CARNEGIE INSTITUTION OF WASHINGTON

Financial Statements and Schedule

June 30, 2016 and 2015

(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, 2016 and 2015, 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, 2016 and 2015, 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 LLP is a Delaware limited liability partnership,
the U.S. member firm of KPMG International Cooperative
("KPMG International"), a Swiss entity.

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 22, 2016

CARNEGIE INSTITUTION OF WASHINGTON

Statements of Financial Position

June 30, 2016 and 2015

Assets		2016	2015
Cash and cash equivalents	$	29,525,260	16,120,426
Contributions receivable, net (note 2)		4,165,123	7,077,572
Accounts receivable and other assets, net		8,082,767	9,040,452
Bond proceeds (note 7)		25,799,872	49,434,798
Investments (notes 3 and 14)		877,972,420	983,996,467
Property and equipment, net (notes 4 and 5)		133,823,031	137,992,598
Long-term deferred assets (note 6)		56,676,701	21,616,194
Total assets	$	1,136,045,174	1,225,278,507
Liabilities and Net Assets			
Liabilities:			
Accounts payable and accrued expenses (note 8)	$	8,204,479	10,145,114
Deferred revenue (note 5)		28,929,144	27,431,440
Bonds payable (note 7)		115,051,346	115,057,854
Accrued postretirement benefits (note 9)		27,674,751	25,923,865
Total liabilities		179,859,720	178,558,273
Net assets (notes 10 and 11):			
Unrestricted		288,925,810	310,287,147
Temporarily restricted		612,103,681	681,328,124
Permanently restricted		55,155,963	55,104,963
Total net assets		956,185,454	1,046,720,234
Commitments and contingencies (notes 9, 12, and 13)			
Total liabilities and net assets	$	1,136,045,174	1,225,278,507

See accompanying notes to financial statements.

CARNEGIE INSTITUTION OF WASHINGTON

Statements of Activities

Years ended June 30, 2016 and 2015

	2016				2015			
	Unrestricted	Temporarily restricted	Permanently restricted	Total	Unrestricted	Temporarily restricted	Permanently restricted	Total
Revenue and support:								
External revenue:								
Grants and contracts	$ 34,549,397	—	—	34,549,397	37,738,760	—	—	37,738,760
Contributions and gifts (note 14)	1,514,781	6,384,906	51,000	7,950,687	1,044,112	9,515,016	51,721	10,610,849
Other income (note 8)	3,993,837	5,625	—	3,999,462	3,660,944	2,552,158	—	6,213,102
External revenue	40,058,015	6,390,531	51,000	46,499,546	42,443,816	12,067,174	51,721	54,562,711
Investment income (loss), net (note 3)	(9,242,328)	(24,507,198)	—	(33,749,526)	15,449,782	43,033,166	—	58,482,948
Net assets released from restrictions (note 10)	51,107,776	(51,107,776)	—	—	50,196,368	(50,196,368)	—	—
Total revenue and support	81,923,463	(69,224,443)	51,000	12,750,020	108,089,966	4,903,972	51,721	113,045,659
Expenses:								
Program expenses:								
Terrestrial magnetism	11,936,953	—	—	11,936,953	11,769,589	—	—	11,769,589
Observatories	17,496,682	—	—	17,496,682	18,318,574	—	—	18,318,574
Geophysical laboratory	19,651,283	—	—	19,651,283	22,714,496	—	—	22,714,496
Embryology	13,463,956	—	—	13,463,956	12,269,662	—	—	12,269,662
Plant biology	11,492,430	—	—	11,492,430	11,402,502	—	—	11,402,502
Global ecology	8,588,883	—	—	8,588,883	7,563,559	—	—	7,563,559
Other programs	934,806	—	—	934,806	1,046,000	—	—	1,046,000
Total program expenses	83,564,993	—	—	83,564,993	85,084,382	—	—	85,084,382
Administrative and general expenses	19,099,189	—	—	19,099,189	17,975,643	—	—	17,975,643
Total expenses	102,664,182	—	—	102,664,182	103,060,025	—	—	103,060,025
Change in net assets before pension-related changes other than net periodic postretirement benefit cost	(20,740,719)	(69,224,443)	51,000	(89,914,162)	5,029,941	4,903,972	51,721	9,985,634
Pension-related changes other than net periodic postretirement benefit cost (note 9)	(620,618)	—	—	(620,618)	(1,275,370)	—	—	(1,275,370)
Change in net assets	(21,361,337)	(69,224,443)	51,000	(90,534,780)	3,754,571	4,903,972	51,721	8,710,264
Net assets at beginning of year	310,287,147	681,328,124	55,104,963	1,046,720,234	306,532,576	676,424,152	55,053,242	1,038,009,970
Net assets at end 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

