

California Association for Research in Astronomy dba W. M. Keck Observatory

(A Nonprofit California Public Benefit Corporation)

Financial Statements (With Independent Auditors' Report Thereon)

September 30, 2015 and 2014



Independent Auditors' Report

The Board of Directors California Association for Research in Astronomy:

Report on Financial Statements

We have audited the accompanying financial statements of the California Association for Research in Astronomy, which comprise the statement of financial position as of September 30, 2015, and the related statements of activities, and cash flows for the year 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 accounting principles generally accepted in the United States of America; 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 audit. We conducted our audit 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 from material misstatement.

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

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

Opinion

In our opinion, the 2015 financial statements referred to above present fairly, in all material respects, the financial position of the California Association for Research in Astronomy as of September 30, 2015, and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

Prior Period Financial Statements

The financial statements of the California Association for Research in Astronomy as of and for the year ended September 30, 2014, were audited by other auditors whose report dated March 20, 2015, expressed an unmodified opinion on those financial statements.

KKDLY LLC

Honolulu, Hawaii February 26, 2016

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Statements of Financial Position

September 30, 2015 and 2014

Assets	2015	2014
Currrent assets:		
Cash and cash equivalents	\$ 7,744,145	\$ 9,178,045
Grants and contracts receivable	517,146	437,056
Prepaid expenses and other assets	178,315	148,313
Total current assets	8,439,606	9,763,414
Noncurrent assets:		
Long-term investments (note 3)	6,804,129	5,857,216
Property and equipment, net (notes 5 and 7)	 54,309,469	54,328,833
Total assets	\$ 69,553,204	\$ 69,949,463
Liabilities and Net Assets		
Current liabilities:		
Accounts payable and accrued expenses:	\$ 2,942,004	\$ 2,520,534
Advances (note 2)	 11,407,045	 12,498,326
Total current liabilities	 14,349,049	 15,018,860
Net assets:		
Unrestricted	54,121,947	54,141,311
Unrestricted - board-designated (note 9)	593,634	354,038
Temporarily restricted (note 10)	488,574	435,254
Total net assets	55,204,155	54,930,603
Commitments (notes 8 and 11)	 	-
Total liabilities and net assets	\$ 69,553,204	\$ 69,949,463

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Statements of Activities

Years Ended September 30, 2015 and 2014

	2015	2014	
Changes in unrestricted net assets:			
Unrestricted operating support and revenues			
Contributions	\$ 239,596	\$ 161,606	
Operating revenues (note 4):			
University of California observatory operations	14,002,090	14,229,688	
Other	8,116,893	7,434,348	
Interest income	208,072	338,851	
Net realized and unrealized gains (losses)			
on investments (note 3)	(59,022)	444,867	
Other income	269,890	145,226	
Net assets released in satisfaction of equipment			
acquisition restrictions (note 10)	597,606	433,352	
Total unrestricted revenues	23,375,125	23,187,938	
Expenses (notes 5, 7, and 11):			
Program services:			
Observatory operations	16,930,565	16,862,967	
California Institute of Technology asset project	3,040,642	3,286,304	
Research	49,157	45,496	
Administration and general	2,552,538	3,204,811	
Fund-raising	581,991	494,770	
Total expenses	23,154,893	23,894,348	
Change in unrestricted net assets	220,232	(706,410)	
Change in temporary restricted net assets:			
Contributions	650,926	216,620	
Net assets released from restrictions (note 10)	(597,606)	(433,352)	
Change in temporarily restricted net assets	53,320	(216,732)	
Change in net assets	273,552	(923,142)	
Net assets at beginning of year	54,930,603	55,853,745	
Net assets at end of year	\$ 55,204,155	\$ 54,930,603	

