
Bonds payable (note 7)		148,851	214,348
Accrued postretirement benefits (note 8)		31,650	32,741
Total liabilities		217,263	287,079
Net assets (notes 9 and 10):			
Without donor restriction		362,758	295,115
With donor restriction		873,426	679,119
Total net assets		1,236,184	974,234
Commitments and contingencies (notes 3, 7, 8, 11, and 12)			
Total liabilities and net assets	$	1,453,447	1,261,313

See accompanying notes to financial statements.

CARNEGIE INSTITUTION FOR SCIENCE

Statements of Activities

Years ended June 30, 2021 and 2020

(Dollars in 000's)

	2021			2020		
	Without donor restriction	With donor restriction	Total	Without donor restriction	With donor restriction	Total
Revenue and support:						
External revenue:						
Grants and contracts	$ 15,343	1,560	16,903	16,203	1,465	17,668
Contributions and gifts (note 13)	826	3,801	4,627	1,480	3,013	4,493
Other income (note 8)	4,112	—	4,112	2,358	—	2,358
External revenue	20,281	5,361	25,642	20,041	4,478	24,519
Investment income, net (note 3)	83,864	237,823	321,687	4,583	13,233	17,816
Net assets released from restrictions (note 9)	48,620	(48,620)	—	51,738	(51,738)	—
Total revenue and support	152,765	194,564	347,329	76,362	(34,027)	42,335
Expenses (note 11):						
Program expenses:						
Observatories	22,590	—	22,590	24,078	—	24,078
Earth & Planets Laboratory	20,303	—	20,303	22,083	—	22,083
Embryology	13,772	—	13,772	13,471	—	13,471
Plant biology	9,523	—	9,523	9,173	—	9,173
Global ecology	3,041	—	3,041	4,792	—	4,792
Other programs	821	—	821	278	—	278
Total program expenses	70,050	—	70,050	73,875	—	73,875
Administrative and general expenses	17,391		17,391	14,416		14,416
Total expenses	87,441	—	87,441	88,291	—	88,291
Change in net assets before pension-related changes other than net periodic postretirement benefit cost	65,324	194,564	259,888	(11,929)	(34,027)	(45,956)
Postretirement changes other than service cost (note 8)	2,890	—	2,890	(3,649)	—	(3,649)
Other components of postretirement benefit expense (note 8)	(828)	—	(828)	(929)	—	(929)
Change in net assets	67,386	194,564	261,950	(16,507)	(34,027)	(50,534)
Net assets at beginning of year	295,115	679,119	974,234	311,622	713,146	1,024,768
Other changes	257	(257)	—	—	—	—
Net assets at end of year	$ 362,758	873,426	1,236,184	295,115	679,119	974,234

See accompanying notes to financial statements.

CARNEGIE INSTITUTION FOR SCIENCE

Statements of Cash Flows

Years ended June 30, 2021 and 2020

(Dollars in 000's)

		2021	2020
Cash flows from operating activities:			
Change in net assets	$	261,950	(50,534)
Adjustments to reconcile change in net assets to net cash used in operating activities:			
Depreciation		8,835	9,449
(Recovery) provision for allowance for uncollectible accounts		(130)	(10)
Net gains on investments and bond proceeds		(322,932)	(19,721)
Net gains on interest rate and commodity swaps		—	(259)
Net loss on disposal of property		97	1,004
Contributions of stock		(49)	(546)
Amortization of bond issuance costs, premium, and discount		(392)	(6)
Contributions and investment income restricted for long-term investment in endowment		(335)	(1,585)
Postretirement changes other than service cost (note 8)		(2,890)	3,649
Changes in operating assets and liabilities:			
Contributions and accounts receivable		1,744	(1,491)
Long-term deferred asset		—	(1,136)
Accounts payable and accrued expenses		(1,842)	(407)
Deferred revenue		(2,086)	1,759
Accrued postretirement benefits		1,799	1,372
Net cash used in operating activities		(56,231)	(58,462)
Cash flows from investing activities:			
Acquisition of property and equipment		(2,034)	(1,049)
Construction of facilities and equipment		(4,269)	(1,038)
Investments purchased		(200,192)	(198,274)
Proceeds from investments sold or matured		412,798	258,890
Purchases of investments from bond proceeds		(79,189)	(103,898)
Net cash provided by investing activities		127,114	(45,369)
Cash flows from financing activity:			
Proceeds from borrowings		—	100,000
Repayments of debt		(65,105)	—
Bond issuance costs capitalized		—	(679)
Proceeds from contributions and investment income restricted for: Investment in endowment		335	1,585
Net cash used in financing activities		(64,770)	100,906
Net increase (decrease) in cash and cash equivalents		6,113	(2,925)
Cash and cash equivalents at beginning of year		30,125	33,050
Cash and cash equivalents at end of year	$	36,238	30,125
Supplementary cash flow information:			
Cash paid for interest	$	2,765	3,851

See accompanying notes to financial statements.

(1) Organization and Summary of Significant Accounting Policies

(a) Organization

Carnegie Institution of Washington, doing business as Carnegie Institution for Science, (Carnegie) conducts advanced research and training in the sciences. Carnegie carries out its scientific work in five research centers located throughout the United States and at an observatory in Chile. The centers are the Departments of Embryology, Plant Biology, Global Ecology, the Observatories, and the division of Earth & Planets Laboratory, formerly known as the Departments of Terrestrial Magnetism and the Geophysical Laboratory.