See accompanying notes to financial statements.

CARNEGIE INSTITUTION OF WASHINGTON

Statements of Cash Flows

Years ended June 30, 2016 and 2015

		2016	2015
Cash flows from operating activities:			
Change in net assets	$	(90,534,780)	8,710,264
Adjustments to reconcile change in net assets to net cash used in operating activities:			
Depreciation		10,738,473	10,799,173
Provision for allowance for uncollectible accounts		216,156	493,934
Net losses (gains) on investments and bond proceeds		37,163,013	(54,232,196)
Net (gains) losses on interest rate and commodity swaps		(823,961)	2,157,654
Net loss on disposal of property		15,840	1,509
Contributions of stock		(99,130)	(296,066)
Amortization of bond issuance costs, premium, and discount		(6,508)	(6,508)
Contributions and investment income restricted for long-term investment		(51,000)	(51,721)
Pension change other than net periodic benefit cost		620,618	1,275,390
(Increase) decrease in assets:			
Contributions and accounts receivable		2,881,654	4,111,194
Accrued investment income		64,783	(61,785)
Long-term deferred asset		(35,060,507)	(4,017,863)
Increase (decrease) in liabilities:			
Accounts payable and accrued expenses		(409,133)	(3,427,821)
Deferred revenue		1,497,704	(623,973)
Accrued postretirement benefits		1,130,268	1,089,847
Net cash used in operating activities		(72,656,510)	(34,078,968)
Cash flows from investing activities:			
Acquisition of property and equipment		(3,915,373)	(5,847,897)
Construction of facilities and equipment		(2,669,374)	(2,791,469)
Investments purchased		(276,707,501)	(402,396,804)
Proceeds from investments sold or matured		369,302,592	457,090,473
Net cash provided by investing activities		86,010,344	46,054,303
Cash flows from financing activity:			
Proceeds from contributions and investment income restricted for:			
Investment in endowment		51,000	51,721
Net increase in cash and cash equivalents		13,404,834	12,027,056
Cash and cash equivalents at beginning of year		16,120,426	4,093,370
Cash and cash equivalents at end of year	$	29,525,260	16,120,426
Supplementary cash flow information:			
Cash paid for interest	$	5,192,254	5,192,260

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, 2016 and 2015, Carnegie had investment income, including net unrealized and realized losses, of $34 million and gains of $58 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.

(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, 2016 and 2015, there are no uncertain tax positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements.

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(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).

Interest rate swap agreements are entered into by Carnegie to mitigate the risk of changes in interest rates associated with fixed interest rate indebtedness. Carnegie recognizes derivative financial instruments at fair value.

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).

Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 820, *Fair Value Measurements*, 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) *Fair Value Measurement Disclosures for Investments in Certain Entities*

In 2015, Carnegie adopted the provisions of ASU No. 2015-07, *Fair Value Measurement: Disclosures for Investments in Certain Entities that Calculate Net Asset Value (NAV) per Share (or Its Equivalent)*

(ASU 2015-07). ASU 2015-07 removes the requirement to classify within the fair value hierarchy table investments in certain funds measured at NAV as a practical expedient to estimate fair value. The ASU also required that any NAV-measured investments excluded from the fair value hierarchy table be summarized as an adjustment to the table so that total investments can be reconciled to the statement of financial position.

