

Lowell Observatory

Years Ended December 31, 2022
and 2021

Lowell Observatory

Years Ended December 31, 2022 and 2021

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Independent Auditors' Report

Board of Directors and Management
Lowell Observatory
Flagstaff, Arizona

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying combined financial statements of Lowell Observatory (the Organization), which comprise the combined statements of financial position as of December 31, 2022 and 2021, and the related combined statements of activities, functional expenses and cash flows for the years then ended, and the related notes to the combined financial statements.

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the combined financial position of Lowell Observatory as of December 31, 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. 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 Lowell Observatory 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 Combined Financial Statements

Management is responsible for the preparation and fair presentation of the combined 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 combined financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' Responsibilities for the Audit of the Combined Financial Statements

Our objectives are to obtain reasonable assurance about whether the combined 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 generally accepted auditing standards 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 judgment made by a reasonable user based on the combined financial statements.

In performing an audit in accordance with generally accepted auditing standards 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 combined 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 combined 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 Lowell Observatory'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 combined financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Lowell Observatory'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.

Report on Combining Information

Our audit was conducted for the purpose of forming an opinion on the combined financial statements as a whole. The combining information on pages 30 through 31 is presented for purposes of additional analysis of the combined financial statements rather than to present the financial position and results of operations, of the individual entities, and it is not a required part of the combined 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 combined financial statements. The combining information has been subjected to the auditing procedures applied in the audit of the combined financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the combined financial statements or to the combined financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining information is fairly stated in all material respects in relation to the combined financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued a report dated May 25, 2023, on our consideration of the Organization'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 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 the Organization'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 the Organization's internal control over financial reporting and compliance.

BeachFleischman PLLC

Phoenix, Arizona
May 25, 2023

Lowell Observatory

Combined Statements of Financial Position

December 31, 2022 and 2021

Assets			
	2022	Restated 2021	
Current assets:			
Cash and cash equivalents	\$ 755,205	\$ 839,737	
Restricted cash and cash equivalents	98,038	3,038,607	
Restricted certificates of deposit	-	6,760,301	
Investments	3,428,553	2,321,618	
Grants receivable	902,786	375,713	
Promises to give, current portion	2,148,215	2,517,396	
Estates and bequests receivable	1,700,000	3,900,000	
Refundable payroll taxes	1,966,888	2,155,807	
Other current assets	912,928	1,171,332	
Total current assets	<u>11,912,613</u>	<u>23,080,511</u>	
Property and equipment, net	56,886,106	49,803,548	
Promises to give, net of current portion	9,006,075	10,776,404	
Collection item	518,303	400,000	
Assets limited to use:			
Investments with donor restrictions	28,914,699	28,935,069	
Total noncurrent assets	<u>95,325,183</u>	<u>89,915,021</u>	
Total assets	<u>\$ 107,237,796</u>	<u>\$ 112,995,532</u>	
Liabilities and Net Assets			
Current liabilities:			
Note payable, bank	\$ 1,506,846	\$ -	
Current portion of long term debt	49,687	-	
Accounts payable	696,764	687,451	
Accrued expenses and other current liabilities	119,007	93,789	
Current portion of deferred access fee revenue	1,447,576	1,433,332	
Total current liabilities	3,819,880	2,214,572	
Note payable, bank	-	5,525,971	
Long-term debt	1,950,313	500,000	
Deferred research grant revenue	29,996	48,420	
Deferred access fee revenue, net of current portion	5,556,134	5,167,424	
Total liabilities	<u>11,356,323</u>	<u>13,456,387</u>	
Contingencies			
Net assets:			
Without donor restrictions:			
Net invested in property and equipment	55,379,260	44,277,577	
Undesignated	(22,291,233)	(12,162,698)	
Board designated	1,925,544	2,320,534	
With donor restrictions	35,013,571	34,435,413	
Total net assets	<u>60,867,902</u>	<u>65,103,732</u>	
Total net assets	<u>95,881,473</u>	<u>99,539,145</u>	
Total liabilities and net assets	<u>\$ 107,237,796</u>	<u>\$ 112,995,532</u>	

See notes to combined financial statements.

Lowell Observatory

Combined Statement of Activities

Year Ended December 31, 2022

	Without donor restrictions	With donor restrictions	Total
Revenues, support and gains:			
Contracts with governmental and other agencies	\$ 4,827,838	\$ -	\$ 4,827,838
Telescope access fees	1,650,395	-	1,650,395
Contributions	6,475,822	4,615,787	11,091,609
Public program revenue	2,108,173	-	2,108,173
Investment loss, net	(242,777)	(4,506,665)	(4,749,442)
Other income	582,734	-	582,734
Gain on sale of assets	2,000	-	2,000
Net assets released from restrictions	<u>4,087,959</u>	<u>(4,087,959)</u>	<u>-</u>
	<u>19,492,144</u>	<u>(3,978,837)</u>	<u>15,513,307</u>
Expenses:			
Program services:			
Research	6,506,568	-	6,506,568
Technology	5,012,872	-	5,012,872
Public programs	<u>4,009,462</u>	<u>-</u>	<u>4,009,462</u>
	<u>15,528,902</u>	<u>-</u>	<u>15,528,902</u>
Support services:			
Management and general	2,053,991	-	2,053,991
Fundraising	<u>1,588,086</u>	<u>-</u>	<u>1,588,086</u>
	<u>3,642,077</u>	<u>-</u>	<u>3,642,077</u>
	<u>19,170,979</u>	<u>-</u>	<u>19,170,979</u>
Change in net assets before transfers	321,165	(3,978,837)	(3,657,672)
Transfers of net assets	<u>256,993</u>	<u>(256,993)</u>	<u>-</u>
Change in net assets	578,158	(4,235,830)	(3,657,672)
Net assets, beginning, as restated	<u>34,435,413</u>	<u>65,103,732</u>	<u>99,539,145</u>
Net assets, ending	<u>\$ 35,013,571</u>	<u>\$ 60,867,902</u>	<u>\$ 95,881,473</u>

See notes to combined financial statements.

Lowell Observatory

Combined Statement of Activities

Year Ended December 31, 2021

		Restated	
	Without donor restrictions	With donor restrictions	Total
Revenues, support and gains:			
Contracts with governmental and other agencies	\$ 4,231,559	\$ -	\$ 4,231,559
Telescope access fees	2,071,708	-	2,071,708
Contributions	8,179,198	9,088,808	17,268,006
Public program revenue	1,372,759	-	1,372,759
Investment income, net	305,849	3,540,812	3,846,661
Other income	320,597	-	320,597
Employee retention credit	2,155,807	-	2,155,807
Net assets released from restrictions	<u>3,801,238</u>	<u>(3,801,238)</u>	<u>-</u>
	<u>22,438,715</u>	<u>8,828,382</u>	<u>31,267,097</u>
Expenses:			
Program services:			
Research	5,194,696	-	5,194,696
Technology	4,531,685	-	4,531,685
Public programs	<u>3,046,364</u>	<u>-</u>	<u>3,046,364</u>
	<u>12,772,745</u>	<u>-</u>	<u>12,772,745</u>
Support services:			
Management and general	1,427,953	-	1,427,953
Fundraising	<u>1,595,554</u>	<u>-</u>	<u>1,595,554</u>
	<u>3,023,507</u>	<u>-</u>	<u>3,023,507</u>
	<u>15,796,252</u>	<u>-</u>	<u>15,796,252</u>
Change in net assets before transfers	6,642,463	8,828,382	15,470,845
Transfers of net assets	<u>(184,716)</u>	<u>184,716</u>	<u>-</u>
Change in net assets	6,457,747	9,013,098	15,470,845
Net assets, beginning	<u>27,977,666</u>	<u>56,090,634</u>	<u>84,068,300</u>
Net assets, ending, as restated	<u>\$ 34,435,413</u>	<u>\$ 65,103,732</u>	<u>\$ 99,539,145</u>