In March 2020, the World Health Organization declared the novel coronavirus (COVID-19) a pandemic. The outbreak of the disease has affected travel, commerce and financial markets globally, including in the United States. The continued spread of COVID-19 and its impact on social interaction, travel, economies and financial markets may adversely affect operations and financial condition, including, among other things, (i) the ability of Carnegie to conduct its operations and/or the cost of operations, (ii) governmental and non-governmental funding and sponsored research and other grants and gifts, and (iii) financial markets impacting investments valuation and interest rates.

Carnegie has implemented pandemic response plans. All bench-based scientific activity continues to operate remotely and on-site through continuity plans and essential staff presence to the extent practical and consistent with federal, state, and local directives. Carnegie is monitoring developments and the directives of federal, state and local officials to determine what additional precautions and procedures may need to be implemented by Carnegie.

(b) Basis of Accounting and Presentation

The financial statements are prepared on the accrual basis of accounting in accordance with U.S. general accepted accounting principles.

(c) Investments and Cash Equivalents

Carnegie's common stock and equity investments are reported at fair value based on quoted market prices, or with respect to commingled funds, real estate funds, certain natural resources funds, absolute return funds, and private equity funds, at estimated net asset values (NAV), as a practical expedient for fair value, provided by the general partners of limited partnerships or other external investment managers. These estimated fair values are reviewed and evaluated by Carnegie. Due to the inherent uncertainties of these estimates, these values may differ from the values that would have been reported had a ready market for such investments existed. See also note 1(e) on other fair value information.

All investments are exposed to various risks, such as interest rate, market, currency, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements. All changes in fair value are recognized in the statements of activities.

Carnegie investment returns are presented net with investment expenses. Investment expenses include investment management fees, custodian fees, and other direct internal operating expenses related to Carnegie's investment activities.

Carnegie considers all highly liquid debt instruments purchased with original maturities of 90 days or less to be cash equivalents. Money market and other highly liquid instruments held by investment managers are reported as investments and bond proceeds. Carnegie holds cash equivalents that are restricted for debt refinancing and are not considered cash equivalents or restricted cash equivalents for purposes of the statements of cash flows. There was no restricted cash as of June 30, 2021 or 2020.

(d) Income Taxes

Carnegie has been recognized by the Internal Revenue Service as exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code (the Code) except for amounts from unrelated business income. Carnegie is also an educational institution within the meaning of Section 170(b)(1)(A)(ii) of the Code. The Internal Revenue Service has classified Carnegie as other than a private foundation, as defined in Section 509(a) of the Code.

Carnegie has analyzed its tax positions and concluded that as of June 30, 2021 and 2020, there are no uncertain tax positions taken that would require recognition or disclosure in the financial statements.

(e) Fair Value of Financial Instruments

The fair value of investments in common stock and equity securities is based on quoted market prices. The fair value of investments in bond funds, commingled funds, real estate, natural resources, absolute return funds, and private equity is estimated using net asset value or its equivalent, as discussed in note 1(c).

Carnegie uses interest rate swap agreements to mitigate the risk of changes in interest rates associated with fixed interest rate indebtedness and changes in the market. Carnegie recognizes these interest rate swap agreements at fair value.

The fair value hierarchical disclosure framework prioritizes and ranks the level of market price observability used in measuring financial instruments at fair value. The hierarchy gives the highest priority to unadjusted quoted market prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3 measurements).

Fair value measurements are categorized in one of the following three categories:

Level 1 – Pricing inputs are unadjusted quoted prices available in active markets for identical assets or liabilities.

Level 2 – Pricing inputs are quoted prices for identical assets or liabilities in markets that are not active, or inputs that are observable either directly or indirectly, for substantially the full term of the asset or liability through corroboration with observable market data.

Level 3 – Pricing inputs are unobservable for the investment and include situations where there is little, if any, market activity for the investment. The inputs into the determination of fair value require significant management judgment or estimation.

The level of a value determined for a financial instrument within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement in its entirety. Determination of what constitutes "observable" input requires judgment by Carnegie. In general, Carnegie considers observable inputs to be market data that are readily available, regularly distributed or updated, reliable and verifiable, and provided by independent sources that are actively involved in the relevant market.

(f) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates. Carnegie makes estimates in measurement and reporting including fair value of investments, useful lives of property and equipment, allowances for doubtful pledges, income tax uncertainties, and other contingencies.

(g) Property and Equipment

Carnegie capitalizes expenditures for land, buildings and leasehold improvements, telescopes, scientific and administrative equipment, and projects in progress. Routine replacement, maintenance, and repairs are charged to expense.

Depreciation is computed on a straight-line basis, generally over the following estimated useful lives:

Buildings and telescopes	50 Years
Scientific and administrative equipment	2–10 Years

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value amount of an asset may not be recoverable. No impairments were recognized in 2021 or 2020.

(h) Contributions and Net Assets

Contributions are classified based on the existence or absence of donor-imposed restrictions as either conditional or unconditional as follows.

Conditional – Includes all contributions with donor-imposed conditions or stipulations representing a barrier that must be overcome before the recipient is entitled to the assets being transferred or promised. A failure to overcome the barrier gives the contributor a right of return of the assets it has transferred or the ability to rescind an obligation to transfer.

Unconditional – Includes all contributions that do not contain a barrier to use and therefore are recorded as revenue once cash or a pledge is received. Donor imposed restrictions for time and/or purpose are not considered a significant barrier and thus these contributions are recorded as unconditional.

In instances where unconditional contributions are to be received after one year or more from the date of the gift, they are recorded at a discounted amount at an appropriate risk-adjusted rate commensurate with the expected collection period. Amortization of the discount is recorded as additional contribution revenue. Allowance is made, if necessary, for uncollectible contributions receivable based upon management's judgment and analysis of the creditworthiness of the donors, past collection experience, and other relevant factors.