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Statements of Cash Flows

Years Ended September 30, 2015 and 2014

	2015	2014
Cash flows from operating activities:		
Change in net assets	\$ 273,552	\$ (923,142)
Adjustments to reconcile change in net assets to net cash		
provided by operating activities:		
Depreciation	5,962,883	6,177,720
Net realized and unrealized losses (gains) on investments	59,022	(444,867)
Net gain on disposal of property and equipment	(20,797)	(45,121)
Contributions restricted for investment in property		
and equipment	(650,926)	(216,620)
Decrease (increase) in operating assets:		
Grants and contracts receivable, net	(80,090)	132,242
Prepaid expenses and other assets	(30,002)	18,678
Contributions receivable, net	-	100,000
Increase (decrease) in operating liabilities:		
Accounts payable and accrued expenses	421,470	(510,716)
Advances	(1,091,281)	(1,350,741)
Net cash provided by operating activities	 4,843,831	 2,937,433
Cash flows from investing activities:		
Purchases of property and equipment	(5,943,519)	(5,661,740)
Purchases of investments	(1,005,935)	(5,465,798)
Proceeds on sale of property and equipment	 20,797	 45,121
Net cash used in investing activities	(6,928,657)	(11,082,417)
Cash flows provided by financing activities:		
Contributions restricted for investment in		
property and equipment	650,926	 216,620
Net decrease in cash and cash equivalents	(1,433,900)	(7,928,364)
Cash and cash equivalents at beginning of year	9,178,045	17,106,409
Cash and cash equivalents at end of year	\$ 7,744,145	\$ 9,178,045

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Notes to Financial Statements

September 30, 2015 and 2014

(1) Organization and Operations

California Association for Research in Astronomy (CARA) is a nonprofit corporation formed by the California Institute of Technology (Caltech) and the University of California (UC) in January 1985 to build and operate the W. M. Keck Observatory (the Observatory) on the summit of Mauna Kea in Hawaii. Tax exempt under Section 501(c)(3) of the Internal Revenue Code, CARA is a nonprofit California public benefit corporation and, as such, is qualified as a nonprofit corporation in the state of Hawaii.

The principal purpose of CARA is to foster astronomical research and to provide technical direction for the development and operation of astronomical facilities on the island of Hawaii, principally on land owned by the state of Hawaii, leased to the University of Hawaii, and subleased to Caltech. The Observatory is owned by Caltech and is leased to CARA for \$1 per year. In consideration for subleasing the land to Caltech for \$1 per year through 2033, the University of Hawaii receives an opportunity to use the Observatory and related facilities and improvements. The astronomical facilities include two 10-meter telescopes (Keck I and Keck II), related instrumentation, adaptive optics technology, support facilities, and required infrastructure improvements.

The costs of development of the Observatory and the development of adaptive optics technology were borne by Caltech, the majority of which were funded by grants from the W. M. Keck Foundation (the Foundation). Caltech's funding for Keck I and Keck II development costs was \$75,222,000 and \$78,600,000, respectively. Keck I development was completed in 1996; Keck II was largely completed in 1998 with the remaining development costs completely expended by 2005.

UC provided financial support to CARA for preoperating costs during the Observatory's development periods, acquisition of focal plane instrumentation, and observatory operations. UC provides continuing operating support for Keck I operations in the amount of \$3,500,000 per year, which continues through fiscal year 2017, and \$1,750,000 for the six-month period ending March 31, 2018, all measured in 1984 dollars. UC provides support for Keck II operations in the amount of \$2,105,000 per year, which continues through fiscal year 2017, and \$1,052,500 for the six-month period ending March 31, 2018, all measured in 1990 dollars. For fiscal years 2015 and 2014, CARA received operating support for Keck I operations of \$8,273,160 and \$8,138,235, respectively. For fiscal years 2015 and 2014, CARA received operating support for Keck II operations of \$5,809,126 and \$5,585,702, respectively. For fiscal years 2015 and 2014, CARA recognized operating revenue for Keck I and Keck II operations from UC of \$14,002,090 and \$14,229,688, respectively.

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Notes to Financial Statements

September 30, 2015 and 2014

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP).

CARA follows the requirements of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Section 958-205-45-2, *Not-for-Profit Entities – Presentation of Financial Statement – Other Presentation Matters.* Under FASB ASC Section 958-205-45-2, CARA is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets based upon the existence or absence of donor-imposed stipulations. Accordingly, net assets of CARA and changes therein are classified and reported as follows:

Unrestricted Net Assets – net assets that are not subject to donor-imposed stipulations and that may be expended for any purpose in performing the objectives of CARA.

Temporarily Restricted Net Assets – net assets subject to donor-imposed stipulations that may or will be met either by actions and/or the passage of time. As the restrictions are satisfied, temporarily restricted net assets are reclassified and reported in the accompanying financial statements as net assets released from restrictions.

Permanently Restricted Net Assets – net assets subject to donor-imposed stipulations that resources must be maintained in perpetuity. As of September 30, 2015 and 2014, CARA had no permanently restricted net assets.

