Reports on the Audit of Federal Award Programs in Accordance with OMB Uniform Guidance

The Pennsylvania State University Fiscal Year Ended June 30, 2024

University Park, Pennsylvania

THE PENNSYLVANIA STATE UNIVERSITY REPORTS ON THE AUDIT OF FEDERAL AWARD PROGRAMS IN ACCORDANCE WITH OMB UNIFORM GUIDANCE FISCAL YEAR ENDED JUNE 30, 2024

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Financial Overview

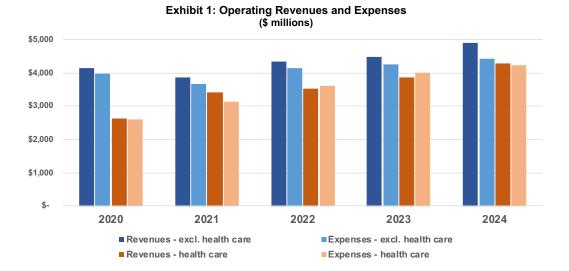
The following section provides summarized results of the financial performance and position of the Pennsylvania State University ("Penn State", or the "University"), and as a result it should be read alongside the accompanying consolidated financial statements and notes to the financial statements. All figures in this section are consolidated and – unless specifically noted – include the University, Penn State Health, and other subsidiaries (see note one to the financial statements).

OPERATING RESULTS

Penn State's net assets increased by \$1.0 billion during the fiscal year ended June 30, 2024 (FY2024), a result of strong operating results at both the University and at Penn State Health alongside positive non-operating activities, particularly in the form of unrealized investment gains. A condensed view of the consolidated statements of activities follows:

Condensed Statements of Activities (\$ millions)		
	2024	2023
Operating revenues		
University – excluding health care related	\$4,890	\$4,488
Health care related	4,294	3,867
Total	9,184	8,355
Operating expenses		
University – excluding health care related	4,437	4,272
Health care related	4,231	3,997
Total	8,668	8,269
Operating income (loss)		
University – excluding health care related	453	216
Health care related	63	(130)
Total	516	86
Nonoperating activities	1 1	
Related to postretirement benefit expense	(6)	211
Related to investments	450	68
Other	37	65
Total	481	344
Increase in net assets – Penn State University	997	430
Less change in noncontrolling interest	4	(69)
Increase in total net assets	1,001	361
Beginning net assets	12,754	12,393
Ending net assets	\$13,755	\$12,754

Exhibit 1, which follows, shows a breakdown of operating expenses and revenues for the last five fiscal years (distinguishing between healthcare related revenues / expenses and the rest of the University).



Operating Revenues

In FY2024, University operating revenues (excluding Penn State Health) exceeded FY2023 by \$402 million, or 9.0%, with notable increases in tuition/fees (\$94 million), grants/contracts (\$141 million, including \$66 million in additional grants from the PA Department of General Services for capital projects), investment income (\$88 million), and auxiliary revenue (\$65 million).

Tuition/fee revenues reflect the rate increases approved by the Board of Trustees in July of 2023: University Park tuition increased 2% and 4% for PA residents and non-residents, respectively, while Commonwealth Campus tuition rates were unchanged for PA residents and raised by 1% for non-residents. World Campus tuition increased by 1% for all students.

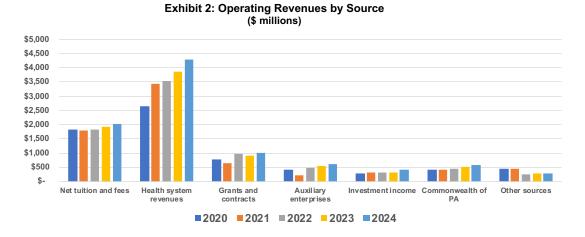
In addition to higher grant revenue from the Department of General Services, federal grant revenue increased by \$96 million in FY2024, with most notable increases at the Applied Research Lab (ARL), the College of Engineering, the College of Medicine, and the airport.

The University recognized more operating investment revenue due to higher average interest rates and also due to an additional \$500 million investment in the University's Long-Term Investment Pool from working capital (i.e. non-endowed, operating funds).

Auxiliary revenues increased most significantly in Intercollegiate Athletics, due to signing bonuses related to new vendor relationships as well as increased concessions sales; housing and food services, due to Board of Trustee approved room and board rates; and parking, due to increased rates.

Healthcare revenues increased in FY2024 due to the two new acute care hospitals being fully operational during the period. Additionally, Penn State Health onboarded the Pennsylvania Psychiatric Institute in July of 2023. During FY2024 Penn State Health also received one-time settlements of \$45 million from an arbitration ruling and \$32 million of prior year net revenues from Centers for Medicare and Medicaid Services due to a decision by the U.S. Supreme Court in September 2023.

Recent trends in consolidated operating revenues are illustrated below in exhibit 2:

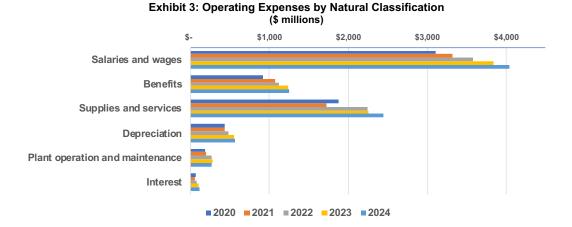


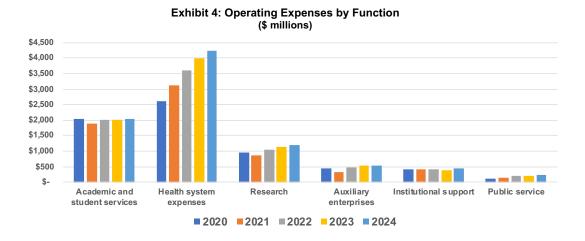
Operating Expenses

University operating expenses – excluding Penn State Health – increased by \$165 million, or 3.9%, in FY2024. Personnel expense makes up \$61 million of the overall increase and is due to annual salary increases and compensation modernization adjustments, the latter of which went into effect during the second half of the fiscal year. Depreciation and interest expense increased \$17 million and \$11 million, respectively, while other non-personnel expenses increased a total of \$77 million.

Specifically related to Penn State Health, salaries and wages increased 7% in FY2024 to remain market competitive and overcome the national nursing shortage. The health system also experienced an increase of medical surgical supplies of 10% which is directly related to the volume of patients treated by the health system and is supported by the increase in net revenues recognized by the health system.

Recent trends in consolidated operating expenses are illustrated below in exhibits 3 and 4.





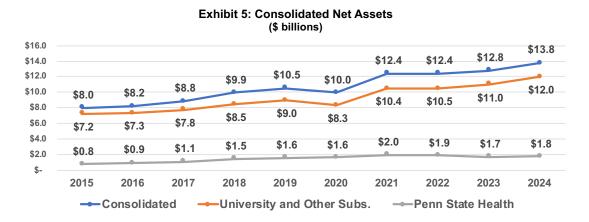
Non-Operating Activities

Non-operating revenues had a significant impact on Penn State's overall increase in net assets during FY2024, with unrealized investment gains specifically accounting for roughly 45% of the \$1.0 billion net increase. Non-operating, endowed, gifts and pledges also added \$83 million to the bottom line in FY2024.

FINANCIAL POSITION

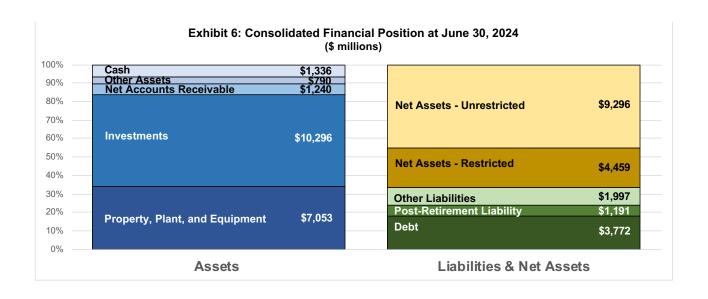
Penn State's total assets crested the \$20 billion mark in FY2024, ending the year at \$20.7 billion, an increase of \$1.0 billion, or 5.1%, from June 30, 2023. The University's liabilities increased modestly by \$10 million, with payoff of long-term debt offset by increases in accounts payable and other accrued expenses.

Over the last ten fiscal years, Penn State's consolidated net assets have grown at an annualized rate of 6.2%. Exhibit 5 illustrates ending consolidated net asset balances for the last ten fiscal years.



A condensed version of Penn State's statements of financial position (i.e. balance sheet) follows, along with a graphical representation of the consolidated statement of financial position at June 30, 2024 in exhibit 6.

Condensed Statements of Financial Position (\$ millions)			
	June 30, 2024	June 30, 2023	
Assets			
Cash and cash equivalents	\$1,336	\$1,008	
Receivables, net	1,240	1,152	
Investments	10,296	9,618	
Property, plant, and equipment, net	7,053	7,001	
Other assets	790	925	
Total assets	\$20,715	\$19,704	
Liabilities			
Accounts payable and accrued expenses	\$1,045	\$932	
Debt	3,772	3,885	
Accrued post-retirement liability	1,191	1,221	
Other liabilities	952	912	
Total liabilities	6,960	6,950	
Net Assets			
Without donor restrictions	9,296	8,584	
With donor restrictions	4,459	4,170	
Total net assets	13,755	12,754	
Total liabilities and net assets	\$20,715	\$19,704	



INVESTMENTS

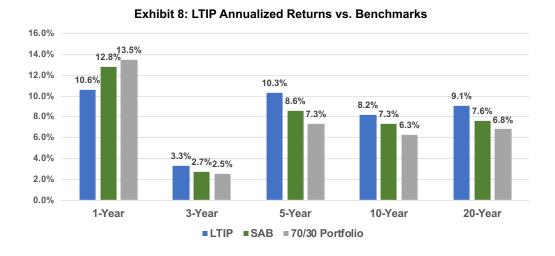
Penn State's Office of Investment Management (OIM) is tasked with the day-to-day management and administration of the University's long-term and operating investments. Under the governance and oversight of the Penn State Investment Council (PSIC) and Board of Trustees, OIM executes the University's investment policy statement and manages the University's investments by taking a reasonable amount of risk. The investment objective is to achieve returns, after fees and expenses, that meet the University's cash needs and keep up with inflation.

The Long-Term Investment Pool (LTIP) is the University's investment portfolio containing most of its donor-endowed funds, in addition to other funds functioning as endowments, all with long-term investment objectives. This commingled pool operates similarly to a mutual fund, with each participating fund owning units of the pool.



Exhibit 7: Investments Growth (\$ millions)

The LTIP had a one-year return of 10.6% in FY2024 and annualized 3-, 5-, 10-, and 20-year returns of 3.3%, 10.3%, 8.2%, and 9.1%, respectively. The 3-, 5-, 10-, and 20-year annualized returns all exceed the LTIP's tactical *Strategic Allocation Benchmark* (or "SAB"), as well as a passive composite benchmark consisting of 70% MSCI All Country World Index and 30% Bloomberg US Aggregate Bond Index (a 70/30 stocks/bonds passive portfolio).



