

South Dakota Science and Technology Authority

A Business Type Enterprise Activity Component Unit of the State of South Dakota



TABLE OF CONTENTS

	PAGE
Independent Auditor's Report	i-iii
Management's Discussion and Analysis	1 - 6
Financial Statements:	
Statement of Net Position	. 7
Statement of Revenues, Expenses, and Changes in Net Position	8
Statement of Cash Flows	9 - 10
Notes to Financial Statements	11 - 25
Required Supplemental Information:	
Schedule of Proportionate Share of the Net Pension Liability (Asset) & Contributions	27
Notes to the Required Supplemental Information	28
Supplemental Information:	
Schedule of Operating Expenses	30
Supplemental Schedule of Expenditures of Federal Awards	31



Independent Auditor's Report

Board of Directors of South Dakota Science and Technology Authority Denver, Colorado

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the business-type activities of South Dakota Science and Technology Authority, a component unit of the State of South Dakota, as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the South Dakota Science and Technology Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the South Dakota Science and Technology Authority, as of June 30, 2023, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) 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 Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of South Dakota Science and Technology Authority, 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 South Dakota Science and Technology Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's 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 auditor's 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 GAAS 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 financial statements.

In performing an audit in accordance with GAAS 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 South Dakota Science and Technology Authority'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 South Dakota Science and Technology Authority'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.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 1–6 and the South Dakota Science and Technology Authority's proportionate share of the net pension liability (asset) and schedule of contributions on pages 27-28 be presented to supplement the basic financial statements. Such information is the responsibility of management and although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise South Dakota Science and Technology Authority's basic financial statements. The schedule of operating expenses and supplemental schedule of expenditures of federal awards are presented for purposes of additional analysis and are not a required part of the basic 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 basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 12, 2023 on our consideration of the '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 '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 's internal control over financial reporting and compliance.

Denver, Colorado October 12, 2023

Esde Saelly LLP

MANAGEMENT'S DISCUSSION AND ANALYSIS JUNE 30, 2023

This section of the South Dakota Science and Technology Authority's (SDSTA's) annual financial report presents management's discussion and analysis of the SDSTA's financial performance during the fiscal year ended June 30, 2023 (FY 2023). This analysis should be read in conjunction with the financial statements and notes to the financial statements.

The SDSTA's financial statements include the operations of funds that the SDSTA has established to achieve its goal of maintaining the Sanford Underground Research Facility (SURF) in support of the science mission under the agreement with the Department of Energy's (DOE's) Office of Science. The property was donated by Homestake Mining Company of California, to the State of South Dakota and SDSTA in April 2006.

The activity of the SDSTA is accounted for as a proprietary fund type. The SDSTA is a component unit of the State of South Dakota, and its financial statements are included in the Annual Comprehensive Financial Report of the State of South Dakota.

Included in the financial statements presented is a current year comparison to prior year balance sheet summary, revenue and expense summary, and capital assets. Further reports reflect current year detailed statement of net position, statement of revenue, expense and changes in net position, cash flow, and schedule of operating expenses. Comparisons of current year to prior year are important to display increases and decreases in various elements of the financial reports for the SDSTA. Current year detailed reports provide significant detail for statement of net position, revenues, expenses, and cash flows for the SDSTA.

FINANCIAL HIGHLIGHTS:

- Total Assets at year-end increased to \$140,465,198.
- Current Assets increased by \$11,120,205. Cash on Deposit with State Treasurer increased by \$13,174,691 due to a \$13,000,000 appropriation from SB35, and interest. Yet, Cash in the Local Bank decreased by \$2,082,818 due to increase in prepaids and accounts receivable of \$488,718, and a decrease in current liabilities of \$459,924 at year-end. Local cash held was also affected by a lower indirect cost rate established in FY2022 compared to higher indirect expenses paid in FY2023. Inventory of Supplies decreased by \$527,243 for surplus of assets.
- Capital Assets increased by \$1,959,896, net of depreciation expense. Page 4 details the major capital asset additions and deletions. Furthermore, page 14 summarizes the changes in capital assets by major categories. The current funding to manage and operate the facility comes from a Cooperative Agreement with the DOE Office of Science that was effective September 30, 2019. Additional property purchased under this agreement is kept separate under the Capital Assets category, as this property has become vested in the SDSTA upon acquisition.
- Net Pension Asset decreased to \$58,078. The State's retirement system is fully funded (see Note 6 page 17). The SDSTA's total contributions to the South Dakota Retirement System (SDRS) increased by \$82,173 from 2022 to 2023. This was due primarily to an increase in personnel wages. GASB standards allow entities to use a pension measurement date up to one year prior to the entities reporting period. Therefore, the SDSTA is using a June 30, 2022, pension measurement date for our fiscal year-end June 30, 2023, statements. GOED funding of \$2,000,000 received in 2017 along with loans from various South Dakota Foundations have enabled the SDSTA to purchase xenon to be used in the future LZ experiment. Xenon purchased decreased by \$246,517 to \$8,687,833 as of June 30, 2023, due to sale of a portion of the asset. In summary, the Pension Asset and Xenon Purchased have decreased by \$4,918,994.
- Pension Related Deferred Outflows is also related to our retirement plan with SDRS. The amounts recorded relate to our proportionate share of the differences between expected and actual experience in pension earnings along with the SDSTA's pension contributions made subsequent to June 30, 2022. Asset Retirement Obligation Deferred Outflows is the estimated costs associated with closing the SURF facility. The total Deferred Outflows of Resources have decreased to \$6,857,010.
- Total Liabilities at year-end decreased by \$3,340,502. Accounts payable is slightly higher when comparing the two time periods. However, liabilities associated with employee wages, leave and benefits decreased due to timing of the payroll accrual. Xenon notes payable decreased by \$2,878,810 for sale of Xenon that was used as a one-time principal reduction.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) JUNE 30, 2023

- Pension Related Deferred Inflows is also connected to our retirement plan with SDRS. The recorded amount relates to our portion of the difference between projected and actual earnings on pension plan investments and changes in various assumptions. Our portion has decreased by \$5,852,211.
- Total Restricted Net Position increased by \$13,862,461. This increase is primarily due to the \$13,000,000 appropriation from SB35 for Underground Expansion.
- Unrestricted Net Position increased by \$745,722 to \$14,014,878.
- Total Net Position at year-end increased by \$16,568,079 to \$136,519,299.
- Charges for Goods and Services increased slightly to \$519,762.
- Operating Grants decreased by \$2,157,140 to \$36,232,484, primarily due to decreased Infrastructure Improvement Projects (IIP Projects).
- Miscellaneous revenue decreased to \$297,521 primarily due to a decrease in revenue from the Sandford Underground Research Facility Foundation and other miscellaneous receipts.
- Capital Grants and Contributions decreased by \$4,066,940. This is due to the property donation of the Sanford Lab Homestake Visitor Center from the Lead Area Chamber of Commerce in FY2022.
- Investment Earnings for fiscal year 2023 are at \$386,252. The unrealized appreciation and undistributed earnings that were reversed from the prior year when compared to the current year unrealized appreciation and undistributed earnings results in an increase in investment earnings. Also, investment earnings of \$305,707 were received on the cash on deposit with State Treasurer. This actual allocation compared to last year increased by \$202,743 due to a higher amount of cash being deposited for investment with the State Treasurer.
- Total Program Expenses for the SDSTA were \$35,667,169 which represents an increase of 5.84% percent from the previous year. Included in Total Program Expenses are Operating Expenses which increased by \$1,936,025 to \$35,267,701. Personnel Services represent 58% of the Operating Expenses; Contractual Services represent 22%; and Supplies, Materials, Travel, Depreciation, and Other Expenses represent 20% of these expenses. Most of the increase in Operating Expenses is due to increased Personnel Services.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) JUNE 30, 2023

FINANCIAL STATEMENT ELEMENTS:

STATEMENT OF NET POSITION

STATEMENT OF NET POSITION							
						Dollar	Percent
		2023		2022		Change	Change
Current Assets	\$	35,359,465	\$	24,239,260	\$	11,120,205	45.88%
Capital Assets	Ψ	96,359,821	Ψ	94,399,925	-	1,959,896	2.08%
Net Pension Asset and Xenon Purchased		8,745,911		13,664,905		(4,918,994)	-36.00%
Total Assets		140,465,197		132,304,090		8,161,107	6.17%
Pension Related Deferred Outflows		5,765,027		6,513,113		(748,086)	-11.49%
Asset Retirement Obligation Deferred Outflows		1,091,983		1,129,638		(37,655)	100.00%
Total Deffered Outflowe of Resources		6,857,010		7,642,751		(785,741)	-10.28%
Long Town Lightlities Outstanding		5 020 572		7 011 151		(2 000 570)	26 410/
Long-Term Liabilities Outstanding Other Liabilities		5,030,573 2,324,419		7,911,151 2,784,343		(2,880,578) (459,924)	-36.41% -16.52%
Total Liabilities		7,354,992		10,695,494		(3,340,502)	-31.23%
Pension Related Deferred Inflows		3,447,916		9,300,127		(5,852,211)	-62.93%
Net Position:							
Net Investment in Capital Assets		96,359,821		94,399,925		1,959,896	2.08%
Restricted		26,144,600		12,282,139		13,862,461	112.87%
Unrestricted		14,014,878		13,269,156		745,722	5.62%
Total Net Position	\$	136,519,299	\$	119,951,220	\$	16,568,079	13.81%
CHANGE IN NET POSITION							
						Dollar	Percent
		2023		2022		Change	Change
Revenues							
Program Revenues:	_		_		Φ.	45.015	0.6707
Charges for Services	\$	519,762	\$	473,945	\$	45,817	9.67%
Operating Grants		36,232,484		38,389,624		(2,157,140)	-5.62%
Miscellaneous		297,521		142,886		154,635	108.22%
General Revenues:		14 700 220		4.066.040		10 722 200	262 900/
Non-Operating Revenues		14,799,230		4,066,940		10,732,289	263.89%
Investment Earnings Total Revenue		386,252 52,235,248		171,113 43,244,508		215,139 8,990,740	125.73% 20.79%
		32,233,240		43,244,300		0,770,740	20.7770
Expenses		2		22 221 688		2 22 7 40 4	7.010/
Program Expenses		35,667,169		33,331,675		2,335,494	7.01%
Non-Operating Expenses Total Expenses		399,468		340,086		59,382	7 119/
Total Expense		36,066,637		33,671,761		2,394,876	7.11%
Change in Net Position		16,568,080		9,572,748		6,595,864	68.90%
Net Position-Beginning		119,951,219		110,136,790		9,814,429	8.91%
Net Position-Ending	\$	136,519,299	\$	119,709,538	\$	16,410,294	13.71%