Modifications of grants or contributions are recorded in the period of modification. There were no modifications during the year ended June 30, 2021 or 2020.

Contributions are classified in categories of net assets as follows:

Without donor restriction – Includes all contributions received without donor-imposed restrictions on use or time, including restricted contributions for which the restrictions were met in the same period the revenue is recognized.

With donor restriction – Includes contributions with donor-imposed restrictions as to purpose of gift and/or time-period expended.

Contributions with donor restriction include endowment gifts in which donors stipulated that the corpus be invested, and only the investment income generated from endowments may be spent. Certain endowments require that a portion of the investment income be reinvested with the original endowment.

Expirations of net assets with donor restriction (i.e., the donor stipulated purpose has been fulfilled or the stipulated time period has elapsed) are reported as releases of restrictions in the statements of activities.

Gifts of long-lived assets, such as buildings or equipment, are considered unrestricted when placed in service unless restricted by the donor. Cash gifts restricted for investment in long-lived assets are released from restriction when the asset is placed into service.

(i) Grants

Carnegie recognizes revenue on grants from federal agencies as conditions are met (i.e., as qualifying expenses are incurred). Funds received in excess of reimbursable expenses are recorded as deferred revenue, and expenses in excess of funds received are recorded as accounts receivable. Funds generally are drawn monthly. Reimbursement of indirect costs may be based on provisional rates if final rates are not received. These provisional rates are subject to subsequent audit by Carnegie's federal cognizant agency, the Department of Energy.

(j) Retirement Benefits

Carnegie has a noncontributory, defined contribution, money-purchase retirement plan in which all U.S. personnel are eligible to participate. After one year of service, an individual's benefits are fully vested. The plan has been funded through individually owned annuities issued by Teachers' Insurance and Annuity Association and College Retirement Equities Fund.

Carnegie also provides postretirement medical benefits to all eligible employees (retirees as of that date were grandfathered) who were age 50 or older and employed as of July 1, 2016, retire after age 55 and have at least 10 years of service. Employees under age 40 on July 1, 2016 and who meet the Rule of 75 (age plus years of service equal to at least 75) on or after age 55 may qualify for retiree health. Employees hired on or after July 1, 2016, must meet the Rule of 75 on or after age 60. The service cost component of net periodic benefit cost for pension and other postretirement benefits is presented as employee benefit expense. The other components of net periodic benefit cost, such as interest, unrecognized losses, and amortization of other actuarially determined amounts, are presented outside of expenses as other non-operating activities.

(k) Revenue Recognition – Contracts with Customers and Accounts Receivable

Other revenues are recognized as the services are provided over the fiscal year, and are primarily related to fees for telescope usage, including revenues to support operations of the telescopes and royalty revenue. See note 5.

Payments for telescope usage have been received in advance and are reported as deferred revenue. Such deferred revenue will be amortized over a period of 50 years, with an expected 31.4 years remaining as of June 30, 2021. Other customer receivables are invoiced based upon contractual terms with revenue being recognized as services are performed. Carnegie maintains allowances for doubtful accounts to reflect management's best estimate of probable losses inherent in receivable balances. Management determines the allowances for doubtful accounts based on known troubled accounts, historical experience, and other currently available evidence.

(l) Recent Accounting Standards

In August 2018, Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-13: *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. The key provisions of ASU 2018-13 include new, eliminated, and modified disclosure requirements. The ASU did not have a significant impact on Carnegie's financial statements.

(2) Contributions Receivable

(a) Unconditional

Contributions receivable are summarized as follows as of June 30, 2021 and 2020 (in thousands):

		2021	2020
Unconditional promises expected to be collected in:			
Less than one year	$	1,936	1,662
One to five years		1,813	2,450
More than five years		150	150
		3,899	4,262
Less:			
Allowance for uncollectible amounts		(152)	(273)
Discount to present value		(176)	(261)
	$	3,571	3,728

Contributions receivable as of June 30, 2021 and 2020 were discounted based on the estimated risk-adjusted rate of return on the pledge date at rates ranging from 0.16% to 2.84%

(b) Conditional

As of June 30, 2021, conditional contributions of $15.8 million are available to Carnegie, which are not recorded as revenue nor as a receivable. Revenue related to these contributions will be recognized once the relevant barriers of each contribution are met.

(3) Investments

Investment income, net consisted of the following for the years ended June 30, 2021 and 2020 (in thousands):

		2021	2020
Interest and dividends	$	3,901	4,501
Net realized gains		99,414	45,448
Net unrealized gains (losses)		224,845	(26,138)
Investment management expenses		(6,473)	(5,995)
	$	321,687	17,816

The following table represents investments that are measured at fair value on a recurring basis as of June 30, 2021 (in thousands):

	June 30, 2021	Level 1	Level 2	Level 3	NAV (1)
Time deposits and money market funds	$ 9,359	9,359	—	—	—
U.S. government bond funds	85,321	85,321	—	—	—
Common stock – domestic	74,152	74,152	—	—	—
Domestic equity commingled funds	164,713	71,035	—	—	93,678
International equity commingled funds	308,799	—	—	—	308,799
Real estate funds	113,432	—	—	—	113,432
Natural resources funds	79,267	—	—	57,461	21,806
Absolute return funds	169,985	—	—	—	169,985
Private equity funds	168,743	14,126	—	—	154,617
	$ 1,173,771	253,993	—	57,461	862,317

The following table represents investments that are measured at fair value on a recurring basis as of June 30, 2020 (in thousands):