Lowell Observatory

Combined Statement of Functional Expenses

Year Ended December 31, 2022

	Program services				Supporting services			
	Research	Technology	Public programs	Total program services	Management and general	Fundraising	Total supporting services	Total expenses
Salaries	\$ 3,187,710	\$ 1,741,578	\$ 2,426,506	\$ 7,355,794	\$ 1,071,251	\$ 990,764	\$ 2,062,015	\$ 9,417,809
Payroll taxes and benefits	643,134	460,381	547,528	1,651,043	202,880	205,214	408,094	2,059,137
	3,830,844	2,201,959	2,974,034	9,006,837	1,274,131	1,195,978	2,470,109	11,476,946
Depreciation	403,799	1,349,138	295,487	2,048,424	43,490	16,194	59,684	2,108,108
Equipment	63,674	49,359	20,505	133,538	15,618	4,456	20,074	153,612
Insurance	31,409	859,911	23,210	914,530	13,712	4,076	17,788	932,318
Interest	-	78,591	-	78,591	60,868	-	60,868	139,459
Other	95,377	29,632	250,385	375,394	23,701	143,116	166,817	542,211
Professional services	1,338,646	30,782	53,167	1,422,595	314,154	33,857	348,011	1,770,606
Repairs and maintenance	291,429	209,001	164,129	664,559	56,194	72,149	128,343	792,902
Supplies and postage	176,032	23,443	96,481	295,956	26,340	32,415	58,755	354,711
Training and development	10,414	32,189	15,036	57,639	162,937	12,555	175,492	233,131
Travel and meals	159,411	14,946	49,995	224,352	35,759	63,678	99,437	323,789
Utilities	105,533	133,921	67,033	306,487	27,087	9,612	36,699	343,186
	<u>\$ 6,506,568</u>	<u>\$ 5,012,872</u>	<u>\$ 4,009,462</u>	<u>\$ 15,528,902</u>	<u>\$ 2,053,991</u>	<u>\$ 1,588,086</u>	<u>\$ 3,642,077</u>	<u>\$ 19,170,979</u>

See notes to combined financial statements.

Lowell Observatory

Combined Statement of Functional Expenses

Year Ended December 31, 2021

	Program services				Supporting services			
	Research	Technology	Public programs	Total program services	Management and general	Fundraising	Total supporting services	Total expenses
Salaries	\$ 2,661,104	\$ 1,575,347	\$ 1,729,874	\$ 5,966,325	\$ 745,553	\$ 843,452	\$ 1,589,005	\$ 7,555,330
Payroll taxes and benefits	504,675	337,961	393,091	1,235,727	175,251	169,724	344,975	1,580,702
	3,165,779	1,913,308	2,122,965	7,202,052	920,804	1,013,176	1,933,980	9,136,032
Bad debt	-	-	-	-	-	241,143	241,143	241,143
Depreciation	403,787	1,356,626	324,993	2,085,406	44,016	16,591	60,607	2,146,013
Equipment	53,320	48,738	3,911	105,969	15,652	1,283	16,935	122,904
Insurance	25,278	751,185	18,752	795,215	12,453	2,438	14,891	810,106
Interest	-	67,352	-	67,352	20,660	-	20,660	88,012
Other	54,365	19,749	67,431	141,545	18,373	136,093	154,466	296,011
Professional services	1,063,938	27,827	225,236	1,317,001	249,342	48,473	297,815	1,614,816
Repairs and maintenance	164,340	174,293	134,389	473,022	38,716	67,804	106,520	579,542
Supplies and postage	125,601	24,387	71,431	221,419	18,947	19,463	38,410	259,829
Training and development	12,613	13,636	13,294	39,543	50,952	2,892	53,844	93,387
Travel and meals	23,813	3,757	2,795	30,365	13,596	37,214	50,810	81,175
Utilities	101,862	130,827	61,167	293,856	24,442	8,984	33,426	327,282
	<u>\$ 5,194,696</u>	<u>\$ 4,531,685</u>	<u>\$ 3,046,364</u>	<u>\$ 12,772,745</u>	<u>\$ 1,427,953</u>	<u>\$ 1,595,554</u>	<u>\$ 3,023,507</u>	<u>\$ 15,796,252</u>

See notes to combined financial statements.

Lowell Observatory

Combined Statements of Cash Flows

Years Ended December 31, 2022 and 2021

	2022	Restated 2021
Cash flows from operating activities:		
Change in net assets	\$ (3,657,672)	\$ 15,470,845
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation	2,108,108	2,146,013
Net realized and unrealized gains (losses) on investments	5,245,368	(3,527,569)
Gain on sale of assets	(2,000)	-
Contributions for long-term purposes	(1,974,684)	(8,265,575)
Bad debts	-	241,143
Changes in operating assets and liabilities:		
Grants receivable	(527,073)	196,390
Promises to give	2,139,510	1,037,892
Estates and bequests receivable	2,200,000	(3,900,000)
Refundable payroll taxes	188,919	(2,155,807)
Other current assets	258,404	(574,985)
Accounts payable	9,313	445,550
Accrued expenses and other current liabilities	25,218	(16,666)
Deferred research grant revenue	(18,424)	2,512
Deferred access fee revenue	402,954	(808,865)
Net adjustments	10,055,613	(15,179,967)
Net cash provided by operating activities	6,397,941	290,878
Cash flows from investing activities:		
Purchases of property and equipment	(9,190,666)	(4,336,678)
Proceeds from sale of assets	2,000	-
Purchases of collection item	(118,303)	-
Purchases of investments	(16,547,426)	(11,128,066)
Proceeds from sale/maturity of investments	10,215,493	7,791,469
Purchases of certificates of deposit	-	(1,951,743)
Proceeds from sale of certificates of deposit	6,760,301	-
Net cash used in investing activities	(8,878,601)	(9,625,018)
Cash flows from financing activities:		
Payments on note payable, bank	(4,019,125)	-
Proceeds from note payable, bank	-	3,325,000
Proceed from long-term debt	1,500,000	350,000
Contributions restricted for long-term purposes	1,974,684	8,265,575
Net cash provided by (used in) financing activities	(544,441)	11,940,575
Net increase (decrease) in cash, cash equivalents, and restricted cash and cash equivalents	(3,025,101)	2,606,435
Cash, cash equivalents, and restricted cash and cash equivalents, beginning	3,878,344	1,271,909
Cash, cash equivalents, and restricted cash and cash equivalents, ending	\$ 853,243	\$ 3,878,344

See notes to combined financial statements.

Lowell Observatory

Notes to Combined Financial Statements

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies:

Organization:

Lowell Observatory (the Observatory), located in Flagstaff, Arizona, is a nonprofit organization whose purpose is conducting astronomical research and sponsoring educational programs related to astronomy. The Observatory's mission is to pursue the study of astronomy, especially the study of our solar system and its evolution; to conduct pure research in astronomical phenomena; and to maintain quality public education and outreach programs to bring the results of astronomical research to the general public. The Observatory is overseen by a Sole Trustee, who is the responsible party for all operations of the Observatory. The Observatory's programs are supported primarily by government grants, public contributions, and investment returns. Therefore, the Organization's viability is dependent upon the strength and support provided to the nonprofit industry, and the Organization's ability to collect on its contracts and promises to give.

The Trust U/W of Percival Lowell (the Trust) is a perpetual trust established for the benefit of the Observatory and is overseen by the Sole Trustee of the Observatory. Percival Lowell's will, which established the Trust, was executed on February 21, 1913, with its final codicil dated December 15, 1915. Percival Lowell died November 12, 1916. The Trust has been amended since that date.

The Lowell Observatory Foundation (the Foundation) was established on September 9, 2014 as a non-profit organization governed by an independent board of trustees and dedicated solely to supporting the Observatory's mission.

Principles of consolidation and combination:

The Trust is consolidated into the Observatory. The combined financial statements include the accounts of the Observatory and the Foundation (collectively the Organization). Due from related party and due to related party are obligations between the Observatory and the Foundation that will be satisfied in future years. All significant interorganizational accounts and transactions have been eliminated.

