



**California Association for Research in Astronomy**  
**Db a W. M. Keck Observatory**  
(A Nonprofit California Public Benefit Corporation)

Financial Statements  
(With Independent Auditors' Report Thereon)

September 30, 2022 and 2021

## Independent Auditors' Report

The Board of Directors  
California Association for Research in Astronomy:

### Report on the Audit of the Financial Statements

#### *Opinion*

We have audited the financial statements of the California Association for Research in Astronomy (CARA), which comprise the statements of financial position as of September 30, 2022 and 2021, and the related statements of activities, and cash flows for the years then ended, and the related notes to financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of CARA as of September 30, 2022 and 2021, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### *Basis for Opinion*

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

#### *Responsibilities of Management for the Financial Statements*

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about CARA's ability to continue as a going concern within one year after the date that the financial statements are available to be issued.

### ***Auditors' Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the financial statements.

In performing an audit in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards*, we:

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

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

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated March 15, 2023 on our consideration of CARA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of CARA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering CARA's internal control over financial reporting and compliance.

*KKDL Y LLC*

Honolulu, Hawaii  
March 15, 2023

**CALIFORNIA ASSOCIATION FOR RESEARCH IN ASTRONOMY**  
**DBA W. M. KECK OBSERVATORY**  
(A Nonprofit California Public Benefit Corporation)

Statements of Financial Position

September 30, 2022 and 2021

<b>Assets</b>	<b>2022</b>	<b>2021</b>
Current assets:		
Cash and cash equivalents	\$ 684,405	\$ 3,283,032
Restricted cash and cash equivalents	2,201,988	2,441,760
Grants and contracts receivable	793,545	326,853
Contributions receivable	250,000	-
Prepaid expenses and other assets	995,399	945,189
Total current assets	4,925,337	6,996,834
Noncurrent assets:		
Contributions receivable, net of current portion	250,000	-
Long-term investments	24,310,753	28,340,872
Property and equipment, net	47,066,760	45,731,381
Total assets	\$ 76,552,850	\$ 81,069,087
<b>Liabilities and Net Assets</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 4,469,468	\$ 4,551,752
Noncurrent liability:		
Note payable	2,500,000	2,500,000
Total liabilities	6,969,468	7,051,752
Net assets:		
Without donor restrictions:		
Undesignated	63,640,693	67,713,206
Board-designated	1,465,970	1,328,786
Total net assets without donor restrictions	65,106,663	69,041,992
With donor restrictions	4,476,719	4,975,343
Total net assets	69,583,382	74,017,335
Commitments	-	-
Total liabilities and net assets	\$ 76,552,850	\$ 81,069,087

See accompanying notes to financial statements.

**CALIFORNIA ASSOCIATION FOR RESEARCH IN ASTRONOMY**  
**DBA W. M. KECK OBSERVATORY**  
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Statements of Activities

Years Ended September 30, 2022 and 2021

	2022			2021		
	Without Donor Restrictions	With Donor Restrictions	Total	Without Donor Restrictions	With Donor Restrictions	Total
Revenues, support, and gains:						
Operating revenues	\$ 22,275,076	\$ -	\$ 22,275,076	\$ 20,892,926	\$ -	\$ 20,892,926
Grants and contributions	2,288,120	3,416,844	5,704,964	2,570,747	2,082,883	4,653,630
Net investment return (loss)	(3,304,855)	-	(3,304,855)	5,098,854	-	5,098,854
Gain (loss) on asset disposal	(9,105)	-	(9,105)	37,863	-	37,863
Other income (loss)	(58,795)	-	(58,795)	337,280	-	337,280
Net assets released from restrictions	3,915,468	(3,915,468)	-	5,330,366	(5,330,366)	-
Total revenues, support, and gains	<u>25,105,909</u>	<u>(498,624)</u>	<u>24,607,285</u>	<u>34,268,036</u>	<u>(3,247,483)</u>	<u>31,020,553</u>
Expenses:						
Program services:						
Operations	23,221,402	-	23,221,402	22,788,307	-	22,788,307
Related party asset projects	1,245,361	-	1,245,361	762,644	-	762,644
Research	390,933	-	390,933	140,141	-	140,141
Supporting services:						
Administration and general	3,469,436	-	3,469,436	3,059,443	-	3,059,443
Fund-raising	714,106	-	714,106	755,002	-	755,002
Total expenses	<u>29,041,238</u>	<u>-</u>	<u>29,041,238</u>	<u>27,505,537</u>	<u>-</u>	<u>27,505,537</u>
Change in net assets	(3,935,329)	(498,624)	(4,433,953)	6,762,499	(3,247,483)	3,515,016
Net assets at beginning of year	69,041,992	4,975,343	74,017,335	62,279,493	8,222,826	70,502,319
Net assets at end of year	<u>\$ 65,106,663</u>	<u>\$ 4,476,719</u>	<u>\$ 69,583,382</u>	<u>\$ 69,041,992</u>	<u>\$ 4,975,343</u>	<u>\$ 74,017,335</u>