SAB consists of index returns representing the following asset classes: public equities (36%), private equity (25%), fixed income (15%), diversifying strategies (12%), and real assets (12%).

CAPITAL ASSETS AND DEBT

FY2024 marks the start of a new capital campaign at Penn State, expected to total roughly \$2.18 billion over the next five years. The 2024-2028 capital plan is a maintenance-centric plan focused on system renewals, maximizing funding impact, and minimizing administrative burden; \$1.19 billion of the plan is tied to self-supporting units, including Intercollegiate Athletics, Auxiliary and Business Services, and the Applied Research Laboratory.

Exhibit 9 illustrates recent trends in capital expenditure, assets under construction, and depreciation expense.

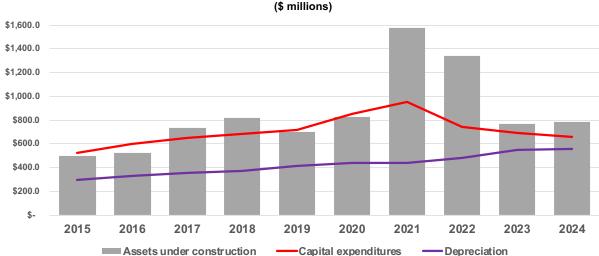


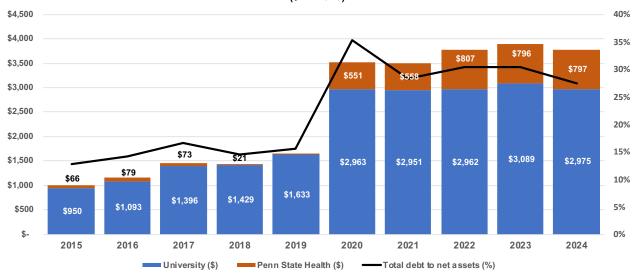
Exhibit 9: Assets Under Construction, Capital Expenditures, and Depreciation (\$ millions)

Major University capital expenditures in FY2024 included over \$493 million in building construction costs, with the most significant projects – based on dollars spent in FY2024 – being the East Halls phase 2B and 2C renovations (\$143 million), the Engineering Collaborative Research and Education Building (\$69 million), and the Susan Welch Liberal Arts Building (\$57 million).

Improvements to land and infrastructure totaled \$44 million in FY2024, and spend on equipment and information technology capital assets totaled \$76 million.

The University's portfolio of outstanding long-term debt is the result of borrowings to fund capital projects as well as specific borrowing made to prefund a significant portion of the University's unfunded actuarial liability with the Commonwealth of Pennsylvania's State Employees' Retirement System (SERS). In April of 2020, the University entered into an agreement with SERS to prefund \$1.061 billion of its unfunded liability in exchange for credits against future contributions (\$93.3 million of credits in both FY2024 and FY2023). The University issued bonds in May of 2020 (series 2020D) in the amount of \$1.065 billion in connection with this prefunding, and the resulting increase in the University's debt load is evident as illustrated on exhibit 10.

Exhibit 10: Long-Term Debt (\$ millions)



Long-term debt declined during FY2024 as no new bonds were issued and principal payments totaling \$123 million were made. However, subsequent to fiscal year end, the University issued general obligation bonds – series 2024 – in the amount of \$157.9 million to fund capital projects associated with the 2024-2028 capital plan. The series 2024 bonds, which closed in August 2024, are <u>not</u> included as outstanding debt in the University's statement of financial position as of June 30, 2024.

RESEARCH AND SPONSORED PROGRAMS

Penn State is a top 30 U.S. research university, as designated by the National Science Foundation's Higher Education Research and Development (HERD) survey, with twelve disciplines – from psychology to atmospheric science and materials engineering – ranking in the top ten for research expenditures.

Exhibit 11 illustrates the growth in research expenses – based on functional expense classification – over the last ten fiscal years.

Exhibit 11: Research Expenses (\$ millions) \$1,300 \$1,200 \$1,200 \$1,100 \$1,000 \$900 \$766 \$800 \$700 \$600 \$500 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Over the last ten years, research expenses have grown at an annualized rate of 5.1%; the annualized growth since fiscal year 2021, however, is 11.6%, with FY2024 research functional spend reaching \$1.2 billion².

The University's research expenses are funded by federal, private, state, and other sources; the largest federal sponsor is the Office of Naval Research (an executive branch agency within the U.S. Department of Defense). The breakdown of FY2024 research funding follows in exhibit 12.

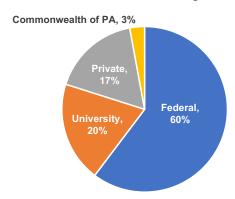


Exhibit 12: Research Funding in FY2024

LOOKING AHEAD

University Strategic Planning

Penn State is underway with phase two of its strategic plan to elevate the University's standing as a world-class institution through the advancement of six priority areas:

- · Enhancing student success
- · Growing (inter)disciplinary research excellence
- · Fostering diversity, equity, inclusion and belonging
- · Increasing land-grant impact
- · Transforming health care through academic and clinical synergy
- · Transforming internal operations

In this second phase, faculty, staff and students at all campuses have been encouraged to submit their feedback on the goals, objectives and metrics connected to each priority area that constitute an institutional plan. The future phases of strategic planning are illustrated in the graphic below.



² There are certain reconciling items between research *functional expenses* in the audited financial statements and the total research spend amount reported externally based on industry standards, which is \$1.3 billion.

Optimized Service Teams

Penn State is moving forward in its effort to streamline internal operations through the design and implementation of *Optimized Service Teams*, or OSTs, encompassing the following functions: information technology, finance, facilities and safety.

These critical workstreams — in alignment with Penn State's mission, strategic priorities and the University roadmap — will result in improved business practices, enhanced service and support for the University community, and the creation of career pathways and development opportunities for staff.

Commonwealth Campuses

To address enrollment challenges at the University's Commonwealth Campuses, Penn State has proactively engaged in strategic activities to put its campuses on solid financial footing and in a position to meet the needs of students and the public throughout the Commonwealth.

The University offered a Voluntary Separation Incentive Program for certain Commonwealth Campus faculty and staff in May 2024, and 383 employees enrolled in the program, representing roughly 21% of those eligible.

Additionally, Optimized Service Teams were implemented at the Commonwealth Campuses and Penn State unveiled a new regional leadership structure throughout the Commonwealth, whereby certain campuses have been placed under a single administration based on geographic proximity and other factors. The regionalization effort is being continually evaluated and refined.

Approval of Stadium Project

In May 2024, the Penn State Board of Trustees approved up to \$700 million to renovate Beaver Stadium as part of the 2024-2028 capital plan. The renovations will grow revenue-generating opportunities, transform the fan and community experience, and enable year-round use of Beaver Stadium, further driving economic growth and development in the surrounding region.

As a self-sustaining unit of the University, renovations will be paid for solely by Penn State Intercollegiate Athletics through fundraising, concessions, naming opportunities, sponsorships, multimedia rights and ticket sales, including new premium seating options. No tuition dollars or educational funds will be used toward the renovations. Renovations are scheduled to be completed before the 2027 football season.





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Independent Auditor's Report

To the Board of Trustees
The Pennsylvania State University

Report on the Audits of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of the University and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2024 and 2023 and the related consolidated statements of activities and cash flows for the years then ended, and the related notes to the consolidated financial statements

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the University as of June 30, 2024 and 2023 and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audits of the Financial Statements* section of our report. We are required to be independent of the University and to meet our 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 Consolidated Financial Statements

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

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

Auditor's Responsibilities for the Audits of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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 audits 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 consolidated financial statements.



To the Board of Trustees
The Pennsylvania State University

In performing audits in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.
- Identify and assess the risks of material misstatement of the consolidated 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 consolidated financial
 statements.
- Obtain an understanding of internal control relevant to the audits in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the University'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 consolidated financial
 statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University'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 audits, significant audit findings, and certain internal control-related matters that we identified during the audits.

Additional Information

Management is responsible for the accompanying list of university officers, letter from the senior vice president for finance and business/treasurer, financial overview, and list of the board of trustees, which are presented for the purpose of additional analysis and are not a required part of the consolidated financial statements. Our opinion on the consolidated financial statements does not cover such information, and we do not express an opinion or any form of assurance thereon.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 7, 2024 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, 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 the University's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

Flente & Morse, PLLC

November 7, 2024

Consolidated Financial Statements

THE PENNSYLVANIA STATE UNIVERSITY CONSOLIDATED STATEMENTS OF FINANCIAL POSITION ASSETS JUNE 30, 2024 AND 2023

(in thousands)

	June 30, 2024	June 30, 2023
Current assets:		
Cash and cash equivalents	\$ 1,335,572	\$ 1,007,504
Short-term investments	1,122,093	1,560,597
Deposits held by bond trustees	103,673	212,274
Deposits held for others	39,089	38,012
Accounts receivable, net of allowances	1,031,786	940,216
Contributions receivable, net	39,169	47,701
Loans to students, net of allowances	2,580	3,264
Inventories	85,358	90,572
Prepaid expenses and other assets	126,528	110,579
Total current assets	3,885,848	4,010,719
Noncurrent assets:		
Deposits held by bond trustees	-	56,215
Contributions receivable, net	144,313	136,385
Loans to students, net of allowances	22,252	25,474
Total investment in plant, net	7,053,208	7,001,411
Beneficial interest in perpetual trusts	32,105	28,117
Investments	9,174,349	8,057,417
Operating lease right-of-use assets, net	163,453	164,769
Other assets	239,500	223,789
Total noncurrent assets	16,829,180	15,693,577
Total assets	\$20,715,028	\$19,704,296

THE PENNSYLVANIA STATE UNIVERSITY CONSOLIDATED STATEMENTS OF FINANCIAL POSITION LIABILITIES AND NET ASSETS JUNE 30, 2024 AND 2023

(in thousands)

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	June 30, 2024	June 30, 2023
Current liabilities:	·	
Accounts payable and other accrued expenses	\$ 1,044,501	\$ 932,120
Deferred revenue	229,993	216,382
Long-term debt	121,436	116,498
Present value of annuities payable	8,522	7,871
Accrued postretirement benefits	56,600	53,408
Refundable United States Government student loans	3,200	3,078
Operating lease liabilities	30,661	26,393
Total current liabilities	1,494,913	1,355,750
	·	
Noncurrent liabilities:		
Deposits held in custody for others	29,689	27,962
Long-term debt	3,651,284	3,769,425
Present value of annuities payable	62,154	59,702
Accrued postretirement benefits	1,133,636	1,167,601
Refundable United States Government student loans	10,107	13,103
Operating lease liabilities	141,046	144,114
Other liabilities	437,437	412,420
Total noncurrent liabilities	5,465,353	5,594,327
Total liabilities	6,960,266	6,950,077
Net assets:		
Without donor restrictions	9,296,274	8,584,561
With donor restrictions	4,458,488	4,169,658
Total net assets	13,754,762	12,754,219
Total liabilities and net assets	\$20,715,028	\$19,704,296

THE PENNSYLVANIA STATE UNIVERSITY CONSOLIDATED STATEMENT OF ACTIVITIES FOR THE YEAR ENDED JUNE 30, 2024

(in thousands)