	June 30, 2020	Level 1	Level 2	Level 3	NAV (1)
Time deposits and money market funds	$ 8,716	8,716	—	—	—
U.S. government bond funds	52,777	52,777	—	—	—
Common stock – domestic	55,334	54,920	—	414	—
Domestic equity commingled funds	155,679	54,453	—	—	101,226
International equity commingled funds	225,015	—	—	—	225,015
Real estate funds	97,958	—	—	6	97,952
Natural resources funds	62,198	—	—	48,241	13,957
Absolute return funds	177,718	—	—	—	177,718
Private equity funds	82,346	72	—	—	82,274
	$ 917,741	170,938	—	48,661	698,142

(1) Certain investments are measured at fair value using NAV as a practical expedient for fair value and have not been classified in the fair value hierarchy. The NAV amounts have been presented to permit reconciliation of the fair value hierarchy to the amounts presented in the statements of financial position.

The following table summarizes the nature and risk of Carnegie's investments in funds, which are valued based on NAV as a practical expedient for fair value as of June 30, 2021 and 2020 (in thousands):

	Fair value		2021 Unfunded	Redemption
	2021	2020	commitments	frequency
Domestic equity commingled funds (a)	$ 93,678	101,226	15,000	Illiquid
International equity commingled funds (b)	308,799	225,015	—	Monthly
Real estate funds (c)	113,432	97,952	52,178	Illiquid
Natural resources funds (d)	21,806	13,957	1,959	Illiquid
Absolute return funds (e)	169,985	177,718	—	Annually
Private equity funds (f)	154,617	82,274	77,583	Illiquid
	$ 862,317	698,142	146,720	

(a) This class comprises two funds, one of which invests in common stocks of biotechnology companies and other invests the majority of its portfolio in publicly traded common stocks. These funds seek to produce returns that mirror or exceed various benchmarks established for comparable portfolios. The notice period is 90 days or less and redemptions can me made once every two years at the end of the calendar year for the first fund and the second fund is subject to a five-year lockup from the initial investment date.

(b) This class comprises five international partnerships that invest in public equity markets internationally and one institutional mutual fund that resembles an emerging markets index. These funds seek to produce returns that mirror or exceed various benchmarks established for comparable portfolios. The majority of Carnegie's capital in this category can be redeemed on a monthly basis or more frequently. The notice period is 30 days or less.

(c) This class includes several real estate funds that invest primarily in U.S. commercial real estate. One fund targets commercial, residential, and industrial real estate in the United Kingdom. Investments under this category cannot be redeemed. Instead, distributions are made from operating proceeds on a periodic basis, typically monthly or quarterly. Proceeds from assets sold are generally distributed immediately. It is estimated that the underlying assets of these funds will be liquidated over the next one to ten years.

(d) This class includes funds that invest primarily in oil and gas assets. The investment strategy is to acquire, operate, develop, and improve oil and gas assets. Investments under this category cannot be redeemed. Instead, distributions are made from operating proceeds on a periodic basis, typically quarterly. Proceeds from assets sold may be distributed immediately. It is estimated that the underlying assets of these funds will be liquidated over the next two to fourteen years.

(e) This class comprises several separate funds, and include partnerships that invest in publicly traded equities, fixed income securities, distressed fixed income securities, value investments, credit investments, event-driven situations, real estate, distressed credit investments, and event-driven situations. In general, these funds seek to produce positive absolute returns that do not necessarily correlate with the public markets. The majority of Carnegie's capital in this category can be redeemed on an annual basis; in some cases, redemptions can occur within a year, with a minimum of typically 90 days' notice. Less than five percent is invested in a partnership where, under the current terms, funds are in liquidation and cannot be withdrawn. The underlying assets are expected to be distributed over the next couple of years.

(f) This class comprises several separate managers and private equity funds that invest primarily in leveraged buyouts, venture capital, emerging growth companies, and various niche strategies. Private equity investment transactions may involve acquisitions, leveraged buyouts, reorganizations, privatizations, restructurings, and spin-offs. Investments under this category cannot be redeemed. Distributions are made as investments are exited. It is estimated that the underlying assets of these various funds will be liquidated over the next one to twelve years.

Level 3 Investments

Carnegie's activity for its natural resources funds measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended June 30, 2021 and 2020 included purchases of approximately $888,000 and 4,653,000, respectively. There were no transfers in or out of Level 3 during the years then ended.

Level 3 investments are valued by investment managers using common valuation techniques. Carnegie reviews these valuation methods and evaluates the appropriateness of these valuations each year. Natural resource funds are primarily oil and gas funds The fair value of these funds, as provided by investment managers to approximate fair value, has been estimated using proven reserves and relies on pricing visible in the NYMEX five-year strip for oil and natural gas and then for subsequent years utilizes a flat price assumption.

Input	2021 Range	2020 Range
Visible forward prices for oil/natural gas (NYMEX) thru FY 2026	$55.29/$2.71	$39.24/$1.99
	$72.17/$3.65	$52.25/$2.71
Flat price assumption for subsequent years	$60.00/$3.00	$60.00/$3.00
Discount rate	10 %	10 %

Carnegie has unfunded commitments related to these Level 3 investments of approximately $11 million as of June 30, 2021.

