CARNEGIE INSTITUTION OF WASHINGTON

Financial Statements and Schedule

June 30, 2017 and 2016

(With Independent Auditors' Report Thereon)

KPMG LLP
1676 International Drive
McLean, VA 22102

Independent Auditors' Report

The Audit Committee
Carnegie Institution of Washington:

We have audited the accompanying financial statements of the Carnegie Institution of Washington, which comprise the statements of financial position as of June 30, 2017 and 2016, 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 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, 2017 and 2016, and the changes in its net assets and cash flows for the years then ended, in accordance with U.S. generally accepted accounting principles.

KPMG

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

November 8, 2017
McLean, Virginia

CARNEGIE INSTITUTION OF WASHINGTON

Statements of Financial Position

June 30, 2017 and 2016

Assets		2017	2016
Cash and cash equivalents	$	34,466,022	29,525,260
Contributions receivable, net (note 2)		5,039,919	4,165,123
Accounts receivable and other assets, net		6,306,220	8,082,767
Bond proceeds (note 7)		20,318,904	25,799,872
Investments (notes 3 and 14)		947,230,518	877,972,420
Property and equipment, net (notes 4 and 5)		133,422,383	133,823,031
Long term deferred asset (note 6)		58,188,295	56,676,701
Total assets	$	1,204,972,261	1,136,045,174
Liabilities and Net Assets			
Liabilities:			
Accounts payable and accrued expenses (notes 7 and 8)	$	17,670,629	8,204,479
Deferred revenue (note 5)		27,684,675	28,929,144
Bonds payable (note 7)		115,044,838	115,051,346
Accrued postretirement benefits (note 9)		25,375,299	27,674,751
Total liabilities		185,775,441	179,859,720
Net assets (notes 10 and 11):			
Unrestricted		308,315,540	288,925,810
Temporarily restricted		655,711,218	612,103,681
Permanently restricted		55,170,062	55,155,963
Total net assets		1,019,196,820	956,185,454
Commitments and contingencies (notes 3, 7, 9, 12, and 13)			
Total liabilities and net assets	$	1,204,972,261	1,136,045,174

See accompanying notes to financial statements.

CARNEGIE INSTITUTION OF WASHINGTON

Statements of Activities

Years ended June 30, 2017 and 2016

	2017				2016			
	Unrestricted	**Temporarily restricted**	**Permanently restricted**	**Total**	**Unrestricted**	**Temporarily restricted**	**Permanently restricted**	**Total**
Revenue and support:								
External revenue:								
Grants and contracts	$ 30,377,862	—	—	30,377,862	34,549,397	—	—	34,549,397
Contributions and gifts (note 14)	1,273,066	7,560,249	14,099	8,847,414	1,514,781	6,384,906	51,000	7,950,687
Other income (note 8)	1,699,642	—	—	1,699,642	3,993,837	5,625	—	3,999,462
External revenue	33,350,570	7,560,249	14,099	40,924,918	40,058,015	6,390,531	51,000	46,499,546
Investment income (loss), net (note 3)	33,833,646	86,637,973	—	120,471,619	(9,242,328)	(24,507,198)	—	(33,749,526)
Net assets released from restrictions (note 10)	50,590,685	(50,590,685)	—	—	51,107,776	(51,107,776)	—	—
Total revenue and support	117,774,901	43,607,537	14,099	161,396,537	81,923,463	(69,224,443)	51,000	12,750,020
Expenses:								
Program expenses:								
Terrestrial magnetism	9,722,282	—	—	9,722,282	11,936,953	—	—	11,936,953
Observatories	20,183,406	—	—	20,183,406	17,496,682	—	—	17,496,682
Geophysical laboratory	20,586,807	—	—	20,586,807	19,651,283	—	—	19,651,283
Embryology	10,912,379	—	—	10,912,379	13,463,956	—	—	13,463,956
Plant biology	11,329,812	—	—	11,329,812	11,492,430	—	—	11,492,430
Global ecology	7,279,057	—	—	7,279,057	8,588,883	—	—	8,588,883
Other programs	647,990	—	—	647,990	934,806	—	—	934,806
Total program expenses	80,661,733	—	—	80,661,733	83,564,993	—	—	83,564,993
Administrative and general expenses	21,068,541	—	—	21,068,541	19,099,189	—	—	19,099,189
Total expenses	101,730,274	—	—	101,730,274	102,664,182	—	—	102,664,182
Change in net assets before pension-related changes other than net periodic postretirement benefit cost	16,044,627	43,607,537	14,099	59,666,263	(20,740,719)	(69,224,443)	51,000	(89,914,162)
Pension-related changes other than net periodic postretirement benefit cost (note 9)	3,345,103	—	—	3,345,103	(620,618)	—	—	(620,618)
Change in net assets	19,389,730	43,607,537	14,099	63,011,366	(21,361,337)	(69,224,443)	51,000	(90,534,780)
Net assets at beginning of year	288,925,810	612,103,681	55,155,963	956,185,454	310,287,147	681,328,124	55,104,963	1,046,720,234
Net assets at end of year	$ 308,315,540	655,711,218	55,170,062	1,019,196,820	288,925,810	612,103,681	55,155,963	956,185,454

See accompanying notes to financial statements.