See accompanying notes to financial statements.

**CALIFORNIA ASSOCIATION FOR RESEARCH IN ASTRONOMY**  
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Statements of Cash Flows

Years Ended September 30, 2022 and 2021

	<b>2022</b>	<b>2021</b>
Cash flows from operating activities:		
Change in net assets	\$ (4,433,953)	\$ 3,515,016
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation	5,271,665	6,723,017
Net realized and unrealized loss (gain) on investments	3,527,779	(4,808,507)
Loss (gain) on disposal of property and equipment	9,105	(37,863)
Contributions restricted for investment in property and equipment	(401,000)	(1,733,103)
Decrease (increase) in assets:		
Grants and contracts receivable	(466,692)	6,704
Contributions receivable	(500,000)	-
Prepaid expenses and other assets	(50,210)	(133,027)
Decrease in liabilities:		
Accounts payable and accrued expenses	(82,284)	(476,927)
Net cash provided by operating activities	2,874,410	3,055,310
Cash flows from investing activities:		
Proceeds on sale of long-term investments	642,786	-
Purchases of long-term investments	(140,446)	(1,706,154)
Purchases of property and equipment	(6,620,325)	(8,026,889)
Proceeds on sale of property and equipment	4,176	37,863
Net cash used in investing activities	(6,113,809)	(9,695,180)
Cash flows from financing activities:		
Contributions restricted for investment in property and equipment	401,000	1,733,103
Proceeds from issuance of note	-	2,500,000
Payment on note	-	(2,500,000)
Net cash provided by financing activities	401,000	1,733,103
Net decrease in cash, cash equivalents, and restricted cash	(2,838,399)	(4,906,767)
Cash, cash equivalents, and restricted cash at beginning of year	5,724,792	10,631,559
Cash, cash equivalents, and restricted cash at end of year	\$ 2,886,393	\$ 5,724,792
Supplemental information:		
Interest paid	\$ -	\$ 99,589

See accompanying notes to financial statements.

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Notes to Financial Statements

September 30, 2022 and 2021

**(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) near 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.

Caltech and UC were equal participants in the design, construction, and pre-operating phase of the Observatory and made financial contributions to those endeavors that differed in both amount and type, with Caltech contributing the majority of the funds, largely through grants from the W. M. Keck Foundation (the Foundation). Caltech owns the telescopes, domes, and physical plant. When Keck I and Keck II telescopes began operations, UC and Caltech continued their equal participation; however, the funding by each institution changed, with UC contributing substantial cash for operating expenses from fiscal year 1992 for Keck I and fiscal year 1996 for Keck II. UC contributed set amounts for each telescope, adjusted annually by a specified factor, through March 31, 2018.

On April 1, 2018, Caltech and UC entered into the Second Amended and Restated Agreement (the Agreement) to continue their financial contributions to the operation of the Observatory. Under the Agreement, UC and Caltech are to provide equal financial support beginning on April 1, 2018; the Agreement will continue until terminated under the terms of the Agreement.