.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) JUNE 30, 2023

CAPITAL ASSETS (Net of Depreciation)

Improvements	\$	42,561,300	\$	43,887,893	\$		(1,326,593)
Underground		17,936,955		17,936,955			-
Buildings		14,347,415		14,776,029			(428,614)
Computer Equipment		74,955		69,868			5,087
Equipment		3,529,913		4,006,074			(476,161)
• •				* *			, ,
Construction in Progress		6,192,248		4,118,734			2,073,514
Land		1,924,136		1,924,136			-
Infrastructure		1,316,138		1,451,642			(135,504)
Furniture		2,250		6,737			(4,488)
Archive Material		70,000		70,000			-
Auto		327,954		334,972			(7,018)
DOE Property Transfer		8,076,554		5,816,885			2,259,669
Total Capital Assets	\$	96,359,817	\$	94,399,925	\$		1,959,892
Total Cupical Associa	Ψ	,0,00,01,	Ψ	<i>></i> 1,0>>,>=0	Ψ		
This year's major capital asset additions and deletions	inclu	ded:					
Purchased Capital Assets:							
Improvements in Progress (Current Year Additions/Deletions)):							
IIP Projects (net)						\$	2,007,369
Other projects							66,145
Auto changes (Current Year Additions/(Deletions)):							
2022 Ram 3500 Tradesman							61,053
Building & Infrastructure Changes (Current Year Additions/(Dele	tions))	:					(247,348)
Computer Equipment, Machinery and Equipment changes (Curren	nt Year	r Additions/(Dele	tions)):			
SLHVC Design Lab Panels							43,691
2 Dell Server Bundles							41,866
Spendrup 350 HP At Oro Hondo FN-RLS01-02							(83,093)
Yates Work Platform (Skip Bonnet) WD-XXS99-01							(30,419)
500KVA Transformer 3 Phase at Oro Hondo							(18,465)
A Bradley Powerflex AC Drive 3 Phase 100HP 125							(15,068)
Hitachi CPWU9410 Projector IT-YSS12-60							(13,228)
Battery For Trojan Locomotive 2.25T BT-XXU99-03							(11,000)
Polycom Eagle Eye V Camera Mic Array							(12,259)
Polycom Eagle Eye V Camera Mic Array							(12,259)
Float Valves for Yates (12)							(98,011)
HydraulicClamb/Pneuma Drilling Attachment w/SkidSteer Moun	t						(26,940)
Shotcrete Mixing Auger							(18,450)
R&M Hoist 10 Ton							(21,561)
700HP Kirk Timberyard Surface Fan							(25,861)
Telephone Systems							(119,538)
Mini Track Loader							(22,546)
Other							(63,954)
DOE Property Transfer:							
Sulzer Pump, Battery Charger Elec Vehicle, Cell Battery Elec Veh							2,671,826
Stench Gas Electric Activation System, TOC Water Sensor 6000i				ch EIP,			
Yardney Filtration Bldg., Alignment System, Wireless Laser Shaf							
2 - 72 V Mosfet Locomotive controller, Western Tornado Sander		-	ot Dr	aın,			
MVP Snow Plow, Deep Well Pump and Motor, Kubota 2019 Die	sei KT	v.				¢	4.051.040
						\$	4,051,949

2023

2022

Change

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) JUNE 30, 2023

LONG-TERM DEBT

At the year-end, the SDSTA had \$5,030,573 in other long-term obligations. This is a decrease of approximately 36% as shown below.

				Total	Total	
					Dollar	Percentage
		2023		2022	Change	Change
Compensated Absences	\$	712,498	\$	781,513	\$ (69,015)	-8.83%
Asset Retirement Obligation		1,196,885		1,129,638	67,247	5.95%
Xenon Notes Payable		3,121,190		6,000,000	(2,878,810)	-47.98%
Total Long-Term Debt	\$	5,030,573	\$	7,911,151	\$ (2,880,578)	-36.41%

- The SDSTA is liable for the accrued vacation leave payable to all full-time employees. In addition, the SDSTA is liable for a portion of the earned sick leave of employees who have been employed for seven consecutive years. The \$69,015 decrease in compensated absences is due to a decrease in the corresponding amount of leave accumulated and outstanding at the end of the year for employees. The decrease in the Xenon Notes Payable was due to the one-time principal payment from the sale of Xenon. The Asset Retirement Obligation increased due to inflationary factors. Note (4) Long-Term Debt in the Notes to Financial Statements on page 15 details the activity for the period for compensated absences, asset retirement obligation and the xenon note payable.
- On November 7, 2022, the SDSTA signed a Promissory Note with the First Interstate Bank for \$5,000,000. This agreement represents a variable rate revolving line of credit. Collateral for this line of credit includes the SDSTA's Account Receivable. The SDSTA put this loan in place if government funding were to be slowed due to a government shutdown. The SDSTA has not drawn down any funding from this line of credit. The maturity date is October 31, 2023, at which time we will renew for another one-year term.

ECONOMIC FACTORS

- A report released from the Particle Physics Project Prioritization Panel (P5) in May 2014, outlined the 10-year strategic plan for high-energy physics in the United States. The report provides strong support for science programs envisioned to be located at SURF, including research into neutrinos and dark matter, both of which are being researched at SURF. This panel formally advises both the DOE Office of Science and the National Science Foundation (NSF) on support for physics. This report has played a key role in the evolution of SURF and its experiments. The next P5 report is in development and is planned to be released in 4th quarter of 2023.
- The SDSTA's Board of Directors approved an operating budget of \$3,592,269 for fiscal year 2024 in favor of SDSTA supported activities. Additionally, SDSTA's total indirect expense budget for fiscal year 2024 is \$14,008,892.
- The SDSTA transitioned to a five-year Cooperative Agreement with the Department of Energy's (DOE) Office of Science in September 2019 including a budget of \$122,134,028 for five years of SURF Operations. We are in the fourth year of this award with a current budget of \$26,735,099. Additionally, SDSTA has been awarded \$28,211,522 in Infrastructure Improvement Projects (IIPs) with \$16,909,525 spent through FY2023.
- In October 2014, DOE established the Long-Baseline Neutrino Facility (LBNF) / Deep Underground Neutrino Experiment (DUNE) Project with strong international support to build the largest science experiment ever attempted on United States soil. LBNF will send neutrinos through the earth from Fermilab in Batavia, Illinois, to the DUNE detectors located at SURF in Lead, South Dakota. In September 2016, DOE formally approved plans for construction at SURF. In June 2021, LBNF began excavating 875,000 tons of rock to create large caverns to house DUNE. DOE support for professional engineering management services continues into FY2024 for this LBNF effort.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED) JUNE 30, 2023

- The LBNF/DUNE Logistics Support Services contract continues with our support to the LBNF/DUNE construction efforts with the buildout of the large underground caverns at SURF for this experiment.
- Further funding was received in FY2023 through Lawrence Berkeley National Laboratory (LBNL) and DOE in support of the LUX-ZEPLIN (LZ) physics experiment operations and the SIGMA-V geothermal energy research project. These awards reimbursed the SDSTA for expenses incurred for materials and supplies as well as a percentage of the salaries of the SDSTA staff members directly supporting these projects. Support continues in FY2024 for LUX-ZEPLIN (LZ).
- Additional funding was received during the fiscal year from Oak Ridge National Laboratory and South Dakota School of Mines to support the Majorana Demonstrator experiment located at the 4850L Davis Campus. Support continues in FY2024 from SD Mines. The CASPAR experiment funded by SD Mines was mothballed in April 2021, during the LBNF excavation. Most of their equipment remains in the current 4850L for future use in their experiment at SURF. This experiment could resume in 2024.
- Additional funding was received from Thyssen Mining Inc. for equipment rentals and miscellaneous items associated with the LBNF project. Amounts charged were then credited to the Cooperative Agreement as the equipment maintenance charges were covered under that funding. An additional agreement was signed with Thyssen Mining Inc. in March 2021 to lease the Ross Pipe Shop and the Ross Maintenance Shop during their cavern excavation for the DUNE project. The lease commenced July 1, 2021, and will end upon the completion of the LBNF excavation in mid-2024.
- The SDSTA entered into a lease with Caterpillar (CAT) on September 15, 2020, for CAT to utilize two existing rooms located on the SURF 1700-foot level underground. The initial term of the lease began on October 1, 2020, and shall continue until September 30, 2030. CAT will be developing and testing new mining related products to sell commercially. The base rent under the lease is \$150,000 per annum is considered "Program Income" by the DOE Cooperative Agreement.
- The SDSTA is compliant with all legal and environmental regulations.

This financial report is designed to provide our citizens, taxpayers, customers, and investors and creditors with a general overview of the SDSTA's finances and to demonstrate the SDSTA's accountability for the money it receives. If you have any questions about this report or need additional information, contact the South Dakota Science and Technology Authority, 630 East Summit Street, Lead, SD 57754.