CARNEGIE INSTITUTION OF WASHINGTON

Statements of Cash Flows

Years ended June 30, 2017 and 2016

		2017	2016
Cash flows from operating activities:			
Change in net assets	$	63,011,366	(90,534,780)
Adjustments to reconcile change in net assets to net cash used in operating activities:			
Depreciation		10,174,108	10,738,473
Provision for allowance for uncollectible accounts		(419,780)	216,156
Net (gains) losses on investments and bond proceeds		(93,746,503)	37,163,013
Net losses (gains) on interest rate and commodity swaps		931,805	(823,961)
Net loss on disposal of property		1,577,176	15,840
Contributions of stock		(23,707)	(99,130)
Amortization of bond issuance costs, premium, and discount		(6,508)	(6,508)
Contributions and investment income restricted for long-term investment in endowment		(14,099)	(51,000)
Pension change other than net periodic benefit cost		3,345,103	620,618
(Increase) decrease in assets:			
Contributions and accounts receivable		1,324,416	2,881,654
Accrued investment income		(2,860)	64,783
Long-term deferred asset		(1,511,594)	(35,060,507)
Increase (decrease) in liabilities:			
Accounts payable and accrued expenses		8,534,345	(409,133)
Deferred revenue		(1,244,470)	1,497,704
Accrued postretirement benefits		(5,644,555)	1,130,268
Net cash used in operating activities		(13,715,757)	(72,656,510)
Cash flows from investing activities:			
Acquisition of property and equipment		(3,668,664)	(3,915,373)
Construction of facilities and equipment		(7,681,970)	(2,669,374)
Investments purchased		(621,137,380)	(276,707,501)
Proceeds from investments sold or matured		651,130,434	369,302,592
Net cash provided by investing activities		18,642,420	86,010,344
Cash flows from financing activity:			
Proceeds from contributions and investment income restricted for: Investment in endowment		14,099	51,000
Net increase in cash and cash equivalents		4,940,762	13,404,834
Cash and cash equivalents at beginning of year		29,525,260	16,120,426
Cash and cash equivalents at end of year	$	34,466,022	29,525,260
Supplementary cash flow information:			
Cash paid for interest	$	5,196,923	5,192,254

See accompanying notes to financial statements.

(1) Organization and Summary of Significant Accounting Policies

(a) Organization

The Carnegie Institution of Washington (Carnegie) conducts advanced research and training in the sciences. It carries out its scientific work in six research centers located throughout the United States and at an observatory in Chile. The centers are the Departments of Embryology, Plant Biology, Global Ecology, Terrestrial Magnetism, the Geophysical Laboratory, and the Observatories.

For the years ended June 30, 2017 and 2016, Carnegie had investment income, including net unrealized and realized gains, of $120.5 million and losses of $33.8 million, respectively. Carnegie's other sources of income are primarily from gifts and federal grants and contracts.

(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 Principle.

(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, as a practical expedient for fair value, provided by the general partners of limited partnerships or other external investment managers. These estimated 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.

All investments are exposed to various risks, such as interest rate, market, 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 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.

(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 the tax positions taken and has concluded that as of June 30, 2017 and 2016, there are no uncertain tax positions taken or expected to be taken that would require recognition or disclosure in the financial statements.

(e) Fair Value of Financial Instruments

Financial instruments of Carnegie include cash equivalents, receivables, investments, bond proceeds, accounts payable, and bonds payable. 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 and commodity swap agreements to mitigate the risk of changes in interest rates associated with fixed interest rate indebtedness and changes in the price of crude oil and natural gas. Carnegie recognizes derivative financial instruments at fair value.

Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 820, *Fair Value Measurement*, establishes, among other things, a hierarchical disclosure framework, which 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 significant 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.

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(g) Changes in Policy

Carnegie changed its leave policy to include leave expense in salaries rather than in fringe benefits on the schedules of expenses. The new policy is effective July 1, 2016 and was applied prospectively.

(h) 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, based on scientific life of equipment

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. Through our annual inventory process, we assess the viability of the equipment and accuracy of the book value. If there are significant impairments we adjust/write down the carrying value of the asset.

(i) Contributions and Net Assets

Contributions are classified based on the existence or absence of donor-imposed restrictions. Contributions are classified in categories of net assets as follows:

Unrestricted – Includes all contributions received without donor-imposed restrictions on use or time

Temporarily restricted – Includes contributions with donor-imposed restrictions as to purpose of gift and/or time period expended

Permanently restricted – Generally includes endowment gifts in which donors stipulated that the corpus be invested in perpetuity. Only the investment income generated from endowments may be spent. Certain endowments require that a portion of the investment income be reinvested in perpetuity.

Contributions include unconditional promises to give. In instances where such promises 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. Satisfaction of donor-imposed restrictions is reported as releases of restrictions in the statements of activities.

Expirations of temporary restrictions on net assets (i.e., the donor stipulated purpose has been fulfilled or the stipulated time period has elapsed) are reported as reclassifications between the applicable classes of net assets.

(Continued)

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 acquired or as costs are incurred for asset construction.

(j) Grants

Carnegie records revenue on grants from federal agencies only to the extent that reimbursable expenses are incurred. This revenue is treated as receivables until the cash drawdown is completed at the end of each month. Accordingly, funds received in excess of reimbursable expenses are recorded as deferred revenue, and expenses in excess of funds received are recorded as accounts receivable. 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.