(4) Property and Equipment

Property and equipment consisted of the following as of June 30, 2021 and 2020 (in thousands):

		2021	2020
Buildings and improvements	$	88,204	96,891
Telescopes		93,970	93,970
Scientific equipment		75,594	78,360
Administrative equipment		5,902	7,083
Construction in progress		2,275	1,076
Land		578	817
Leased equipment		103	234
Art		174	174
		266,800	278,605
Accumulated depreciation		(158,209)	(160,329)
	$	108,591	118,276

As of June 30, 2021, construction in progress consists of $1.7 million of scientific equipment, and $0.4 million other equipment and improvements. As of June 30, 2020, construction in progress consists of $0.9 million of scientific equipment, and $0.2 million of other equipment and improvements.

As of June 30, 2021 and 2020, approximately $50.7 million and $52.9 million, respectively, of property and equipment, net of accumulated depreciation, was located in Las Campanas, Chile.

Effective May 14, 2021 Carnegie identified and classified certain assets associated with its headquarters building in Washington D.C. as held for sale. The assets, with an aggregated net book value of $7,056,000 as of June 30, 2021, have been segregated from land, buildings and other property and presented as assets held for sale within the accompanying financial statements. Depreciation related to these assets stopped with the effective date and the assets were sold on October 1, 2021 (see note 17).

(5) Magellan Consortium

During the year ended June 30, 1998, Carnegie entered into an agreement (Magellan Agreement) with four universities establishing a consortium to build and operate the Magellan telescopes. The two Magellan telescopes are located on Manqui Peak, Las Campanas in Chile. The first telescope, with a cost of approximately $41.7 million, was placed in service during 2001. The other, with a cost of approximately $30.1 million, was placed in service in 2003. The aggregated net book value of the two telescopes was $44.9 million as of June 30, 2021.

(Continued)

The university members of the consortium, by contribution to the construction and operating costs of Magellan, acquired rights of access and oversight as described in the Magellan Agreement. Total contributions by the university members for construction, which amounted to $36.0 million, covered approximately 50% of the total construction costs. These monies were used by Carnegie to finance part of the Magellan Telescopes' construction costs. The contributions were recorded as deferred revenue and are being recognized ratably as income over the remaining estimated useful lives of the telescopes. As of June 30, 2021 and 2020 the deferred revenue for the consortium totaled $20.7 million and $21.4 million, respectively.

(6) Long Term Deferred Asset

Carnegie is a founder and initial contributor to the Giant Magellan Telescope (GMT) project, which is managed by the Giant Magellan Telescope Organization Corporation (GMTO) that includes institutions from the United States, Australia, and Korea. The GMTO is a nonprofit organization incorporated in 2007 for the purpose of developing and building a state-of-the-art, next-generation, extremely large telescope. Contributors to the GMT project acquire rights of access to the telescope upon completion, as described in the Founders' Agreement dated March 20, 2009. Beginning in fiscal year 2010, Carnegie began to capitalize cash contributions to the GMTO, primarily received through fundraising efforts, as a long term deferred asset. The asset will be amortized over the expected 50 year life of the telescope beginning at the time it is placed into service. Carnegie's cash contributions to GMTO in fiscal years 2021 and 2020 were $0 and $1.1 million, respectively. The long term deferred asset value was $61.6 million and $61.6 million at June 30, 2021 and 2020, respectively.

(7) Debt

(a) Bonds Payable

Bonds payable consisted of the following as of June 30, 2021 and 2020 (in thousands):

		2021	2020
Maryland Health and Higher Education Facilities Authority (MHHEFA) 2010 Revenue Bonds	$	—	30,600
California Educational Facilities Authority (CEFA) 2010 Revenue Bonds		—	34,500
2014 Taxable bonds		50,000	50,000
2020 Taxable bonds		100,000	100,000
Bond issue cost		(1,149)	(752)
	$	148,851	214,348

On February 4, 2010, MHHEFA issued unsecured $30.6 million of fixed rate, tax-exempt revenue bonds on behalf of Carnegie with a fixed interest rate of 4.25%. The MHHEFA 2010 revenue bonds are reflected above as of June 30, 2020 and were subsequently redeemed in full on July 1, 2020 using the proceeds of the series 2020 taxable bonds. There are no financial covenants or stand-by credit facilities associated with the bonds.

On March 24, 2010, CEFA issued unsecured fixed-rate, tax-exempt revenue bonds with a par value of $34.5 million on behalf of Carnegie with a fixed interest rate of 5.0%. The CEFA 2010 revenue bonds are reflected above as of June 30, 2020 and were subsequently redeemed in full on July 8, 2020 using the proceeds of the series 2020 taxable bonds. There are no financial covenants or stand-by credit facilities associated with the bonds.

On May 15, 2014, Carnegie issued unsecured 2014 Series fixed rate taxable bond with a par value of $50.0 million, maturing in 2054. Proceeds were used to finance a portion of the GMT project (note 6), and other capital projects and operations in support of Carnegie's scientific mission. The bond bears interest at a fixed rate of 4.241% with sinking fund redemptions of $10,000,000 on each July 1, 2050 through 2054. The Series 2014 bonds are subject to redemption prior to maturity in whole or in part, on any date, at the option of the issuer. There are no financial covenants or stand-by credit facilities associated with the bonds.

On June 9, 2020, Carnegie issued unsecured 2020 Series fixed rate taxable bonds with a par value of $100.0 million, maturing in 2049. $65.1 million of proceeds were used in July 2020 to redeem the CEFA and MHHEFA bonds in full and any associated swaps terminated in concert with this transaction. Proceeds were also used to fund certain capital needs and to pay the cost of issuing the bonds. The bonds bear interest at a fixed rate of 3.224% with sinking fund redemptions due on each July 1, 2042 through 2049. The Series 2020 bonds are subject to redemption prior to maturity in whole or in part, on any date, at the option of issuer. There are no financial covenants or stand-by credit facilities associated with the bonds. All prior bond redemptions occurred by July 8, 2020. The proceeds from the Series 2020 bonds are invested in cash equivalents and are considered level 1 in the fair value hierarchy as of June 30, 2021 and 2020.