STATEMENT OF NET POSITION JUNE 30, 2023

ASSETS

TOTAL NET POSITION	\$ 136,519,299
Unrestricted Net Position	14,014,878
Foundation	639,670
Pension	2,375,188
Underground Expansion	13,114,216
Indemnification	7,799,604
Experiments	621,241
Mine Closure	1,594,680
Restricted for:	
Invested in Capital Assets	96,359,821
NET POSITION	
Deferred Inflows of Resources Pension Related Deferred Inflows (Note 6)	3,447,916
TOTAL LIABILITIES	7,354,992
Total Long-Term Liabilities	5,030,573
Long-Term Xenon Notes Payable (Note 4)	3,121,190
Asset Retirement Obligation (Note 4)	1,196,885
Accrued Leave, Benefits (Note 4)	712,498
Long-Term Liabilities	
	, ,
Total Current Liabilities	2,324,419
Accrued Leave, Benefits (Note 4)	712,498
Accrued Wages and Benefits	592,265
Accounts Payable	1,019,656
Current Liabilities	
LIABILITIES_	
Total Deferred Outflows of Resources	6,857,010
Pension Related Deferred Outflows (Note 6)	5,765,027
Asset Retirement Obligation Deferred Outflows	1,091,983
Deferred Outflows of Resources	
TOTAL ASSETS	140,465,198
Total Noncurrent Assets	105,105,733
Buildings, Machinery, Equipment, Infrastructure, & DOE Property Transferred (Net) (Note 3)	76,498,730
Underground (Note 3)	17,936,955
Land (Note 3)	1,924,136
Net Pension Asset (Note 6)	58,078
Noncurrent Assets Xenon Purchased (Note 5)	8,687,833
Total Current Assets	35,359,465
Inventory of Supplies & Warehouse	3,118,868
Prepaid Expenses	1,215,646
Interest Receivable	95,802
Accounts Receivable	2,642,355
Cash on Deposit with State Treasurer	24,570,910
Cash in Local Bank and Petty Cash	\$ 3,715,885

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEAR ENDED JUNE $30,\,2023$

Operating Revenue	
Charges for Goods and Services	\$ 519,762
Operating Grants	36,232,484
Miscellaneous	297,521
Total Operating Revenue	37,049,767
	, , ,
Operating Expenses	
Personnel Services	20,579,684
Travel	296,362
Contractual Services	7,890,552
Supplies, Materials and Other Operating Expenses	3,733,628
Depreciation Expense	2,767,474
Total Operating Expenses	35,267,701
Operating Gain	1,782,066
Nonoperating Revenues/Expenses	
Interest Revenue	386,252
State Appropriation SB35	13,000,000
Gain/(Loss) on Sale of Assets	1,790,165
Contributions	9,065
Other Expense	(399,468)
Total Nonoperating Revenues/Expenses	14,786,014
Change in Net Position	16,568,080
Net Position Beginning of Year	119,951,219
Net Position End of Year	\$ 136,519,299

The accompanying notes are an integral part of this statement.

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED JUNE 30, 2023

Cash Flows from Operating Activities:		
Other Operating Cash Receipts	\$	822,691
Cash Receipts from Operating Grants		35,983,925
Cash Payments to Employees for Services		(21,647,497)
Cash Payments to Suppliers of Goods and Services		(12,133,626)
Net Cash Provided by Operating Activities	\$	3,025,493
Cash Flows from Noncapital Financing Activities:		
Interest/Insurance Paid on Xenon	\$	(482,289)
Net Cash Used by Noncapital Financing Activities	\$	(482,289)
Cash Flows from Capital and Related Financing Activities:		
State Appropriation SB35	\$	13,000,000
Purchase of Capital Assets	Ψ	(4,772,928)
Net Cash Provided by Capital and Related Financing Activities	\$	8,227,072
		, ,
Cash Flows from Investing Activities:		
Interest Earnings	\$	321,597
Net Cash Provided by Investing Activities	\$	321,597
Net increase in Cash and Cash Equivalents	\$	11,091,873
Cash and Cash Equivalents at Beginning of Year		17,194,922
Cash and Cash Equivalents at End of Year	\$	28,286,795
Reconciliation of Operating Loss to Net Cash Used in Operating Activities:		
Operating Gain	\$	1,782,066
Adjustments to Reconcile Operating Loss to Net Cash Used in Operating Activities: Depreciation & Amortization Expense		2,767,474
Change in Assets and Liabilities:		(2.2.1.1)
Receivables		(243,151)
Prepaid Expenses		(149,591)
Inventory		(103,471)
Net Pension Asset		4,672,477
Decrease(Increase) in Deferred Outflow of Resources - Pension Increase (Decrease) Deferred Inflow of Resources - Pension		748,086
Increase (Decrease) Deferred Inflow of Resources - Pension Decrease(Increase) in ARO		(5,852,211)
Accounts and Other Payables		(67,247) 107,226
Accounts and Other Payables Accrued Wages Payable		(498,136)
Accrued Wages Payable Accrued Leave Payable		(138,030)
Net Cash Used in Operating Activities	\$	3,025,493
The Court Court of Operating Investment	Ψ	0,020,170

STATEMENT OF CASH FLOWS (CONTINUED) FOR THE YEAR ENDED JUNE 30, 2023

Cash and	l Cash I	Equivalents:
----------	----------	---------------------

Cash in Local Bank	\$ 3,712,835
Petty Cash	3,050
Cash with State Treasurer	24,570,910
Total Cash and Cash Equivalents	\$ 28,286,795
Non-Cash Capital and Related Financing Activities:	
Gain/Loss on Disposal of Assets	\$ 1,772,473
Donated Inventory of Supplies	9,065
Total Non-Cash Activities	\$ 1,781,537

The accompanying notes are an integral part of this statement.

NOTES TO FINANCIAL STATEMENTS JUNE 30, 2023

(1) Summary of Significant Accounting Policies

a. Reporting Entity

The South Dakota Science and Technology Authority (SDSTA) was created and organized by Chapter 1-16H of the South Dakota Codified Laws. The purposes of the SDSTA is to foster and facilitate scientific and technology investigation, experimentation, and development by creating a mechanism through which laboratory, experimental and development facilities may be acquired, developed, constructed, maintained, operated, and decommissioned. The initial focus of the SDSTA is to support the transfer of the Homestake Gold Mine in Lead, South Dakota for development by the research community to become the world's premier Underground Science and Engineering Laboratory; more specifically, the Sanford Underground Research Facility (SURF). Additional focus is maintained by the SDSTA for an education and outreach program detailing the progress. The SDSTA is a business type component unit of the State of South Dakota (the State). As such, the accompanying financial statements are included in the Annual Comprehensive Financial Report of the State of South Dakota.

The Sanford Underground Research Facility Foundation (SURFF) is a legally separate, tax-exempt component unit of the SDSTA. The SURFF was established as a fundraising organization to supplement resources for the SDSTA programs related to education, internships, public outreach, and the development of the SURF Institute. Thus, the services the SURFF provides is for the SDSTA. The sitting Chairperson of the SDSTA serves as a voting Director on an ex officio basis and is included in the total number of Directors as listed by the Bylaws. Two board members from the SDSTA are also on the Board of the SURF Foundation. The SDSTA is also responsible for any outstanding debt.

b. Fund Accounting

The SDSTA Fund is accounted for as an enterprise fund. Enterprise funds are used to account for operations (a) that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes.

c. Measurement Focus, Basis of Accounting

The SDSTA Fund follows the economic resources measurement focus and accrual basis of accounting, wherein revenues are recognized when earned and expenses are recognized when incurred. Likewise, the SURFF follows the accrual basis of accounting. Revenues are recognized when they are earned, and expenses are recognized when they are incurred.

d. Inventory of Supplies

Inventory of supplies consists primarily of expendable equipment/supplies, donated, and purchased, not yet in service. Donated inventory of supplies are revalued at their estimated fair value on date of donation. Purchased equipment values are reported at cost. Reported cost values include ancillary charges necessary to place the asset into its intended location and condition for use at a later date.

e. Capital Assets

Capital assets include land, buildings, machinery, and equipment, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period. Infrastructure assets are long-lived capital assets that normally are stationary in nature and normally can be preserved for a significantly greater number of years than most capital assets. Capital assets are recorded at historical cost. Donated capital assets are valued at their estimated fair value on the date donated. Reported cost values include ancillary charges necessary to place the asset into its intended location and condition for use.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(1) Summary of Significant Accounting Policies (Continued)

e. Capital Assets (Continued)

Subsequent to initial capitalization, improvements or betterments that are significant, and which extend the useful life of a capital asset are also capitalized. Depreciation of all exhaustible capital assets is recorded as an expense in the Statement of Revenues, Expenses, and Changes in Net Position, with net capital assets reflected in the Statement of Net Position. Accumulated depreciation is reported on the Statement of Net Position.

Capitalization thresholds (the dollar values above which asset acquisitions are added to the capital asset accounts), depreciation methods, and estimated useful lives of capital assets reported in the SDSTA's financial statements are as follows:

	Capi	talization	Depreciation	Estimated	
	Th	reshold	Method	Useful Life	
Land and Land Rights	A	ll Land	N/A	N/A	
Improvements	\$	5,000	Straight-line	10-50 yrs.	
Infrastructure		5,000	Straight-line	25-50 yrs.	
Buildings		5,000	Straight-line	10-50 yrs.	
Automobiles, Furniture, Machinery and Equipment		5,000	Straight-line	2-75 yrs.	

f. Revenue and Expense Classifications

In the Statement of Revenues, Expenses, and Changes in Net Position, revenues and expenses are classified in a manner consistent with how they are classified in the Statement of Cash Flows. That is, transactions for which related cash flows are reported as capital and related financing activities, non-capital financing activities, or investing activities are not reported as components of operating revenue or expenses. The Authority's proprietary fund distinguishes between operating and non-operating revenues and expenses. Operating revenues and expenses of the SDSTA consist of reimbursement of the costs of operations from Homestake Mining Company and other entities, and the costs of providing those services, including depreciation. All other revenues and expenses are reported as non-operating.

g. Cash and Cash Equivalents

Cash includes cash on hand, demand deposits, and participating interest in the State's internal investment pool held by the State Treasurer. The amount held in the State's internal investment pool is reported at fair value. The SDSTA has access to the entire amount of their cash resources on demand. Accordingly, equity in the cash management pool is considered to be cash and cash equivalents for the purpose of the Statement of Cash Flows.

h. Equity Classifications

Equity is classified as net position and is displayed in three components:

- 1. Net investment in capital assets consists of capital assets, including restricted capital assets, net of accumulated depreciation (if applicable) and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvements of those assets.
- 2. Restricted net position consists of net position with constraints placed on their use either by (a) external groups such as creditors, grantors, contributors, or laws and regulations of other governments; or (b) law through constitutional provisions or enabling legislation.
- 3. Unrestricted net position all other net position that do not meet the definition of "restricted" or "net investment in capital assets."