Estimates:

The preparation of combined financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) 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 combined financial statements and the reported amounts of revenues, support, gains and expenses during the reporting period. On an ongoing basis, management evaluates its estimates and assumptions, including those related to inputs used to recognize revenue over time. Actual results could differ materially from such estimates and assumptions.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Net assets:

Net assets, support, gains, and losses are classified based on the existence or absence of donor or grantor imposed restrictions. Accordingly, net assets and changes therein are classified and reported as follows:

- *Net assets without donor restrictions* - Net assets available for use in general operations and not subject to donor restrictions.
- *Net assets with donor restrictions* - Net assets subject to donor-imposed restrictions. Some donor-imposed restrictions are temporary in nature, such as those that will be met by the passage of time or other events specified by the donor. Other donor-imposed restrictions are perpetual in nature, where the donor stipulates that resources be maintained in perpetuity. Donor-imposed restrictions are released when a restriction expires, that is, when the stipulated time has elapsed, when the stipulated purpose for which the resource was restricted has been fulfilled, or both.

Revenue recognition:

Contracts with governmental and other agencies:

The Observatory has various contracts with governmental and other agencies. For contracts that have an exchange element, revenue is recognized over time as goods or services are transferred and expenditures for services under the provisions of the contract are incurred. Advances received from governmental funding sources in excess of costs incurred under the related exchange contracts are deferred and recognized as revenue when the related expenses are incurred using a cost-based input method. Deferred revenue from research contracts with an exchange element is a contract liability and is classified as deferred research grant revenue on the combined statements of financial position. At January 1, 2021, the balance of deferred research grant revenue was \$45,908. Revenue related to non-exchange contracts with governmental and other agencies is recognized as a contribution.

Telescope access fees:

Telescope access fees are charged to partnering universities for time on the Organization's telescopes in exchange transactions. Advances received from the partnering universities are recorded as deferred revenue. Revenue is recognized at a point in time in the period earned based on actual nights used. Deferred revenue from telescope access fees is a contract liability and is classified as deferred access fee revenue on the combined statements of financial position. At January 1, 2021, the balance of deferred access fee revenue was \$7,409,621.

Contributions:

Contributions are considered non-exchange transactions and are recognized in the appropriate category of net assets in the period received. Contributions of assets other than cash are recorded at their estimated fair value at the date of gift. Conditional promises to give are not recognized until the conditions on which they depend have been substantially met.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Revenue recognition (continued):

Public program revenue:

Public program revenue consists of exchange transactions recognized at a point in time when the related services are provided.

Donated goods and services:

Support arising from donated goods and services is recognized in the combined financial statements at its fair value. Donated services are recognized when the services received meet one of the following criteria:

- (a) create or enhance nonfinancial assets
- (b) require specialized skills, are provided by individuals possessing those skills, and would typically need to be purchased if not provided by donation.

Although the Organization utilizes the services of outside volunteers to perform a variety of tasks that assist the Organization, the fair value of all these services may not be reflected in the combined financial statements because the above criteria are not met.

Transaction price:

For exchange transactions, the transaction price is the amount of consideration the Organization expects to be entitled to in exchange for transferring goods and services to the customer. When a contract has a single performance obligation, the entire transaction price is attributed to that performance obligation. When a contract has more than one performance obligation, the transaction price is allocated to each performance obligation based on estimated relative standalone selling prices of the goods or services at the inception of the contract, which typically is determined using cost plus an appropriate margin.

Performance obligations:

Contracts that constitute exchange transactions are considered to contain a single performance obligation if the promise to transfer individual goods or services is not separately identifiable from other promises in the contracts primarily because the Organization provides a significant service of integrating a complex set of tasks and components into a single project or capability. A series of goods or services are a single performance obligation if the goods or services are substantially the same and each distinct good or service in the series will be satisfied over time and the same method would be used to measure progress towards satisfaction. Contracts that cover multiple performance phases of the product lifecycle (development, production, maintenance and support) are typically considered to have multiple performance obligations even when they are part of a single contract.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Revenue recognition (continued):

Performance obligations (continued):

For contracts with multiple performance obligations, the Organization allocates the transaction price to each performance obligation using the best estimate of the standalone selling price of each distinct good or service in the contract. The Organization invoices its customers over time as the performance obligations are satisfied. Payment is typically due within 30 days of invoice.

Contract combination and modification:

To determine proper revenue recognition for exchange transactions, the Organization evaluates whether two or more contracts should be combined and accounted for as a single contract and whether a combined or single contract should be accounted for as more than one performance obligation. This evaluation requires significant judgment, and the decision to combine contracts or separate a combined or single contract into multiple performance obligations could change the amount of revenue and profit recorded in a given period.

The Organization accounts for contract modifications as a separate contract when the modification results in the promise to deliver additional goods or services that are distinct and the increase in price of the contract is for the same amount as the stand-alone selling price of the additional goods or services included in the modification.

Cost and expense recognition:

Contract costs include direct labor, materials, and indirect costs related to contract performance, such as indirect labor, communications, technology and depreciation costs. Costs charged to certain contracts from government agencies include indirect costs and are subject to audit by the United States Department of the Interior, Interior Business Center, as directed by the Office of National Aeronautics and Space Administration.

Cash and cash equivalents:

All highly liquid debt instruments purchased with a maturity of three months or less are considered to be cash equivalents. All cash and cash equivalents are placed with various credit institutions. At times, such amounts may be in excess of the FDIC insurance limits; however, management does not believe they are exposed to any significant credit risk on cash and cash equivalents.

Restricted cash and cash equivalents consist of amounts received with donor-imposed restrictions. All donor-imposed restrictions on restricted cash and cash equivalents are temporary in nature.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Cash and cash equivalents (continued):

The following table provides a reconciliation of cash and cash equivalents, and restricted cash and cash equivalents reported on the combined statements of financial position to the combined statements of cash flows:

	<u>2022</u>	<u>2021</u>
Cash and cash equivalents	\$ 755,205	\$ 839,737
Restricted cash and cash equivalents	<u>98,038</u>	<u>3,038,607</u>
	<u>\$ 853,243</u>	<u>\$ 3,878,344</u>

The restrictions on cash and cash equivalents restricted by donors will lapse when the funds are spent on the related restricted purposes.

Investments:

Investments are carried at fair value. Donated investments are recorded at fair value at the date of gift. Investment gains and losses are included in the changes in net assets in the accompanying combined statements of activities as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor-imposed stipulations or legal requirements net of related investment fees. Realized gains or losses on disposition of investments are recorded on a trade date basis using the specific identification method. Dividends and interest income are accrued when earned. Investments are considered to be impaired when a decline in fair value is judged to be other-than-temporary.

Fair value measurements:

Fair value is defined as the price to sell an asset or transfer a liability between market participants in an orderly exchange in the principal or most advantageous market for that asset or liability. The fair value for qualifying alternative investments is determined based on the investment's net asset value as a practical expedient. Considerable judgment is required in interpreting market data used to develop the estimates of fair value. Accordingly, the estimates presented in the combined financial statements are not necessarily indicative of the amounts that could be realized in a current market exchange. The use of different market assumptions and estimation methodologies may have a material effect on the estimated fair value.

Grants receivable:

The Organization records grants receivable for its unconditional rights to consideration arising from performance under contracts with customers that are primarily Federal Government agencies. The carrying value of such receivables, net of allowance for doubtful accounts, represents their estimated net realizable value. At January 1, 2021, the balance of grants receivable was \$572,103.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Grants receivable (continued):

The Organization grants unsecured credit without interest to governmental agencies. The Organization grants credit to all other customers, generally without collateral or interest. Grants receivable consist primarily of uncollateralized obligations from Federal Government agencies related to amounts earned but uncollected from the Organization's contracts with those agencies. Payments of grants receivable are applied to the specific invoices identified on the remittance advice, or if unspecified, to the earliest unpaid invoices.

Management considers all accounts over 30 days to be past due and provides an allowance for doubtful accounts based upon prior experience and management's assessment of the collectibility of specific accounts. Doubtful accounts are periodically reviewed for collectibility and charged against operations when management determines that all collection efforts have been exhausted. As of December 31, 2022 and 2021, receivable balances are considered fully collectible by management; therefore, no allowance for doubtful accounts has been provided.

Promises to give:

Unconditional promises to give are recognized as support at their estimated net realizable value in the period received. Promises to give that are collectible over future periods are discounted to their net present value. The provision for uncollectible promises to give is based on management's estimate of current economic factors, applied as a percentage of gross contribution revenues. Promises to give are periodically reviewed for collectibility and written off when determined uncollectible. At December 31, 2022 and 2021, promises to give are considered fully collectible, therefore, no allowance for uncollectible pledges has been provided.