ASU 2015-10, *Technical Corrections and Improvements*, clarified one aspect of the definition of readily determinable fair value (RDFV), thereby affecting the measurement of and disclosure about certain investments. During 2016, based on this technical correction, management re-evaluated its investments historically measured using NAV, as a practical expedient, in structures with characteristics similar to a mutual fund as to whether they have an RDFV. Based on that re-evaluation, certain NAV disclosures have been amended, and certain investments aggregating $46,766,007 previously accounted for using NAV as a practical expedient as of June 30, 2015 and previously excluded from the fair value hierarchy were determined to have an RDFV and have been included as Level 2 investments at that date.

(g) 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.

(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 are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value amount of an asset may not be recoverable.

(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 are 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.

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. 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 is based upon provisional rates, which are subject to subsequent audit by Carnegie's federal cognizant agency, the Department of Energy.

(k) 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. Fund-raising expenses of $1,462,645 and $1,974,726 for the years ended June 30, 2016 and 2015, respectively, have been included in administrative and general expenses in the accompanying statements of activities.

(Continued)

(2) Contributions Receivable

Contributions receivable are summarized as follows as of June 30, 2016 and 2015:

		2016	2015
Unconditional promises expected to be collected in:			
Less than one year	$	2,709,868	6,134,459
One to five years		2,557,034	1,824,700
		5,266,902	7,959,159
Less:			
Allowance for uncollectible amounts		(842,735)	(628,144)
Discount to present value		(259,044)	(253,443)
	$	4,165,123	7,077,572

Contributions receivable as of June 30, 2016 and 2015 were discounted based on the estimated risk-adjusted rate of return on the pledge date at rates ranging from less than 0.30% to 5.2%.

(3) Investments

Investments at fair value consisted of the following as of June 30, 2016 and 2015:

		2016	2015
Time deposits and money market funds	$	2,315,529	70,412,592
U.S. government bond fund		45,350,423	50,790,609
Common stock – domestic		75,917,998	77,624,421
Domestic equity commingled funds		124,315,646	142,850,600
International equity commingled funds		186,849,057	193,254,067
Real estate funds		95,270,308	93,902,101
Natural resources funds		53,328,360	44,237,448
Absolute return funds		242,555,663	255,876,445
Private equity funds		52,069,436	55,048,184
	$	877,972,420	983,996,467

Investment income (loss), net consisted of the following for the years ended June 30, 2016 and 2015:

		2016	2015
Interest and dividends	$	6,676,385	5,530,059
Net realized gains		21,066,998	128,451,884
Net unrealized losses		(59,838,538)	(74,240,225)
Investment management expenses		(1,654,371)	(1,258,770)
	$	(33,749,526)	58,482,948

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

The following table represents investments that are measured at fair value on a recurring basis as of June 30, 2015:

	2015	Level 1	Level 2	Level 3	NAV (1)
Time deposits and money market funds	$ 70,412,592	70,412,592	—	—	—
U.S. government bond funds	50,790,609	2,348,598	48,442,011	—	—
Common stock – domestic	77,624,421	77,210,725	—	413,696	—
Domestic equity commingled funds	142,850,600	47,975,458	—		94,875,142
International equity commingled funds	193,254,067	34,472,153	—	—	158,781,914
Real estate funds	93,902,101	—	—	14,152,379	79,749,722
Natural resources funds	44,237,448	—	—	38,266,005	5,971,443
Absolute return funds	255,876,445	—	—	—	255,876,445
Private equity funds	55,048,184	—	—	—	55,048,184
	$ 983,996,467	232,419,526	48,442,011	52,832,080	650,302,850

(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 statement 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, 2016 and 2015:

	Fair value		2016 unfunded	Redemption
	2016	2015	commitments	frequency
Domestic equity commingled fund (a)	$ 76,934,848	94,875,142	6,069,170	Biennial
International equity commingled funds (b)	157,514,908	158,781,914	—	Monthly
Real estate funds (c)	86,918,942	79,749,722	39,250,368	Illiquid
Natural resources funds (d)	12,587,082	5,971,443	16,371,630	Illiquid
Absolute return funds (e)	242,555,663	255,876,445	—	Quarterly to illiquid
Private equity funds (f)	52,069,436	55,048,184	27,085,250	Illiquid
	$ 628,580,879	650,302,850	88,776,418	

(a) This class is comprised of a single fund which 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 is comprised of three international partnerships which 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, which 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, which invest primarily in timber and oil and gas assets as well as companies and investment funds which invest in these assets. The investment strategy is to acquire, operate, develop, and improve oil and gas and timber producing assets or to delegate these activities through investments in companies and investment funds which invest in these 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 is comprised of several separate funds, including: two long/short hedge funds which invest in publicly traded equities, one partnership that invests in fixed income securities and one multistrategy 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 60 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 is comprised of three separate managers and nine separate private equity funds which 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.