Under the Agreement, during each of the fiscal years 2022 and 2021, CARA recognized operating revenues for observatory operations of \$8,331,500 and \$7,905,300, respectively, from UC and Caltech (see Note 6).

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Notes to Financial Statements

September 30, 2022 and 2021

**(2) Summary of Significant Accounting Policies**

***Basis of Presentation***

The accompanying financial statements have been prepared using the accrual basis of accounting and accounting principles generally accepted in the United States of America (GAAP).

***Net Assets***

The financial statements report net assets and changes in net assets based upon the existence or absence of restrictions on use that are placed by its donors or grantors, as follows:

*Net Assets Without Donor Restrictions* – net assets that are not subject to donor-imposed stipulations and that may be expended for any purpose in performing the objectives of CARA. CARA’s governing board has designated, from net assets without donor restrictions, net assets for a Director’s Fund as further described in Note 12.

*Net Assets With Donor Restrictions* – net assets subject to donor-imposed stipulations that may or will be met either by actions and/or the passage of time. Donor-imposed restrictions are released when a restriction expires, that is, when the stipulated purpose which the resource was restricted has been fulfilled, when the stipulated time has elapsed, or both.

***Cash, Cash Equivalents, and Restricted Cash***

CARA considers all highly liquid instruments with original maturities of three months or less to be cash equivalents. As of September 30, 2022 and 2021, cash equivalents of \$2,722,892 and \$4,652,142, respectively, were invested in the University of California Short-term Investment Pool (UC STIP), and reported at fair value in the accompanying financial statements. See Note 4 for further discussion and disclosures related to fair value measurements. Cash equivalents held to satisfy the purpose of a note payable (see Note 8) are reported separately as restricted cash and cash equivalents in the accompanying statements of financial position.

The following table reconciles cash and cash equivalents reported within the statements of financial position to the sum of the corresponding amounts within the statements of cash flows as of September 30, 2022 and 2021:

	<b>2022</b>	<b>2021</b>
Cash and cash equivalents	\$ 684,405	\$ 3,283,032
Cash equivalents restricted for instrumentation development	2,201,988	2,441,760
Total cash and cash equivalents	<b>\$ 2,886,393</b>	<b>\$ 5,724,792</b>

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***Long-Term Investments***

CARA's investments in the University of California Total Return Investment Pool (UC TRIP) and General Endowment Pool (UC GEP) are stated at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). See Note 4 for further discussion and disclosures related to fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Realized and unrealized gains (losses) on investments are based on the difference between the fair value of assets at the beginning of the fiscal year, or at the time of purchase for assets purchased during the fiscal year, and the related fair value on the day investments are sold with respect to realized gains (losses), or on the last day of the fiscal year for unrealized gains (losses).

***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:

<u>Class of assets</u>	<u>Estimated useful lives</u>
Observatory instrumentation	5-20 years
Observatory facility	3-15 years
Vehicles and equipment	3-20 years

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 for construction in progress when costs are incurred.

***Revenue and Revenue Recognition***

CARA recognizes revenue from UC and Caltech under the Agreement in the fiscal year in which the amounts are intended under the Agreement.

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Recognition of revenue from contracts with customers occurs as CARA satisfies one or more performance obligations, which are promises in a contract to transfer a distinct good or service to a customer. CARA's performance obligations under its cooperative agreement with the National Aeronautics and Space Administration (NASA) are, in general, the use of the Observatory by NASA, as well as other support and development activities. CARA satisfies its performance obligations under the cooperative agreement on an over-time basis, as it incurs allowable direct costs and therefore recognizes revenue from such agreements as exchange transactions. All services provided under the cooperative agreement, which are measured by allowable costs incurred, immediately accrue to the benefit of NASA. The current NASA cooperative agreement began March 1, 2018 and has a 5-year term. Based upon the cooperative agreement's terms, the maximum remaining obligation to potentially be authorized under the cooperative agreement was approximately \$2,018,000 at September 30, 2022.