(k) 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 participation, 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.

(l) Allocation of Costs

The costs of providing programs and supporting services have been summarized in the statements of activities. 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. Fundraising expenses of $1.8 million and $1.5 million for the years ended June 30, 2017 and 2016, respectively, have been included in administrative and general expenses in the accompanying statements of activities.

(m) Application of New Accounting Standards

In August 2016, FASB issued ASU 2016-14, *Presentation of Financial Statement of Not-for-Profit Entities*, which will impact presentation of the net asset classes on the statement of the financial position and the statement of activities and require enhanced disclosures related to the net assets. The guidance will be effective for Carnegie in the year ending June 30, 2018.

In February 2016, FASB issued ASU 2016-02, *Leases*, which will impact recognition of leased assets and leased liabilities. The guidance will be effective for Carnegie in the year ending June 30, 2020.

Carnegie is currently in the process of evaluating the impact of adoption of these recently issued accounting standards on its financial statements.

(2) Contributions Receivable

Contributions receivable are summarized as follows as of June 30, 2017 and 2016:

	2017	2016
Unconditional Promises expected to be collected in:		
Less than one year	$ 3,088,394	2,709,868
One to five years	2,483,400	2,557,034
	5,571,794	5,266,902
Less:		
Allowance for uncollectible amounts	(421,026)	(842,735)
Discount to present value	(110,849)	(259,044)
	$ 5,039,919	4,165,123

Contributions receivable as of June 30, 2017 and 2016 were discounted based on the estimated risk-adjusted rate of return on the pledge date at rates ranging from 0.59% to 1.71%.

(3) Investments

Investments at fair value consisted of the following as of June 30, 2017 and 2016:

	2017	2016
Time deposits and money market funds	$ 4,147,898	2,315,529
U.S. government bond fund	45,095,323	45,350,423
Common stock – domestic	113,224,957	75,917,998
Domestic equity commingled funds	112,793,107	124,315,646
International equity commingled funds	224,445,115	186,849,057
Real estate funds	99,128,097	95,270,308
Natural resources funds	71,163,532	53,328,360
Absolute return funds	227,452,776	242,555,663
Private equity funds	49,779,713	52,069,436
	$ 947,230,518	877,972,420

Investment income (loss), net consisted of the following for the years ended June 30, 2017 and 2016:

	2017	2016
Interest and dividends	$ 12,198,033	6,676,385
Net realized gains	95,641,406	21,066,998
Net unrealized gains	15,413,692	(59,838,538)
Investment management expenses	(2,781,512)	(1,654,371)
	$ 120,471,619	(33,749,526)

The following table represents investments that are measured at fair value on a recurring basis as of June 30, 2017:

	2017	Level 1	Level 2	Level 3	NAV (1)
Time deposits and money market funds	$ 4,147,898	4,147,898	—	—	—
U.S. government bond funds	45,095,323	4,893,048	40,202,275	—	—
Common stock – domestic	113,224,957	112,811,261	—	413,696	—
Domestic equity commingled funds	112,793,107	48,974,669	—	—	63,818,438
International equity commingled funds	224,445,115	30,460,341	—	—	193,984,774
Real estate funds	99,128,097	—	—	7,755,843	91,372,254
Natural resources funds	71,163,532	—	—	49,238,408	21,925,124
Absolute return funds	227,452,776	—	—	—	227,452,776
Private equity funds	49,779,713	—	—	—	49,779,713
	$ 947,230,518	201,287,217	40,202,275	57,407,947	648,333,079

The following table represents investments that are measured at fair value on a recurring basis as of June 30, 2016:

	2016	Level 1	Level 2	Level 3	NAV (1)
Time deposits and money market funds	$ 2,315,529	2,315,529	—	—	—
U.S. government bond funds	45,350,423	3,527,559	41,822,864	—	—
Common stock – domestic	75,917,998	75,504,302	—	413,696	—
Domestic equity commingled funds	124,315,646	47,380,798	—	—	76,934,848
International equity commingled funds	186,849,057	29,334,149	—	—	157,514,908
Real estate funds	95,270,308	—	—	8,351,366	86,918,942
Natural resources funds	53,328,360	—	—	40,741,278	12,587,082
Absolute return funds	242,555,663	—	—	—	242,555,663
Private equity funds	52,069,436	—	—	—	52,069,436
	$ 877,972,420	158,062,337	41,822,864	49,506,340	628,580,879

(Continued)

(1) Certain investments are measured at fair value using NAV as a practical expedient 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 net asset value as a practical expedient for fair value as of June 30, 2017 and 2016:

	Fair value		2017 Unfunded	Redemption
	2017	2016	commitments	frequency
Domestic equity commingled fund (a)	$ 63,818,438	76,934,848	—	Biennial
International equity commingled funds (b)	193,984,774	157,514,908	—	Monthly
Real estate funds (c)	91,372,254	86,918,942	67,233,913	Illiquid
Natural resources funds (d)	21,925,124	12,587,082	11,653,000	Illiquid
Absolute return funds (e)	227,452,776	242,555,663	—	Quarterly, annual, biennial
Private equity funds (f)	49,779,713	52,069,436	21,623,750	Illiquid
	$ 648,333,079	628,580,879	100,510,663	

(a) This class comprises a single fund that invests in common stocks of biotechnology companies. This fund seeks to produce returns that mirror or exceed various benchmarks established for comparable portfolios. The notice period is 90 days.