Cash and Cash Equivalents

CARA considers all highly liquid instruments with original maturities of three months or less to be cash equivalents. As of September 30, 2015 and 2014, cash equivalents of \$7,603,123 and \$8,949,520, respectively, were invested in the University of California Short-term Investment Pool (UC STIP). Investments included in the UC STIP are highly liquid investments held by the UC and have original maturities of three months or less. These investments include indirect observable inputs and therefore are considered to be Level 2 in the fair value hierarchy.

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Notes to Financial Statements

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Long-term Investments

CARA records its investments at fair value as defined in ASC 820, Fair Value Measurements and Disclosures. Investments are stated at fair value with gains and losses included in the statements of activities as an increase or decrease in unrestricted net assets unless their use is temporarily or permanently restricted by a donor.

CARA follows the measurement provisions of Accounting Standards Update (ASU) No. 2009-12, *Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)*, to certain investments in funds that do not have readily determinable fair values including private investments, hedge funds, real estate, and other funds of funds. This guidance allows for the estimation of the fair value of investments in investment companies for which the investment does not have a readily determinable fair value using net asset value per share or its equivalent.

CARA's investments in the University of California's General Endowment Pool (UC GEP) are reported at net asset value. The UC GEP is a unitized fund whereby CARA participates in investment returns and income on an equivalent pro-rated basis with all participants in the pool. For these investments, CARA has concluded that the net asset value reported by the underlying fund is a practical expedient to estimating fair value. CARA's investments in the UC GEP are redeemable with the fund at net asset value under the original terms of the investment agreement with the UC subject to the restrictions discussed in note 3. Due to the nature of the investments held by the funds, changes in market conditions and the economic environment may significantly impact the net asset value of the funds and, consequently, the fair value of CARA's interests in the funds.

Property and Equipment

Expenditures incurred by CARA for observatory instrumentation and facilities, operating equipment, and vehicles are capitalized at cost, except for donated property that is valued at fair market value at the date of the gift, and depreciated when placed in service. Depreciation is provided over the estimated useful lives of the respective assets using the straight-line method. The estimated useful lives are as follows:

	Estimated
Class of assets	useful lives
Observatory instrumentation	10-20 years
Observatory facility	3-15 years
Vehicles and equipment	3-20 years

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Notes to Financial Statements

September 30, 2015 and 2014

CARA reports contributions designated by donors to acquire long-lived assets as restricted support. Absent explicit donor stipulations about how long those long-lived assets must be maintained, CARA reports expirations of donor restrictions when the acquired long-lived assets are placed in service.

Advances

Operating and instrumentation funds received from UC are recorded as advances until expended for operating expenditures, observatory instrumentation, or vehicles and equipment. Funds received from the Association of Universities for Research in Astronomy (AURA) and other foundation grants for the purpose of developing certain instruments for the Keck telescopes or adaptive optics development are recorded as advances until expended for their stated purpose.

A summary of advances at September 30, 2015 and 2014 follows:

	2015		 2014
University of California:			
Observatory operations	\$	10,406,026	\$ 10,325,829
Other		330,000	-
W. M. Keck Foundation		433,884	1,174,242
Gordon and Betty Moore Foundation		237,135	851,374
Association for the Universities for Research			
in Astronomy		-	118,836
Other		-	28,045
Total advances	\$	11,407,045	\$ 12,498,326

Contributions

Contributions are recorded in the period received. CARA reports gifts as restricted support if they are received with donor-imposed stipulations that limit the use of the donated assets. When a donor restriction expires, that is, when a stipulated time restriction ends or purpose restriction is accomplished, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statements of activities as net assets released from restrictions.

As described in note 1, CARA leases the Observatory and related facilities and improvements from Caltech for \$1 per year. As the use of the Observatory is so specific that there is no assignable value, it is impractical to determine a fair rental value to be reported as contribution revenue in the accompanying statements of activities.

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Notes to Financial Statements

September 30, 2015 and 2014

Use of Estimates

The preparation of the financial statements in accordance with GAAP requires management of CARA to make a number of estimates and assumptions relating to the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include the carrying amount of property and equipment and the valuation of receivables and investments. Actual results could differ from those estimates.

Long-Lived Assets

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset be tested for possible impairment, CARA first compares undiscounted cash flows expected to be generated by an asset to the carrying value of the asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying value exceeds its fair value. Fair value is determined through various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, as necessary.