Property and equipment:

Property and equipment are stated at cost except for donated equipment, which is recorded at its fair market value at the date of gift. Property and equipment with a value of greater than or equal to \$5,000 and a useful life of more than one year is capitalized. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets.

Buildings and improvements	5 - 40 years
Equipment and computers	3 - 30 years
Furniture and fixtures	5 - 10 years
Vehicles	5 - 10 years

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Impairment of long-lived assets:

The Organization reviews long-lived assets to be held and used for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If the sum of the undiscounted expected future cash flows over the remaining useful life of the long-lived assets is less than the carrying amount, the asset is considered impaired. Impairment losses would be measured as the amount by which the carrying amount exceeds the fair value of the asset. There was no impairment of long-lived assets recognized for 2022 and 2021.

Collection items:

The Organization has ownership of a vintage car, which was donated to the Observatory by the Sole Trustee in 2002. The vehicle is capitalized based on its appraised value at the date of the unrestricted contribution. During 2022, the Organization purchased a vintage telescope for its collection. The telescope is recorded at cost.

Endowments:

The Organization's endowments consist of funds established under either donor restriction or as designated by the Trustees for a variety of purposes. As required by GAAP, net assets associated with endowment funds (including funds designated by the Trustees to function as endowments) are classified and reported based on the existence or absence of donor-imposed restrictions.

The Trustees of the Foundation have interpreted Arizona's Management of Charitable Funds Act (AMCFA), Arizona's enacted legislation of the Uniform Prudent Management of Institutional Funds Act (UPMIFA), as requiring the preservation of the fair value of the original gift, as of the gift date of the donor-restricted endowment funds, unless there are explicit donor stipulations to the contrary. As a result of this interpretation, the Organization retains in perpetuity (a) the original value of initial and subsequent gift amounts donated to the endowment and (b) any accumulations to the endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added. Donor-restricted amounts not retained in perpetuity are subject to appropriation for expenditure by the Organization in a manner consistent with the standard of prudence prescribed by AMCFA and UPMIFA.

Program expense allocations:

The Organization's expenses are classified into functional expenses, which include program services and supporting services.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Program expense allocations (continued):

Program services are comprised of the following functional categories: research, technology, and public programs. Research encompasses all expenses to conduct research in all areas of astronomy, including studies of the sun, solar system, stars, exoplanets, galaxies and cosmology. This includes outlays related to contracts with governmental and other agencies. Technology includes the cost of servicing, maintaining and developing the telescopes, and the facilities and instruments used for research operations. It also integrates expenses related to telescope access fees. Public programs category is comprised of expenses to operate the education and outreach program provided to the general public, which includes tours, solar viewing, presentations, telescope viewing and camps.

Supporting services are comprised of the following functional categories: management and general and fundraising. Management and general provides the administrative support for the Organization. Fundraising incorporates costs associated with donor development, communications, compliance and generating donations for the Organization.

The combined financial statements report certain categories of expenses that are attributable to one or more program or supporting services of the Organization. Those expenses include depreciation, the Director's office, communications department, and information technology department. Depreciation is allocated based on a square footage basis, the Director's office is allocated based on a time and cost study of where efforts are made, certain costs of the communications department are allocated based on the benefit received, and the information technology department is allocated based on a cost study of specific technology utilized and the benefit received.

Advertising:

Advertising costs are expensed as incurred. Total advertising expense was \$122,331 and \$41,945 for 2022 and 2021.

Income taxes:

The Observatory, the Foundation, and the Trust are exempt from income taxes under both Internal Revenue Code (IRC) section 501(c)(3) and Arizona income tax laws. The Observatory is classified as other than a private foundation under IRC section 509(a)(1). The Foundation and the Trust are each classified as other than a private foundation under IRC section 509(a)(3) as a supporting organization of the Observatory. Income from certain activities not directly related to the Organization's tax-exempt purpose, however, may be subject to taxation as unrelated business taxable income.

From time to time, the Organization may be subject to penalties and interest assessed by various taxing authorities, which are classified as general and administrative expenses if they occur.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

1. Description of organization and summary of significant accounting policies (continued):

Subsequent events:

The Organization's management has evaluated the events that have occurred subsequent to December 31, 2022 through May 25, 2023, the date that the combined financial statements were available to be issued.

2. Liquidity and availability of financial assets:

As part of the Organization's liquidity management, it has a policy to structure its financial assets to be available as its general expenditures, liabilities and other obligations come due. In addition, the Organization invests cash in excess of daily requirements in short-term investments. To help manage unanticipated liquidity needs, the Organization has also committed a line of credit in the amount of \$11 million, which it could draw upon. At December 31, 2022 the Organization could draw down an additional \$9.49 million.

The following reflects the Organization's financial assets as of the combined statement of financial position date, reduced by the amounts not available for general use within one year of the combined statement of financial position date because of contractual or donor-imposed restrictions.

	<u>2022</u>	<u>2021</u>
Cash and cash equivalents	\$ 755,205	\$ 839,737
Restricted cash and cash equivalents	98,038	3,038,607
Restricted certificates of deposit	-	6,760,301
Investments	32,343,252	31,256,687
Grants receivable	902,786	375,713
Estates and bequests receivable	1,700,000	3,900,000
Promises to give	11,154,290	13,293,800
Refundable payroll taxes	<u>1,966,888</u>	<u>2,155,807</u>
Total financial assets	<u>48,920,459</u>	<u>61,620,652</u>
Promises to give scheduled to be collected in more than one year	(9,006,075)	(10,776,404)
Contractual or donor-imposed restrictions:		
Endowment funds	(7,414,756)	(8,187,575)
Other donor restrictions	(12,212,896)	(15,166,431)
Restricted certificates of deposit	-	(6,760,301)
Funds restricted by lender as collateral	(1,506,846)	(5,525,971)
Restricted cash and cash equivalents	(98,038)	(3,038,607)
Board designations:		
Endowment funds	<u>(1,925,546)</u>	<u>(2,320,534)</u>
Financial assets available to meet cash needs for general expenditures within one year	<u>\$ 16,756,302</u>	<u>\$ 9,844,829</u>

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

3. Investments:

	<u>2022</u>	<u>2021</u>
Money market funds	\$ 5,923,309	\$ 3,602,610
Fixed income securities	5,515,489	3,838,572
Equity securities	18,335,320	21,130,714
Alternative investments	<u>2,569,134</u>	<u>2,684,791</u>
	32,343,252	31,256,687
Less investments with donor restrictions	<u>28,914,699</u>	<u>28,935,069</u>
	<u>\$ 3,428,553</u>	<u>\$ 2,321,618</u>

Investment income (loss) for the years ended December 31, 2022 and 2021 is as follows:

	<u>2022</u>	<u>2021</u>
Interest and dividends	\$ 622,097	\$ 443,036
Net realized and unrealized gain on investments	(5,245,368)	3,527,569
Investment fees	<u>(126,171)</u>	<u>(123,944)</u>
	<u>\$ (4,749,442)</u>	<u>\$ 3,846,661</u>

4. Fair value measurements:

At December 31, 2022, the fair value of assets measured on a recurring basis is as follows:

	<u>Fair value</u>	<u>Level 1</u>	<u>Practical expedient</u>
Money market funds	\$ 5,923,309	\$ 5,923,309	\$ -
Fixed income securities	5,515,489	5,515,489	-
Equity securities:			
US large cap	11,943,182	11,943,182	-
US mid cap	1,794,333	1,794,333	-
US small cap	1,516,482	1,516,482	-
Developed international	1,878,604	1,878,604	-
Other	1,202,719	1,202,719	-
Alternative investments	<u>2,569,134</u>	<u>-</u>	<u>2,569,134</u>
	<u>\$ 32,343,252</u>	<u>\$ 29,774,118</u>	<u>\$ 2,569,134</u>

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

4. Fair value measurements (continued):

At December 31, 2021, the fair value of assets measured on a recurring basis is as follows:

	Fair value	Level 1	Practical expedient
Money market funds	\$ 3,602,610	\$ 3,602,610	\$ -
Fixed income securities	3,838,572	3,838,572	-
Equity securities:			
US large cap	13,704,068	13,704,068	-
US mid cap	1,791,776	1,791,776	-
US small cap	1,805,278	1,805,278	-
Developed international	1,698,868	1,698,868	-
Other	2,130,724	2,130,724	-
Alternative investments	<u>2,684,791</u>	<u>-</u>	<u>2,684,791</u>
	<u><u>\$ 31,256,687</u></u>	<u><u>\$ 28,571,896</u></u>	<u><u>\$ 2,684,791</u></u>

The assets in the preceding tables were measured primarily using the market approach. Following is a description of the valuation methodologies used for assets measured at fair value. The asset's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Transfers between levels are recorded at the beginning of the reporting period in which they occur. Valuation techniques used maximize the use of observable inputs and minimize the use of unobservable inputs:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Organization has the ability to access.