(b) This class comprises four international partnerships that invest in public equity markets internationally and one institutional mutual fund that mirrors an emerging markets index. Of these, one holds a concentrated portfolio of global companies. In general, 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 Europe. The fair values of the investments in this category have been estimated using the net asset value of Carnegie's ownership interest in partners' capital. 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 timber and oil and gas assets. The investment strategy is to acquire, operate, develop, and improve oil and gas and timber producing 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, including three long/short hedge funds that invest in publicly traded equities, one partnership that invests in fixed income securities; one partnership that invests in distressed fixed income securities; one multi-strategy partnership that invests in value investments, credit investments, event-driven situations, real estate, and distressed credit investments; and one partnership that invests in distressed credit securities and event-driven situations. In general, these funds seek to produce positive absolute returns that do not necessarily correlate with the public markets. The fair values of the investments in this category have been estimated using the net asset value of Carnegie's ownership interest in partners' capital. 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 one 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 four separate managers and nine separate private equity funds that invest primarily in leveraged buyouts, venture capital, emerging growth companies, corporate finance, and various niche strategies. Eight of the nine funds are funds of funds, where the manager assembles a portfolio of other private equity funds. Private equity investment transactions may involve acquisitions, leveraged buyouts, reorganizations, privatizations, restructurings, and spin-offs. The fair values of the investments in this category have been estimated using the net asset value of Carnegie's ownership interest in partners' capital. Investments under this category cannot be redeemed. Private capital partnerships span several years that are often divided into commitment and distribution phases. In the first half of the span, capital is drawn down or called as investment opportunities are identified. During the second half of the span, capital is returned to the investment partners in the form of distributions. Such distributions are made on a periodic basis, typically quarterly. It is estimated that the underlying assets of these various funds will be liquidated over the next one to twelve years.

Level 3 Investments

The following table presents Carnegie's activity for investments measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended June 30, 2017 and 2016.

		Common stock domestic	Real estate funds	Natural resources funds	Total
Balance at June 30, 2015	$	413,696	14,152,379	38,266,005	52,832,080
Total realized gains, net		—	710,260	221,514	931,774
Total unrealized gains (losses), net		—	759,626	(13,568,275)	(12,808,649)
Transfers in/out of Level 3		—	(7,578,912)	—	(7,578,912)
Purchases and issuances		—	1,440,270	16,072,575	17,512,845
Settlements		—	(1,132,257)	(250,541)	(1,382,798)
Balance at June 30, 2016		413,696	8,351,366	40,741,278	49,506,340
Total realized gains (losses), net		—	592,034	4,405,242	4,997,276
Total unrealized gains (losses), net		—	(288,461)	(439,896)	(728,357)
Transfers in/out of Level 3		—	—	—	—
Purchases and issuances		—	—	10,521,845	10,521,845
Settlements		—	(899,096)	(5,990,061)	(6,889,157)
Balance at June 30, 2017	$	413,696	7,755,843	49,238,408	57,407,947

There were no transfers of funds between levels during the year ended June 30, 2017. One fund was transferred out of Level 3 to NAV for the year ended June 30, 2016.

Level 3 investments are valued by Carnegie or by investment managers using common valuation techniques. Carnegie reviews these valuation methods and evaluates the appropriateness of these valuations each year. Real estate funds are valued by investment managers based on appraised value of the property. Real estate investment managers can use estimated values in the absence of external appraisals. Natural resource funds are primarily oil and gas funds. The fair value of these funds has been estimated using an established forward pricing curve beyond the first two years of production. The inputs used in the forward pricing curve model include the following at June 30, 2017:

Input	2017 Range	2016 Range
Forward prices for oil/natural gas (NYMEX)	$46.62/$3.10	$48.02/$3.02
	$48.12-54.24/$2.89-3.08*	$57.50/$3.57*
Discount rate	12%	12%

* Average of remaining years pricing

Significant increases or decreases in these unobservable inputs may result in significantly higher or lower valuation results.

Carnegie has unfunded commitments related to these Level 3 investments of approximately $23.3 million as of June 30, 2017.

(4) Property and Equipment

Property and equipment consisted of the following as of June 30, 2017 and 2016:

		2017	2016
Buildings and improvements	$	88,282,589	92,356,904
Scientific equipment		76,590,289	75,989,953
Telescopes		93,969,502	93,969,502
Construction in progress		7,062,285	2,328,578
Administrative equipment		5,007,313	4,630,576
Leased equipment		352,582	300,559
Land		817,117	817,117
Art		80,888	90,388
		272,162,565	270,483,577
Accumulated depreciation		(138,740,182)	(136,660,546)
	$	133,422,383	133,823,031

Construction in progress consists of $2.0 million and $2.1 million of scientific equipment and $5.0 million and $0.3 million for building improvements as of June 30, 2017 and June 30, 2016, respectively.

The large increase in construction in progress for building improvements is due to the renovation at the Carnegie headquarters at P Street in Washington, D.C.

As of June 30, 2017 and 2016, approximately $57.8 million and $59.9 million, respectively, of property and equipment, net of accumulated depreciation, was located in Las Campanas, Chile.