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	Without Donor Restrictions	With Donor Restrictions	Total
Operating revenues and other support:			
Tuition and fees, net of discounts of \$300,968	\$ 2,011,793	\$ -	\$ 2,011,793
Commonwealth of Pennsylvania -			
Appropriations	329,777	-	329,777
Special contracts	100,002	-	100,002
Department of General Services projects	139,456	-	139,456
United States Government grants and contracts	832,021	-	832,021
Private grants and contracts	162,542	-	162,542
Gifts and pledges	114,704	28,048	142,752
Investment return, net	287,761	136,375	424,136
Sales and services of educational activities	102,496	269	102,765
Auxiliary enterprises	608,084	-	608,084
Health System revenue	4,294,189	-	4,294,189
Other sources	36,546	-	36,546
Net assets released from restrictions	184,229	(184,229)	
Total operating revenues and other support	9,203,600	(19,537)	9,184,063
Operating expenses:			
Educational and general -			
Academic and student services	2,034,611	-	2,034,611
Research	1,200,191	-	1,200,191
Public service	226,977	-	226,977
Institutional support	441,279	-	441,279
Total educational and general	3,903,058	-	3,903,058
Auxiliary enterprises	533,689	-	533,689
Health System expense	4,231,258	-	4,231,258
Total operating expenses	8,668,005	-	8,668,005
Increase (decrease) in net assets from operating activities	535,595	(19,537)	516,058
Nonoperating activities:			
Gifts and pledges	-	82,528	82,528
Current year investment returns	226,730	223,069	449,799
Changes in funds held by others in perpetuity	-	3,988	3,988
Loss on disposal of assets	(37,953)	-	(37,953
Nonperiodic change in postretirement benefit plan	(32,101)	-	(32,101
Other components of net periodic postretirement benefit cost	26,232	-	26,232
Actuarial adjustment on annuities payable	-	(11,627)	(11,627
Net asset transfer due to donor intent	(10,409)	10,409	-
Increase in net assets from nonoperating activities	172,499	308,367	480,866
Increase in net assets - The Pennsylvania State University	708,094	288,830	996,924
N			
Noncontrolling interest:	2010		2.610
Excess of revenues over expenses	3,619	-	3,619
Increase in net assets - noncontrolling interest	3,619	-	3,619
Increase in total net assets	711,713	288,830	1,000,543
Net assets at the beginning of the year	8,584,561	4,169,658	12,754,219

THE PENNSYLVANIA STATE UNIVERSITY CONSOLIDATED STATEMENT OF ACTIVITIES FOR THE YEAR ENDED JUNE 30, 2023

(in thousands)

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	Without Donor Restrictions	With Donor Restrictions	Total
Operating revenues and other support:			
Tuition and fees, net of discounts of \$297,199	\$ 1,917,557	\$ -	\$ 1,917,557
Commonwealth of Pennsylvania -			
Appropriations	326,542	-	326,542
Special contracts	120,341	-	120,341
Department of General Services projects	73,622	-	73,622
United States Government grants and contracts	735,527	-	735,527
Private grants and contracts	163,129	-	163,129
Gifts and pledges	109,920	17,070	126,990
Investment return, net	198,551	137,828	336,379
Sales and services of educational activities	103,804	232	104,036
Auxiliary enterprises	542,730	-	542,730
Health System revenue	3,866,539	-	3,866,539
Other sources	41,581	-	41,581
Net assets released from restrictions	139,999	(139,999)	-
Total operating revenues and other support	8,339,842	15,131	8,354,973
Operating expenses:			
Educational and general -			
Academic and student services	2,011,757	-	2,011,757
Research	1,131,235	-	1,131,235
Public service	213,839	-	213,839
Institutional support	384,503	-	384,503
Total educational and general	3,741,334	-	3,741,334
Auxiliary enterprises	529,924	-	529,924
Health System expense	3,997,337	-	3,997,337
Total operating expenses	8,268,595	-	8,268,595
Increase in net assets from operating activities	71,247	15,131	86,378
Nonoperating activities:			
Gifts and pledges	-	77,118	77,118
Current year investment returns	21,911	45,489	67,400
Changes in funds held by others in perpetuity	-	1,877	1,877
Loss on disposal of assets	(2,329)	-	(2,329)
Nonperiodic change in postretirement benefit plan	189,862	-	189,862
Other components of net periodic postretirement benefit cost	21,313	-	21,313
Actuarial adjustment on annuities payable	-	(11,447)	(11,447
Net asset transfer due to donor intent	(28,189)	28,189	-
Increase in net assets from nonoperating activities	202,568	141,226	343,794
Increase in net assets - The Pennsylvania State University	273,815	156,357	430,172
	273,013	130,337	750,172
Noncontrolling interest:			
Excess of expenses over revenues	(68,573)	-	(68,573
Decrease in net assets - noncontrolling interest	(68,573)	-	(68,573)
Increase in total net assets	205,242	156,357	361,599
Net assets at the beginning of the year	8,379,319	4,013,301	12,392,620
Net assets at the end of the year	\$ 8,584,561	\$ 4,169,658	\$ 12,754,219
riet assets at the end of the year	\$ 0,504,501	\$ 4,103,030	\$ 12,754,21

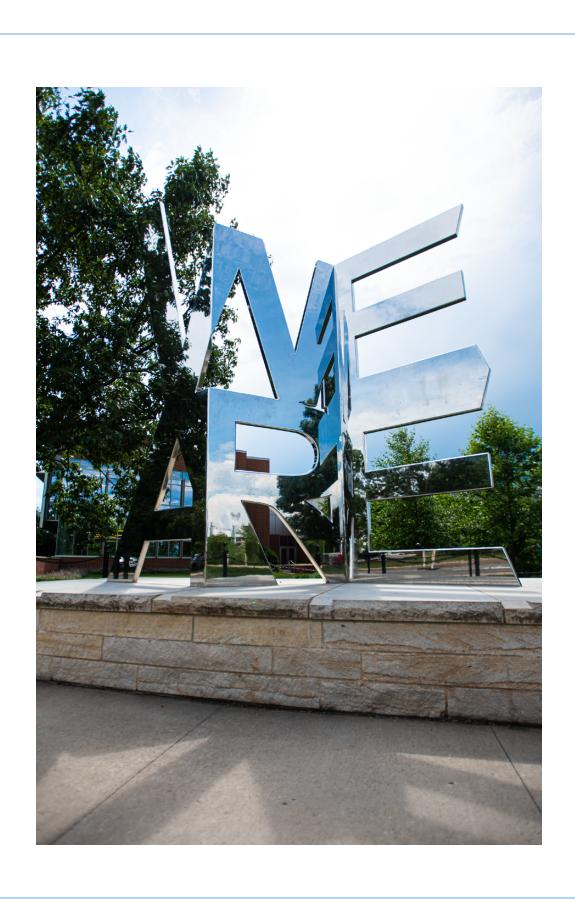
THE PENNSYLVANIA STATE UNIVERSITY CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED JUNE 30, 2024 AND 2023

(in thousands)

	June 30, 2024	June 30, 2023
Cash flows from operating activities:		
ncrease in net assets	\$ 1,000,543	\$ 361,599
Adjustments to reconcile change in net assets to net cash provided by operating activities -		
Actuarial adjustment on annuities payable	11,627	11,454
Contributions restricted for long-term investment	(79,664)	(104,297
Interest and dividends restricted for long-term investment	(78,710)	(22,551
Net realized and unrealized gains on long-term investments	(730,887)	(301,052
Depreciation and amortization expense	559,566	549,574
Noncash lease expense	2,517	6,086
Write-offs and disposals of assets	54,548	30,334
Contributions of land, buildings and equipment	(1,438)	(2,045
Provision for bad debts	(11,995)	44,098
Decrease in deposits held for others	2,059	6,248
Increase in receivables	(77,902)	(126,565
Decrease (increase) in inventories	5,214	(4,910
Increase in prepaid expenses and other assets	(35,649)	(17,583
Increase (decrease) in accounts payable and other accrued expenses	137,398	(1,757
Increase in deferred revenue	13,610	35,753
Decrease in accrued postretirement benefits	(30,773)	(250,446
Net cash provided by operating activities	740,064	213,940
Cash flows from investing activities:		
Purchase of land, buildings and equipment	(654,877)	
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees	165,141	, ,
Purchase of land, buildings and equipment	165,141 (909)	(140,454 (1,461
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees	165,141	(140,454 (1,461
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans	165,141 (909)	(140,454 (1,461 4,074
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans	165,141 (909) 4,046	(140,454 (1,461 4,074 (3,934,661
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments	165,141 (909) 4,046 (2,757,868)	(140,454 (1,461 4,074 (3,934,661 4,213,256
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities	165,141 (909) 4,046 (2,757,868) 2,810,326	(140,454 (1,461 4,074 (3,934,661 4,213,256
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities:	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141)	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment	165,141 (909) 4,046 (2,757,868) 2,810,326	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141) 79,664 78,710	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment Payments of annuity obligations	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141)	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551 (7,876
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment Payments of annuity obligations Proceeds from long-term debt	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141) 79,664 78,710 (8,524)	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551 (7,876 236,758
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment Payments of annuity obligations	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141) 79,664 78,710 (8,524)	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551 (7,876 236,758 (119,885
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment Payments of annuity obligations Proceeds from long-term debt Principal payments on long-term debt	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141) 79,664 78,710 (8,524)	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551 (7,876 236,758 (119,885 (7,211
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment Payments of annuity obligations Proceeds from long-term debt Principal payments on long-term debt Refundable federal student loans Net cash provided by financing activities	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141) 79,664 78,710 (8,524) (122,799) (3,174) 23,877	(140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551 (7,876 236,758 (119,885 (7,211 228,634
Purchase of land, buildings and equipment Decrease (increase) in deposits held by bond trustees Repayments and advances on student loans Collections on student loans Purchase of investments Proceeds from sale of investments Net cash used in investing activities Cash flows from financing activities: Contributions restricted for long-term investment Interest and dividends restricted for long-term investment Payments of annuity obligations Proceeds from long-term debt Principal payments on long-term debt Refundable federal student loans	165,141 (909) 4,046 (2,757,868) 2,810,326 (434,141) 79,664 78,710 (8,524) - (122,799) (3,174)	(693,602 (140,454 (1,461 4,074 (3,934,661 4,213,256 (552,848 104,297 22,551 (7,876 236,758 (119,885 (7,211 228,634 (110,274

Supplemental disclosures of cash flow information (Notes 2 and 9)

See notes to consolidated financial statements



Notes to Consolidated Financial Statements

FOR THE YEARS ENDED JUNE 30, 2024 AND 2023

1. THE UNIVERSITY AND RELATED ENTITIES

The Pennsylvania State University ("University"), which was founded in 1855 as an instrumentality of the Commonwealth of Pennsylvania ("Commonwealth" or "Pennsylvania"), is organized as a non-profit corporation under the laws of the Commonwealth. As Pennsylvania's land grant university, the University is committed to improving the lives of the people of Pennsylvania, the nation and the world through its integrated, tri-part mission of high-quality teaching, research and outreach. In addition to its main campus located in University Park, PA, the University has a physical presence throughout the Commonwealth at its multiple commonwealth campuses, and a virtual presence globally via its World Campus.