Sponsored Programs, Grants, and Contracts

Governmental and private grants and contracts normally provide for the recovery of direct and indirect costs, subject to audit. CARA recognizes revenues associated with direct costs as incurred. Indirect costs recovered on federally sponsored programs are based on cost reimbursement rates negotiated with CARA's cognizant agency, the Office of Naval Research. Indirect costs recovered on all other grants and contracts are based on rates negotiated with the respective parties.

Subsequent Events

CARA has evaluated subsequent events from the balance sheet date through February 26, 2016, the date at which the financial statements were available to be issued. There are no other matters to disclose.

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Notes to Financial Statements

September 30, 2015 and 2014

(3) Long-term Investments

CARA's long-term investments are stated at fair value. Investment purchases and sales are recorded on a trade-date basis. Unrealized appreciation or depreciation on investments is recorded in the statement of activities. Dividend income is recorded on the ex-dividend date. Interest income is recorded when earned. As of September 30, 2015 and 2014, CARA's long-term investments consisted of \$6,804,129 and \$5,857,216, respectively, in the UC GEP.

The UC GEP is valued based on net asset value as discussed in note 2. The pool includes the following at September 30, 2015: 21.3% U.S. equity securities, 20.3% international equity securities, 9.6% U.S. fixed income securities, 2.4% international fixed income securities, 8.3% U.S. real estate funds, 9.5% private equity funds, 26.2% absolute return funds, and 2.4% cash. The level in the fair value hierarchy within which a fair value measurement in its entirety falls is based on the lowest-level input that is significant to the fair value measurement in its entirety. As the pool includes investments with unobservable inputs, the fair value of the pool is considered to be Level 3 in the fair value hierarchy.

The following is a summary of the inputs used as of September 30, 2015 and 2014 in valuing CARA's long term investments carried at fair value:

]	Fair Value as of S	September 30, 201	5
	(Level 1)	(Level 2)	(Level 3)	Total
University of California General Endowment Pool	\$ -	\$ -	\$ 6,804,129	\$ 6,804,129
	1	Fair Value as of S	September 30, 201	4
	(Level 1)	(Level 2)	(Level 3)	Total
University of California General Endowment Pool	\$ -	\$ -	\$ 5,857,216	\$ 5,857,216

Under CARA's investment agreement with the UC, the funds held in the UP GEP are not subject to an initial lockup period, however, fund redemptions are limited to 5% per year unless additional redemptions are approved by the UC.

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Notes to Financial Statements

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The following is a reconciliation of investments as of and for the years ended September 30, 2015 and 2014, in which significant unobservable inputs (Level 3) were used in determining fair value:

	2015		2014	
Balance at beginning of year	\$	5,857,216	\$	-
Total gains (losses) included in income:				
Realized		-		-
Unrealized		(53,087)		441,216
Purchases, issuance, and settlements (net)		1,000,000		5,416,000
Balance at end of year	\$	6,804,129	\$	5,857,216

CARA's accounting policy is to recognize transfers between levels of the fair value hierarchy on the date of the event or change in circumstances that caused the transfer. There were no significant transfers into or out of Level 1, 2, or 3 for the years ended September 30, 2015 and 2014.

(4) Operating Revenues

A summary of operating revenues for the years ended September 30, 2015 and 2014 follows:

	2015		2014	
University of California - observatory operations (note 1)	\$	14,002,090	\$	14,229,688
National Aeronautics and Space Administration		3,847,108		3,707,620
W. M. Keck Foundation		751,304		339,027
National Science Foundation		527,146		729,290
Gordon and Betty Moore Foundation		620,921		4,976
Association for Universities for Research in Astronomy		318,836		985,494
Other		2,051,578		1,667,941
Total operating revenues	\$	22,118,983	\$	21,664,036

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Notes to Financial Statements

September 30, 2015 and 2014

(5) Property and Equipment

A summary of property and equipment at September 30, 2015 and 2014 follows:

	2015	2014
Observatory instrumentation and adaptive optics: Property and equipment	\$ 91,337,462	\$ 92,238,852
Construction in progress	24,628,054	22,043,877
	115,965,516	114,282,729
Observatory infrastructure: Property and equipment	4,082,075	3,742,948
Vehicles and equipment	5,259,563	4,960,493
Less accumulated depreciation	125,307,154 (70,997,685)	122,986,170 (68,657,337)
Total property and equipment, net	\$ 54,309,469	\$ 54,328,833

Depreciation expense amounted to \$5,962,883 and \$6,177,720 in 2015 and 2014, respectively.