Interest expense paid aggregated $2.8 million and $3.9 million for the years ended June 30, 2021 and 2020, respectively.

(8) Employee Benefit Plans

(a) Retirement Plan

Contributions made by Carnegie, described in note 1(j), totaled approximately $5.0 million and $4.6 million for the years ended June 30, 2021 and 2020, respectively.

(b) Postretirement Benefits Plan

Cash payments made by Carnegie for the postretirement medical benefits, as detailed in note 1(j), totaled $0.6 million and $0.6 million for the years ended June 30, 2021 and 2020 respectively.

Postretirement benefits expense for the years ended June 30, 2021 and 2020 consists of the following (in thousands):

		2021	2020
Service cost – benefits earned during the year	$	1,592	1,060
Interest cost on projected benefit obligation		846	947
Amortization of prior service costs		(18)	(18)
Postretirement benefit expense	$	2,420	1,989

The 2021 postretirement benefits expense was approximately $1.8 million more than the cash payments of $0.6 million and 2020 postretirement benefits expense was approximately $1.4 million more than the cash payments of $0.6 million. The postretirement benefit expense was allocated among program and supporting services expenses in the accompanying statements of activities.

The reconciliation of the plan's funded status to amounts recognized in the financial statements as of June 30, 2021 and 2020 follows (in thousands):

		2021	2020
Change in benefit obligation:			
Benefit obligation at beginning of year	$	32,741	27,721
Service cost		1,592	1,060
Interest cost		846	947
Actuarial (gain) loss		(2,908)	3,631
Contributions (net of retiree contributions)		(621)	(618)
Benefit obligation at end of year		31,650	32,741
Change in plan assets:			
Fair value of plan assets at beginning of year		—	—
Contributions to the plan		680	700
Benefits paid		(680)	(700)
Funded status of the plan	$	31,650	32,741

Pension related changes other than net periodic postretirement benefit cost consisted of the following as of June 30, 2021 and 2020 (in thousands):

		2021	2020
Unrecognized net actuarial gain (loss)	$	2,908	(3,631)
Unrecognized prior service costs		(18)	(18)
	$	2,890	(3,649)

The unrecognized net loss and prior service costs that have not been recognized as a component of net periodic postretirement benefit cost as of June 30, 2021 and 2020 are as follows (in thousands):

		2021	2020
Unrecognized net actuarial (loss) gain	$	(1,359)	1,549
Unrecognized prior service costs		(23)	(41)
	$	(1,382)	1,508

The present value of the benefit obligation as of June 30, 2021 and 2020 was determined using an assumed discount rate of 2.77% and 2.62%, respectively. The present value of the net periodic postretirement benefit cost for the years ended June 30, 2021 and 2020 was determined using an assumed discount rate of 2.62% and 3.47%, respectively. Carnegie’s policy is to fund postretirement benefits as claims and administrative fees are paid.

The measurement date used to determine postretirement benefit obligations is June 30.

Carnegie expects to contribute approximately $0.9 million to its postretirement benefit plan during the year ending June 30, 2022.

The following benefit payments (net of retiree contributions), which reflect expected future service, are expected to be paid in future years ending June 30 (in thousands):

2022	$	942
2023		948
2024		992
2025		1,029
2026		1,069
2027-2031		6,325

The prescription drug benefits offered by Carnegie are determined to not be actuarially equivalent to Medicare Plan D, and the effects of the Medicare Prescription Drug Improvement and Modernization Act, excluding the subsidy, do not have a significant impact on the per capita claims cost.

(9) Net Assets

(a) Without Donor Restrictions

Net assets without donor restrictions consisted of the following as of June 30, 2021 and 2020 (in thousands):

		2021	2020
Board-designated quasi-endowments	$	175,409	132,763
Undesignated		187,349	162,352
	$	362,758	295,115

(b) With Donor Restrictions

Net assets with donor restrictions were available to support the following donor-restricted purposes as of June 30, 2021 and 2020 (in thousands):

		2021	2020
Endowment assets available for future appropriation	$	779,067	586,055
Specific research programs		53,683	43,401
Equipment acquisition and construction		3,567	3,574
Passage of time		—	9,076
Operation of Maxine Singer building		15,000	15,000
General support (Carnegie endowment)		22,109	22,013
	$	873,426	679,119

Endowment assets available for future appropriation are those net assets that will be released from restriction based upon board approved appropriation each year. These are comprised of all endowment funds (See Note 11). The other line items include non-endowment restrictions as well as the endowment original gift of $58,026 and $57,691 as of June 30, 2021 and 2020, respectively, which cannot be spent.

(c) Net Assets Released from Restrictions

During 2021 and 2020, Carnegie met donor-imposed requirements on certain gifts and, therefore, released net assets with donor restriction as follows (in thousands):

		2021	2020
Appropriation of endowment assets	$	44,837	45,533
Specific research programs		3,766	6,183
Equipment acquisition and construction		7	22
	$	48,610	51,738

(10) Endowment

Carnegie's endowment consists of a number of individual funds established for a variety of purposes. Its endowment includes both donor-restricted endowment funds and funds designated by the Board of Trustees to function as endowments to support the purposes of Carnegie. Net assets associated with endowment funds are classified and reported based on the existence or absences of donor-imposed restrictions.