Other operating revenues recognized by CARA include direct revenues from various subcontracts in which CARA provides personnel, equipment, and facilities in support of instrumentation development by UC and Caltech. Title to such instrumentation is held by the prime contractor. Accordingly, CARA recognizes revenue from such contracts as exchange transactions. Performance obligations under such contracts are distinct tasks, and revenue is recognized as costs are billed for tasks performed.

Contributions are recognized when cash, securities, or other assets, an unconditional promise to give, or a notice of beneficial interest is received. Conditional promises to give (those with a measurable performance or other barrier, and a right of return) are not recognized until the conditions on which they depend have been substantially met. Contributed goods and services received from subrecipients are recorded at fair value at the date of donation.

A portion of CARA's revenue is derived from cost-reimbursable federal grants, which are conditioned upon certain performance requirements and/or the incurrence of allowable qualifying expenses. Amounts received are recognized as revenue when such expenditures have been incurred in compliance with specific grant provisions. CARA has elected to report such contributions whose restrictions are met in the same period as the revenue is recognized as contributions without restrictions. Amounts received prior to incurring qualifying expenditures are reported as refundable advances in the statements of financial position. No amounts have been received in advance under CARA's federal grants as of September 30, 2022 and 2021.

When a donor restriction expires, that is, when a stipulated time restriction ends or purpose restriction is accomplished, net assets with donor restrictions are reclassified to net assets without donor restrictions 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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***Functional Allocation of Expenses***

The costs of program and supporting services activities are summarized on a functional basis in the statements of activities. The following table presents the natural classification detail of expenses by function for the fiscal years ended September 30, 2022 and 2021:

	September 30, 2022					
	Program Services			Supporting Services		
	Operations	Related Party Asset Projects	Research	Administration and General	Fund-raising	Total
Salaries and benefits	\$ 13,203,459	\$ 565,121	\$ 303,993	\$ 2,142,119	\$ 572,431	\$ 16,787,123
Depreciation	5,257,530	-	664	10,739	2,732	5,271,665
Services, supplies, and other	1,699,810	462,890	76,518	1,190,376	112,425	3,542,019
Occupancy	1,538,214	-	5,433	83,172	10,231	1,637,050
Equipment	599,528	217,350	4,325	43,030	16,287	880,520
Grants to others	872,861	-	-	-	-	872,861
Interest	50,000	-	-	-	-	50,000
Total expenses	\$ 23,221,402	\$ 1,245,361	\$ 390,933	\$ 3,469,436	\$ 714,106	\$ 29,041,238

	September 30, 2021					
	Program Services			Supporting Services		
	Operations	Related Party Asset Projects	Research	Administration and General	Fund-raising	Total
Salaries and benefits	\$ 12,057,510	\$ 517,667	\$ 127,891	\$ 2,252,179	\$ 658,887	\$ 15,614,134
Depreciation	6,701,716	-	1,000	16,184	4,117	6,723,017
Services, supplies, and other	1,689,499	96,597	7,487	671,524	66,325	2,531,432
Equipment	1,281,843	9,484	2,221	76,598	11,442	1,381,588
Occupancy	550,619	138,896	1,542	42,958	14,231	748,246
Grants to others	461,504	-	-	-	-	461,504
Interest	45,616	-	-	-	-	45,616
Total expenses	\$ 22,788,307	\$ 762,644	\$ 140,141	\$ 3,059,443	\$ 755,002	\$ 27,505,537

The financial statements report certain categories of expenses which are attributable to more than one program or supporting function. Therefore, such expenses require allocation on a reasonable basis that is consistently applied. The allocated expenses include salaries and benefits, as well as certain information technology and occupancy expenses, which are allocated on the basis of time and effort.

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***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 grants and contracts receivables and long-term 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 NASA, CARA's cognizant agency. Indirect costs recovered on all other grants and contracts are based on rates negotiated with the respective parties.

***Recently Issued Accounting Pronouncement***

In February 2016, the Financial Accounting Standards Board (the FASB) issued Accounting Standards Update (ASU) 2016-02, *Leases (Topic 842)*, which requires lessees to recognize leases on the statement of financial position and disclose key information about leasing arrangements. The new standard establishes a right-of-use (ROU) model that requires a lessee to recognize a ROU asset and lease liability on the statement of financial position for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the statement of activities. ASU 2016-02 is effective for CARA's annual reporting period beginning October 1, 2022, with early adoption permitted. CARA is currently evaluating the effect that ASU 2016-02 will have on its financial statements.