As a state-related institution, the University receives an annual appropriation from the Commonwealth. The Commonwealth's General Assembly is not obligated to appropriate funding to the University, and there is no assurance that future appropriations will be made at either historical levels or to the extent requested by the University. The University's operating appropriation from the Commonwealth was \$329.8 million and \$326.5 million for the years ended June 30, 2024 and 2023, respectively.

Governance of the University, including oversight of administration and financial operations, is vested solely with the University's Board of Trustees (the "Board"). The Board is comprised of thirty-eight members. Thirty-six of the trustees are voting members, nine of whom are either appointed by the Governor of the Commonwealth or are cabinet-level members of the Governor's administration. The remaining voting members are elected by alumni (nine), elected by agricultural societies active in the Commonwealth (six), elected by the Board representing business and industry (six), elected by the Board as at-large members (three), a student trustee (one), an academic trustee (one), and the immediate past president of the Penn State Alumni Association (one).

BASIS OF PRESENTATION

The financial statements of the University include, on a consolidated basis, the consolidated financial statements of Penn State Health ("Health System"), a Pennsylvania non-profit corporation, and its wholly owned subsidiaries (see Note 13 for additional information), and the financial statements of The Corporation for Penn State and its subsidiaries ("Corporation"). The Corporation is a non-profit member corporation organized in 1985 for the exclusive purpose of benefiting and promoting the interests of the University, the Corporation's sole member. The Corporation's financial statements consist primarily of the assets and revenues of The Pennsylvania College of Technology ("Penn College"), a wholly owned subsidiary of the Corporation. All transactions among the University, the Health System, and the Corporation have been eliminated.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING

The University's consolidated financial statements are prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (GAAP). The Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) is the source of authoritative GAAP.

The University's consolidated financial statements include statements of financial position, activities and cash flows. In accordance with FASB ASC requirements, net assets and the changes in net assets are classified as with donor restrictions or without donor restrictions.

Net assets with donor restrictions are net assets subject to donor-imposed restrictions, either in perpetuity or for a specified time or purpose. Net assets with perpetual restrictions consist primarily of the historical amounts of endowed gifts. Additionally, contributions receivable and remainder interests which are required by donors to be retained in perpetuity are included at their estimated net present values. Net assets restricted by time or purpose consist of contributions receivable and remainder interests that are not required to be held in perpetuity. In addition, endowment appreciation and net unrealized losses on donor-restricted endowment funds for which historical cost exceeds market value are included.

Net assets without donor restrictions are net assets not subject to donor-imposed restrictions. These net assets may be designated for specific purposes at the discretion of management or may otherwise be limited by contractual agreements with outside parties. Revenue from donor-restricted sources is reclassified as revenue without donor restrictions when the circumstances of the restriction have been fulfilled. Donor-restricted contributions whose restrictions are met within the same fiscal year are reported as revenue without donor restrictions. All expenses from operations are reported as a reduction of net assets without donor restrictions since the use of restricted contributions in accordance with donors' stipulations results in the release of the restriction.

USE OF ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts on the financial statements and the disclosure of investments, fair value measurements, postretirement benefits, and contingencies and commitments. Actual results could differ from those estimates.

REVENUE RECOGNITION

Tuition

Tuition revenue is recognized over the course of each semester (summer, fall, spring) as instruction is provided to students. Tuition is due from students by the beginning of each applicable semester. Overdue payments are reflected in accounts receivable as the University has an unconditional right to payment.

Tuition receipts of \$72.0 million, included in deferred revenue at June 30, 2023, were recognized during the year ended June 30, 2024. Tuition receipts of \$71.8 million, included in deferred revenue at June 30, 2022, were recognized during the year ended June 30, 2023. Institutional financial aid provided by the University for tuition and fees is reflected as a reduction of tuition and fee revenue. As tuition contracts have a duration of one year or less, the University has elected to apply the optional exemption prescribed by ASC 606-10-50-14 and, as such, has not disclosed the aggregate transaction price allocated to unsatisfied performance obligations or the time at which the revenue associated with these unsatisfied performance obligations is expected to be recognized. At June 30, unsatisfied performance obligations under tuition contracts relate solely to summer semester instruction to be provided in July and August of the subsequent year. Transaction prices for tuition and fees are determined and allocated based on the applicable published tuition and fees schedules.

Grants and Contracts

Grants and contracts revenue is recognized over time as the eligible grant activities are conducted. Grants and contracts deemed to be exchange transactions fall under the scope of ASC Topic 606, Revenue from Contracts with Customers. The performance obligation for each grant or contract is deemed to be the research or program work itself. Work completed under grants and contracts does not result in assets that can be sold to other customers and the University is entitled to payment for the work completed to date. Grants and contracts that are deemed to be contributions fall under the scope of ASC Topic 958, Not-for-Profit Entities. These are deemed to be conditional contributions, as eligible expenditures must be incurred in order to have a right of release of funding from the sponsor. Most grants and contracts are cost reimbursement basis, and incurred expenditures are periodically billed to the customer for reimbursement.

Grants and contracts receipts of \$40.3 million, included in deferred revenue at June 30, 2023, were recognized during the year ended June 30, 2024. Grants and contracts receipts of \$36.9 million, included in deferred revenue at June 30, 2022, were recognized during the year ended June 30, 2023. The University has entered into numerous grants and contracts, with periods of performance ending at various dates from July 1, 2024 through December 31, 2050. The estimated performance obligations remaining under these grants and contracts as of June 30, 2024 total \$1.593 billion. Transaction prices for grants and contracts are determined and allocated based on the budgets included in the respective award agreements.

Sales and Services of Educational Activities and Auxiliary Enterprises

Revenues from sales and services of educational activities and auxiliary enterprises consist primarily of health services, housing and food services, intercollegiate athletics, campus operations, and hospitality services. Performance obligations associated with these contracts consist of the provision of goods or services, and significant judgment is involved to determine whether the performance obligations are satisfied over time or at a point in time. Typically, revenue associated with semester-based contracts, such as housing and food services, is recognized over the course of the semester as services are provided. For other contracts, such as health services, athletic ticket sales, hotel room

charges, and other campus operations, revenue is recognized at a point in time, when the good or service is provided. Contracts included in sales and services of educational activities and auxiliary enterprises are typically one year or less in length. As such, receipts included in deferred revenue at June 30, 2023 and 2022 were fully recognized during the years ended June 30, 2024 and 2023. In addition, the University has elected to apply the optional exemption prescribed by ASC 606-10-50-14 and, as such, has not disclosed the aggregate transaction price allocated to unsatisfied performance obligations or the time at which the revenue associated with these unsatisfied performance obligations is expected to be recognized. At June 30, unsatisfied performance obligations under sales and services of educational activities and auxiliary enterprises relate primarily to summer semester housing and food services to be provided in July and August of the subsequent year, as well as athletic events held during the fall semester. Transaction prices for sales and services of educational activities and auxiliary enterprises are typically straightforward and explicitly stated in the contract.

Health System

Patient care service revenue is reported at the amount that reflects the consideration to which the Health System expects to be entitled in exchange for providing patient care. These amounts are due from patients, third-party payors (including health insurers and government programs), and others and include variable consideration for retroactive revenue adjustments due to settlement of audits, reviews, and investigations. Generally, the Health System bills the patients and third-party payors several days after the services are performed or the patient is discharged from the facility. Revenue is recognized as performance obligations are satisfied.

Performance obligations are determined based on the nature of the services provided by the Health System. Revenue for performance obligations satisfied over time is recognized based on actual charges incurred in relation to total expected (or actual) charges. The Health System believes that this method provides a faithful depiction of the transfer of services over the term of the performance obligation based on the inputs needed to satisfy the obligation. Generally, performance obligations satisfied over time relate to patients in the Health System's hospital receiving inpatient acutecare services or patients receiving services in the Health System's outpatient centers or other clinical settings. The Health System measures the performance obligation from admission into the hospital, or the commencement of an outpatient services or other visit, to the point when it is no longer required to provide services to that patient, which is generally at the time of discharge or completion of the outpatient services or other visit. Revenue for performance obligations satisfied at a point in time is generally recognized when goods are provided to the Health System's patients and customers in a retail setting (for example, pharmaceuticals and medical equipment) and the Health System does not believe it is required to provide additional goods or services related to that sale.

Because all of its performance obligations relate to contracts with a duration of less than one year, the Health System has elected to apply the optional exemption provided in ASC 606-10-50-14(a) and, therefore, is not required to disclose the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period. The unsatisfied or partially unsatisfied performance obligations referred to above are primarily related to inpatient acute-care services at the end of the reporting period. The performance obligations for these contracts are generally completed when the patients are discharged, which generally occurs within days or weeks of the end of the reporting period.

The Health System determines the transaction price based on standard charges for goods and services provided, reduced by contractual adjustments provided to third-party payers, discounts provided to uninsured patients in accordance with the Health System's policy, and implicit price concessions provided to uninsured patients. The Health System determines its estimates of contractual adjustments and discounts based on contractual agreements, its discount policies, and historical experience. The Health System determines its estimate of implicit price concessions based on its historical collection experience with this class of patients.

Generally, patients who are covered by third-party payors are responsible for related deductibles and coinsurance, which vary in amount. The Health System also provides services to uninsured patients and offers those uninsured patients a discount, either by policy or law, from standard charges. The Health System estimates the transaction price for patients with deductibles and coinsurance and from those who are uninsured based on historical experience and current market conditions. The initial estimate of the transaction price is determined by reducing the standard charge by any contractual adjustments, discounts, and implicit price concessions. Subsequent changes to the estimate of the transaction price are generally recorded as adjustments to patient service revenue in the period of the change. For the years ended June 30, 2024 and 2023, changes in its estimates of implicit price concessions, discounts, and contractual adjustments for performance obligations satisfied in prior years were not significant. Subsequent changes that are determined to be the result of an adverse change in the patient's ability to pay are recorded as bad debt expense.

Consistent with the Health System's mission, care is provided to patients regardless of their ability to pay. Therefore, the Health System has determined it has provided implicit price concessions to uninsured patients and patients with other uninsured balances (for example, copays and deductibles). The implicit price concessions included in estimating the transaction price represent the difference between amounts billed to patients and the amounts the Health System expects to collect based on its collection history with those patients.

Patients who meet the Health System's criteria for charity care are provided care without charge or at amounts less than established rates. Such amounts determined to qualify as charity care are not reported as revenue. The amount of charges foregone under the Health System's charity care policy was \$87.1 million and \$90.6 million for the years ended June 30, 2024 and 2023, respectively. The direct and indirect costs of charity care, based on a ratio of the Health System's operational costs to its gross charges, was \$43.9 million and \$40.8 million for the years ended June 30, 2024 and 2023, respectively.

The Health System has agreements with third party payors that provide for reimbursements at amounts different from its established rates. Cost report settlements result from the adjustment of interim payments to final reimbursement under the Medicare, Medicaid, Blue Cross/Blue Shield, and HMO programs that are subject to audit by fiscal intermediaries.