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(1) Summary of Significant Accounting Policies (Concluded)

i. Application of Net Position

It is the SDSTA's policy to first use restricted net position, prior to the use of unrestricted net position, when an expense is incurred for purposes for which both restricted and unrestricted net position are available.

i. Accrued Leave

Compensated absences consist of vacation and sick leave earned. The vacation leave is earned by full-time employees at the rate of 4.62 hours per pay period, increasing to 6.16 hours per pay period from 4-8 years of service, and 7.69 hours earned after 8 years of service. The vacation leave may accumulate only to a maximum of twice the annual accrual. Upon retirement or resignation, only full-time employees with 180 days of continuous service will be paid for accumulated vacation leave. Sick leave is earned at the rate of 4.32 hours per pay period. Upon termination, some employees are entitled to receive compensation for a portion of their sick leave balance. Those with seven years of service or more will receive compensation at the rate of 25 percent of their balance up to a maximum of 480 hours.

k. Pensions

For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense (revenue), information about the fiduciary net position of the South Dakota Retirement System (SDRS) and additions to/deletions from SDRS's fiduciary net position have been determined on the same basis as they are reported by SDRS. The SDSTA's contributions and net pension liability (asset) are recognized on an accrual basis of accounting.

l. Leases

We evaluated all current leases to determine if they meet the GASB 87 definition of a lease. For those that did meet the definition of a lease, we concluded they were immaterial for reporting in FY2023. We will analyze this each Fiscal Year.

m. Asset Retirement Obligation

GASB 83 "Certain Asset Retirement Obligations" was implemented in FY2022. We reported an asset retirement obligation (see note 4). This cost will be evaluated each fiscal year and updated for any changes.

n. Subscription Based Information Technology Arrangements (SBITA's)

GASB 96 was implemented in FY2023. We evaluated all current information technology contracts to determine if they meet the GASB 96 definition of a SBITA. For those that did meet the definition of a SBITA, we concluded they were immaterial for reporting in FY2023. We will analyze this each Fiscal Year.

(2) Deposits and Investments

Deposits

The majority of the SDSTA's cash is on deposit with the State Treasurer. Such funds are invested through the South Dakota Investment Council. Management of the State's internal investment pool is the statutory responsibility of the South Dakota Investment Council (SDIC). The investment policy and required risk disclosures for the State's internal investment pool are presented in the audit report of the South Dakota Investment Council, which can be obtained by contacting the Department of Legislative Audit, 427 South Chapelle, c/o 500 East Capitol, Pierre, South Dakota 57501. Custodial credit risk is the risk that in the event of a bank failure, the SDSTA's deposits may not be returned to it. The SDSTA does not have a deposit policy for custodial credit risk. None of the SDSTA's deposits were exposed to custodial credit risk.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(2) Deposits and Investments (continued)

Investments

In general, SDCL 1-16H-18 permits funds to be invested in (a) direct obligations of, or obligations the principal of the interest on which are fully guaranteed or insured by, the United States of America; or (b) obligations of any solvent insurance company or other corporation or business entity if rated in the two highest classifications established by a standard rating service or insurance companies or a nationally recognized rating agency; or (c) short term discount obligations of the Federal National Mortgage Association; or (d) obligations of any state of the United States or any political subdivision, public instrumentality, or public authority of any state of the United States, which obligations are not callable before the principal is to be paid, are fully secured as to both sufficiency and timely payment by, and payable solely from, obligations described in (a). The SDSTA did not have any investments as of June 30, 2023.

(3) Changes in Capital Assets

A summary of changes in capital assets for the year ended June 30, 2023, is as follows:

,g	Balance June 30, 2022	Increases Decreases		Balance June 30, 2023
Business-Type Activities:	June 30, 2022	Increases	Decreases	June 30, 2023
Capital Assets, not Being				
Depreciated:				
Land	\$ 1,924,136	\$ -	\$ -	\$ 1,924,136
Underground	17,936,955	φ -	Ф -	17,936,955
Archive Materials	70,000	_	_	70,000
Construction Work in	70,000			70,000
Progress (CIP) (see Note 10)	4,118,734	4,035,169	1,961,655	6,192,248
Total Capital Assets, not	4,110,754	1,033,107	1,501,055	-
Being Depreciated	24,049,824	4,035,169	1,961,655	30,046,647
	21,012,021	.,000,100	1,501,000	20,010,017
Capital Assets, Being				
Depreciated:				
DOE Property Transferred	6,328,277	2,684,639	12,813	9,000,103
Automobiles	477,611	61,053	-	538,664
Buildings	17,383,244	-	123,513	17,259,731
Furniture	67,298	-	-	67,298
Computer Equipment	339,634	41,866	15,065	366,435
Improvements	55,625,517	-	6,589	55,618,928
Infrastructure	2,003,189	-	117,246	1,885,943
Machinery and Equipment	10,183,443	57,752	591,649	9,649,546
Total Capital Assets, Being				
Depreciated	92,408,213	2,845,309	866,874	94,386,650
Total Capital Assets, Before				
Depreciation	116,458,038	6,880,478	2,828,529	120,509,987
Less Accumlated Depreciation:				
DOE Property Transferred	511,392	416,333	4,176	923,549
Automobiles	142,639	68,071	-	210,710
Buildings	2,607,215	356,083	50,983	2,912,316
Computer Equipment	269,766	36,778	15,064	291,480
Furniture	60,561	4,487	-	65,048
Improvements	11,737,624	1,326,593	6,589	13,057,628
Infrastructure	551,547	52,259	34,002	569,805
Machinery and Equipment	6,177,368	469,221	526,957	6,119,633
Total Accumlated Depreciation	22,058,112	2,729,825	637,770	24,150,167
Capital Assets, Net	\$ 94,399,926	\$ 4,150,654	\$ 2,190,759	\$ 96,359,821
	14	4		

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(4) Long-Term Debt

A summary of changes in long-term debt follows:

	I	Beginning						Ending	Dι	ie Within
		Balance	Additions		Additions Deletion		Balance		Balance On	
Accrued Compensated Absences	\$	1,563,025	\$	1,249,628	\$	1,387,657	\$	1,424,996	\$	712,498
Asset Retirement Obligation		1,129,638		67,247		-		1,196,885		-
Xenon Notes Payable		6,000,000		-		2,878,810		3,121,190		_
	\$	8,692,663	\$	1,316,875	\$	4,266,467	\$	5,743,071	\$	712,498

Xenon Notes Payable

Loan Agreements with S.D. Community Foundation (SDCF), S.D. State University Foundation (SDSUF), and University of S.D. Foundation (USDF) to purchase Xenon.

Repayment of Xenon Notes Payable

Each Foundation's share of Xenon shall be sold at a time such that the loans will be paid by the maturity date provided by the loan documents. Furthermore, if the SDSTA sells Xenon for more than the cost to purchase it, the Foundations shall be paid the full principal amount payable plus an amount equal to the Average Return times the number of liters of Xenon purchased using Foundation Funds. The "Average Return" means the total price received for the sale of all Xenon owned by SDSTA within the Project minus the amount paid to all Foundations providing funding, with the difference then divided by the total number of liters sold. Furthermore, if the SDSTA fails to pay any payment required on or before the due date, the Foundations may declare the entire remaining balance immediately due and payable.

In November 2022, the South Dakota Science and Technology Authority negotiated the sale of 45,274 liters of Xenon for \$2,878,810. Book value at 6/30/2022 of Xenon sold was \$246,517 (See Note 5). Proceeds from this sale were used to satisfy part of the long-term debt on loan agreements with the three foundations. The remaining balance of the notes payable was renegotiated and extend the due date of these notes by two years.

The loans are 13 year, unsecured non recourse loans with 2.5% simple interest paid quarterly. The SDCF note is due on October 1, 2028. The SDSUF and USDF notes are due December 31, 2028.

Also see Note 8. \$3,121,190

The annual requirements to amortize long-term debt outstanding as of June 30, 2023, are as follows:

	Xenon Not	tes Payable	Totals						
	Interest	Principal	I	nterest]	Principal			
2024	78,030	-		78,030		-			
2025	78,030	-		78,030		-			
2026	78,030	-		78,030		-			
2027	78,030	-		78,030		-			
2028	78,030	-		78,030		-			
2029	32,780	3,121,190		32,780		3,121,190			
Total	\$ 422,928	\$ 3,121,190	\$	422,928	\$	3,121,190			

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(4) Long-Term Debt (Continued)

Asset Retirement Obligation (ARO)

South Dakota Science and Technology Authority has deemed there would be costs associated with closing the SURF facility, if abandoning the site would occur. Outside regulatory agencies that would be involved with oversite of the closure would be the U.S. Environmental Protection Agency, and the South Dakota Department of Agriculture and Natural Resources. The capital assets on SDSTA's financial statements that would be included in the asset retirement obligation are land, above ground and underground infrastructure, and buildings. We used a team of internal experts to develop the estimate including: mining engineers, mechanical engineers, construction managers, heavy equipment experts, all with expertise in mining, underground, and environmental industries. The methods and assumptions used by these experts were to estimate hours associated with completing the below tasks using a current average salary and benefit rate, plus any associated contractor fees. Using these assumptions, they have determined the below actions would need to be taken and associated costs incurred:

SDSTA Estimate:	
SURF Site Closure Cost	
Project 1. Shutdown Dewatering System	\$ 19,813
Project 2. Secure Surface to UG Access Points	123,427
Project 3. Remove Underground Hazardous Materials	170,660
Project 4. Underground Inspection/Documentation	259,460
Project 5. Utility Reduction	8,403
Project 6. Secure Surface Area(s) and Building	72,213
Project 7. Secure Yates Shaft Entrance	116,071
Project 8. Secure Ross Shaft Entrance	116,071
Project 9. Secure Oro Hondo Shaft Entrance	79,391
Project 10. Secure 5 Shaft Entrance	137,822
Project 11. Remove Hoists from Service	31,450
Project 12. Remove Hazardous Material from Surface	62,103
Grand Total	\$ 1,196,885

Per our land donation agreement from Homestake Mining Company in 2006, we assumed all liability for closure, and were obligated to restrict \$1,000,000 for such an event; SDSTA complied with this agreement. Since then, interest has accrued and been restricted by SDSTA; current restricted and separately reported cash on hand for site abandonment is \$1,594,680.