(6) Income Taxes

CARA has received a determination from taxing authorities that it is an organization exempt from taxation under Section 501(c)(3) of the U.S. Internal Revenue Code and Section 23701d of the California Revenue and Taxation Code and is generally not subject to federal or state income taxes. However, CARA is subject to income taxes on any net income derived from a trade or business, regularly carried on, and not in furtherance of the purposes for which it was granted exemption. No income tax provision has been recorded as the net income, if any from any unrelated trade or business, in the opinion of management, is not material to the financial statements taken as a whole.

CARA applies the provisions of ASC Topic 740, *Income Taxes*, which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return, and provides guidance on derecognition, classification, interest, and penalties, disclosure, and transition. Management believes that no such uncertain tax position exists for CARA requiring accrual or disclosure at September 30, 2015 and 2014. CARA is no longer subject to U.S. federal income tax examinations by tax authorities for years before 2012.

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Notes to Financial Statements

September 30, 2015 and 2014

(7) Related-Party Transactions

Caltech and UC provide various instrument and adaptive optics development services to CARA. During fiscal years 2015 and 2014, total expenditures for these services charged to CARA were \$1,863,090 and \$2,273,089, respectively, by Caltech, and \$487,899 and \$384,084, respectively, by UC.

CARA provided services for projects on Caltech's observatory assets located in Hawaii including: ongoing repair of the telescope mirror segments, telescope control system upgrades, dome shutter improvements, installation of two photo-voltaic systems on Caltech's Waimea headquarters buildings, and ongoing installation of a spare secondary mirror. During fiscal years 2015 and 2014, total expenditures for these projects was \$3,040,642 and \$3,286,304, respectively.

(8) Commitments

CARA entered into various contractual agreements for operations, laser guide star and adaptive optics systems, observatory construction and development of instrumentation and interferometry systems. A summary of commitments at September 30, 2015 follows:

Operations	\$ 949,855
Instrumentation	198,313
Laser guide star and adaptive optics systems	 109,051
Total commitments	\$ 1,257,219

(9) Board-Designated Net Assets

In 2006, CARA established a board-designated Director's Fund separate from its unrestricted, undesignated net assets for receipt of all unrestricted contributions and their subsequent expenditures. In 2015 and 2014, CARA received contributions of \$239,596 and \$161,606, respectively, which were board-designated for the Director's Fund. At September 30, 2015 and 2014, respectively, the fund totaled \$593,634 and \$354,038.

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Notes to Financial Statements

September 30, 2015 and 2014

(10) Temporarily Restricted Net Assets

In 2015 and 2014, CARA received restricted contributions for various instrumentation and adaptive optics technology development and Advancement Office initiatives totaling \$650,926 and \$216,620, respectively. In 2015 and 2014, \$597,606 and \$433,352, respectively, of temporarily restricted net assets were released from restriction in satisfaction of equipment acquisition and program restrictions. At September 30, 2015 and 2014, \$488,574 and \$435,254, respectively, was available for these activities.

(11) Deferred Compensation

403(b)Plan

CARA has a defined contribution retirement plan (the Plan), which was established under Section 403(b) of the U.S. Internal Revenue Code. All eligible employees participate in the Plan. An eligible employee is defined as an employee regularly scheduled to work at least 20 hours per week subject to the appropriate waiting period and employment classification as defined in the Plan. CARA is required to make contributions to the Plan at various percentages of base salary depending on the participant's age and grade. Contributions to the Plan amounted to \$862,380 and \$933,633 for fiscal years 2015 and 2014, respectively.

457(b) Plan

In 2014, CARA established a voluntary deferred compensation plan for a specific group of management designed in accordance with the provisions of Section 457 of the Internal Revenue Code. The plan allows participants to defer a portion of their compensation until after employment termination. Assets in the plan are held by CARA on a non trust basis and are subject to the claims of its creditors. The plan is funded entirely from the compensation of the participants and vests with the employee immediately. CARA makes no contributions to the plan. The 457(b) plan assets and related liability obligation to participants of \$145,718 and \$115,886 as of September 30, 2015 and September 30, 2014, respectively, are included within other assets and accounts payable and accrued expenses in the accompanying statements of financial position.