Laws and regulations concerning government programs, including Medicare and Medicaid, are complex and subject to varying interpretation. As a result of investigations by governmental agencies, various health care entities have received requests for information and notices regarding alleged noncompliance with those laws and regulations, which, in some instances, have resulted in entities entering into significant settlement agreements. Compliance with such laws and regulations may also be subject to future government review and interpretation, as well as significant regulatory action, including fines, penalties, and potential exclusion from the related programs. There can be no assurance that regulatory authorities will not challenge the Health System's compliance with these laws and regulations, and it is not possible to determine the impact (if any) such claims or penalties would have upon the Health System. In addition, the contracts the Health System has with commercial payors also provide for retroactive audit and review of claims.

Settlements with third-party payors for retroactive adjustments due to audits, reviews, or investigations are considered variable consideration and are included in the determination of the estimated transaction price for providing patient care. These settlements are estimated based on the terms of the payment agreement with the payor, correspondence from the payor, and the Health System's historical settlement activity, including an assessment to ensure that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the retroactive adjustment is subsequently resolved. Estimated settlements are adjusted in future periods as adjustments become known (that is, new information becomes available) or as years are settled or are no longer subject to such audits, reviews, and investigations. In November 2023, in light of the Supreme Court's decision in American Hospital Association v. Becerra and the district court's remand to the agency, the Centers for Medicare & Medicaid Services (CMS) issued a final rule outlining the remedy for the invalidated OPPS 340B-acquired drug payment policy for calendar years 2019-2022. In total, the Health System received approximately \$31.7 million in payments under this final rule. These payments were received and recognized within Health System revenue in 2024 as an adjustment arising from a change in the transaction price. The budget neutrality offset is expected to be realized between 2026 and 2041. Adjustments arising from a change in the transaction price were not significant in 2023.

Additionally, during 2024 and 2023, the Health System recognized \$6.5 million and \$6.2 million, respectively, of net patient service revenue as a result of Medical Assistance payments made by the Commonwealth of Pennsylvania. These payments are intended to help offset medical education costs.

The Health System recognizes revenue related to retail pharmacy at a point in time. Retail pharmacy sales are recognized within Health System revenue on the accompanying consolidated statements of activities and totaled \$145.6 million and \$120.6 million during the years ended June 30, 2024 and 2023, respectively.

Overall

The University has elected to use the practical expedient prescribed by ASC 606-10-32-18, in which the promised amount of consideration need not be adjusted for the effects of a significant financing component if the period between when promised goods or services are transferred to a customer and when the customer pays for the goods or services is expected to be one year or less at contract inception.

CONTRIBUTIONS

Unconditional promises to give are recognized as revenues and receivables in the year made and consist of written or oral promises to contribute to the University in the future. Contributions receivable are recorded as donor-restricted revenue, either due to purpose restrictions and/or the implicit time restriction inherent in the future date at which the contribution is to be received. The amounts are present valued based on timing of expected collections.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The University has provided fair value estimates for certain financial instruments. Fair value information presented in the financial statements is based on information available at June 30, 2024 and 2023. The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable and other accrued expenses approximate fair value because of the terms and relatively short maturity of these financial instruments. The carrying values of the University's loans to students are also reasonable estimates of their fair value, as the total outstanding loans to students as of June 30, 2024 and 2023 have been made at the rates available to students for similar loans at such times. Investments are reported at fair value as disclosed in Note 4. The fair value of the University's bonds payable is disclosed in Note 8. See Note 6 for further discussion of fair value measurements.

CASH FLOWS

The following items are included as supplemental disclosure to the statements of cash flows for the years ended June 30:

2024	2023
\$ 1,335,572	\$ 1,007,504
4,104	3,779
29,451	28,044
\$ 1,369,127	\$ 1,039,327
2024	2023
\$ 134.221	\$ 136.092
	\$ 1,335,572 4,104 29,451 \$ 1,369,127

Capitalized costs accrued related to construction are \$92.6 million and \$84.5 million as of June 30, 2024 and 2023, respectively. Taxes paid for 2024 and 2023 are considered immaterial. Cash and cash equivalents include certain investments in highly liquid instruments with remaining maturities of 90 days or less, except for such assets held by the University's investment managers as part of their long-term investment strategies. Short-term investments include other current investments held for general operating purposes with maturities greater than 3 months but less than 12 months.

ACCOUNTS RECEIVABLE

Accounts receivable at June 30 consists of the following:

(in thousands of dollars)	2024 2023	
Grants and contracts, net of allowance of \$3,100 and \$3,100	\$ 270,362	\$ 255,462
Patient accounts receivable	619,638	568,116
Student receivables, net of allowance of \$50,484 and \$63,525	61,128	54,802
Other, net of allowance of \$0 and \$12	80,658	61,836
Total accounts receivable, net	\$ 1,031,786	\$ 940,216

An allowance for credit losses is established for amounts expected to be uncollectible over the contractual life of the receivables. The University calculates the allowance using an expected loss model that considers actual historical loss rates adjusted for current economic conditions and reasonable and supportable forecasts. Receivables are written off when management determines they will not be collected. During the year ended June 30, 2023, the University changed its process for delinquent student receivable collections, resulting in an increased gross receivable offset by an increased allowance.

Changes in the allowance for credit losses related to student receivables for the years ended June 30, 2024 and 2023 were as follows:

(in thousands of dollars)	
Balance as of June 30, 2022	\$ 14,845
Impact of collection process change	52,141
Write-offs, net of recoveries	(3,461)
Balance as of June 30, 2023	63,525
Provisions	(1,382)
Write-offs, net of recoveries	(11,659)
Balance as of June 30, 2024	\$ 50,484

LOANS TO STUDENTS

Loans to students are disbursed to qualified students based on need and include loans granted by the University from institutional resources and under federal government loan programs. Students enter a grace period upon ceasing at least half-time enrollment status. The grace period varies depending on the type of loan. Upon expiration of the grace period, interest begins to accrue, and repayment begins one month thereafter. Repayments of these loans are made directly to the University. Loans to students are uncollateralized and carry default risk.

Funds advanced by the federal government of \$13.3 million and \$16.2 million at June 30, 2024 and 2023, respectively, are ultimately refundable to the government and are classified as liabilities in the consolidated statements of financial position. The federal liability related to the Perkins loan program will be reduced through the return of funds as required by the Department of Education.

Loans to students consisted of the following at June 30:

(in thousands of dollars)	2024		2024 202		023
Loans to students:					
Federal government loan programs:					
Perkins loan program	\$	10,905	\$	14,250	
Institutional loan programs		17,613		18,411	
		28,518		32,661	
Less allowance for doubtful accounts:					
Balance, beginning of year		(3,923)		(7,444)	
Provision for doubtful accounts		237		3,521	
Balance, end of year		(3,686)		(3,923)	
Loans to students, net	\$	24,832	\$	28,738	

An allowance for credit losses is established for amounts expected to be uncollectible over the contractual life of the loans. The University calculates the allowance using an expected loss model that considers actual historical loss rates adjusted for current economic conditions and reasonable and supportable forecasts. Further, the University does not evaluate credit quality of student loans receivable after the initial approval of the loan. Loans to students are considered past due when payment is not received by the due date, and interest continues to accrue until the loan is paid in full or written off.

The University considers the age of the amounts outstanding in determining the collectability of loans to students. The aging of the loans to students based on days delinquent and the related allowance for doubtful accounts at June 30 are as follows:

(in thousands of dollars) 2024	1	5 days or less	46-75	5 days	 105 lys	Over 5 days		Total
Loans to students:								
Federal government loan programs	\$	10,617	\$	15	\$ 15	\$ 258	\$	10,905
Institutional loan programs		13,984		18	17	3,594		17,613
Total loans to students	\$	24,601	\$	33	\$ 32	\$ 3,852	\$	28,518
Allowance for doubtful accounts:								
Federal government loan programs								(1,008)
Institutional loan programs								(2,678)
Total allowance for doubtful accounts								(3,686)
Total loans to students, net							\$	24,832
(in thousands of dollars)		5 days or less	46-75	5 days	105 lys	Over 5 days	,	Total
Loans to students:								
Federal government loan programs	\$	13,713	\$	20	\$ 16	\$ 501	\$	14,250
Institutional loan programs		15,024		17	12	3,358		18,411
Total loans to students	\$	28,737	\$	37	\$ 28	\$ 3,859	\$	32,661
iotal loans to students								
Allowance for doubtful accounts:								
								(1,421)
Allowance for doubtful accounts:								(1,421)

INVENTORIES

Total loans to students, net

Inventories are stated at the lower of cost or net realizable value on the first-in, first-out basis.

INVESTMENTS

The University's noncurrent investments are comprised of the University's endowment and other investments held for general operating purposes. The University's investments are reported at fair value in the accompanying financial statements with gains and losses included in the consolidated statement of activities. The University believes that the estimated fair value is a reasonable estimate of market value as of June 30, 2024 and 2023. The fair value estimations include assumptions and methods that were reviewed by University management. The estimated fair value amounts for public securities held by the University with readily determinable fair values have been based on information as supplied by the various financial institutions that act as trustees or custodians for the University.

Because private investments are not readily marketable, the estimated fair value is subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market existed, and such differences could

28,738

be material. The fair values of these private investments are determined based upon financial information provided by the investment manager.

The University authorizes certain investment managers to purchase derivative securities to attain a desired market position; and the University may directly invest in derivative securities to attain a desired market position. The University does not trade or issue derivative financial instruments other than through the investment management practices noted above. The University records derivative securities at fair value with gains and losses reflected in the consolidated statements of activities.

BENEFICIAL INTEREST IN PERPETUAL TRUSTS

The University is the beneficiary of certain perpetual trusts held and administered by outside trustees. The fair value of these trust assets has been recorded as net assets with donor restrictions and related beneficial interest in perpetual trusts in the consolidated financial statements.

INVESTMENT IN PLANT

Total investment in plant as of June 30 is comprised of the following:

(in thousands of dollars)	2024		2023
Land	\$	187,221	\$ 187,985
Buildings		9,656,329	9,243,547
Improvements other than buildings		936,864	887,180
Equipment		2,159,513	2,195,927
Assets under construction		784,534	771,342
Total plant		13,724,461	13,285,981
Less accumulated depreciation		(6,671,253)	(6,284,570)
Total investment in plant, net	\$	7,053,208	\$ 7,001,411

The value of land, buildings, and equipment is recorded at cost or, if received as gifts, at fair value at date of gift commitment. The University does not capitalize the cost of library books. Depreciation is computed over the estimated useful lives of the assets using the straight-line method. Useful lives range from 4 to 50 years for buildings, 10 to 20 years for improvements other than buildings, and 1 to 20 years for equipment. Depreciation expense was \$559.6 million and \$549.6 million for the fiscal years ended June 30, 2024 and 2023, respectively. The University has certain building and equipment lease agreements in effect which are considered finance leases that are included as long-term debt in the statements of financial position. Buildings and equipment held under finance leases are amortized on a straight-line basis over the shorter of the lease terms or the estimated useful lives of the assets. Total investment in plant associated with these leases was \$43.2 million and \$42.3 million at June 30, 2024 and 2023, respectively.