Practical Expedient - Investments for which fair value is measured at net asset value per share (or its equivalent). Due to the inherent uncertainty of these estimates, these values may differ materially from the values that would have been used had a ready market for these investments existed.

The fair value of the Organization's investments are valued at the closing price reported on the active market on which the individual securities are traded except for the alternative investments. The Organization's alternative investments are valued based on their net asset value using the practical expedient. The alternative investments consist primarily of offshore investment funds that provide investment exposure to global equity, bond, currency and commodity markets and fixed-income securities, without quoted prices. The funds may invest in instruments that provide economic exposure to developed and emerging market issuers. These investments have restrictions on redemptions consisting of lock up periods of up to 65 days. No unfunded commitments exist related to these investments.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

5. Promises to give:

Promises to give consist of pledges from foundations and individual donors. At December 31, 2022 and 2021, promises to give are as follows:

	<u>2022</u>	<u>2021</u>
Pledges receivable in less than one year	\$ 2,148,215	\$ 2,517,396
Pledges receivable in one to five years	6,158,806	6,830,217
Pledges receivable in more than five years	3,677,080	4,999,440
Less unamortized discount to present value	<u>(829,811)</u>	<u>(1,053,253)</u>
	11,154,290	13,293,800
Less current portion	<u>2,148,215</u>	<u>2,517,396</u>
Noncurrent portion	<u>\$ 9,006,075</u>	<u>\$ 10,776,404</u>

Long-term promises to give are discounted to their present value using U.S. treasury rates ranging from 1.89% to 3.99% at December 31, 2022 and 2021. During 2021, a promise to give of \$241,143 could not be fulfilled by the donor and was written off. This amount is included in bad debt expense.

At December 31, 2022, 85% of promises to give are from two donors. At December 31, 2021, 87% of promises to give are from three donors.

6. Employee retention credit:

The Organization has filed amended quarterly payroll tax reports to claim \$1,730,408 in federal employee retention credits for the year ended December 31, 2021. In addition, subsequent to the issuance of the combined financial statements for the year ended December 31, 2020, the Organization filed amended quarterly payroll tax reports to claim \$425,399 in credits related to 2020. Due to a significant backlog at the Internal Revenue Service processing centers, the refunds related to these claims are expected in 2023, therefore, the receivable has been classified as current. The credits are recorded as an offset to departmental expenses.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

7. Property and equipment:

	<u>2022</u>	<u>2021</u>
Land	\$ 445,917	\$ 445,917
Buildings and improvements	27,565,221	27,503,607
Equipment and computers	40,829,302	40,721,672
Furniture and fixtures	282,508	282,508
Vehicles	321,079	355,221
Construction in progress	<u>15,995,726</u>	<u>6,974,303</u>
	85,439,753	76,283,228
Less accumulated depreciation	<u>28,553,647</u>	<u>26,479,680</u>
	<u>\$ 56,886,106</u>	<u>\$ 49,803,548</u>

In 1960, the Organization entered into a series of contracts with the United States Naval Observatory (USNO) to construct and operate the Navy Precision Optical Interferometer (NPOI) to conduct astronomical research. NPOI was constructed on the Lowell Observatory Anderson Mesa Facility, which is an 180 acre area located in southeast Flagstaff, Arizona on the Coconino National Forest. The Observatory has a special use permit to conduct astronomical research at this location.

Since 1960, the Organization has received significant Federal funding from both USNO and Navy Research Laboratory related to this project. During 2022, the Observatory elected to terminate its relationship with NPOI. At December 31, 2022, the Organization has recorded assets related to NPOI that were acquired with Federal funding with a remaining net book value of approximately \$4,600,000. The Observatory is currently in negotiations to transfer these assets and the special use permit to the Naval Research Laboratory. Management believes that they will receive consideration in excess of the recorded assets' net book value and as such, no impairment loss has been recorded.

8. Note payable, bank:

The Organization had a \$7,140,000 revolving line of credit note (the Note) with BNY. The Note called for monthly interest only payments at the monthly LIBOR rate with a floor of 0.90% with a maturity date of March 2023. In August 2022, the Note was modified and the line of credit was increased to \$11,000,000 with monthly interest only payments at the 30 day SOFAR rate (3.99% at December 31, 2022) plus 1.2%, with a minimum rate of 1.2%. There is no maturity date under the new agreement; however, BNY may call the note at any time. The Note is collateralized by investment assets of the Organization. The Organization had an outstanding balances of \$1,506,846 and \$5,525,971 related to these lines of credit at December 31, 2022 and 2021.

The Organization is required to be in compliance with certain non-financial covenants.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

9. Long-term debt:

	<u>2022</u>	<u>2021</u>
Note payable, Small Business Administration, interest at 2.75%, payable in aggregate monthly installments of \$8,672 beginning November 2022 through May 2050, collateralized by all assets of the Organization. Installment payments are first applied to accrued interest until January 2023. Starting with February 2023, the installment payments will apply to principal and interest.	\$ 2,000,000	\$ 500,000
Less current portion	<u>49,687</u>	<u>-</u>
	<u>\$ 1,950,313</u>	<u>\$ 500,000</u>

Future maturities of long-term debt are as follows:

<u>Year ending December 31,</u>	
2023	\$ 49,687
2024	51,071
2025	52,493
2026	53,955
2027	55,458
Thereafter	<u>1,737,336</u>
	<u>\$ 2,000,000</u>

10. Paycheck Protection Program loan:

The Organization obtained a \$1,413,200 loan from Western Alliance Bank Lending under the Paycheck Protection Program (PPP) in May 2020. Under the terms of the PPP, up to 100% of the loan (and related interest) may be forgiven if the proceeds are used for covered expenses and certain other requirements related to wage rates and maintenance of full-time equivalents are met. The Organization applied for forgiveness with the lender on November 23, 2020 and received forgiveness of \$1,413,200 from the Small Business Administration (SBA) on December 31, 2020.

The Organization received a Second Draw PPP loan in February 2021 in the amount of \$1,297,640 from Western Alliance Bank Lending. The conditions of use and forgiveness of the loan are consistent with the original PPP loan. The Organization applied for forgiveness with the lender on October 26, 2021 and received forgiveness of \$1,297,640 from the Small Business Administration (SBA) on February 1, 2022.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

10. Paycheck Protection Program loan (continued):

The Organization accounts for the PPP loan as a conditional contribution in accordance with ASC 958-605. The contribution is conditional based on the Organization incurring covered expenses, maintaining employee count, and limiting salary reductions. During the year ended December 31, 2021, \$1,297,640 was recognized as support based on the assessment of conditions that have been met.

The SBA may undertake a review of a loan of any size during the ten-year period following forgiveness or repayment of the loan. The review may include the loan forgiveness application, eligibility for the program, as well as whether the Organization received the proper loan amount. The timing and outcome of any SBA review is not known.

11. Deferred access fee revenue:

The Organization has entered into a series of agreements to provide several educational institutions access to its telescopes. Under the terms of the agreements, the institutions are required to provide prescribed levels of financial support in exchange for nights of telescope use. Deferred access fee revenue represents amounts received from the institutions for nights not yet provided. At December 31, 2022 and 2021, deferred access fee revenue totaled \$7,003,710 and \$6,600,756.

12. Net assets with donor restrictions:

Net assets with donor restrictions are restricted for the following purposes or periods.