For calculating useful life of this liability, we correlate to our relationship with LBNF/DUNE (Long Based Neutrino Facility/Deep Underground Neutrino Experiment). This relationship is expected to continue until 2045 per the Snowmass/P5 (Particle Physics Project Prioritization Panel), thus we deem a conservative useful life of 30 years.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(5) Xenon Purchases

Xenon purchased is valued at a cost per liter with additional freight, customs, and analysis charges. Total Xenon purchased to date is \$8,687,833 as shown by the detail below.

Fiscal Year	# of Liters	<u>Total Cost</u>	Average Cost/Liter
2014	20,000	\$332,855	\$16.64/liter
2016	200,000	1,273,808	6.37/liter
2017	600,295	3,433,693	5.72/liter
2018	260,000	1,473,544	5.67/liter
2019	300,000	1,650,450	5.50/liter
2020	140,000	770,000	5.50/liter
2023	(45,274)	(246,517)	5.89/liter
Total Purchased	1,475,021	\$8,687,833	\$ 5.89/liter

(6) Retirement/Pension Plan

Plan Information:

All employees, working more than 20 hours per week during the year, participate in the South Dakota Retirement System (SDRS), a cost sharing, multiple employer hybrid defined benefit pension plan administered by SDRS to provide retirement benefits for employees of the State of South Dakota and its political subdivisions. The SDRS provide retirement, disability, and survivor benefits. The right to receive retirement benefits vests after three years of credited service. Authority for establishing, administering, and amending plan provisions are found in SDCL 3-12. The SDRS issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained at http://sdrs.sd.gov/publications.aspx or by writing to the SDRS, P.O. Box 1098, Pierre, SD 57501-1098 or by calling (605) 773-3731.

Benefits Provided:

SDRS has four classes of members: Class A general members, class B public safety and judicial members, Class C Cement Plant Retirement Fund members, and Class D Department of Labor and Regulation members.

Members that were hired before July 1, 2017, are Foundation members. Class A Foundation members and Class B Foundation members who retire after age 65 with three years of contributory service are entitled to an unreduced annual retirement benefit. An unreduced annual retirement benefit is also available after age 55 for Class A Foundation members where the sum of age and credited service is equal to or greater than 85 or after age 55 for Class B Foundation judicial members where the sum of age and credited service is equal to or greater than 80. Class B Foundation public safety members can retire with an unreduced annual retirement benefit after age 55 with three years of contributory service. An unreduced annual retirement benefit is also available after age 45 for Class B Foundation public safety members where the sum of age and credited service is equal to or greater than 75. All Foundation retirement benefits that do not meet the above criteria may be payable at a reduced level. Class A and B eligible spouses of foundation members will receive a 60 percent joint survivor benefit when the member dies.

Members that were hired on/after July 1, 2017, are Generational members. Class A Generational members and Class B Generational judicial members who retire after age 67 with three years of contributory service are entitled to an unreduced annual retirement benefit. Class B Generational public safety members can retire with an unreduced annual retirement benefit after age 57 with three years of contributory service. At retirement, married Generational members may elect a single-life benefit, a 60 percent joint and survivor benefit, or a 100 percent joint and survivor benefit. All Generational retirement benefits that do not meet the above criteria may be payable at a reduced level. Generational members will also have a variable retirement account (VRA) established, in which they will receive up to 1.5 percent of compensation funded by part of the employer contribution. VRA's will receive investment earnings based on investment returns.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(6) Retirement/Pension Plan (Continued)

Legislation enacted in 2017 established the current COLA process. At each valuation date:

- Baseline actuarial accrued liabilities will be calculated assuming the COLA is equal to the long-term inflation assumption of 2.25%.
- If the fair value of assets is greater or equal to the baseline actuarial accrued liabilities, the COLA will be:
 - The increase in the 3rd quarter CPI-W, no less than 0.5% and no greater than 3.5%.
- If the fair value of assets is less than the baseline actuarial accrued liabilities, the COLA will be:
 - O The increase in the 3rd quarter CPI-W, no less than 0.5% and no greater than a restricted maximum such that, that if the restricted maximum is assumed for future COLA's, the fair value of assets will be greater or equal to the accrued liabilities.

Legislation enacted in 2021 reduced the minimum COLA from 0.5 percent to 0.0 percent.

All benefits except those depending on the Member's Accumulated Contributions are annually increased by the Cost-of-Living Adjustment.

Contributions:

Per SDCL 3-12, contribution requirements of the active employees and the participating employers are established and may be amended by the SDRS Board. Covered employees are required by state statute to contribute the following percentages of their salary to the plan; Class A Members 6.0% of salary; Class B Judicial Members, 9.0% of salary; and Class B Public Safety Members, 8.0% of salary. State Statute also requires the employer to contribute an amount equal to the employee's contribution. The SDSTA's share of contributions to the SDRS for the fiscal years ended June 30, 2023, 2022, and 2021, equal to required contributions each year, were as follows: \$962,630, \$880,457, and \$841,062, respectively.

<u>Pension Liabilities (Assets), Pension Expense (Revenue), and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions:</u>

As of June 30, 2022, SDRS is 100.1% funded and accordingly has a net pension asset. The proportionate share of the components of the net pension asset of the South Dakota Retirement System for the SDSTA as of the measurement period ending June 30, 2022, and reported by the SDSTA as of June 30, 2023, are as follows:

Proportionate share of pension liability	\$ 86,752,272
Less Proportionate share of net pension restricted for pension benefits	86,810,350
Proportionate share of net pension liability (asset)	\$ (58,078)

At June 30, 2023, the SDSTA reported a liability (asset) of \$ (58,078) for its proportionate share of the net pension liability (asset). The net pension liability (asset) was measured as of June 30, 2022, and the total pension liability (asset) used to calculate the net pension asset was based on a projection of the SDSTA's share of contributions to the pension plan relative to the contributions of all participating entities. At June 30, 2022, the SDSTA's proportion was 0.61454000% which is an decrease of 0.0031640% from its proportion measured as of June 30, 2021.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(6) Retirement/Pension Plan (Continued)

For the year ended June 30, 2023, the SDSTA recognized pension expense of \$431,646. At June 30, 2023, the SDSTA reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	ed Outflows Resources	Deferred Inflows Of Resources			
Difference between expected and actual experience.	\$ 1,105,558	\$	3,770		
Changes in assumption.	3,691,253		3,234,889		
Net Difference between projected and actual earnings on pension plan investments.	-		139,182		
Changes in proportion and difference between SDSTA contributions and proportionate share of contributions.	5,586		70,075		
SDSTA contributions subsequent to the measurement date.	962,630		-		
TOTAL	\$ 5,765,027	\$	3,447,916		

\$962,630 reported as deferred outflow of resources related to pensions resulting from the SDSTA's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending June 30, 2024. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense (revenue) as follows:

Year Ended June 30:

2024	\$ 324,669
2025	796,978
2026	(918,354)
2027	1,151,187
TOTAL	\$ 1,354,480

Actuarial Assumptions:

The total pension liability (asset) in the June 30, 2022, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation 2.25 %

Salary Increases Graded by year of service, from 7.66% at entry to 3.15% after 25 years of service. Discount Rate 6.50% net of plan investment expense. This is composed of an average inflation

rate of 2.50% and real returns of 4.00%

Future COLAs 2.10%

All mortality rates are based on Pub-2010 amount-weighted mortality tables, projected generationally with improvement scale MP-2020

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(6) Retirement/Pension Plan (Continued)

Active and Terminated Vested Members:

Teachers, Certified Regents, and Judicial: PubT-2010

Other Class A Members: PubG-2010 Public Safety Members: PubS-2010

Retired Members:

Teachers, Certified Regents, and Judicial Retirees: PubT-2010, 108% of rates above age 65

Other Class A Retirees: PubG-2010, 93% of rates through age 74, increasing by 2% per year until 111% of

rates at age 83 and above.

Public Safety Retirees: PubS-2010, 102% of rates at all ages

Beneficiaries:

PubG-2010 contingent survivor mortality table

Disabled Members:

Public Safety: PubS-2010 disabled member mortality table Others: PubG-2010 disabled member mortality table

The actuarial assumptions used in the June 30, 2022, valuation was based on the results of an actuarial experience study for the period of July 1, 2016, to June 30, 2021.

Investment portfolio management is the statutory responsibility of the South Dakota Investment Council (SDIC), which may utilize the services of external money managers for management of a portion of the portfolio. SDIC is governed by the Prudent Man Rule (i.e., the council should use the same degree of care as a prudent man). Current SDIC investment policies dictate limits on the percentage of assets invested in various types of vehicles (equities, fixed income securities, real estate, cash, private equity, etc.). The long-term expected rate of return on pension plan investments was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2022 (see the discussion of the pension plan's investment policy) are summarized in the following table using geometric means:

		Long-Term
	Target	Expected Real Rate
Asset Class	Allocation	of Return
Global Equity	58.00%	3.70%
Fixed Income	30.00%	1.10%
Real Estate	10.00%	2.60%
Cash	2.00%	0.40%
Total	100%	2.70%

Discount Rate:

The discount rate used to measure the total pension liability (asset) was 6.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that matching employer contributions will be made at rates equal to the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability (asset).

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(6) Retirement/Pension Plan (Concluded)

Sensitivity of (liability) to changes in the discount rate:

The following presents the SDSTA's proportionate share of the net pension liability (asset) calculated using the discount rate of 6.50% as well as what the SDSTA's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower (5.50%) or 1-percentage point higher (7.50%) than the current rate:

	1% <u>Decrease</u>	Current Discount <u>Rate</u>	1% <u>Increase</u>
SDSTA's proportionate share of the net pension liability (asset)	\$12.059.339	\$ (58,078)	\$(9,961,209)

Pension Plan Fiduciary Net Position:

Detailed information about the plan's fiduciary net position is available in the separately issued SDRS financial report.