LEASES

The University determines if an arrangement is or contains a lease at inception of the contract. The right-of-use (ROU) assets represent the right to use the underlying assets for the lease term and the lease liabilities represent the obligation to make lease payments arising from the leases. ROU assets are recognized at commencement date based on the present value of lease payments over the lease term, adjusted for any initial direct costs incurred and lease incentives received, with the subsequent measurement based on lease classification. The lease liability is initially measured as the present value of unpaid lease payments and is subsequently measured using the effective interest method. The value of an option to extend or terminate a lease is reflected to the extent it is reasonably certain the University will exercise that option. The University has used the incremental borrowing rate when measuring its leases as the rate implicit in the lease is not readily determinable. The University's incremental borrowing rate is determined based on the Tax-Exempt Bloomberg Valuation Services (BVAL) Municipal AAA Curves Index Rate. The Index is constructed using hourly trades from the Municipal Securities Rulemaking Board (MSRB) AAA-rated municipal bonds normalized for differences in credit, optionality, and coupon size. ASC 842 defines a short-term lease as a lease with a term of twelve months or less that does not include a purchase option that is reasonably certain of being exercised ("short-term leases"). The University has elected, for all asset classes, the short-term lease recognition exemption provided in the standard that eliminates the requirement to recognize on the statements of financial position any short-term leases. The lease expense for these short-term leases is recognized on a straight-line basis over the lease

term within operating expenses in the consolidated statements of activities and is not considered material to the consolidated financial statements. Finance lease ROU assets are included in total investment in plant, net, with the related liabilities included in current and noncurrent long-term debt in the consolidated statements of financial position. Operating lease ROU assets and related current and long-term liabilities are separately presented in the consolidated statements of financial position. Expenses for operating leases, amortization of assets held under finance leases, and finance lease interest expense are recognized within operating expenses in the consolidated statements of activities.

The University has elected, for all asset classes, the practical expedient to not separate lease and nonlease components. Certain of the University's lease agreements include payments based on actual maintenance, taxes, insurance, and utilities. Other agreements include rental payments adjusted periodically for inflation. These are deemed to be variable lease payments and are recognized in operating expenses as incurred but are not included in the ROU asset or liability balances. These variable lease payments are not considered material to the consolidated financial statements. The University's lease agreements do not contain any material residual value guarantees, restrictions, or covenants.

ACCOUNTS PAYABLE AND OTHER ACCRUED EXPENSES

Accounts payable and other accrued expenses at June 30 consist of the following:

(in thousands of dollars)	2024	2023	
Accounts payable (non-Health System)	\$ 285,410	\$	253,577
Health System accounts payable and other accrued expenses	614,987		539,664
Accrued payroll and other related liabilities	107,702		103,583
Accrued interest	34,107		31,664
Student deposits	2,295		3,632
Total accounts payable and other accrued expenses	\$ 1,044,501	\$	932,120

IMPAIRMENT OF LONG-LIVED ASSETS

Long-lived assets, which include investment in plant and definite-lived intangible assets, are assessed for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. An impairment loss is recognized in change in net assets in the period that the impairment occurs.

ASSET RETIREMENT OBLIGATIONS

The University has recognized liabilities for asset retirement obligations. The University has identified asbestos abatement and the decommissioning of the Breazeale Nuclear Reactor as conditional asset retirement obligations. These obligations are reported as part of other noncurrent liabilities within the consolidated statements of financial position. The following table details the change in liabilities:

(in thousands of dollars)	
Balance as of June 30, 2022	\$ 106,396
Adjustment to liability	5,273
Accretion expense	4,624
Liabilities settled	(6,784)
Balance as of June 30, 2023	109,509
Adjustment to liability	1,995
Accretion expense	4,452
Liabilities settled	(4,982)
Balance as of June 30, 2024	\$ 110,974

ANNUITIES PAYABLE

Annuities payable consist of annuity payments currently due and the actuarial amount of annuities payable. The actuarial amount of annuities payable is the present value of the aggregate liability for annuity payments over the expected lives of the beneficiaries.

NET ASSETS

Net assets consist of the following at June 30:

(in thousands of dollars)			
2024	Without donor restrictions	With donor restrictions	Total
Net assets by category:			
Endowment funds	\$ 906,988	\$ 3,876,918	\$ 4,783,906
University capital activities	1,925,170	14,616	1,939,786
Operating general funds carryforward	812,173	-	812,173
Other unit non-general fund reserves	543,134	246,311	789,445
University other	62,706	-	62,706
Pledges	-	183,482	183,482
Split-interest agreements	-	116,900	116,900
Student loan funds	27,679	20,261	47,940
Net investment in plant	3,630,194	-	3,630,194
Postretirement benefits and pension prefunding	(374,208)	-	(374,208)
Penn State Health operations	1,490,251	-	1,490,251
Non-controlling interest in Penn State Health	272,187	-	272,187
Total net assets	\$ 9,296,274	\$ 4,458,488	\$ 13,754,762

(in thousands of dollars)							
2023	Without donor restrictions	With donor restrictions	Total				
Net assets by category:							
Endowment funds	\$ 851,333	\$ 3,606,007	\$ 4,457,340				
University capital activities	1,453,685	19,435	1,473,120				
Operating general funds carryforward	818,350	-	818,350				
Other unit non-general fund reserves	368,955	206,606	575,561				
University other reserves	197,768	-	197,768				
Pledges	-	207,022	207,022				
Split-interest agreements	-	110,434	110,434				
Student loan funds	24,779	20,154	44,933				
Net investment in plant	3,727,311	-	3,727,311				
Postretirement benefits and pension prefunding	(546,563)	-	(546,563)				
Penn State Health operations	1,420,375	-	1,420,375				
Non-controlling interest in Penn State Health	268,568	-	268,568				
Total net assets	\$ 8,584,561	\$ 4,169,658	\$ 12,754,219				

INCOME TAXES

The University files U.S. federal and state tax returns. The statute of limitations on the University's federal returns generally remains open for three years following the year they are filed. In accordance with ASC Topic 740, Income Taxes, the University continues to evaluate tax positions and has determined there is no material impact on the University financial statements.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-13, "Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments." This update includes changes to the accounting and measurement of financial assets, including the University's accounts receivable and loans to students, by requiring the University to recognize an allowance for all expected losses over the life of the financial asset at origination. This differs from the current practice where an allowance is not recognized until the losses are considered probable. Credit losses are recognized through the recording of an allowance rather than as a write-down of the carrying value. This update was effective for the University beginning July 1, 2023. The adoption of this guidance did not have a material impact on the consolidated financial statements.

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3. LIQUIDITY AND AVAILABILITY OF FINANCIAL ASSETS

The University regularly monitors liquidity required to meet its operating needs and other contractual commitments, while also striving to maximize the investment of its available funds. For purposes of analyzing resources available to meet general expenditures over a 12-month period, the University considers all expenditures related to its ongoing mission-related activities to be general expenditures.

Student loans receivable are not considered to be available to meet general expenditures because principal and interest on these loans are used solely to make new loans.

In addition to financial assets available to meet general expenditures over the next 12 months, the University anticipates collecting sufficient revenue to cover general expenditures not covered by donor-restricted resources. Refer to the statements of cash flows, which identifies the sources and uses of the University's cash and shows positive cash generated by operations for the years ended June 30, 2024 and 2023.

The University has various sources of liquidity at its disposal, including cash and cash equivalents and fixed income and equity securities.

The University has designated a portion of its resources without donor restrictions for endowment and other purposes. These funds are invested for long-term appreciation and current income but remain available and may be spent at the discretion of management.

The following reflects the University's financial assets as of June 30, 2024 and 2023, reduced by amounts not available for general use within one year. Certain long-term investments could be liquidated if needed based on the terms of their agreements.

(in thousands of dollars)	2024	2023
Total assets	\$ 20,715,028	\$ 19,704,296
Less:		
Inventories	(85,358)	(90,572)
Prepaid expenses and other assets	(126,528)	(110,579)
Total investment in plant, net	(7,053,208)	(7,001,411)
Beneficial interest in perpetual trusts	(32,105)	(28,117)
Operating lease right-of-use assets	(163,453)	(164,769)
Other assets	(239,500)	(223,789)
Total financial assets	13,014,876	12,085,059
Less:		
Noncurrent investments	(9,174,349)	(8,057,417)
Contractual or donor-imposed restrictions:		
Deposits held by bond trustees	(103,673)	(268,489)
Deposits held for others	(39,089)	(38,012)
Receivables subject to time restrictions	(44,672)	(38,676)
Receivables subject to donor-imposed restrictions	(121,187)	(120,426)
Loans to students, net	(24,832)	(28,738)
Financial assets available to meet cash needs for general expenditures within one year	\$ 3,507,074	\$ 3,533,301

4. INVESTMENTS

Investments by major category as of June 30 are summarized as follows:

(in thousands of dollars)		2024	2023		
Fixed income	\$	3,416,894	\$	3,594,516	
Equity investments		4,793,916		4,319,325	
Real assets		994,576		827,249	
Opportunistic		1,091,056		876,924	
Total	\$ 1	10,296,442	\$	9,618,014	

Fixed income investments are comprised of public and private fixed income strategies such as government and corporate debt, mortgage-backed, and other asset-backed related debt. Equity includes investments such as public and private strategies across the globe. Real asset strategies include real estate, natural resources, and commodities. Opportunistic includes investments such as public and private strategies utilizing both equity and debt structures that are expected to achieve absolute returns over longer periods of time and do not classify well into the other three investment types.

Equity index futures contracts comprise the University's derivative instruments as of June 30, 2024 and 2023, and are included in the fair value of the University's investments. These contracts are fully cash collateralized and marked to market daily. Futures contracts have minimal credit risk because the counterparties are the exchanges themselves and are employed as a low-cost investment vehicle with daily liquidity which allows the University to maintain desired market exposure considering irregular cash flows. Fully cash collateralized derivative securities were immaterial as of June 30, 2024 and 2023.

5. ENDOWMENT NET ASSETS

The University's endowment includes both donor-restricted endowment funds and funds designated to function as endowments. As required by GAAP, net assets associated with endowment funds, including funds designated to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The ASC Not-for-Profit Entities Presentation of Financial Statements Subtopic (ASC Subtopic 958-205) provides guidance on the net asset classification of donor-restricted endowment funds for not-for-profit organizations subject to an enacted version of the Uniform Prudent Management of Institutional Funds Act (UPMIFA) and improves disclosure about an organization's endowment funds regardless of whether the organization is subject to UPMIFA. The Commonwealth of Pennsylvania has not adopted UPMIFA but rather has enacted Pennsylvania Act 141 ("PA Act 141"). PA Act 141 permits an organization's trustees to define expendable income as a stipulated percentage of endowment assets (between 2% and 7% of the fair value of the assets averaged over a period of at least three preceding years) without regard to actual interest, dividend, or realized and unrealized gains.