(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 university members of the consortium, by contribution to the construction and operating costs of Magellan, acquire 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, 2017 and 2016, the deferred revenue for the consortium totaled $23.4 million and $24.1 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 deferred long term 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 year 2017 and fiscal year 2016 were $1.5 million and $35.1 million, respectively. The deferred long term asset value was $58.1 million and $56.7 million at June 30, 2017 and 2016, respectively.

(7) Bonds Payable

(a) 2010 Maryland Health and Higher Education Facilities Revenue Bonds

On February 4, 2010, the Maryland Health and Higher Education Facilities Authority (MHHEFA) issued $30.6 million of fixed rate, tax-exempt revenue bonds on behalf of Carnegie. Bond proceeds totaling approximately $30.5 million were used to refund $30.0 million in bonds issued in 2002 by MHHEFA and cover the costs of issuance including related fees.

The structure of the 2010 MHHEFA bonds is two term bonds, maturing in 2037 and 2040. The bond due July 1, 2037 bears interest at a fixed coupon rate of 4.25% with sinking fund redemptions as follows:

Due July 1:		
2036	$	6,120,000
2037		6,115,000
	$	12,235,000

The bond due July 1, 2040 bears interest at a fixed coupon rate of 4.50% with sinking fund redemptions as follows:

Due July 1:		
2038	$	6,115,000
2039		6,115,000
2040		6,115,000
	$	18,345,000

The MHHEFA bonds payable outstanding was $30.6 million as of June 30, 2017 and 2016. The interest expense for the MHHEFA issues was $1.4 million for the years ended June 30, 2017 and 2016.

The 2010 MHHEFA bonds are unsecured. There are no financial covenants or stand-by credit facilities associated with the bonds.

The bonds are subject to redemption and purchase prior to maturity, beginning on July 1, 2020, at the option of MHHEFA upon the direction of Carnegie.

(b) 2010 California Educational Facilities Authority Revenue Bonds

On March 24, 2010, the California Educational Facilities Authority (CEFA) issued fixed-rate, tax-exempt revenue bonds with a par value of $34.5 million on behalf of Carnegie. Bond proceeds totaling approximately $36.4 million were used to a) refund $17.5 million of 1993 Series B bonds issued by CEFA on behalf of Carnegie for the purpose of financing the Magellan telescope project and the renovation of facilities of the Observatories at Pasadena, b) refund $18.3 million of 2006 CEFA refunding revenue bonds that, in turn, were used to finance the Magellan telescope project and the renovation of facilities of the Observatories at Pasadena, and c) cover the costs of issuance including related fees.

The structure of the 2010 CEFA bond is a single, fixed-rate bond, maturing in 2040, with a par value of $34.5 million. The bond bears interest at a fixed coupon rate of 5.00% with sinking fund redemptions as follows:

Due July 1:		
2036	$	6,905,000
2037		6,905,000
2038		6,905,000
2039		6,905,000
2040		6,905,000
	$	34,525,000

The CEFA bonds payable outstanding was $34.5 million as of June 30, 2017 and 2016. The interest expense for the CEFA issue was $1.7 million for the years ended June 30, 2017 and 2016.

The 2010 CEFA bonds are unsecured. There are no financial covenants or stand-by credit facilities associated with the bonds.

The 2010 California bonds are subject to redemption and purchase prior to maturity, beginning on July 1, 2020, at the option of CEFA upon the direction of Carnegie.

(c) Series 2014 Taxable Bonds

On May 15, 2014, Carnegie issued fixed rate, taxable bonds with a par value of $50 million. Bond proceeds totaling $50 million will be used to: a) finance a portion of the institution’s participation in the GMT project (note 6), b) other institutional purposes to include capital projects and operations in support of Carnegie’s scientific mission, and c) cover the costs of issuance including related fees.

The structure of the 2014 Series taxable bond is a single, fixed-rate bond, maturing in 2054, with a par value of $50 million. The bond bears interest at a fixed coupon rate of 4.241% with sinking fund redemptions as follows:

Due July 1:	
2050	$ 10,000,000
2051	10,000,000
2052	10,000,000
2053	10,000,000
2054	10,000,000
	$ 50,000,000

The Series 2014 bonds payable outstanding was $50 million as of June 30, 2017 and 2016. The interest expense for the Series 2014 issue was $2.1 million for the years ended June 30, 2017 and 2016.

The Series 2014 bonds are secured solely by Carnegie's credit. There are no financial covenants or stand-by credit facilities associated with the bonds.

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.

(d) Line of Credit

Carnegie has entered into an unsecured revolving credit facility with a maximum principal amount of $12 million from a commercial bank. The line expires on May 31, 2018 and is subject to covenants including a provision to reduce outstanding principal to zero for 30 consecutive days. Borrowings under the credit facility bear interest at a floating London Interbank Offered Rate (LIBOR) plus a credit spread of 0.59%. Carnegie drew $6 million from the credit facility in 2017 to pay for capital projects. This draw is reflected on the statement of financial position in accounts payable.