	<u>2022</u>	<u>2021</u>
Subject to expenditure for specified purpose:		
Improvements and maintenance	\$ 18,550,864	\$ 23,906,658
Marketing	811	19,226
Exhibits, education and outreach, and other public programs	445,599	350,776
Research	2,221,698	1,867,977
Funds held in Trust U/W of Percival Lowell to be used for Observatory purposes	<u>32,234,174</u>	<u>30,771,520</u>
	<u>\$ 53,453,146</u>	<u>\$ 56,916,157</u>

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

12. Net assets with donor restrictions (continued):

	<u>2022</u>	<u>2021</u>
Endowments:		
Earnings are subject to appropriation and expenditure for specified purposes:		
Endowment fund	\$ 50,517	\$ 47,017
ADC endowment fund	36,213	12,469
Exploration fund, subject to reversionary agreement	69,750	83,479
Exploration fund, not subject to reversionary agreement	1,703,864	2,040,996
Giovale endowed fund for astronomical research	506,191	610,965
GODO endowment fund	471,487	383,398
Historic preservation fund, subject to reversionary agreement	9,447	1,127
Historic preservation fund, not subject to reversionary agreement	54,270	64,593
Inspiration fund, subject to reversionary agreement	2,205	2,559
Inspiration fund, not subject to reversionary agreement	5,676	6,438
Instrumentation fund, subject to reversionary agreement	674,586	813,915
Instrumentation fund, not subject to reversionary agreement	1,633	1,968
Marcus cometary research fund	335,801	405,009
Mars Hill fund, not subject to reversionary agreement	81,372	91,237
Millennium fund, subject to reversionary agreement	2,001,416	2,409,974
Native American astronomy outreach fund, not subject to reversionary agreement	412,947	489,705
Percival Lowell post doc fellowship	29,283	-
Robert M. Ayers Education Fund, subject to reversionary agreement	377,462	439,611
Waddell fund, not subject to reversionary agreement	98,103	118,423
William G. Tifft Endowment fund	350,000	-
Young scholar fund	<u>142,533</u>	<u>164,692</u>
Total endowments	<u>7,414,756</u>	<u>8,187,575</u>
	<u>\$ 60,867,902</u>	<u>\$ 65,103,732</u>

13. Endowments:

The Organization's endowment consists of the Millennium Fund and fifteen other perpetually restricted funds. Investment earnings related to the endowed assets are restricted for prescribed operating purposes.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

13. Endowments (continued):

Reversionary agreement governing the Millennium Fund:

In 2000, the Lowell Millennium Fund (the Fund) was created to be a fund for the benefit of the Observatory. The Fund received both gifts without restrictions and gifts with perpetual restrictions from outside parties. The Observatory, through the Executive Committee of the Lowell Observatory Advisory Board, determined that it would consider all of the Fund as an endowment fund and began to administer it in that manner. When the Foundation was created, the Executive Committee contributed the Fund to the Foundation, but retained the right to compel its return in the future at the discretion of the Executive Committee.

Reversionary agreements relative to certain other Foundation endowment funds:

Since the creation of the Foundation, the Observatory has been the recipient of other gifts that were received without donor restrictions, which it then, subsequently, donated to the Foundation with restrictions consistent with the requirements and stipulations of certain of the Foundation's endowment funds. By agreement between the Observatory and the Foundation, the Observatory can, at any time, compel the return of these funds to the Observatory by written request.

In both cases, because the assets held by the Foundation are restricted by the terms of their contribution to the Foundation as only having the income available to benefit the Observatory, they are all recorded as perpetually restricted. At December 31, 2022 and 2021, these funds comprised 42% and 46% of the Foundation's perpetually restricted net assets.

Changes in endowment net assets for the year ended December 31, 2022 are as follows:

	Without donor restrictions	With donor restrictions	Total
Endowment net assets, beginning	\$ 2,320,534	\$ 8,187,575	\$ 10,508,109
Investment loss, net fees	(313,890)	(1,111,734)	(1,425,624)
Contributions	-	550,929	550,929
Distributions	(81,098)	(265,833)	(346,931)
Transfers of net assets	-	53,819	53,819
	<u>\$ 1,925,546</u>	<u>\$ 7,414,756</u>	<u>\$ 9,340,302</u>

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

13. Endowments (continued):

Changes in endowment net assets for the year ended December 31, 2021 are as follows:

	Without donor restrictions	With donor restrictions	Total
Endowment net assets, beginning	\$ 2,082,801	\$ 6,649,798	\$ 8,732,599
Investment return, net fees	292,084	929,026	1,221,110
Contributions	13,393	113,060	126,453
Distributions	(67,744)	(243,920)	(311,664)
Transfers of net assets	-	739,611	739,611
Endowment net assets, ending	<u>\$ 2,320,534</u>	<u>\$ 8,187,575</u>	<u>\$ 10,508,109</u>

Funds with deficiencies:

From time to time, certain donor-restricted endowment funds may have fair values less than the amount required to be maintained by donors or by law (underwater endowments). We have interpreted UPMIFA to permit spending from underwater endowments in accordance with prudent measures required under law. As of December 31, 2022 and 2021, there were no deficiencies of this nature.

Return objectives and risk parameters:

The Organization has adopted investment policies including those for endowment assets that attempt to preserve the capital, preserve the purchasing power, and achieve long-term growth of capital of the endowment assets. Endowment assets include those assets of donor-restricted funds that the organization must hold in perpetuity or for a donor-specified period(s). Under these policies all assets including endowment assets are invested in a manner that is intended to produce results that exceed various external benchmarks while assuming a moderate level of investment risk. Actual returns in any given year may vary from this amount.

Spending policy and how the investment objectives relate to spending policy:

The Trust and Foundation have spending policies in place whereby amounts are appropriated based on determination of certain criteria to include the preservation of the endowment corpus, consideration of economic conditions, effects of inflation and deflation and the expected return from income and appreciation of investments.

The spending policy over the Trust endowments utilizes a total return approach.

The spending policy over the Foundation endowments also utilizes a total return approach, but provides for appropriations (currently a 4% rate annually) which may be made regardless of whether an Endowment Fund has sufficient current period and/or accumulated net investment returns but after taking into consideration the criteria specified above.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

14. Retirement plans:

The Organization has a contributory 403(B) retirement plan historically held at Teachers' Insurance and Annuity Association. The last contributions sent to TIAA were in December 2016. Beginning in December 2016 new contributions were sent to Mutual of America. Beginning in 2017 the plan documents were changed and eligible employees may voluntarily participate in the plan. As of July 2020, the Observatory contributes 1%-5% of gross earnings, up to the Internal Revenue Service maximum allowable, when the employee contributes 1%-5% of gross earnings. Previously the Observatory matching contribution was a set 5%, when the employee contributes 5% or more. The Organization made contributions of \$422,388 and \$346,388 to the plan during the years ended December 31, 2022 and 2021.

15. Contingencies:

For the years ended December 31, 2022 and 2021, substantially all of the Organization's grant revenue and receivables are comprised of revenue derived from federal agencies. A significant reduction in the level of this support, if it were to occur, would have a material effect on the programs and activities of the Organization. The governmental funding is subject to compliance audits by the respective governmental agencies. Assessments from such audits, if any, are recorded when the amounts of such assessments are reasonably determinable.

Beginning in 1910, the Observatory obtained a series of special use permits from the U.S. Forest Service to construct facilities and perform astronomical research on land located in southeast Flagstaff, Arizona in the Coconino National Forest. The permits expire and are subsequently reissued by the U.S. Forest Service every twenty years. Management believes that the permits will be reissued in perpetuity. In the event that the permits are not reissued, the Observatory may be required to remediate the land to its original condition. Because the timing of this obligation is indeterminate, no asset retirement obligation has been recorded. If the U.S. Forest Services does not continue to issue these permits, the costs associated with this obligation could significantly impact the combined financial statements.

16. Statement of cash flows:

Supplemental disclosure of cash flow information:

Cash paid for interest was \$106,952 and \$76,564 for the years ended December 31, 2022 and 2021.