(a) Interpretation of Relevant Law

Effective January 23, 2008, the District of Columbia enacted the Uniform Management of Institutional Funds Act (UPMIFA), the provisions of which apply to endowment funds existing on or established after that date. Based on its interpretation of the provisions of UPMIFA, Carnegie is required to act prudently when making decisions to spend or accumulate donor-restricted endowment funds. As a result of this interpretation, Carnegie classifies as net assets with donor restriction the original value of gifts donated to the permanent endowment and subsequent gifts to the endowment. The remaining portion of the endowment fund are appropriated for expenditure by Carnegie in a manner consistent with the standard of prudence prescribed by UPMIFA.

In accordance with UPMIFA, Carnegie considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment fund: the duration, preservation, and purposes of the fund; general economic conditions, including inflation; expected total return from investments; other resources; and investment and spending policies.

(b) Return Objectives and Risk Parameters

Carnegie's Board of Trustees has adopted an investment policy, including return objectives, for its endowment. This policy has identified an appropriate risk posture, stated expectations and objectives, asset allocation guidelines, and criteria to monitor and evaluate the performance results of the endowment fund's managers. Carnegie expects the endowment fund to provide a real rate of return of approximately 5% annually, while recognizing that performance in any given year may vary from this goal.

(c) Strategies Employed for Achieving Objectives

To satisfy its long-term rate of return objectives, Carnegie relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). Carnegie employs a diversified asset allocation strategy that allocates investments among four broad asset classes: common stock, alternative assets, fixed income, and cash. Common stock is subdivided into domestic and international categories. Alternative assets are subdivided into absolute return partnerships, natural resources, real estate, and private equity funds.

(d) Spending Policy and How the Investment Objectives Relate to Spending Policy

The current Board-approved spending rule requires that the amounts appropriated for spending from the endowment comprises a) 70% of the previous year's budget, adjusted for inflation and b) 30% of the most recent year-end endowment value, adjusted for debt, and then multiplied by the determined spending rate, currently 5%, and adjusted for inflation. The rule functions to smooth annual contributions from the endowment in support of the operating budget. In establishing this policy, Carnegie considered the long-term expected return on its funds. Carnegie expects the current spending and investment policies to grow its endowment to keep pace with inflation annually.

(e) Appropriation of Endowment Assets for Next Fiscal Year

For fiscal year 2022, Carnegie has appropriated $48.7 million of its endowment funds assets to be distributed for spending. In accordance with the endowment spending policy described above, this amount is calculated based upon an endowment spending rate of five percent (5%). Additional amounts required to fulfill debt obligations of Carnegie are also authorized for expenditure.

(f) Funds with Deficiencies

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor or UPMIFA requires Carnegie to retain as a fund of perpetual duration. No such deficiencies existed as of June 30, 2021 or 2020.

(g) Endowment Net Asset Classification

Net asset classification by type of endowment as of June 30, 2021 and 2020 is as follows (in thousands):

		Without donor restrictions	With donor restrictions	Total
June 30, 2021:				
Donor-restricted endowment funds	$	—	837,093	837,093
Board-designated endowment funds		175,409	—	175,409
	$	175,409	837,093	1,012,502
June 30, 2020:				
Donor-restricted endowment funds	$	—	643,745	643,745
Board-designated endowment funds		132,763	—	132,763
	$	132,763	643,745	776,508

Original gifts for donor-restricted endowment funds (in thousands) are $58,025 and $57,691 as of June 30, 2021 and 2020, respectively.

Changes in endowment net assets for the years ended June 30, 2021 and 2020 were as follows (in thousands):

		Without donor restrictions	With donor restrictions	Total
Endowment net assets, June 30, 2019	$	135,397	674,402	809,799
Investment return:				
Investment income		(208)	(1,230)	(1,438)
Net gains		2,898	14,429	17,327
Total investment return		2,690	13,199	15,889
Contributions		—	1,677	1,677
Appropriation of assets for expenditures		(5,324)	(45,533)	(50,857)
Endowment net assets, June 30, 2020		132,763	643,745	776,508
Investment return:				
Investment income		(397)	(1,929)	(2,326)
Net gains		49,248	239,752	289,000
Total investment return		48,851	237,823	286,674
Contributions		—	619	619
Fund reclassifications		(563)	(257)	(820)
Appropriation of assets for expenditures		(5,642)	(44,837)	(50,479)
Endowment net assets, June 30, 2021	$	175,409	837,093	1,012,502

(11) Expenses and Allocation of Costs

Most expenses are directly charged to the respective program or supporting activity. Certain costs have been allocated among the programs based upon management’s estimate of each program’s share of the allocated costs. General operations cost as presented in the table below include professional and contract services, building maintenance and operation and indirect costs. Science expenses below represent educational and research supplies, subcontracts, and non-capitalized equipment.

The composition of expenses for the year ended June 30, 2021 are as follows:

Program activities		Personnel costs and fellowships	General operations costs	Depreciation and interest	Science expenses	Travel and meetings	Total expenses
Observatories	$	15,311	1,125	5,084	1,002	68	22,590
Earth & Planets Laboratory		14,235	1,215	3,224	1,593	36	20,303
Embryology		7,302	852	2,349	3,255	14	13,772
Plant biology		6,539	1,327	785	835	37	9,523
Global ecology		1,956	700	342	35	8	3,041
Other programs		477	339	—	5	—	821
Total Program		45,820	5,558	11,784	6,725	163	70,050
Support activities							
Admin and General		9,828	6,106	1,271	108	78	17,391
Total Supporting		9,828	6,106	1,271	108	78	17,391
Total Expenses	$	55,648	11,664	13,055	6,833	241	87,441

The composition of expenses for the year ended June 30, 2020 are as follows:

Program activities		Personnel costs and fellowships	General operations costs	Depreciation and interest	Science expenses	Travel and meetings	Total expenses
Observatories	$	14,620	2,358	5,553	917	630	24,078
Earth & Planets Laboratory		14,298	1,563	3,485	1,727	1,010	22,083
Embryology		6,835	896	2,772	2,891	77	13,471
Plant biology		5,948	1,239	930	892	164	9,173
Global ecology		2,554	1,011	345	794	88	4,792
Other programs		185	44	—	41	8	278
Total Program		44,440	7,111	13,085	7,262	1,977	73,875
Support activities							
Admin and General		9,641	2,175	1,502	526	572	14,416
Total Supporting		9,641	2,175	1,502	526	572	14,416
Total Expenses	$	54,081	9,286	14,587	7,788	2,549	88,291

Carnegie streamlined the number of functions and natural classes in fiscal year 2021 and has made conforming changes to the presentation of fiscal year 2020, which aligns with Carnegie's operational changes in 2021.

(12) Liquidity

As of June 30, 2021 and 2020, Carnegie has $254.0 million and $230.0 million in financial assets, respectively, to meet cash needs within one year for general expenditures or day-to-day cash needs for the organization. The liquidity is primarily from investments, but also includes cash and accounts receivable. These assets are reduced by amounts not available for general use within one year due to restrictions on their use including donor and board restrictions. These assets available are as follows:

		2021	2020
Cash	$	36,238	30,125
Investments		1,173,771	917,741
Accounts receivable		7,807	9,265
Total financial assets		1,217,816	957,131
Restrictions on use of assets:			
Endowment funds restricted for future purposes		(837,093)	(643,745)
Board restricted endowment funds		(175,409)	(132,763)
Total restrictions		(1,012,502)	(776,508)
FY22/21 board approved endowment allocation		48,784	49,523
Financial assets available to meet cash needs for general expenditures within one year	$	254,098	230,146

As part of Carnegie's liquidity management, it structures financial assets to be available as its general expenditures, liabilities, or other obligations come due. Carnegie's investment and liquidity allocation is reviewed frequently and approved by the investment committee. Although Carnegie does not intend to spend from the board restricted endowment funds, amounts from these funds could be released from restriction with board approval.

(13) Lease Arrangements

Carnegie leases a portion of the land it owns in Las Campanas, Chile to other organizations. These organizations have built and operate telescopes on the land. Most of the lease arrangements are not specific and some are at no cost to the other organizations. The value of the no-cost leases could not be determined and is not considered significant, and accordingly, contributions have not been recorded in the financial statements.

Carnegie also leases a portion of one of its laboratories to another organization for an indefinite term. Rents to be received under the agreement are approximately $200,000 annually, adjusted for inflationary increases.

(14) Contingencies

Costs charged to the federal government under cost-reimbursement grants and contracts are subject to government audit. Therefore, all such costs are subject to adjustment. Management believes that adjustments, if any, would not have a significant effect on the financial statements.

(15) Related Party Transactions

A trustee of Carnegie is also the chairman of an investment entity with which Carnegie has invested $57.5 million and $48.2 million in eight of its investment funds, as of June 30, 2021 and 2020, respectively. Carnegie paid approximately $0.7 million and $0.9 million in management and incentive fees and interest to these funds for the years ended June 30, 2021 and 2020, respectively.

(16) Subsequent Events

Carnegie has evaluated subsequent events through the date the financial statements were issued, December 21, 2021 and determined no adjustments or disclosures were required, except for the sale of an administrative building as outlined below.

On October 1, 2021 Carnegie sold its headquarters building located in Washington D.C for $65.0 million.

CARNEGIE INSTITUTION FOR SCIENCE

Schedules of Expenses

Years ended June 30, 2021 and 2020

(Dollars in 000's)

	2021			2020		
	Carnegie funds	Federal and private grants	Total expenses	Carnegie funds	Federal and private grants	Total expenses
Personnel costs:						
Salaries	$ 32,232	7,691	39,923	31,162	8,519	39,681
Fringe benefits and payroll taxes	11,332	1,700	13,032	9,751	1,932	11,683
Total personnel costs	43,564	9,391	52,955	40,913	10,451	51,364
Fellowship grants and awards	144	203	347	(14)	374	360
Depreciation	8,835	—	8,835	9,449	—	9,449
General expenses:						
Educational and research supplies	2,856	971	3,827	2,387	888	3,275
Building maintenance and operation	2,667	55	2,722	3,069	72	3,141
Travel and meetings	130	105	235	1,244	1,233	2,477
Professional and contract services	4,798	354	5,152	2,117	533	2,650
Communications	543	13	556	520	64	584
Administrative and general	2,100	604	2,704	2,477	350	2,827
Interest	4,221	—	4,221	5,138	—	5,138
Subcontracts	—	1,089	1,089	—	2,515	2,515
Equipment	5,795	2,989	8,784	2,671	1,024	3,695
Fund-raising expense	2,854	39	2,893	2,882	(65)	2,817
Total general expenses	25,964	6,219	32,183	22,505	6,614	29,119
Total direct costs	78,507	15,813	94,320	72,853	17,439	90,292
Indirect costs:						
Grants and contracts	(6,947)	6,947	—	(7,088)	7,088	—
Total costs	71,560	22,760	94,320	65,765	24,527	90,292
Capitalized scientific equipment and facilities	(6,879)	—	(6,879)	(2,001)	—	(2,001)
Total expenses	$ 64,681	22,760	87,441	63,764	24,527	88,291

See accompanying independent auditors' report.