(e) Fair Value of Bond Proceeds

Bond proceeds of $20.3 million and $25.8 million as of June 30, 2017 and 2016, respectively, are invested in four market-neutral hedge funds that invest in marketable securities with 24.1% and 2.0% held in cash as of June 30, 2017 and 2016, respectively. The fair values of the investments have been estimated using net asset value as a practical expedient. Three of these hedge funds can be redeemed on a monthly basis with either a 60 or 20 day notice. One of the funds has an initial two year lock up period. There are no unfunded commitments as of June 30, 2017.

(8) Interest Rate and Commodity Swap Agreements

(a) 2010 Maryland Health and Higher Education Facilities Authority Revenue Bonds

On February 11, 2010, Carnegie entered into a basis swap with Barclays Capital. A basis swap is an interest rate swap, which involves the exchange of two floating rate financial instruments. Under this agreement, Barclays Capital pays Carnegie 68.08% of three-month LIBOR and Carnegie pays Barclays Capital the Securities Industry and Financial Markets Association Benchmark (SIFMA) minus 0.08% on a notional amount of $22.9 million, which matches the amortization structure of the 2010 MHHEFA bonds (note 7(a)), reducing on the dates and in the amounts as follows:

Due July 1:		
2036	$	4,590,000
2037		4,586,250
2038		4,586,250
2039		4,586,250
2040		4,586,250

Carnegie may terminate and cash settle this transaction upon meeting a three business day notice requirement, with both parties obligated to pay any amounts owed on the termination date.

In addition to this basis swap, on February 26, 2010, Carnegie entered into a fixed to floating interest rate swap where Carnegie receives 3.6895% and pays SIFMA on a notional amount of $7.6 million. This transaction matches the amortization structure of the 2010 bonds (note 7(a)), reducing on the dates and in the amounts as follows:

Due July 1:		
2036	$	1,530,000
2037		1,528,750
2038		1,528,700
2039		1,528,700
2040		1,528,700

Under this agreement, Carnegie may terminate and cash settle the transaction upon meeting a three-business-day notice requirement and Barclays Capital owns the right to cancel the swap with Carnegie after ten years and upon meeting a 30-calendar day notice requirement.

The basis swap and fixed to floating interest rate swap agreements described above are derivative instruments that are recorded at fair value. The estimated fair value as of June 30, 2017 and 2016 was liabilities of $0.7 million and $0.3 million, respectively. These amounts are included in accounts payable and accrued expenses in 2017 and 2016 on the accompanying statements of financial position. The change in fair value for the years ended June 30, 2017 and 2016 was a loss of $0.4 million and a gain of $0.7 million, respectively, and is reported as other income.

(b) 2010 California Educational Facilities Authority Refunding Revenue Bonds

On March 17, 2010, Carnegie entered into a basis swap with Barclays Capital. A basis swap is an interest rate swap, which involves the exchange of two floating rate financial instruments. Under this agreement, Barclays Capital pays Carnegie 68.000% of three-month LIBOR and Carnegie pays Barclays Capital SIFMA minus 0.111% on a notional amount of $25.9 million, which matches the amortization structure of the 2010 bonds (note 7(b)), reducing on the dates and in the amounts as follows:

Due July 1:		
2036	$	5,178,750
2037		5,178,750
2038		5,178,750
2039		5,178,750
2040		5,178,750

Carnegie may terminate and cash settle this transaction upon meeting a three business day notice requirement, with both parties obligated to pay any amounts owed on the termination date.

In addition to this basis swap, on March 17, 2010, Carnegie entered into a fixed to floating interest rate swap where Carnegie receives 3.737% and pays SIFMA on a notional amount of $8.6 million. This transaction matches the amortization structure of the 2010 bonds (note 7(b)), reducing on the dates and in the amounts as follows:

Due July 1:		
2036	$	1,726,250
2037		1,726,250
2038		1,726,250
2039		1,726,250
2040		1,726,250

Under this agreement, Carnegie may terminate and cash settle the transaction upon meeting a three-business-day notice requirement and Barclays Capital owns the right to cancel the swap with Carnegie after ten years and upon meeting a 30-calendar day notice requirement.

The basis swap and fixed to floating interest rate swap agreements described above are derivative instruments that are recorded at fair value. The estimated fair value as of June 30, 2017 and 2016 was liabilities of $0.7 million and $0.2 million, respectively. These amounts are included in accounts payable and accrued expenses in 2017 and 2016 on the accompanying statements of financial position. The change in fair value for the years ended June 30, 2017 and 2016 was a loss of $0.5 million and a gain of $0.8 million, respectively, and is reported as other income.

(Continued)

(9) Employee Benefit Plans

(a) Retirement Plan

Contributions made by Carnegie, described in note 1(k), totaled approximately $5.1 million and $4.9 million for the years ended June 30, 2017 and 2016, respectively.

(b) Postretirement Benefits Plan

Cash payments made by Carnegie for the postretirement medical benefits, as detailed in note 1(k), totaled $1.0 million for the years ended June 30, 2017 and 2016.