Lowell Observatory

Notes to Combined Financial Statements (continued)

Years Ended December 31, 2022 and 2021

17. Restatement:

The Organization has restated receivables and net assets without donor restrictions in the amount of \$2,155,807 at December 31, 2021 to reflect employee retention tax credits that were claimed for 2021 and 2020. The amount has been recorded as an increase in change in net assets for 2021 and a restatement of the beginning net assets for 2022. There was no effect on the change in net assets for 2022.

Lowell Observatory

Combining Statement of Financial Position

December 31, 2022

	Assets			
	Lowell Observatory and Trust	Lowell Observatory Foundation	Eliminating	Combined total
Current assets:				
Cash and cash equivalents	\$ 691,771	\$ 63,434	\$ -	\$ 755,205
Restricted cash and cash equivalents	1,180	96,858	-	98,038
Investments	3,428,553	-	-	3,428,553
Grants receivable	902,786	-	-	902,786
Promises to give, current portion	2,148,215	-	-	2,148,215
Estate and bequests receivable	1,350,000	350,000	-	1,700,000
Refundable payroll taxes	1,966,888	-	-	1,966,888
Other current assets	<u>912,928</u>	<u>-</u>	<u>-</u>	<u>912,928</u>
Total current assets	<u>11,402,321</u>	<u>510,292</u>	<u>-</u>	<u>11,912,613</u>
Property and equipment, net	56,886,106	-	-	56,886,106
Due from related party	(4,962)	4,962	-	-
Promises to give, net of current portion	9,006,075	-	-	9,006,075
Collection item	518,303	-	-	518,303
Assets limited to use:				
Investments with donor restrictions	<u>19,855,610</u>	<u>9,059,089</u>	<u>-</u>	<u>28,914,699</u>
Total noncurrent assets	<u>86,261,132</u>	<u>9,064,051</u>	<u>-</u>	<u>95,325,183</u>
Total assets	<u>\$ 97,663,453</u>	<u>\$ 9,574,343</u>	<u>\$ -</u>	<u>\$ 107,237,796</u>
Liabilities and Net Assets				
Current liabilities:				
Note payable, bank	\$ 1,506,846	\$ -	\$ -	\$ 1,506,846
Current portion of long-term debt	49,687	-	-	49,687
Accounts payable	696,764	-	-	696,764
Accrued expenses and other current liabilities	119,007	-	-	119,007
Current portion of deferred access fee revenue	<u>1,447,576</u>	<u>-</u>	<u>-</u>	<u>1,447,576</u>
Total current liabilities	<u>3,819,880</u>	<u>-</u>	<u>-</u>	<u>3,819,880</u>
Long-term debt	1,950,313	-	-	1,950,313
Deferred research grant revenue	29,996	-	-	29,996
Deferred access fee revenue, net of current portion	<u>5,556,134</u>	<u>-</u>	<u>-</u>	<u>5,556,134</u>
Total liabilities	<u>11,356,323</u>	<u>-</u>	<u>-</u>	<u>11,356,323</u>
Contingencies				
Net assets:				
Without donor restrictions:				
Net invested in property and equipment	55,379,260	-	-	55,379,260
Undesignated	(22,334,378)	43,145	-	(22,291,233)
Board designated	<u>-</u>	<u>1,925,544</u>	<u>-</u>	<u>1,925,544</u>
	<u>33,044,882</u>	<u>1,968,689</u>	<u>-</u>	<u>35,013,571</u>
With donor restrictions	<u>53,262,248</u>	<u>7,605,654</u>	<u>-</u>	<u>60,867,902</u>
Total net assets	<u>86,307,130</u>	<u>9,574,343</u>	<u>-</u>	<u>95,881,473</u>
Total liabilities and net assets	<u>\$ 97,663,453</u>	<u>\$ 9,574,343</u>	<u>\$ -</u>	<u>\$ 107,237,796</u>

Lowell Observatory

Combining Statement of Activities

Year Ended December 31, 2022

	Lowell Observatory and Trust	Lowell Observatory Foundation	Eliminating	Combined total
Revenues, support and gains:				
Contracts with governmental and other agencies	\$ 4,827,838	\$ -	\$ -	\$ 4,827,838
Telescope access fees	1,650,395	-	-	1,650,395
Contributions	10,639,704	451,905	-	11,091,609
Public program revenue	2,108,173	-	-	2,108,173
Investment income, net	(3,302,495)	(1,446,947)	-	(4,749,442)
Other income	582,734	-	-	582,734
Gain on sale of assets	2,000	-	-	2,000
	<u>16,508,349</u>	<u>(995,042)</u>	<u>-</u>	<u>15,513,307</u>
Expenses:				
Program services:				
Research	6,506,568	-	-	6,506,568
Technology	5,012,872	-	-	5,012,872
Public programs	4,009,462	-	-	4,009,462
	<u>15,528,902</u>	<u>-</u>	<u>-</u>	<u>15,528,902</u>
Support services:				
Management and general	2,047,895	6,096	-	2,053,991
Fundraising	1,577,603	10,483	-	1,588,086
	<u>3,625,498</u>	<u>16,579</u>	<u>-</u>	<u>3,642,077</u>
	<u>19,154,400</u>	<u>16,579</u>	<u>-</u>	<u>19,170,979</u>
Change in net assets before transfers	(2,646,051)	(1,011,621)	-	(3,657,672)
Transfers of net assets	256,993	(256,993)	-	-
Change in net assets	<u>\$ (2,389,058)</u>	<u>\$ (1,268,614)</u>	<u>\$ -</u>	<u>\$ (3,657,672)</u>

Lowell Observatory

Single Audit Reports

Year Ended December 31, 2022

Lowell Observatory

Single Audit Reports

Year Ended December 31, 2022

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**Independent Auditors' Report on Internal Control over Financial Reporting
and on Compliance and Other Matters Based on an Audit of Financial Statements
Performed in Accordance with *Government Auditing Standards***

Sole Trustee and Management
Lowell Observatory
Flagstaff, Arizona

We have audited, in accordance with the 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, the combined financial statements of Lowell Observatory (the Organization), which comprise the combined statement of financial position as of December 31, 2022, and the related combined statements of activities, functional expenses and cash flows for the year then ended, and the related notes to the combined financial statements, and have issued our report thereon dated May 25, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the combined financial statements, we considered the Organization's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the combined financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control. Accordingly, we do not express an opinion on the effectiveness of the Organization's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements, on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Organization's combined financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Organization's combined financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the combined financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Organization's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Organization's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

BleachFleischman PLLC

Phoenix, Arizona
May 25, 2023

**Independent Auditors' Report on Compliance for Each Major Program,
on Internal Control over Compliance, and on the Schedule of Expenditures
of Federal Awards Required by the Uniform Guidance**

Sole Trustee and Management
Lowell Observatory
Flagstaff, Arizona

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Lowell Observatory's (the Organization) compliance with the types of compliance requirements identified as subject to audit in the *OMB Compliance Supplement* that could have a direct and material effect on each of the Organization's major federal programs for the year ended December 31, 2022. The Organization's major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

In our opinion, the Organization complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended December 31, 2022.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of *Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditors' Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the Organization and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the Organization's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules, and provisions of contracts or grant agreements applicable to the Organization's federal programs.

Auditors' Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the Organization's compliance based on our audit. 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 generally accepted auditing standards, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the Organization's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with generally accepted auditing standards, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, 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 Organization's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the Organization's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditors' Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the combined financial statements of the Organization as of and for the year ended December 31, 2022, and have issued our report thereon dated May 25, 2023, which contained an unmodified opinion on those combined financial statements. Our audit was performed for the purpose of forming an opinion on the combined financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the combined 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 combined financial statements. The information has been subjected to the auditing procedures applied in the audit of the combined financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the combined financial statements or to the combined financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the combined financial statements as a whole.