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***Economic Uncertainties and Subsequent Events***

The COVID-19 pandemic, together with recent geopolitical events and rising inflation, continues to cause widespread concern and economic hardship for consumers, businesses, and communities across the globe. The extent of the impact of these matters on CARA’s operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, and its impacts on CARA’s funders, employees, and vendors, all of which at present cannot be determined. Accordingly, the extent to which these matters may impact CARA’s financial position and changes in net assets and cash flows is uncertain, and the accompanying financial statements include no adjustments relating to the effects of these matters.

CARA has evaluated subsequent events from the statement of financial position date through March 15, 2023, the date at which the financial statements were available to be issued. There are no other matters to disclose.

**(3) Liquidity and Availability**

CARA manages its financial assets and the availability of reserves required to meet its operating needs and other contractual commitments, while also striving to maximize the investment of its available funds. Financial assets classified below as available for general expenditures within one year are those that are considered both convertible to cash and free of donor-imposed and/or contractual restrictions that would limit or prevent the use of such cash to fund general expenditures.

At September 30, 2022 and 2021, CARA’s financial assets available for general expenditures within one year were as follows:

	<u>2022</u>	<u>2021</u>
Financial assets:		
Cash and cash equivalents	\$ 684,405	\$ 3,283,032
Restricted cash and cash equivalents	2,201,988	2,441,760
Grants and contracts receivable	793,545	326,853
Contributions receivable	250,000	-
Long-term investments	<u>24,310,753</u>	<u>28,340,872</u>
Total financial assets	28,240,691	34,392,517
Less amounts not available to be used within one year – noncurrent contributions receivable and long-term investments in excess of fund redemption limits	<u>(14,767,178)</u>	<u>(17,157,645)</u>
Financial assets available to meet general expenditures within one year	<u>\$ 13,473,513</u>	<u>\$ 17,234,872</u>

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As part of its liquidity management plan, CARA monitors and then invests cash in excess of daily requirements in the UC STIP to maintain financial flexibility. To generate investment returns, cash in excess of annual requirements is invested in the UC TRIP and UC GEP funds. However, financial assets contain certain investments with limitations on liquidity that would reduce the total investments that could be made available but could not be accessed if warranted. See Note 4 for further disclosure about CARA's investments.

CARA has a board-designated Director's Fund (see Note 12) separate from its undesignated net assets without donor restrictions in the amount of \$1,465,970 and \$1,328,786 at September 30, 2022 and 2021, respectively. Although CARA does not intend to spend from the Director's Fund other than amounts appropriated for general expenditures as part of its annual budget approval process, amounts from the Director's Fund could be made available if necessary.

**(4) Fair Value Measurements**

The fair value of CARA's investments have been estimated using the net asset value per share as a practical expedient, and in accordance with the FASB's Accounting Standards Codification Subtopic 820-10, *Fair Value Measurement and Disclosures*, are not required to be presented in a fair value hierarchy. There have been no changes in the methodologies used at September 30, 2022 and 2021.

The following table summarizes CARA's investments for which fair value is measured using the net asset value per share practical expedient as of September 30, 2022 and 2021:

	<u>Fair Value as of September:</u>		<u>Redemption Frequency</u>	<u>Redemption Notice Period</u>
	<u>2022</u>	<u>2021</u>		
Cash and cash equivalents:				
University of California				
Short-Term Investment Pool	\$ 2,722,892	\$ 4,652,142	Daily	Trade date
Long-term investments:				
University of California				
Total Return Investment Pool	8,766,355	10,280,193	Monthly	30 days
General Endowment Pool	15,544,398	18,060,679	Monthly	30 days
	<u>\$ 27,033,645</u>	<u>\$ 32,993,014</u>		

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The following is a description of CARA’s investments:

**UC STIP** – is a highly liquid investment fund held by UC. Shares of the UC STIP are purchased and redeemed at a constant value of \$1 per share.