(7) Risk Management

The SDSTA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. There were no insurance claims exceeding insurance coverage during the past three years. During the period ended June 30, 2023, the SDSTA managed its risks as follows:

Building Structure Charges:

The buildings and permanent structures owned by the SDSTA are not covered by commercial insurance. However, the recently erected MSF and the SLHVC is covered by commercial insurance.

Personal Property Insurance:

The SDSTA purchases insurance for the contents of the administration building from a commercial insurance carrier. However, the contents of the SDSTA's other buildings are not insured.

Employee Health Insurance:

The SDSTA purchases health insurance for its employees from a commercial insurance carrier. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

Liability Insurance:

The SDSTA purchases liability insurance for risks related to torts, theft or damage of property, errors and omissions of public officials, employee practices liability coverage, employee dishonesty, cybersecurity, and professional engineers' coverage through its participation in the South Dakota Authority Captive Insurance Company, a component unit of the State of South Dakota. Additional liability coverage including auto liability coverage and environmental liability is purchased from commercial insurance carriers. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

Worker's Compensation:

For the policy renewal date of January 1, 2022, through January 1, 2023, the SDSTA continued to purchase workers' compensation through a commercial insurance carrier. Settled claims resulting from these risks have not exceeded the liability coverage during the past three years.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(7) Risk Management (Continued)

Unemployment Benefits:

The SDSTA provides coverage for unemployment benefits by paying into the Unemployment Compensation Fund established by state law and managed by the State of South Dakota.

(8) Significant Commitments, Contracts, and Subsequent Events

On December 23, 2009, the SDSTA received \$20,000,000 designated as Sanford Gift No.2. Gift No.2 was originally established for the construction of the Sanford Center for Science Education. Two amendments to the Homestake Gift Agreement were signed in June 2010 and October 2011, respectively, whereby it was agreed to use \$15 million of this \$20 million for infrastructure and safety upgrades at the Underground Davis Campus and for replacing steel and other rehabilitation of the Ross Shaft. In early August 2012, the SDSTA signed a third amendment to the Gift Agreement and received the remaining \$15 million of Gift No.2 called for by Section 2 of the Gift Agreement. The Gift No.2 balance of \$20 million was to be held in a restricted fund whereby the principal was not to be expended until a written approval of a business and operational plan for the Sanford Center for Science Education was received from Mr. Sanford. Furthermore, the third amendment allowed the SDSTA to utilize and expend interest and other earnings on Gift No.2 restricted funds. In May, 2013, the SDSTA signed a fourth amendment to the Gift Agreement whereby it was agreed to expend up to \$7,000,000 of Gift No.2 for the construction or remodeling of the Yates Dry Building (located at SURF), the remodeling or replacement of the Lead Homestake Visitor's Center and the remodeling of Jonas Hall (located on the campus of Black Hills State University in Spearfish, SD). This authorization was conditioned on the SDSTA raising \$1.5 million from other sources for the Black Hills State University project and \$1 million for the SURF Homestake Visitor's Center (SLHVC) in Lead. The SDSTA secured a \$2 million Future Fund grant from the State of South Dakota in October 2013 and an additional \$500,000 was received in July 2014 from Great Plains Education Foundation that satisfied this monetary obligation. Both outside facilities agreed in writing to incorporate and use the name "Sanford" in the naming of the facilities. Operating agreements are in place which provide for the ongoing operations of the respective facilities by the Homestake Visitor Center, Inc. and Black Hills State University. Given the construction budget of the SLHVC and the Jonas Science Building renovation costs, it was not possible to undertake the upgrades to the Yates Dry. These details were reported in the Fifth Amendment to the Homestake Gift Agreement in February 2015. Furthermore, any part of Gift No.2 not used for the three construction projects may be used for the construction and operation of additional underground laboratory space at SURF to accommodate other experiments, and for related infrastructure to access or support the new laboratory space through the shafts. After the above projects were finished approximately \$1,000,000 remained. On June 23, 2016, the sixth amendment was signed allowing the SDSTA to use the remaining funds to purchase real estate known as "Ellison Hill" and to conduct needed environmental assessments and remediation of the property. This will provide needed storage and construction material laydown space for the LBNF and DUNE projects. The "Ellison Hill" property was purchased in May 2017. The cost of this remediation was shared equally by the SDSTA and Homestake Mining Company per the purchase agreement.

With additional change orders, the contract amount was decreased to \$302,319. Remediation of the property was completed in November 2017. At fiscal yearend 2023, a balance of \$10 remained as Gift No. 2 funds. This will be transferred to the SDSTA's operating account.

The SDSTA's long-term cooperative agreement with Homestake Mining Company of California continues. The SDSTA agrees to combine Homestake's wastewater from Grizzly Gulch with the mine wastewater, as well as treat, and discharge the water. For the first year of this agreement, Homestake agreed to pay the SDSTA an amount ranging from \$.58 to \$.84 per 1000 gallons based on average total gallons treated per minute per month. Revenue from this agreement for the past two years was \$123,902 and \$205,127, respectively. Revenue was lower this last year due to the number of gallons treated being lower. The terms of the agreement were amended in September 2020 adjusting the price per 1000 gallons to \$.75 and extending this price and the contract to September 30, 2030. Estimated revenues for the upcoming year are at \$240,000.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(8) Significant Commitments, Contracts, and Subsequent Events (Continued)

A lease between the SDSTA and DOE for land (above ground) and space (underground) for the LBNF was signed on March 29, 2016. The term of the lease goes through April 30, 2036, but shall remain in force thereafter from year to year without further notice but shall in no event extend beyond a total of 65 years. Additional amendments to this lease executed in June 2017 and May 2018 (Amendment #1 and Amendment #2) added additional space in the Ross Dry Facility in support of the Long Baseline Neutrino Facility. An easement was signed with Homestake Mining Company for the construction and maintenance of conveyor facilities for the transportation of excavated rock to the Open Cut (open mine pit) owned by Homestake. The LBNF will include a large experimental facility underground at the 4850'L. Waste rock excavated from that level will be deposited into the Open Cut. An additional easement was negotiated with the City of Lead across their property to construct, maintain, and operate this overhead conveyance system. The conveyance system has been constructed and waste rock is being transported into the Open Cut starting June 2021.

Homestake Mining Company agreed with the signing of the Third Amendment to the Property Donation Agreement in August 2015 to release \$2,500,000 from the Indemnification Fund for the SDSTA to fund the captive insurance company. The original appropriation for the indemnification fund found at 2004 SD Session Laws, Chapter 14, Section 1 was revised by the State Legislature per Legislative Session 2015 HB 1186, to allow the use of up to \$2,500,000 to provide initial capital and pay expenses for the SDSTA's purposes in the captive insurance company.

Letter Agreement #1586 was signed in August 2015 between the GOED and the SDSTA whereby the State is granting up to \$6,000,000 between July 14, 2015, and September 30, 2018. The State has chosen to engage in a partnership with the SDSTA, the South Dakota Community Foundation, the South Dakota State University Foundation, and the University of South Dakota Foundation to assist with the costs of infrastructure/laboratory upgrades, procurement of xenon for the LUX-ZEPLIN (LZ) dark matter experiment, and interest payments to these foundations. The full \$6,000,000 has been received from the State as well as \$2,000,000 each from the South Dakota Community Foundation, the University of South Dakota Foundation, and the South Dakota State University Foundation. Loan agreements are in place between the SDSTA and the three foundations for a total of \$6,000,000 to be used for the purchase of xenon for the future LZ experiment. The loans extend to the last quarter of 2026. They are unsecured nonrecourse loans with 2.5% simple interest to be paid quarterly to each lender. The loans will be repaid at the end of the LZ experiment (approximately October 2026) from the sale proceeds of the xenon previously purchased. A total of 1,520,295 liters of xenon have been purchased for experiment use. The processed xenon has all been received at SURF and is being used in the LZ experiment.

On November 7, 2022, the SDSTA signed a Promissory Note with the First Interstate Bank for \$5,000,000. This agreement represents a variable rate revolving line of credit. Collateral for this line of credit includes the SDSTA's Account Receivable. The SDSTA has not drawn down any funding from this line of credit. The maturity date is October 31, 2023, at which time we will renew for another one-year term.

On March 9, 2023, SDSTA signed a five-year commitment for annual sponsorship to the Washington Pavilion in Sioux Falls, South Dakota, for the Water Experience exhibit, totaling \$75,000. The Washington Pavilion is eastern South Dakota's home for the arts, entertainment, and science.

The State of South Dakota appropriated \$13 million of general fund moneys through Senate Bill 35 during the 2023 legislative session, for the purposes of expanding laboratory space at the Sanford Underground Research Facility. The SDSTA will contract with Thyssen Mining Incorporated to work on this project.

In July 2023 SDSTA entered into an Owners Interest Insurance Policy that covers the LBNF/DUNE project as well as SDSTA Underground Expansion Project. The total premium cost is \$2,316,669. Fermi Research Alliance will reimburse \$2,262,051 of the cost and the remaining \$54,518 with be paid from SDSTA funds. To cash flow this purchase SDSTA entered into a loan for \$1,620,969 to cover the initial costs of the policy. This loan will be paid in full by March 2024.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(9) Significant Contingencies - Litigation

At June 30, 2023, the SDSTA engaged in no lawsuits.

(10) Construction Work in Process

The SDSTA accumulates the costs of construction projects in Construction Work in Progress until the project is completed and/or placed in service. Some of the ongoing improvement projects are capitalized as they progress. As of June 30, 2023, construction work in progress was at \$6,192,248.

(11) Continuing Operations

On September 30, 2019, the SDSTA transitioned to a five-year Cooperative Agreement totaling to date \$122,134,028 with the DOE's Office of Science – Integrated Support Center. This will fund the SDSTA's operations for SURF. The federal fiscal year 2024 budget totals \$26,661,651. Additionally, SDSTA has been awarded \$28,211,522 in Infrastructure Improvement Projects (IIPs) with \$16,909,525 spent through FY2023; \$9,000,000 has been budgeted in FY2024. We have proposed for fiscal year 2024 and 2025 approximately \$24M of additional IIPs that will be awarded separately, if approved. LBNF/DUNE Logistics Support Services continues with Fermi National Accelerator Laboratory (FNAL) through March 31, 2024. Additionally, SDSTA support for the LZ experiment operations through a DOE grant have been extended to February 2024. DOE has requested SDSTA to submit a proposal to continue operations via a Cooperative Agreement with the Office of Science for the periods 2025-2029, award will likely be an extension of the current CA but is yet to be determined.