The expense for postretirement benefits for the years ended June 30, 2017 and 2016 consists of the following:

		2017	2016
Service cost – benefits earned during the year	$	1,077,285	1,001,951
Interest cost on projected benefit obligation		1,023,500	1,125,341
Amortization of prior services costs		(18,000)	(18,000)
Postretirement benefit expense	$	2,082,785	2,109,292

The 2017 postretirement benefits expense was approximately $1.1 million more than the cash payments of $1.0 million and the 2016 postretirement benefit expense was approximately $1.1 million more than the cash payments of $1.0 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, 2017 and 2016 follows:

		2017	2016
Change in benefit obligation:			
Benefit obligation at beginning of year	$	27,674,751	25,923,865
Service cost		1,077,285	1,001,951
Interest cost		1,023,500	1,125,341
Actuarial (gain)/loss		(3,363,103)	584,618
Company contributions (net of retiree contributions)		(1,037,134)	(961,024)
Benefit obligation at end of year		25,375,299	27,674,751
Change in plan assets:			
Fair value of plan assets at beginning of year		—	—
Contributions to the plan		1,252,151	961,024
Benefits paid		(1,252,151)	(961,024)
Funded status of the plan	$	(25,375,299)	(27,674,751)

Pension related changes other than net periodic postretirement benefit cost consisted of the following as of June 30, 2017 and 2016:

		2017	2016
Unrecognized net actuarial (loss) gain	$	3,363,103	(584,618)
Unrecognized prior service costs		(18,000)	(18,000)
	$	3,345,103	(602,618)

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, 2017 and 2016 are as follows:

		2017	2016
Unrecognized net actuarial gain (loss)	$	(2,883,820)	479,283
Unrecognized prior service costs		(95,000)	(113,000)
	$	(2,978,820)	366,283

The net loss and prior service cost that will be amortized into net periodic benefit cost over the next fiscal year are as follows:

		2017	2016
Unrecognized prior service cost	$	18,000	18,000
	$	18,000	18,000

The present value of the benefit obligation as of June 30, 2017 and 2016 was determined using an assumed discount rate of 4.09% and 3.75%, respectively. The present value of the net periodic postretirement benefit cost for the years ended June 30, 2017 and 2016 was determined using an assumed discount rate of 3.75% and 4.41%, respectively. Carnegie’s policy is to fund postretirement benefits as claims and administrative fees are paid.

For measurement purposes, an 7.5%, annual rate of increase in medical claims was assumed for 2017; the rate of increase was assumed to decrease at 0.5% per year, eventually reaching 5.0% in 2024. The healthcare cost trend rate assumption has a significant effect on the amounts reported. A one-percentage point change in assumed annual healthcare cost trend rate would have the following effects:

		One-percentage point increase	One-percentage point decrease
Effect on total of service and interest cost components	$	550,098	(407,282)
Effect on postretirement benefit obligation		4,723,533	(3,690,514)

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

Carnegie expects to contribute approximately $0.8 million to its postretirement benefit plan during the year ending June 30, 2018.

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

2018	814,905
2019	857,348
2020	889,182
2021	913,186
2022–2027	6,572,950

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.

(10) Net Assets

(a) Unrestricted Net Assets

Unrestricted net assets consisted of the following as of June 30, 2017 and 2016:

	2017	2016
Board-designated quasi-endowments	$ 128,362,216	118,594,860
Undesignated	179,953,324	170,330,950
	$ 308,315,540	288,925,810

(b) Temporarily Restricted Net Assets

Temporarily restricted net assets were available to support the following donor-restricted purposes as of June 30, 2017 and 2016:

	2017	2016
Endowment assets available for future appropriation	$ 613,967,928	570,404,581
Specific research programs	28,371,501	30,692,322
Equipment acquisition and construction	860,257	850,139
Passage of time	12,511,532	10,156,639
	$ 655,711,218	612,103,681

(c) Permanently Restricted Net Assets

Permanently restricted net assets consisted of endowed gifts, the income from which is available to support the following donor-restricted purposes as of June 30, 2017 and 2016 are as follows:

		2017	2016
Specific research programs	$	15,289,736	15,276,236
Operation of Maxine Singer building		15,000,050	15,000,050
Equipment acquisition and construction		2,764,719	2,764,720
General support (Carnegie endowment)		22,115,557	22,114,957
	$	55,170,062	55,155,963

(d) Net Assets Released from Restrictions

During 2017 and 2016, Carnegie met donor-imposed requirements on certain gifts and, therefore, released temporarily restricted net assets as follows:

		2017	2016
Appropriation of endowment assets	$	43,066,056	40,812,418
Specific research programs		7,509,747	9,537,519
Equipment acquisition and construction		14,882	475,647
Passage of time		—	282,192
	$	50,590,685	51,107,776

(11) 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 permanently restricted net assets the original value of gifts donated to the permanent endowment and subsequent gifts to the endowment. The remaining portion of the endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts 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:

1) The duration and preservation of the fund
2) The purposes of the donor-restricted endowment fund
3) General economic conditions, including the possible effects of inflation
4) The expected total return from income and the appreciation of investments
5) Other resources
6) The investment and spending policies of Carnegie

(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 an average rate of return of approximately 8-9% 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 at an average of 3-4% annually.

(e) Appropriation of Endowment Assets for Next Fiscal Year

For fiscal year 2018, Carnegie has appropriated $46,352,322 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.

(Continued)

(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, 2017. Carnegie had one fund with a deficiency as of June 30, 2016.