(Continued)

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, 2016 and 2015.

	Common stock domestic	Real estate funds	Natural resources funds	Total
Balance at June 30, 2014	$ 413,696	14,282,308	82,063,925	96,759,929
Total realized gains, net	—	—	27,785,853	27,785,853
Total unrealized gains (losses), net	—	1,628,448	(43,698,686)	(42,070,238)
Purchases and issuances	—	2,125,000	908,148	3,033,148
Settlements	—	(3,883,377)	(28,793,235)	(32,676,612)
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 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

One fund was transferred out of Level 3 to NAV for the year ended June 30, 2016. There were no transfers of funds between the levels for the year ended June 30, 2015.

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 have 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, 2016:

Input	Range
Forward prices for oil/natural gas (NYMEX)	\$48.02/\$3.02 – 2016 \$57.50/3.57 – average of remaining years pricing
Discount rate	12%

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

Investments in these funds 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. Carnegie has unfunded commitments related to these investments of approximately $78.1 million at June 30, 2016.

(4) Property and Equipment

Property and equipment consisted of the following as of June 30, 2016 and 2015:

	2016	2015
Buildings and improvements	$ 92,356,904	91,644,116
Scientific equipment	75,989,953	72,328,014
Telescopes	93,969,502	93,969,502
Construction in progress	2,328,578	2,593,248
Administrative equipment	4,630,576	4,394,331
Leased equipment	300,559	300,559
Land	817,117	817,117
Art	90,388	76,099
	270,483,577	266,122,986
Accumulated depreciation	(136,660,546)	(128,130,388)
	$ 133,823,031	137,992,598

Construction in progress consists of $2,075,912 and $2,056,384 for scientific equipment and $252,666 and $536,864 for building improvements as of June 30, 2016 and 2015, respectively.

As of June 30, 2016 and 2015, approximately $59.9 million and $61.7 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, 2016 and 2015, the deferred revenue totaled $24.1 million and $24.8 million, respectively.

(6) Long-Term Deferred Asset

Carnegie is a Founder and initial contributor to the GMT Project, which is managed by the Giant Magellan Telescope Organization Corporation (GMTO) that includes institutions from the U.S., 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 GMTO 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 fund-raising 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 years 2016 and 2015 were $35.1 million and $4.0 million, respectively. The deferred long-term asset value was $56.7 million and $21.6 million at June 30, 2016 and 2015, 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 $30,580,000 of fixed-rate, tax-exempt revenue bonds on behalf of Carnegie. Bond proceeds totaling approximately $30,500,000 were used to refund $30,000,000 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 $30,580,000 as of June 30, 2016 and 2015. The interest expense for the MHHEFA issues was $1,345,512 for the years ended June 30, 2016 and 2015.

The 2010 MHHEFA bonds are secured solely by Carnegie's credit. 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 $34,525,000 on behalf of Carnegie. Bond proceeds totaling approximately $36,400,000 were used to: a) refund $17,500,000 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 $18,300,000 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 $34,525,000. 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 $34,525,000 as of June 30, 2016 and 2015. The interest expense for the CEFA issue was $1,726,250 for the years ended June 30, 2016 and 2015.

The 2010 CEFA bonds are secured solely by Carnegie's credit. 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 $50,000,000. Bond proceeds totaling $50,000,000 will be used to: a) finance a portion of the Institution's participation in the Giant Magellan Telescope 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 $50,000,000. 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 $50,000,000 as of June 30, 2016 and 2015. The interest expense for the Series 2014 issue was $2,120,500 for the years ended June 30, 2016 and 2015.