(12) Related Party Transactions

The SDSTA has a consulting contract with Dialogue, LLC, which is a company owned and operated by the SDSTA Executive Director's spouse. The consultant reports to the Chairman of the Board of Directors under this agreement and not the Executive Director. All contract and invoice payments to Dialogue LLC, were signed and approved by the SDSTA's Chairman of the Board of Directors. Payments totaled \$34,950 in FY2023. Additionally, SDSTA entered into a contract for marketing consulting services with Turner Lee Consulting & Design, which is owned and operated by the SDSAT Foundation Board President on July 26, 2022, and will terminate on July 25, 2023. The consultant reports to the SDSTA Executive Director. Payments totaled \$15,100 in FY2023.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) JUNE 30, 2023

(13) Blended Component Unit Condensed Financial Information

SANFORD UNDERGROUND RESEARCH FACILITY FOUNDATION CONDENSED STATEMENT OF NET POSITION JUNE 30, 2023

ASSETS	

ASSETS		
Current Assets		
Cash in Local Bank	\$	609,670
Accounts Receivable		20,000
Contributions Receivable Total Current Assets		30,000 639,670
Total Cullent Assets		057,070
TOTAL ASSETS		639,670
NET POSITION		
Restricted for:		
Davis-Bachall		45,000
Garden		517,113
Interns Public Outrooch		31,013
Public Outreach Visitor Center		33,331 396
Unrestricted Net Position		12,817
omesured rectrosition		12,017
TOTAL NET POSITION	\$	639,670
CONDENSED STATEMENT OF REVENUES, EXPENSES, AND ADDRESS OF THE PROPERTY OF THE	ND CHANGES IN NET	POSITION
JUNE 30, 2023		
Restricted Revenue Garden	\$	123,095
Interns	Þ	19,681
Public Outreach		8,500
STEM Education		29,667
Visitor Center		2,718
Miscellaneous and Unrestricted Revenue		23,332
Total Revenue		206,993
Expenses		
Miscellaneous Expenses	\$	10,953
Payments to Primary Government		24,816
Total Expenses		35,769
Change in Net Position		171,224
Net Position Beginning of Year		468,446
Net Position End of Year	\$	639,670
CONDENSED STATEMENT OF CASH FLOWS		
JUNE 30, 2022		
Cash Provided from Operating Activites		
Cash Received from Donations	\$	166,040
Cash Payments for Operating Activities		24,816
Net Increase in Cash and Cash Equivalents		141,224
Cash and Cash Equivalents at Beginning of Year		468,446
Cash and Cash Equivalents at End of Year	\$	609,670
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

REQUIRED SUPPLEMENTARY INFORMATION OTHER THAN MD&A

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY REQUIRED SUPPLEMENTARY INFORMATION

Schedule of the Proportionate Share of the Net Pension Liability (Asset) and Schedule of the SDSTA Contributions

SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET)

South Dakota Retirement System

Last 10 Fiscal Years *

	2023		2022	2021		2020	2019		2018		2017	2016	2015
SDSTA's proportion of the net pension liability (asset)	0.6145	100%	0.6177040%	0.5665885%	ó	0.4949484%	0.44446339	%	0.4881662%	C).5027360%	0.5089089%	0.5287996%
SDSTA's proportionate share of net pension liability (asset)	\$ (58	,078) \$	(4,730,555)	\$ (24,607) \$	(52,451)	\$ (10,36)	6) \$	(44,302)	\$	1,698,193	\$ (2,158,428)	\$ (3,809,788)
SDSTA's covered employer payroll	\$ 14,431	,476 \$	13,727,913	\$ 12,193,592	\$	10,237,119	\$ 8,995,99	3 \$	9,596,007	\$	9,256,007	\$ 9,042,866	8,888,749
SDSTA's proportionate share of the net pension liability (asset) as a percentageof its covered-employee payroll	(.40%	34.46%	0.20%	Ď	0.51%	0.129	%	0.46%		18.35%	23.87%	42.86%
Plan fiduciary net position as a percentage of the total pension liability (asset)	100	.10%	105.52%	100.04%	ó	100.09%	100.029	%	100.10%		96.89%	104.10%	107.30%

^{*} The amounts presented for each fiscal year were determined as of the measurement date of the collective net pension liability (asset) which is 6/30 of previous fiscal year. Until a full 10-year trend is compiled, the SDSTA will present information for those years for which information is available.

SCHEDULE OF THE AUTHORITY CONTRIBUTIONS

South Dakota Retirement System

Last 10 Fiscal Years

	2023		2022		2021		2020		2019		2018		2017		2016		2015
Contractually required contribution Contributions in relation to the	\$	962,630	s	880,457	\$	841,062	\$ 746,095	\$	631,417	\$	554,398	\$	595,112	\$	573,626	\$	557,420
contractually required contribution	\$	962,630	\$	880,457	\$	841,062	\$ 746,095	\$	631,417	\$	554,398	\$	595,112	\$	573,626	\$	557,420
Contribution deficiency (excess)	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
SDSTA's covered-employee payroll	\$	15,829,925	\$	14,431,476	\$	13,727,913	\$ 12,193,592	\$	10,237,119	\$	8,995,993	\$	9,596,007	\$	9,256,007	\$	9,042,866
Contributions as a percentage of covered-employee payroll		6.08%		6.10%		6.13%	6.12%		6.17%		6.16%		6.20%		6.20%		6.16%

^{*} Until a full 10-year trend is compiled, the SDSTA will present information for those years for which information is available.

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY REQUIRED SUPPLEMENTARY INFORMATION

Schedule of the Proportionate Share of the Net Pension Liability (Asset) and Schedule of the SDSTA Contributions (Continued)

Changes from Prior Valuation

The June 30, 2022, Actuarial Valuation reflects numerous changes to the actuarial assumptions as a result of an experience analysis completed since the June 30, 2021, Actuarial Valuation. In addition, two changes in actuarial methods have been implemented since the prior valuation.

The details of the changes since the last valuation are as follows:

Benefit Provision Changes

During the 2022 Legislative Session no significant SDRS benefit changes were made and gaming enforcement agents became Class B Public Safety Members.

Actuarial Assumption Changes

As a result of an experience analysis covering the period from July 1, 2016 to June 30, 2021 and presented to the SDRS Board of Trustees in April and June, 2022, significant changes to the actuarial assumptions were recommended by the SDRS Senior Actuary and adopted by the Board of Trustees first effective for this June 30, 2022 actuarial valuation.

The changes to economic assumptions included increasing the price inflation to 2.50% and increasing the wage inflation to 3.15%. The current assumed investment return assumption of 6.50% was retained, lowering the assumed real investment return to 4.00%. The baseline COLA assumption of 2.25% was also retained. Salary increase assumptions were modified to reflect the increase in assumed wage inflation and recent experience. The assumed interest on accumulated contributions was decreased to 2.25%

The demographic assumptions were also reviewed and revised. The mortality assumption was changed to the Pub-2010 amount-weighted tables using separate tables for teachers, general, and public safety retirees, with assumptions for retirees adjusted based on credible experience. The mortality assumption for active and terminated vested members was changed to the unadjusted amount-weighted Pub-2010 tables, again by member classification and the assumption for beneficiaries was changed to the amount-weighted Pub-2010 general contingent survivor table. Adjustments based on experience were also made to the assumptions regarding retirement, termination, disability, age of spouses for married Foundation members, percentage of terminated vested members electing a refund, and benefit commencement age for terminated vested Public Safety members with 15 or more years of service.

The SDRS COLA equals the percentage increase in the most recent third calendar quarter CPI-W over the prior year, no less than 0% (0.5% prior to 2021) and no greater than 3.5%. However, if the FVFR assuming the long-term COLA is equal to the baseline COLA assumption (currently 2.25%) is less than 100%, the maximum COLA payable will be limited to the increase that if assumed on a long-term basis, results in a FVFR equal to or exceeding 100%.

As of June 30, 2021, the FVFR assuming the long-term COLA is equal to the baseline COLA assumption (2.25%) was greater than 100% and the full 0% to 3.5% COLA range was payable. For the June 30, 2021, Actuarial Valuation, future COLAs were assumed to equal the baseline COLA assumption of 2.25%.

As of June 30, 2022, the FVFR assuming future COLAs equal to the baseline COLA assumption of 2.25% is less than 100% and the July 2023 SDRS COLA is limited to a restricted maximum of 2.10%. The July 2023 SDRS COLA will equal inflation, between 0% and 2.10%. For this June 30, 2022, Actuarial Valuation, future COLAs were assumed to equal the restricted maximum COLA of 2.10%.

Actuarial assumptions are reviewed for reasonability annually and reviewed in depth periodically, with the next experience analysis anticipated before the June 30, 2027, Actuarial Valuation and any recommended 7 changes approved by the Board of Trustees are anticipated to be first implemented in the June 30, 2027, Actuarial Valuation.

Actuarial Method Changes

Actuarial method changes with minor impact were implemented for this valuation after recommendation by Cavanaugh Macdonald Consulting as part of their reviews of prior valuations. As a result, liabilities and normal costs for refund benefits and the Generational Variable Retirement Account are now calculated using the entry age normal cost method with normal costs based on the expected value of these accounts rather than the actual balance.