(g) Endowment Net Asset Classification

Net asset classification by type of endowment as of June 30, 2017 and 2016 is as follows:

	Unrestricted	Temporarily restricted	Permanently restricted	Total
June 30, 2017:				
Donor-restricted endowment funds	$ —	613,967,928	55,170,062	669,137,990
Board-designated endowment funds	128,362,216	—	—	128,362,216
	$ 128,362,216	613,967,928	55,170,062	797,500,206
June 30, 2016:				
Donor-restricted endowment funds	$ (1,787)	570,404,581	55,155,963	625,558,757
Board-designated endowment funds	118,594,860	—	—	118,594,860
	$ 118,593,073	570,404,581	55,155,963	744,153,617

Changes in endowment net assets for the years ended June 30, 2017 and 2016 were as follows:

	Unrestricted	Temporarily restricted	Permanently restricted	Total
Endowment net assets, June 30, 2015	$ 128,710,305	635,724,751	55,104,963	819,540,019
Investment return:				
Investment income	678,710	3,651,801	—	4,330,511
Net appreciation (realized and unrealized gains and losses)	(5,233,631)	(28,159,553)	—	(33,393,184)
Total investment return	(4,554,921)	(24,507,752)	—	(29,062,673)
Contributions	79,750	—	51,000	130,750
Appropriation of assets for expenditures	(5,642,061)	(40,812,418)	—	(46,454,479)
Endowment net assets, June 30, 2016	118,593,073	570,404,581	55,155,963	744,153,617
Investment return:				
Investment income	1,292,699	6,812,904	—	8,105,603
Net appreciation (realized and unrealized gains and losses)	15,144,938	79,816,499	—	94,961,437
Total investment return	16,437,637	86,629,403	—	103,067,040
Contributions	2,500	—	14,099	16,599
Appropriation of assets for expenditures	(6,670,994)	(43,066,056)	—	(49,737,050)
Endowment net assets, June 30, 2017	$ 128,362,216	613,967,928	55,170,062	797,500,206

(12) 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 $0.2 million annually, adjusted for inflationary increases.

Carnegie leases land and buildings for various research departments. The monetary terms of the leases are considerably below fair value; however, these terms were developed considering other nonmonetary transactions between Carnegie and the related party lessors. Management believes the overall value of such agreements is immaterial.

(13) 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.

(14) Related Party Transactions

Carnegie recorded contributions from its trustees, officers, and directors of approximately $0.4 million and $1.0 million for the years ended June 30, 2017 and 2016, respectively.

A trustee of Carnegie is also the chairman of an investment entity with which Carnegie has invested $42.0 million and $38.0 million in eight of its investment funds, as of June 30, 2017 and 2016, respectively. Carnegie paid approximately $0.7 million and $0.5 million in management and incentive fees and interest to these funds for the years ended June 30, 2017 and 2016, respectively.

(15) Subsequent Events

Carnegie has evaluated subsequent events through the date the financial statements were issued, November 8, 2017 and determined no adjustments or disclosures were required.

Schedule

CARNEGIE INSTITUTION OF WASHINGTON

Schedules of Expenses

Years ended June 30, 2017 and 2016

	2017			2016		
	Carnegie funds	Federal and private grants	Total expenses	Carnegie funds	Federal and private grants	Total expenses
Personnel costs:						
Salaries	$ 26,307,258	11,203,262	37,510,520	21,976,102	9,602,884	31,578,986
Fringe benefits and payroll taxes	10,426,627	3,327,123	13,753,750	14,557,026	4,427,136	18,984,162
Total personnel costs	36,733,885	14,530,385	51,264,270	36,533,128	14,030,020	50,563,148
Fellowship grants and awards	3,168,223	2,157,681	5,325,904	3,026,553	2,354,811	5,381,364
Depreciation	10,174,108	—	10,174,108	10,738,473	—	10,738,473
General expenses:						
Educational and research supplies	2,266,282	1,632,396	3,898,678	2,277,754	2,085,859	4,363,613
Building maintenance and operation	4,015,612	1,746,152	5,761,764	3,757,987	333,546	4,091,533
Travel and meetings	1,762,658	1,550,420	3,313,078	1,558,595	1,662,596	3,221,191
Professional and contract services	2,664,585	1,345,558	4,010,143	3,122,182	1,527,364	4,649,546
Communications	386,588	69,433	456,021	397,129	84,367	481,496
Administrative and general	3,329,767	337,365	3,667,132	2,023,215	345,099	2,368,314
Interest	4,598,988	—	4,598,988	4,397,605	—	4,397,605
Subcontracts	—	5,302,564	5,302,564	—	8,412,242	8,412,242
Equipment	5,714,524	7,510,318	13,224,842	4,828,182	3,970,369	8,798,551
Fund-raising expense	1,727,892	41,284	1,769,176	1,373,233	89,412	1,462,645
Total general expenses	26,466,896	19,535,490	46,002,386	23,735,882	18,510,854	42,246,736
Total direct costs	76,543,112	36,223,556	112,766,668	74,034,036	34,895,685	108,929,721
Indirect costs:						
Grants and contracts	(10,048,473)	10,048,473	—	(10,493,664)	10,493,664	—
Total costs	66,494,639	46,272,029	112,766,668	63,540,372	45,389,349	108,929,721
Capitalized scientific equipment and facilities	(11,036,394)	—	(11,036,394)	(6,265,539)	—	(6,265,539)
Total expenses	$ 55,458,245	46,272,029	101,730,274	57,274,833	45,389,349	102,664,182

See accompanying independent auditors' report.