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) Fair Value of Bond Proceeds

Bond proceeds of $25.8 million and $49.4 million as of June 30, 2016 and 2015, respectively, are invested in four market-neutral hedge funds. The market-neutral hedge funds invest in marketable securities with 2.0% and 1.7% held in cash (Level 1) as of June 30, 2016 and 2015, 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 60 or 20 day notice. One of the funds has an initial two year lock up period.

(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 agreement, Barclays Capital pays Carnegie 68% 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 $22,935,000, 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 $7,645,000. 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 agreement, Carnegie may terminate and cash settle the transaction upon meeting a three-day business 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, 2016 and 2015 were liabilities of $310,235 and $1,028,794, respectively. These amounts are included in accounts payable and accrued expenses in 2016 and 2015 on the accompanying statements of financial position. The change in fair value for the years ended June 30, 2016 and 2015 was a gain of $718,559 and $1,101,909, 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 agreement, Barclays Capital pays Carnegie 68% of three-month LIBOR and Carnegie pays Barclays Capital SIFMA minus 0.111% on a notional amount of $25,893,750, 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 $8,631,250. 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 agreement, Carnegie may terminate and cash settle the transaction upon meeting a three-day business 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, 2016 and 2015 were liabilities of $170,700 and $983,473, respectively. These amounts are included in accounts payable and accrued expenses in 2016 and 2015 on the accompanying statements of financial position. The change in fair value for the years ended June 30, 2016 and 2015 was a gain of $812,773 and $1,236,052, respectively, and is reported as other income.

(c) Commodity Swaps

Carnegie entered into a series of fixed-floating commodity swap agreements with J. Aron & Company, fixed price payer, for NYMEX West Texas Intermediate Crude Oil (WTI-Oil) and NYMEX Natural Gas. The natural gas swaps expired on December 3, 2015 and the oil swaps expired on January 8, 2016 and were not replaced due to lack of excessive exposure.

The commodity swap agreements described above are derivative instruments that are recorded at fair value. The estimated fair value as of June 30, 2015 was a receivable of $707,371. The amounts are included in accounts receivable and other assets, in the accompanying statement of financial position. The change in fair value for the years ended June 30, 2016 and 2015 was a loss of $707,371 and a gain of $180,307, respectively, and is reported as other income.

For the valuation of interest rate and commodity swaps as of June 30, 2016 and 2015, Carnegie used pricing models based on significant observable inputs as of the valuation date (Level 2) of the fair value hierarchy, including prices of instruments with similar maturities and characteristics, interest rate yield curves, measures of interest rate volatility, and oil and natural gas pricing. See note 1(e) for definitions of the fair value hierarchy.

(9) Employee Benefit Plans

(a) Retirement Plan

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 defined contribution plan has been funded through individually owned annuities issued by Teachers’ Insurance and Annuity Association (TIAA) and College Retirement Equities Fund (CREF). Contributions made by Carnegie totaled approximately $4.9 million and $4.7 million for the years ended June 30, 2016 and 2015, respectively.

(b) Postretirement Benefits Plan

Carnegie 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, 2006, retire after age 55 and have at least 10 years of service. Employees under age 50 on July 1, 2006 and who meet the Rule of 75 (age plus years of service equal at least 75) on or after age 55 may qualify for retiree health. Employees hired on or after July 1, 2006, must meet the Rule of 75 on or after age 60. Cash payments made by Carnegie for these benefits totaled $961,024 and $793,199 for the years ended June 30, 2016 and 2015, respectively.

The expense for postretirement benefits for the years ended June 30, 2016 and 2015 consists of the following:

		2016	2015
Service cost – benefits earned during the year	$	1,001,951	903,610
Interest cost on projected benefit obligation		1,125,341	997,456
Amortization of prior service costs		(18,000)	(18,000)
Postretirement benefit expense	$	2,109,292	1,883,066

The 2016 postretirement benefits expense was approximately $1,148,268 more than the cash payments of $961,024 and the 2015 postretirement benefits expense was approximately $1,089,867 more than the cash payments of $793,199. The postretirement benefits 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, 2016 and 2015 follows:

		2016	2015
Change in benefit obligation:			
Benefit obligation at beginning of year	$	25,923,865	23,558,628
Service cost		1,001,951	903,610
Interest cost		1,125,341	997,456
Actuarial loss		584,618	1,257,370
Benefits paid		(961,024)	(793,199)
Benefit obligation at end of year		27,674,751	25,923,865
Change in plan assets:			
Fair value of plan assets at beginning of year		—	—
Contribution to plan		961,024	793,199
Benefits paid		(961,024)	(793,199)
Fair value of plan assets at end of year		—	—
Funded status	$	(27,674,751)	(25,923,865)

Pension related changes other than net periodic postretirement benefit cost consisted of the following as of June 30, 2016 and 2015:

		2016	2015
Unrecognized net actuarial loss	$	(584,618)	(1,257,370)
Unrecognized prior service cost		(18,000)	(18,000)
	$	(602,618)	(1,275,370)

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, 2016 and 2015:

		2016	2015
Unrecognized net actuarial loss	$	479,283	(105,335)
Unrecognized prior service cost		(113,000)	(131,000)
	$	366,283	(236,335)

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

		2016	2015
Unrecognized prior service cost		18,000	18,000
	$	18,000	18,000

The present value of the benefit obligation as of June 30, 2016 and 2015 was determined using an assumed discount rate of 3.75% and 4.41%, respectively. The present value of the net periodic postretirement benefit cost for the years ended June 30, 2016 and 2015 was determined using an assumed discount rate of 4.41% and 4.30%, respectively. Carnegie's policy is to fund postretirement benefits as claims and administrative fees are paid.

For measurement purposes, a 9% annual rate of increase in medical claims was assumed for 2016; the rate of increase was assumed to decrease at 0.5% per year, eventually reaching 5% 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	$	502,554	379,186
Effect on postretirement benefit obligation		5,425,216	4,200,672

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

Carnegie expects to contribute $762,845 to its postretirement benefit plan during the year ending June 30, 2017.

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

2017	$	762,845
2018		839,744
2019		889,932
2020		928,266
2021		982,080
2022–2025		5,692,156

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, 2016 and 2015:

		2016	2015
Board-designated quasi-endowments	$	118,594,860	128,710,305
Undesignated		170,330,950	181,576,842
	$	288,925,810	310,287,147

(b) Temporarily Restricted Net Assets

Temporarily restricted net assets were available to support the following donor-restricted purposes as of June 30, 2016 and 2015:

		2016	2015
Endowment assets available for future appropriation	$	570,404,581	635,724,751
Specific research programs		30,692,322	37,098,427
Equipment acquisition and construction		850,139	1,325,787
Passage of time		10,156,639	7,179,159
	$	612,103,681	681,328,124

(Continued)

(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, 2016 and 2015:

	2016	2015
Specific research programs	$ 15,276,236	15,225,736
Operation of Maxine Singer building	15,000,050	15,000,050
Equipment acquisition and construction	2,764,720	2,764,720
General support (Carnegie endowment)	22,114,957	22,114,457
	$ 55,155,963	55,104,963

(d) Net Assets Released from Restrictions

During 2016 and 2015, Carnegie met donor-imposed requirements on certain gifts and, therefore, released temporarily restricted net assets as follows:

	2016	2015
Appropriation of endowment assets	$ 40,812,418	37,726,836
Specific research programs	9,537,519	11,953,885
Equipment acquisition and construction	475,647	15,587
Passage of time	282,192	500,060
	$ 51,107,776	50,196,368

(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 make a determination to appropriate or accumulate donor-restricted endowment fund:

1) The duration and preservation of the fund
2) The purposes of the organization and 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 of the organization
6) The investment and spending policies of the organization

(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 be comprised of: 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 5.00%, 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 2017, Carnegie has appropriated $43,970,000 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. Deficiencies of this nature that are reported in unrestricted net assets were $1,787 as of June 30, 2016. These deficiencies resulted from unfavorable market fluctuations that occurred shortly after the investment of new permanently restricted contributions. No such deficiencies existed as of June 30, 2015.