BleachFleischman PLLC

Phoenix, Arizona
May 25, 2023

Lowell Observatory

Schedule of Expenditures of Federal Awards

Year Ended December 31, 2022

Federal Grant/Pass-Through Grantor/ Program or Cluster Title	Grant number	Pass-through entity identifying number	Federal assistance listing number (ALN)	Passed through to subrecipients	Federal expenditures
Research and Development - Cluster					
<u>National Aeronautics and Space Administration</u>					
Science:					
Direct awards:					
NASA Headquarters	81094	80NSSC18K0856	43.001	\$ -	\$ 35,066
NASA Headquarters	81105	80NSSC19K0556	43.001	134,323	148,088
NASA Headquarters	81130	80NSSC19K0289	43.001	59,325	110,311
NASA Headquarters	81211	80NSSC21K1828	43.001	6,387	116,869
NASA Headquarters	81225	80NSSC21K0886	43.001	-	28,443
NASA Headquarters	81325	80NSSC20K1001	43.001	35,384	99,979
NASA Headquarters	81405	NNX17AF13G	43.001	-	19,891
NASA Headquarters	81420	80NSSC18K0729	43.001	73,772	253,684
NASA Headquarters	81490	NNX16AJ51G	43.001	-	53
NASA Headquarters	81491	80NSSC21K0168	43.001	81,098	114,517
NASA Headquarters	81495	80NSSC18K0203	43.001	-	20,992
NASA Headquarters	81502	NNX17AH06G	43.001	4,571	4,571
NASA Headquarters	81503	80NSSC21K1328	43.001	18,779	195,801
NASA Headquarters	81506	80NSSC19K0420	43.001	-	167,432
NASA Headquarters	81531	80NSSC22K0659	43.001	-	20,227
Total direct NASA				<u>413,639</u>	<u>1,335,924</u>
Pass-through awards:					
NASA JPL/CalTech	82451	FFP 1689877	43.001	-	442
NASA JPL/CalTech	82501	RSA 1682444	43.001	-	10,360
NASA JPL/CalTech	82808	RSA 1645394	43.001	-	1,470
NASA JPL/CalTech	82809	RSA 1653026	43.001	-	17,200
NASA JPL/CalTech	82810	RSA 1659108	43.001	-	6,344
Space Telescope Science Institute	73827	HST-GO-15207.005-A	43.001	-	17,485
Space Telescope Science Institute	73828	HST-GO-15233.001-A	43.001	-	12,349
Boston University	78310	4500002707	43.001	-	15,802
Johns Hopkins Applied Physics Lab	78506	#173217	43.001	-	139,050
Johns Hopkins Applied Physics Lab	78505	#162333	43.001	-	1,356
Southwest Research Institute	78415	#K99090JRG	43.001	-	57,664
Southwest Research Institute	78420	#K99058JRG	43.001	-	27,637
Southwest Research Institute	78426	M99055DS	43.001	-	5,768
Southwest Research Institute	78431	#278981Q	43.001	-	84,561
Southwest Research Institute	78438	#Q99053AH	43.001	-	9,313
Planetary Science Institute	78446	#1641	43.001	-	739
William Marsh Rice University	78450	#X03017904	43.001	-	11,748
San Francisco State University	78480	#S21-0002	43.001	-	17,879
Total pass-through NASA				<u>-</u>	<u>437,167</u>
Total NASA				<u>\$ 413,639</u>	<u>\$ 1,773,091</u>

See accompanying notes to schedule of expenditures of federal awards

Lowell Observatory

Schedule of Expenditures of Federal Awards (continued)

Year Ended December 31, 2022

Federal Grant/Pass-Through Grantor/ Program or Cluster Title	Grant number	Pass-through entity identifying number	Federal assistance listing number (ALN)	Passed through to subrecipients	Federal expenditures
Research and Development - Cluster (continued)					
<u>National Science Foundation</u>					
Mathematical and Physical Sciences:					
Direct awards:					
National Science Foundation	83005	AST-1907492	47.049	\$ 72,817	\$ 134,774
National Science Foundation	83012	AST-2025202	47.049	-	18,347
National Science Foundation	83020	AST-1944827	47.049	897	71,516
National Science Foundation	83050	AST-1734484	47.049	-	52,619
National Science Foundation	83051	AST-2109207	47.049	-	31,173
National Science Foundation	83070	AST-2009343	47.049	-	88,768
National Science Foundation	83075	AST-2009501	47.049	-	46,277
National Science Foundation	83116	AST-1612874	47.049	-	19,169
National Science Foundation	83130	AST-2109179	47.049	-	51,141
National Science Foundation	83135	AST-2206703	47.049	-	3,930
Total direct National Science Foundation				73,714	517,714
Pass-through awards:					
New Mexico Institute of Mining and Technology	83202	PO023587	47.049	-	442
Southwest Research Institute	83201	#N99033ZO	47.049	-	590
Total pass-through National Science Foundation				-	1,032
Total National Science Foundation				73,714	518,746
<u>Department of Defense</u>					
Basic and Applied Scientific Research:					
Direct awards:					
Naval Research Laboratory	75115, 75120, 75125	N00173-16-2-C904	12.300	-	2,511,002
Total Department of Defense				-	2,511,002
Total Research and Development - Cluster				487,353	4,802,839
<u>Small Business Administration</u>					
Disaster Assistance Loan:					
Direct awards:					
Economic Injury Disaster Loans			59.008	-	888,420
Total Small Business Administration				-	888,420
Total expenditures of federal awards				\$ 487,353	\$ 5,691,259

See accompanying notes to schedule of expenditures of federal awards

Lowell Observatory

Notes to Schedule of Expenditures of Federal Awards

Year Ended December 31, 2022

1. Basis of presentation:

The accompanying Schedule of Expenditures of Federal Awards (the Schedule) includes the federal award activity of Lowell Observatory (the Organization) under programs of the federal government for the year ended December 31, 2022. The information in this Schedule is presented in accordance with the requirements of *Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance)*. Because the Schedule presents only a selected portion of the operations of Lowell Observatory, it is not intended to and does not present the combined financial position, changes in net assets or cash flows of the Organization.

2. Summary of significant accounting policies:

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

The Organization has not elected to use the ten percent de minimis indirect cost rate as allowed under the Uniform Guidance.

3. Federal assistance listing numbers (ALN):

The program titles and ALN numbers or federal identification numbers were obtained from the federal or pass-through grantor or the update to the *Catalog of Federal Domestic Assistance*.

4. Disaster assistance loans:

Balances outstanding on disaster assistance loans (ALN 59.008) at the end of the audit period were \$2,000,000.

Lowell Observatory

Schedule of Findings and Questioned Costs

Year Ended December 31, 2022

Summary of Auditors' Results

Financial Statements

The auditors' report expressed an unmodified opinion on whether the combined financial statements of Lowell Observatory were prepared in accordance with accounting principles generally accepted in the United States of America.

Internal control over financial reporting:

Material weakness(es) identified?	<u> </u> Yes	<u> X </u> No
Significant deficiency(ies) identified?	<u> </u> Yes	<u> X </u> None reported

Noncompliance material to financial statements noted?	<u> </u> Yes	<u> X </u> No
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Federal Awards

Internal control over major federal programs:

Material weakness(es) identified?	<u> </u> Yes	<u> X </u> No
Significant deficiency(ies) identified?	<u> </u> Yes	<u> X </u> None reported

The auditors' report on compliance for the major federal awards program of Lowell Observatory expressed an unmodified opinion on its major programs.

Audit findings that are required to be reported in accordance with 2 CFR 200.516(a) are reported in the Schedule.

Identification of major federal programs:

Research and Development Cluster:	
Science	ALN 43.001
Mathematical and Physical Sciences	ALN 47.049
Basic and Applied Scientific Research	ALN 12.300
Economic Injury Disaster Loans	ALN 59.008

Dollar threshold used to distinguish between Type A and Type B programs: \$750,000

Auditee qualified as a low-risk auditee?	<u> X </u> Yes	<u> </u> No
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Lowell Observatory

Schedule of Findings and Questioned Costs (continued)

Year Ended December 31, 2022

Findings - Financial Statement Audit

None

Lowell Observatory

Schedule of Findings and Questioned Costs (continued)

Year Ended December 31, 2022

Findings and Questioned Costs - Major Federal Award Programs Audit

None

Lowell Observatory

Summary Schedule of Prior Year Findings

Year Ended December 31, 2022

Financial Statement Audit Findings

None

Major Federal Award Programs Audit Findings

Finding 2021-001: Other Matters

Condition:

Annual monitoring of subrecipient's single audit was not documented.

Recommendation:

We recommend the Organization adhere to its policies and procedures for subrecipient monitoring.

Current status:

No similar instances were noted in current year.