SUPPLEMENTARY INFORMATION

SCHEDULE OF OPERATING EXPENSES FOR THE YEAR ENDED JUNE 30, 2023

Personnel Services		
Employee Salaries	\$	13,534,227
Employee Benefits	·	7,045,457
Total Personal Services		20,579,684
Travel		
Meals and Lodging		159,991
Auto and Fleet Services		50,334
Air - Commercial and Charter		68,154
Incidentals to Travel		13,252
Non-Employee Travel		4,630
Meals (Not Overnight)		-
Total Travel		296,362
Contractual Services		
Equipment Rental		77,189
Contractual - Other		3,000,379
Insurance		1,407,874
Lobbying		299,982
Computer Services		16,007
Telecommunications		102,384
Monitoring and Programming		25,820
Legal Consultant		104,341
Training		140,291
Consultant Fees - Accounting and Auditing		43,363
Promotion and Advancement		55,978
Dues and Memberships		26,251
Utilities		2,481,469
Maintenance and Repairs		109,224
Total Contractual Services		7,890,552
Supplies, Materials and Other Operating Expenses		
Maintenance and Repairs		2,681,710
Other Supplies and Equipment		770,552
Other Expenses		195,615
Office Supplies and Equipment		19,997
Licenses and Permits		48,863
Workshop and Registration Fees		12,002
Postage		2,840
Bank Charges		2,050
Total Supplies, Materials and Other Operating Expenses		3,733,628
Depreciation Expense		2,767,474
Total Operating Expenses	\$	35,267,701

SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2023

	Pass-Through Numbers	Federal AL Number	Amount	
U.S. Department of Energy				
Pass-Through the Regents of the University of California				
LUX/Zeplin (LZ) Experiment Operations - Engineer/Research Supp.	7525117	81.UNKNOWN	\$	1,132
U.S. Department of Energy				
Pass-Through the Regents of the University of California				
LBNL SIGMA-V Project	7371823	81.UNKNOWN	\$	47,672
U.S. Department of Energy				
Pass-Through Oak Ridge National Laboratory				
Experiment Support for Majorana Demonstrator	4000193681	81.UNKNOWN	\$	8,042
U.S. Department of Energy				
Pass-Through the Regents of the University of California				
LUX/Zeplin (LZ) Experiment Operations - Engineer/Research Supp.	7650068	81.UNKNOWN	\$	72,637
U.S. Department of Energy				
Pass-Through Fermi National Accelerator Laboratory				
SURF(Sanford Underground Research Facility)LBNF/DUNE Support	674969	81.UNKNOWN	\$	4,829,726
U.S. Department of Energy				
Pass-Through Fermi National Accelerator Laboratory				
SURF(Sanford Underground Research Facility)LBNF Prof.Staff Serv.	671265	81.UNKNOWN	\$	171,162
U.S. Department of Energy				
Pass-Through RESPEC				
Thermal Breakout Project	03506A	81.UNKNOWN	\$	416
U.S. Department of Energy				
Office of Science - Chicago Office of Acquisition/Assistance	HEBYAQ8MUEU3	81.049	\$	30,558,122
U.S. Department of Energy				
Office of Science - Chicago Office of Acquisition/Assistance	HEBYAQ8MUEU3	81.049	\$	984,176
National Nuclear Security Administration				
Pass-Through South Dakota School of Mines & Technology				
Small Business Technology Transfer Program	CT001412	81.RD	\$	24,767
National Aeronautics & Space Administration				
Pass-Through South Dakota School of Mines & Technology				
South Dakota Space Grant Consortium	80NSSC20M0040	43.UNKNOWN	\$	2,360
Total			\$ 3	6,700,212

Note: The schedule of expenditures of federal awards is presented on the cash basis of accounting.



Federal Awards Reports June 30, 2023

South Dakota Science and Technology Authority



South Dakota Science and Technology Authority Table of Contents June 30, 2023

Independent Auditor's 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	1	
Independent Auditor's Report on Compliance for the Cooperative Agreement with the U.S. Department of Energy's Office of Science for the Sanford Underground Research Facility (SURF); Report on Internal Control Over Compliance; and Report on the Schedule of Expenditures of Federal Awards of the South Dakota Science and Technology Authority's Cooperative Agreement		
Schedule of Expenditures of Federal Awards	. 7	
Notes to Schedule of Expenditures of Federal Awards	. 8	
Schedule of Findings and Questioned Costs – Cooperative Agreement	. 9	



Independent Auditor's 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

The Honorable Kristi Noem
Governor of South Dakota
and
Board of Directors
South Dakota Science and Technology Authority

We have audited, 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, the financial statements of the business-type activities of South Dakota Science and Technology Authority, ("the Authority"), a component unit of the State of South Dakota, as of and for the year then ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements and have issued our report thereon dated October 12, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority'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 opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority'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 a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's 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 have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's 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 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 result of that testing, and not to provide an opinion on the effectiveness of the entity'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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Denver, Colorado October 12, 2023

Esde Saelly LLP



Independent Auditor's Report on Compliance for the Cooperative Agreement with the U.S.

Department of Energy's Office of Science for the Sanford Underground Research Facility (SURF);

Report on Internal Control Over Compliance; and Report on the Schedule of Expenditures of Federal

Awards of the South Dakota Science and Technology Authority's Cooperative Agreement

The Honorable Kristi Noem
Governor of South Dakota
and
Board of Directors
South Dakota Science and Technology Authority
Lead, South Dakota

Report on Compliance

Opinion on the Cooperative Agreement

We have audited the South Dakota Science and Technology Authority's (the Authority) compliance with the Cooperative Agreement applicable to the Authority's U.S. Department of Energy's Office of Science for the Sanford Underground Research Facility (SURF) – Operations Program (Cooperative Agreement) for the year ended June 30, 2023.

In our opinion, the Authority complied, in all material respects, with the compliance requirements referred to above that that are applicable to the Cooperative Agreement for the year ended June 30, 2023.

Basis for Opinion on the Cooperative Agreement

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*); and with the compliance criteria prescribed in the *OMB Compliance Supplement* that we considered to be direct and material to the Cooperative Agreement. Our audit does not purport to, and does not meet, the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform and Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. Our responsibilities under those standards and the Cooperative Agreement are further described in the Auditor's Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the Authority 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 the Cooperative Agreement. Our audit does not provide a legal determination of the Authority's compliance with the compliance requirements referred to above.

Other Matter – Federal Expenditures Not Included in the Compliance Audit

As discussed in Note A, the schedule of expenditures of federal awards of the Authority's Cooperative Agreement is intended to present only the expenditures of federal awards of the Cooperative Agreement. The schedule does not purport to, and does not, present fairly the expenditures of federal awards of the State of South Dakota or the Authority as of and for the year ended June 30, 2023, in conformity with the Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Our opinion is not modified with respect to this matter.

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 Authority 's government programs.

Auditor's 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 Authority'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 GAAS, *Government Auditing Standards*, and the OMB Compliance Supplement 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 Authority's compliance with the requirements of the government program as a whole.

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and the OMB Compliance Supplement, 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 Authority'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 Authority'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 OMB Compliance
 Supplement, but not for the purpose of expressing an opinion on the effectiveness of The
 Authority'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 government 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 Auditor's 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 OMB Compliance Supplement. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards of the Cooperative Agreement

We have audited the financial statements the Authority, a component unit of the State of South Dakota, as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements. We issued our report thereon dated October 12, 2023, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards of the Cooperative Agreement is presented for purposes of additional analysis and is not a required part of the basic 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 basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic 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 of the Cooperative Agreement is fairly stated in all material respects in relation to the basic financial statements as a whole.

Denver, Colorado October 12, 2023

Esde Saelly LLP

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS OF THE COOPERATIVE AGREEMENT WITH THE U.S.

DEPARTMENT OF ENERGY'S OFFICE OF SCIENCE FOR THE SANFORD UNDERGROUND RESEARCH FACILITY (SURF)

OPERATIONS PROGRAM (COOPERATIVE AGREEMENT)

Year ended June 30, 2023

	Federal Financial		
Program Description	Assistance Listing	Expenditures	
U.S. DEPARTMENT OF ENGERGY			
Office of Science - Chicago Office of Acquisition/Assistance	81.049	\$	30,558,122

NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS OF THE COOPERATIVE AGREEMENT WITH THE U.S. DEPARTMENT OF ENERGY'S OFFICE OF SCIENCE FOR THE SANFORD UNDERGROUND RESEARCH FACILITY (SURF) — OPERATIONS PROGRAM (COOPERATIVE AGREEMENT)

Year ended June 30, 2023

Note A - Basis of Presentation

The South Dakota Science and Technology Authority (the Authority) is a discretely presented business-type activities component unit of the State of South Dakota. The accompanying schedule of expenditures of federal awards of the Authority's Cooperative Agreement is intended to present only the expenditures of federal awards of the Cooperative Agreement as directed by the South Dakota Department of Legislative Audit. The schedule does not purport to, and does not, present fairly the expenditures of federal awards of the State of South Dakota or the Authority as of and for the year ended June 30, 2023, in conformity with the Title 2 *U.S. Code of Federal Regulations Part 200, Uniform and Administrative Requirements, Cost Principles, and the Audit Requirements for Federal Awards*. In addition, the schedule presents only a selected portion of the operations of the Authority, it is not intended to, and does not, present the financial position, changes in net position or cash flows of the Authority.

Note B - Summary of Significant Accounting Policies

Expenditures reported on the schedule are reported on the cash 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.

Note C - Indirect Cost Rate

The SDSTA has elected not to use the 10-percent indirect cost rate as allowed under the Uniform Guidance.

Schedule of Findings and Questioned Costs – Cooperative Agreement Year Ended June 30, 2023

Section I – Summary of Auditor's Results

Financial Statements

Type of auditor's report issued

Unmodified

Internal control over financial reporting:

Material weaknesses identified No

Significant deficiencies identified not considered

to be material weaknesses None Reported

Noncompliance material to financial statements noted No

Federal Awards

Internal control over major programs:

Material weaknesses identified No

Significant deficiencies identified not considered

to be material weaknesses None Reported

Type of auditor's report issued on compliance for major programs Unmodified

Any audit findings disclosed that are required to be reported

in accordance with 2 CFR 200.516 No

Identification of the program audited:

Name of Federal Program or Cluster <u>Federal Financial</u>

Assistance Listing

SURF (Sanfor Underground Research Facility)

Operations Support 81.049

Schedule of Findings and Questioned Costs – Cooperative Agreement Year Ended June 30, 2023

Section II – Financial Statement Findings

None

Schedule of Findings and Questioned Costs – Cooperative Agreement Year Ended June 30, 2023

Section III – Federal Award Findings and Questioned Costs

None