The University has interpreted PA Act 141 to permit the University to spend the earnings of its endowment based on a total return approach, without regard to the fair value of the original gift. As a result of this interpretation, the University classifies as net assets with donor restrictions the original value of gifts donated to the permanent endowment, the original value of subsequent gifts to the permanent endowment, and accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. Also included in net assets with donor restrictions are gains and losses attributable to permanent endowments and deficiencies associated with funds where the value of the fund has fallen below the original value of the gift. Funds functioning as endowments are established at the direction of University management, on behalf of the Board, and are classified as net assets without donor restrictions due to the lack of external donor restrictions. Also included in net assets without donor restrictions are gains and losses attributable to funds functioning as endowments.

From time to time, due to unfavorable market fluctuations, the fair value of some assets associated with individual donor-restricted endowment funds may fall below the level that donors require to be retained as a perpetual fund, while other assets are unaffected to the same extent and maintain or exceed the level required. Such deficiencies are reported as net assets with donor restrictions. As of June 30, 2024 and 2023, funds with an original gift value of \$96.8 million and \$171.9 million were "underwater" by \$3.8 million and \$12.2 million, respectively. Subsequent investment gains will be used to restore the balance up to the fair market value of the original gift.

Endowment net asset composition by type of fund as of June 30:

(in thousands of dollars)						
2024	Without donor restrictions					
Donor-restricted endowment funds	\$ -	\$ 3,876,918	\$ 3,876,918			
Funds functioning as endowments	906,988	-	906,988			
Total net assets	\$ 906,988	\$ 3,876,918	\$ 4,783,906			

(in thousands of dollars)			
2023	Without donor restrictions	With donor restrictions	Total
Donor-restricted endowment funds	\$ -	\$ 3,606,007	\$ 3,606,007
Funds functioning as endowments	851,333	-	851,333
Total net assets	\$ 851,333	\$ 3,606,007	\$ 4,457,340

Changes in endowment net assets for the years ended June 30:

(in thousands of dollars)					
2024	Without donor restrictions restrictions			Total	
Endowment net assets, beginning of the year	\$	851,333	\$	3,606,007	\$ 4,457,340
Endowment return, net		79,008		333,470	412,478
Contributions		-		75,112	75,112
Endowment spending		(33,879)		(137,671)	(171,550)
Transfers to create funds functioning as endowments		10,526		-	10,526
Endowment net assets, end of the year	\$	906,988	\$	3,876,918	\$ 4,783,906

(in thousands of dollars)						
2023	Without donor restrictions	With donor restrictions	Total			
Endowment net assets, beginning of the year	\$ 834,280	\$ 3,460,316	\$ 4,294,596			
Endowment return, net	38,994	175,086	214,080			
Contributions	-	86,928	86,928			
Endowment spending	(29,644)	(134,066)	(163,710)			
Transfers to create funds functioning as endowments	7,703	-	7,703			
Net asset transfer due to donor intent	-	17,743	17,743			
Endowment net assets, end of the year	\$ 851,333	\$ 3,606,007	\$ 4,457,340			

The University has adopted investment and spending policies for endowment assets that attempt to provide a relatively predictable stream of funding to programs supported by its endowment while seeking to maintain, over time, the purchasing power of the endowment assets.

The overall investment objective for the University's pooled endowment funds is to grow the real (inflation adjusted) purchasing power of the assets through a prudent long-term investment strategy. To satisfy its long-term objective, the University relies on a total return strategy in which investment returns are achieved through both capital appreciation and income. The University targets a diversified asset allocation, with prudent risk constraints, which places a greater emphasis on equity-based investments to achieve its long-term return objectives.

The University expects the spending policy to provide generous current spending while preserving "intergenerational equity". The policy spending amount for both fiscal years 2024 and 2023 was based on 5.0% of the endowment plan's average fair market value over the prior twenty quarters preceding the fiscal year in which the distribution was planned and was net of administrative expenses.

6. FAIR VALUE MEASUREMENTS

The University utilizes the following fair value hierarchy, which prioritizes into three broad levels the inputs to valuation techniques used to measure fair value:

- Level 1 Quoted prices (unadjusted) for identical assets or liabilities in active markets as of the measurement date.

 Such instruments valued at Level 1 primarily consist of securities that are directly held and actively traded in public markets.
- Level 2 Inputs other than unadjusted quoted prices that are observable for the asset or liability, directly or indirectly, including quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability, and inputs that are derived from observable market data by correlation or other means.
- Level 3 Unobservable inputs that cannot be corroborated by observable market data.

In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement has been determined based on the lowest level input that is significant to the fair value measurement in its entirety. The University's assessment of significance of a particular item to the fair value measurement in its entirety requires judgment, including consideration of inputs specific to the asset.

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The following table presents information about the University's financial assets and liabilities, as categorized by level of the fair value hierarchy according to the lowest level of inputs significant to each measurement or net asset value (NAV) per share as of June 30, 2024 and 2023:

(in thousands of dollars) 2024	Level 1	Level 2	Level 3	NAV	Total
Assets:	2010.1	2010.2	2010.0	10.70	10101
Long-term Investment Pool:					
Fixed income					
Public separate accounts	\$ -	\$ 466,166	\$ -	\$ -	\$ 466,166
Public funds	137,200	-	_	_	137,200
Private funds	-	_	_	493,183	493,183
Equity investments				,	,
Public separate accounts	1,648,365	_	_	_	1,648,365
Private funds	-	_	_	2,729,585	2,729,585
Real assets				_,,	_,,,
Public separate accounts	81,812	_	_	_	81,812
Public funds	165,314	_	_	-	165,314
Private funds	_	_	_	746,389	746,389
Opportunistic				-,	-,
Private funds	_	_	_	750,644	750,644
Total	\$ 2,032,691	\$ 466,166	\$ -	\$ 4,719,801	\$ 7,218,658
		, , , , , ,		. , ., ., .,	. , ., ., ., .
Operating Investments:					
Fixed income				<u> </u>	
Public separate accounts	\$ -	\$ 2,014,001	\$ -	\$ -	\$ 2,014,00
Public funds	211,279	-	-	-	211,279
Private funds	-	-	-	95,065	95,06
Equity investments				<u> </u>	
Public separate accounts	36,137	-	-	-	36,137
Private separate accounts	-	-	4,405	-	4,405
Public funds	276,589	-	-	-	276,589
Private funds	-	-	3,834	95,001	98,83!
Real assets				<u> </u>	
Public funds	899	-	-	-	899
Private funds	-	-	7	155	162
Opportunistic				<u> </u>	
Public funds	84	-	-	-	84
Private funds	-	-	-	340,328	340,328
Total	\$ 524,988	\$ 2,014,001	\$ 8,246	\$ 530,549	\$ 3,077,784
Deposits held by bond trustees:					
Fixed income					
Public funds	\$ 99,569	\$ -	\$ -	\$ -	\$ 99,569
Deposits held for others	\$ -	\$ 9,638	\$ -	\$ -	\$ 9,638
Beneficial interest in perpetual trusts	\$ -	\$ -	\$ 32,105	\$ -	\$ 32,10
Liabilities:			,,-20		,.
	¢	¢	\$ 70.070	de .	\$ 70,676
Present value of annuities payable	\$ -	\$ -	\$ 70,676	\$ -	\$ 70,6

2023	L	evel 1		Level 2	Le	evel 3		NAV		Total
Assets:										
Long-term Investment Pool:										
Fixed income										
Public separate accounts	\$	-	\$	366,126	\$	-	\$	-	\$	366,126
Public funds		110,730		-		-		-		110,730
Private funds		-		-		-		424,446		424,446
Equity investments		'		'		'		'		
Public separate accounts		1,145,174		-		-		-		1,145,174
Private funds		-		-		-		2,763,331		2,763,331
Real assets								,		
Public separate accounts		71,129		-		-		-		71,129
Public funds		153,350		-		-		-		153,350
Private funds		-		-		-		601,042		601,042
Opportunistic										
Private funds		-		-		-		606,237		606,237
Total	\$	1,480,383	\$	366,126	\$	-	\$	4,395,056	\$	6,241,565
Operating Investments:										
Fixed income		472	φ.	2 422 070	Φ.		ф.		φ.	2 424 44
Public separate accounts	\$	173	\$	2,423,970	\$	-	\$	-	\$	2,424,143
Public funds		174,186		-		-		04.005		174,186
Private funds		-1		-		-		94,885		94,885
Equity investments		35,633								35,633
Public separate accounts		35,633		-		2 125		-		
Private separate accounts		201 055		-		3,125		-		3,125
Public funds Private funds		281,855		-		4,284		85,923		281,855 90,207
Real assets		-1		-		4,204		65,925		90,207
Public funds		1,039								1,039
Private funds		1,039		-		7		682		689
Opportunistic Opportunistic		-1		-		/		002		003
Public funds		68				_		_		68
Private funds		- 08		-		_		270,619		270,619
Total	\$	492,954	•	2,423,970	\$	7,416	\$	452,109	•	3,376,449
iotai	η Ψ	772,334	Ф	2,723,310	Ψ	7,410	Ф	732,103	Ф	3,370,445
Deposits held by bond trustees:										
Fixed income										
Public funds	\$	264,710	\$	-	\$	-	\$	-	\$	264,710
Deposits held for others	\$	-	\$	9,968	\$	-	\$	-	\$	9,968
Beneficial interest in perpetual trusts	\$	-	\$	-	\$	28,117	\$	-	\$	28,117
Liabilities:										
* * * * *	\$		\$		\$					

Public separate accounts hold public fixed income and equity investments owned directly by the University. Some of these investments may be valued using matrix pricing which is based on the price or yield of a similar, more actively traded security. Private separate accounts hold private fixed income and equity investments owned directly by the University. Public funds are commingled investment structures that are publicly listed and whose valuations are readily available. Private funds comprise commingled investment structures that are not publicly listed and are managed collectively following a prescribed investment strategy.

The Long-Term Investment Pool (LTIP) is structured similarly to a mutual fund and is used for investing the University's endowment funds, funds functioning as endowments, and other operating funds that are expected to be held long-term. A unit method of accounting for the LTIP is utilized by the University. Each participating fund enters and withdraws from the LTIP based on monthly unit values.