**UC TRIP** – is a unitized fund whereby CARA participates in investment returns and income on an equivalent pro-rated basis with all participants in the pool. The UC TRIP consists of the following investments at September 30, 2022: 50.7% fixed income securities, 49.2% public equity, and 0.1% cash. Under CARA’s investment agreements with UC, investments in the UC TRIP are redeemable at net asset value. As of September 30, 2021, the UC TRIP amounted to approximately \$11.9 billion, with no unfunded commitments.

**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. The UC GEP consists of the following investments at September 30, 2022: 37.2% public equity funds, 8.4% absolute return funds, 8.0% fixed income, 24.7% private equity funds, 7.2% U.S. real estate funds, 3.6% real asset funds, 4.7% private credit, and 6.2% cash. Under CARA’s investment agreements with UC, investments in the UC GEP are redeemable at net asset value. The funds held in the UC GEP are not subject to an initial lockup period, however, fund redemptions are limited to 5% per year unless additional redemptions are approved by UC. As of September 30, 2022, the UC GEP amounted to approximately \$17.9 billion, with unfunded commitments amounting to approximately \$2.6 billion.

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 fund and, consequently, the fair value of CARA’s interests in the UC TRIP and UC GEP.

Net investment return (loss) for the fiscal years ended September 30, 2022 and 2021 are net of investment expenses and are comprised of the following:

	<u>2022</u>	<u>2021</u>
Net realized and unrealized gains (losses) on investments	\$ (3,527,779)	\$ 4,808,507
Dividend and interest income	222,924	290,347
Net investment return (loss)	<u>\$ (3,304,855)</u>	<u>\$ 5,098,854</u>

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**(5) Contributions Receivable**

In May 2022, CARA received a \$1,000,000 contribution from a foundation to be used for instrumentation and an internship program of which \$500,000 was received in the fiscal year ended September 30, 2022. The remaining balance of \$500,000 will be received in \$250,000 increments in May 2023, and May 2024.

**(6) Operating Revenues**

A summary of operating revenues for the fiscal years ended September 30, 2022 and 2021 follows:

	<u>2022</u>	<u>2021</u>
Observatory operations (see Note 1):		
University of California	\$ 8,331,500	\$ 7,905,300
California Institute of Technology	8,331,500	7,905,300
National Aeronautics and Space Administration	5,232,590	4,595,586
Other	<u>379,486</u>	<u>486,740</u>
Total operating revenues	<u>\$ 22,275,076</u>	<u>\$ 20,892,926</u>

**(7) Property and Equipment**

A summary of property and equipment at September 30, 2022 and 2021 follows:

	<u>2022</u>	<u>2021</u>
Observatory instrumentation and adaptive optics:		
Property and equipment	\$ 113,638,108	\$ 113,842,691
Construction in progress	<u>30,681,685</u>	<u>24,839,153</u>
	144,319,793	138,681,844
Observatory infrastructure:		
Property and equipment	5,265,156	5,265,156
Vehicles and equipment	<u>6,173,184</u>	<u>5,592,259</u>
	155,758,133	149,539,259
Less accumulated depreciation	<u>(108,691,373)</u>	<u>(103,807,878)</u>
Total property and equipment, net	<u>\$ 47,066,760</u>	<u>\$ 45,731,381</u>

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Depreciation expense amounted to \$5,271,665 and \$6,723,017 for the fiscal years ended September 30, 2022 and 2021, respectively.

**(8) Note Payable**

In March 2019, CARA entered into an agreement with the Heising-Simons Foundation for a program related investment (PRI) loan in support of its strategic mission for the continued development and building of the Keck Planet Finder instrument. The loan was for \$2,500,000, unsecured, with 2% accumulated interest and principal due June 1, 2023, without prepayment penalties. The note was repaid early in full in March 2021, including accrued interest of \$99,589.