Net asset classification by type of endowment as of June 30, 2016 and 2015:

	Unrestricted	Temporarily restricted	Permanently restricted	Total
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
June 30, 2015:				
Donor-restricted endowment funds	$ —	635,724,751	55,104,963	690,829,714
Board-designated endowment funds	128,710,305	—	—	128,710,305
	$ 128,710,305	635,724,751	55,104,963	819,540,019

Changes in endowment net assets for the years ended June 30, 2016 and 2015:

	Unrestricted	Temporarily restricted	Permanently restricted	Total
Endowment net assets, June 30, 2014	124,443,474	630,454,654	55,053,242	809,951,370
Investment return:				
Investment income	558,785	3,075,417	—	3,634,202
Net appreciation (realized and unrealized gains and losses)	7,253,516	39,921,516	—	47,175,032
Total investment return	7,812,301	42,996,933	—	50,809,234
Contributions	96,500	—	51,721	148,221
Appropriation of assets for expenditure	(3,641,970)	(37,726,836)	—	(41,368,806)
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 depreciation (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 expenditure	(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

(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 $207,125 annually, adjusted for Consumer Price Index 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 lessors. The substance of the transactions indicates arm's-length terms between Carnegie and the lessors.

(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 $1.0 million and $1.6 million for the years ended June 30, 2016 and 2015, respectively.

A trustee of Carnegie is also the Chairman of an investment entity with which Carnegie has invested $38.0 million and $32.8 million in seven and six of its investment funds, as of June 30, 2016 and 2015, respectively. Carnegie paid approximately $0.4 million and $4.0 million in management and incentive fees and interest to these funds for the years ended June 30, 2016 and 2015, respectively.

(15) Subsequent Events

Carnegie has evaluated subsequent events through the date the financial statements were issued, November 22, 2016, and determined no adjustments or disclosures were required.

Schedule

CARNEGIE INSTITUTION OF WASHINGTON

Schedules of Expenses

Years ended June 30, 2016 and 2015

	2016			2015		
	Carnegie funds	**Federal and private grants**	**Total expenses**	**Carnegie funds**	**Federal and private grants**	**Total expenses**
Personnel costs:						
Salaries	$ 21,976,102	9,602,884	31,578,986	21,159,723	9,217,018	30,376,741
Fringe benefits and payroll taxes	14,557,026	4,427,136	18,984,162	12,667,509	4,186,659	16,854,168
Total personnel costs	36,533,128	14,030,020	50,563,148	33,827,232	13,403,677	47,230,909
Fellowship grants and awards	3,026,553	2,354,811	5,381,364	2,429,969	3,169,965	5,599,934
Depreciation	10,738,473	—	10,738,473	10,799,173	—	10,799,173
General expenses:						
Educational and research supplies	2,277,754	2,085,859	4,363,613	2,527,620	2,588,584	5,116,204
Building maintenance and operation	3,757,987	333,546	4,091,533	3,395,476	614,137	4,009,613
Travel and meetings	1,558,595	1,662,596	3,221,191	1,396,432	1,654,421	3,050,853
Professional and contract services	3,122,182	1,527,364	4,649,546	2,756,331	1,112,475	3,868,806
Communications	397,129	84,367	481,496	428,377	88,464	516,841
Administrative and general	2,023,215	345,099	2,368,314	3,182,775	2,246,457	5,429,232
Interest	4,397,605	—	4,397,605	4,431,149	—	4,431,149
Subcontracts	—	8,412,242	8,412,242	—	8,267,459	8,267,459
Equipment	4,828,182	3,970,369	8,798,551	3,960,363	7,444,098	11,404,461
Fund-raising expense	1,373,233	89,412	1,462,645	1,664,815	309,911	1,974,726
Total general expenses	23,735,882	18,510,854	42,246,736	23,743,338	24,326,006	48,069,344
Total direct costs	74,034,036	34,895,685	108,929,721	70,799,712	40,899,648	111,699,360
Indirect costs:						
Grants and contracts	(10,493,664)	10,493,664	—	(10,419,864)	10,419,864	—
Total costs	63,540,372	45,389,349	108,929,721	60,379,848	51,319,512	111,699,360
Capitalized scientific equipment and facilities	(6,265,539)	—	(6,265,539)	(8,639,335)	—	(8,639,335)
Total expenses	$ 57,274,833	45,389,349	102,664,182	51,740,513	51,319,512	103,060,025

See accompanying independent auditors' report.