In May 2021, CARA entered into an agreement with the Heising-Simons Foundation for a program related investment (PRI) loan in support of its strategic mission for the development and building of the Santa Cruz Array of Lenslets for Exoplanet Spectroscopy (SCALES) instrument. The loan is for \$2,500,000, unsecured, with 2% accumulated interest and principal due June 1, 2025, without prepayment penalties. Unused loan proceeds amounting to \$2,201,998 and \$2,441,760 as of September 30, 2022 and 2021, respectively are reported as restricted cash and cash equivalents in the accompanying statements of financial position.

**(9) 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, 2022 and 2021. CARA is no longer subject to U.S. federal income tax examinations by tax authorities for years before 2019.

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**(10) Related-Party Transactions**

Caltech and UC provide various instrument and adaptive optics development services to CARA. During the fiscal years ended September 30, 2022 and 2021, total expenditures for these services charged to CARA were \$1,112,385 and \$1,432,627, respectively, by Caltech, and \$2,380,044 and \$3,691,051, respectively, by UC.

CARA provided services for projects on Caltech’s observatory assets located in Hawaii, including the upgrade of NIRES, ongoing upgrades of the telescope mirror segments, telescope control system upgrades, dome shutter improvements, instrument development, and various facilities improvements. During the fiscal years ended September 30, 2022 and 2021, total expenditures for these projects were \$1,005,589 and \$704,404, respectively.

CARA provided services for projects as a subawardee to UC for instrument development. During the fiscal years ended September 30, 2022 and 2021, total expenditures for these projects were \$239,772 and \$58,240, respectively.

**(11) Commitments**

CARA entered into various contractual agreements for operations, instrument and adaptive optics development, and facilities improvements. A summary of commitments at September 30, 2022 follows:

Instrumentation	\$ 3,371,510
Adaptive optics systems	1,904,150
Operations	1,628,137
Total commitments	\$ 6,903,797

**(12) Board-Designated Net Assets Without Donor Restrictions**

CARA established a board-designated Director’s Fund separate from its undesignated net assets without donor restrictions to be spent at the Observatory Director’s discretion, except that there is a ceiling of \$100,000 for each activity unless Board approval is obtained. The Director will report annually to the Board on the use of this fund. In 2022 and 2021, CARA received contributions of \$382,807 and \$494,484, respectively, which were board-designated for the Director’s Fund. At September 30, 2022 and 2021, the board-designated net assets amounted to \$1,465,970 and \$1,328,786, respectively.

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**(13) Net Assets With Donor Restrictions**

Net assets with donor restrictions at September 30, 2022 and 2021 are restricted for the following purposes:

	<u>2022</u>	<u>2021</u>
Education and outreach	\$ 1,882,343	\$ 606,429
Instrument and AO development	1,307,079	4,363,714
Related party asset projects	1,287,297	5,200
Total net assets with donor restrictions	<u>\$ 4,476,719</u>	<u>\$ 4,975,343</u>

Net assets were released from donor restrictions by incurring expenses satisfying the restricted purpose or other events specified by the donor as follows for the fiscal years ended September 30, 2022 and 2021:

	<u>2022</u>	<u>2021</u>
Instrument and AO development	\$ 3,457,635	\$ 5,255,265
Education and outreach	290,936	75,101
Related party asset projects	166,897	-
Total net assets released from restrictions	<u>\$ 3,915,468</u>	<u>\$ 5,330,366</u>

**(14) Deferred Compensation**

***403(b) Plan***

CARA sponsors a defined contribution retirement plan (the Plan), which was established under Section 403(b) of the U.S. Internal Revenue Code. The Plan provides for CARA to make contributions at various percentages of base salary depending on the participant's age and grade. Eligible employees, as defined in the Plan, may make contributions not to exceed amounts allowable under the U.S. Internal Revenue Code. Contributions to the Plan amounted to \$1,033,966 and \$1,023,849 for the fiscal years ended September 30, 2022 and 2021, respectively.

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***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 \$589,563 and \$659,358 as of September 30, 2022 and September 30, 2021, respectively, are included within other assets and accounts payable and accrued expenses in the accompanying statements of financial position.