The following tables present information related to changes in Level 3 for each category of financial assets and liabilities for years ended June 30, 2024 and 2023:

(in thousands of dollars)	Long-Term Investment Pool		perating estments	Int Pe	eneficial erest in erpetual Trusts
Assets:					
Balance as of June 30, 2022	\$ 1,525	\$	4,595	\$	26,240
Gifts		-	-		1,029
Total realized and unrealized gains		-	1,296		848
Net transfers in (out)	(1,525	5)	1,525		-
Balance as of June 30, 2023		-	7,416		28,117
Gifts		-	-		2,611
Purchases		-	260		-
Sales		-	(161)		-
Total realized and unrealized (losses) gains		-	(209)		1,377
Net transfers in		-	940		-
Balance as of June 30, 2024	\$	- \$	8,246	\$	32,105

	Present Value of Annuities Payable	
Liabilities:		
Balance as of June 30, 2022	\$ 63,995	
Actuarial adjustment of liability	1,551	
Gifts	2,904	
Sales	(877)	
Balance as of June 30, 2023	67,573	
Actuarial adjustment of liability	5,952	
Gifts	691	
Sales	(3,540)	
Balance as of June 30, 2024	\$ 70,676	

The following table presents the fair value and redemption frequency for private funds' investments whose fair value is not readily determinable and is estimated using NAV or its equivalent as of June 30:

	Fair \	/alue	Unfunded Commitments	Redemption	Redemption
(in thousands of dollars)	2024	2023	At June 30, 2024	Frequency	Notice Period
Private Funds With Redemption	Ability:				
Fixed income investments	\$ 431,400	\$ 393,545	\$ -	Various	2-90 days
Equity investments	1,333,700	1,273,408	-	Various	2-90 days
Real asset investments	396,962	256,643	5,779	Various	2-90 days
Opportunistic investments	929,168	750,127	-	Various	2-90 days
Subtotal	\$ 3,091,230	\$ 2,673,723	\$ 5,779		
Private Funds Without Redempti	on Ability:				
Fixed income investments	\$ 156,848	\$ 125,786	\$ 198,840		
Equity investments	1,490,886	1,575,846	542,982		
Real asset investments	349,582	345,081	234,436		
Opportunistic investments	161,804	126,729	159,873		
Subtotal	\$ 2,159,120	\$ 2,173,442	\$ 1,136,131		
				1	

Private funds with redemption ability include private funds that the University has some discretion as to the timing of withdrawing money from the commingled fund. Redemptions vary from daily to three years with required notification of 90 days or less.

Private funds without redemption ability include private funds that the University has no or very little discretion as to the timing of withdrawing money from the commingled fund. Realizations from these funds are received as the underlying investments are liquidated or distributed, typically within 10-15 years after initial commitment.

Unfunded commitments represent remaining commitments of the LTIP's private funds as of June 30, 2024 that may be invested in the future.

7. CONTRIBUTIONS RECEIVABLE

Contributions receivable are summarized as follows as of June 30:

(in thousands of dollars)	2024	2023
In one year or less	\$ 42,009	\$ 50,316
Between one year and five years	44,746	54,756
More than five years	164,005	131,382
Contributions receivable, gross	250,760	236,454
Less allowance	(1,842)	(1,757)
Less discount	(65,436)	(50,611)
Contributions receivable, net	\$ 183,482	\$ 184,086

Contributions received during the years ended June 30, 2024 and 2023 are discounted at rates ranging from 4.33% to 5.09% and 3.96% to 5.40%, respectively. The discount rates for prior periods ranged from 0.11% to 6.28%.

At June 30, 2024 and 2023 the University has received bequest intentions of \$927.7 million and \$865.1 million, respectively, and certain other conditional promises to give of \$88.1 million and \$59.7 million, respectively. These intentions and conditional promises to give are not included in the consolidated financial statements.

8. LONG-TERM DEBT

The various bond issues, notes payable and finance lease obligations that are included in long-term debt in the statement of financial position consist of the following at June 30:

The Pennsylvania State University Bonds	(in thousands of dollars)	2024	2023
Series 2022A 123,605 125,450 Series 202B 25,610 26,500 Series 2020B 76,725 78,045 Series 2020B 292,740 303,795 Series 2020D 987,835 1,013,920 Series 2020E 42,600 47,585 Series 2019A 100,200 101,030 Series 2018 58,870 60,025 Series 2018 58,870 60,025 Series 2017A 140,955 143,920 Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015B 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2007B 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 200,000 <td< td=""><td>The Pennsylvania State University Bonds</td><td></td><td></td></td<>	The Pennsylvania State University Bonds		
Series 2022B 25,610 26,500 Series 2020A 76,725 78,045 Series 2020D 292,740 303,795 Series 2020E 987,835 1,013,920 Series 2019A 100,200 102,030 Series 2019B 108,430 111,165 Series 2018 58,870 60,025 Series 2017A 140,955 143,920 Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue	Series 2023	\$ 203,990	\$ 203,990
Series 2020A	Series 2022A	123,605	125,450
Series 2020B 292,740 303,795 Series 2020D 987,835 1,013,920 Series 2020E 42,600 47,585 Series 2019A 100,200 102,030 Series 2019B 108,430 111,165 Series 2018 58,870 60,025 Series 2017A 140,955 143,920 Series 2017B 108,340 101,300 Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2019 200,000 200,000 Lancaster Lealth Taxable Bonds Gissued for Penn State Health) 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) 288,840 288,840 Lyconing County Authority College Revenue Bonds (issued for Penn College) 24,290 <td< td=""><td>Series 2022B</td><td>25,610</td><td>26,500</td></td<>	Series 2022B	25,610	26,500
Series 2020D 987,835 1,013,920 Series 2020E 42,600 47,585 Series 2019A 100,200 102,030 Series 2018 108,430 111,165 Series 2017A 140,955 143,920 Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2006 695 1,015 Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 28,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2	Series 2020A	76,725	78,045
Series 2020E	Series 2020B	292,740	303,795
Series 2019A 100,200 102,030 Series 2019B 108,430 111,165 Series 2018 58,870 60,025 Series 2017A 140,955 143,920 Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015A 52,070 53,990 Series 2007B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds (issued for Penn State Health) 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) 222,000 222,000 Series 2019 222,000 222,000 223,000 Lucaster County Municipal Authority Revenue Bonds (issued for Penn College) 288,840 288,840 Lycoming County Authority College Re	Series 2020D	987,835	1,013,920
Series 2019B	Series 2020E	42,600	47,585
Series 2018 58,870 60,025 Series 2017A 140,955 143,920 Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2015B 157,140 169,050 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 28,840 28,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 <td>Series 2019A</td> <td>100,200</td> <td>102,030</td>	Series 2019A	100,200	102,030
Series 2017A 140,955 143,920 Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 28,840 28,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 <t< td=""><td>Series 2019B</td><td>108,430</td><td>111,165</td></t<>	Series 2019B	108,430	111,165
Series 2017B 108,340 111,260 Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 <t< td=""><td>Series 2018</td><td>58,870</td><td>60,025</td></t<>	Series 2018	58,870	60,025
Series 2016A 101,300 104,730 Series 2016B 157,140 169,050 Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2015 40,575 42,735 Series 2015 465 1,090 Total bonds payable	Series 2017A	140,955	143,920
Series 2016B 157,140 169,050 Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660	Series 2017B	108,340	111,260
Series 2015A 52,070 53,990 Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2016A	101,300	104,730
Series 2015B 78,485 83,345 Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2016B	157,140	169,050
Series 2007B 22,050 26,875 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2015A	52,070	53,990
Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2015B	78,485	83,345
(issued for The Pennsylvania State University) Series 2006 695 1,015 Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2007B	22,050	26,875
Series 2004 420 820 Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979			
Penn State Health Taxable Bonds Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) 222,000 222,000 Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) 288,840 288,840 Series 2021 288,840 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) 24,290 26,305 Series 2021A 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2006	695	1,015
Series 2019 200,000 200,000 Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) 222,000 222,000 Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) 288,840 288,840 Series 2021 288,840 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2004	420	820
Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health) 222,000 222,000 Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) 288,840 288,840 Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) 24,290 26,305 Series 2021A 20,345 21,180 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Penn State Health Taxable Bonds		
(issued for Penn State Health) Series 2019 222,000 222,000 Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) 288,840 Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2019	200,000	200,000
Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979			
(issued for Penn State Health) Series 2021 288,840 288,840 Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2019	222,000	222,000
Lycoming County Authority College Revenue Bonds (issued for Penn College) Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979			
Series 2021A 24,290 26,305 Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2021	288,840	288,840
Series 2021B 20,345 21,180 Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Lycoming County Authority College Revenue Bonds (issued for Penn College)		
Series 2016 40,575 42,735 Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2021A	24,290	26,305
Series 2015 465 1,090 Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2021B	20,345	21,180
Total bonds payable 3,478,575 3,569,660 Unamortized bond premiums 239,027 256,979	Series 2016	40,575	42,735
Unamortized bond premiums 239,027 256,979	Series 2015	465	1,090
	Total bonds payable	3,478,575	3,569,660
Unamortized deferred bond costs (16,029) (16,847)	Unamortized bond premiums	239,027	256,979
	Unamortized deferred bond costs	(16,029)	(16,847)

(in thousands of dollars)	2024	2023
Notes payable and finance leases		
Notes payable	31,810	36,958
Finance lease obligations	39,337	39,173
Total notes payable and finance leases	71,147	76,131
Total long-term debt	\$ 3,772,720	\$ 3,885,923

Debt issuance	Interest rate mode	Interest rates	Payment ranges and maturity (in thousands of dollars)				
The Pennsylvania S	tate Unive	rsity Bonds					
Series 2023	Fixed	5.00% - 5.25%	\$2,985 to \$7,715 through September 2043 with \$45,220 and \$58,795 due September 2048 and 2053, respectively				
Series 2022A	Fixed	5.00% - 5.25%	\$1,940 to \$4,770 through September 2042 with \$27,765 and \$35,890 due September 2047 and 2052, respectively				
Series 2022B	Fixed	3.003% - 4.673%	\$915 to \$1,550 through September 2037 with \$8,940 due September 2042				
Series 2020A	Fixed	4.00% - 5.00%	\$1,385 to \$3,090 through September 2040 with \$17,980 and \$22,490 due September 2045 and 2050, respectively				
Series 2020B	Fixed	1.680% - 2.888%	\$5,895 to \$13,910 through September 2035 with \$67,170 and \$89,310 due September 2040 and 2050, respectively				
Series 2020D	Fixed	1.545% - 2.84%	\$26,465 to \$33,545 through September 2035 with \$304,225 and \$328,000 due September 2043 and 2050, respectively				
Series 2020E	Fixed	5.00%	\$5,230 to \$7,010 through March 2031				
Series 2019A	Fixed	5.00%	\$1,925 to \$6,720 through September 2049				
Series 2019B	Fixed	2.30% - 3.50%	\$2,800 to \$3,720 through September 2034 with \$20,455 and \$52,515 due September 2039 and September 2049, respectively				
Series 2018	Fixed	5.00%	\$1,210 to \$2,320 through September 2037 with \$16,650 and \$18,255 due September 2043 and September 2048, respectively				
Series 2017A	Fixed	5.00%	\$3,115 to \$5,965 through September 2037 with \$34,750 and \$44,620 due September 2042 and September 2047, respectively				
Series 2017B	Fixed	2.616% - 3.793%	\$2,995 to \$3,830 through September 2032 with \$21,305 and \$56,595 due September 2037 and September 2047, respectively				
Series 2016A	Fixed	5.00%	\$3,600 to \$6,465 through September 2036 with \$37,520 due September 2041				
Series 2016B	Fixed	4.00% - 5.00%	\$7,165 to \$22,195 through September 2036				
Series 2015A	Fixed	5.00%	\$2,015 to \$3,445 through September 2035 with \$20,000 due September 2040				
Series 2015B	Fixed	5.00%	\$5,105 to \$8,435 through September 2035				
Series 2007B	Fixed	5.25%	\$5,085 to \$5,955 through August 2027				
	Pennsylvania Higher Educational Facilities Authority University Revenue Bonds						
Series 2006	Fixed	5.125%*	\$1,610 due September 2025				
Series 2004	Series 2004 Fixed 5.00%* \$1,905 due September 2024						
*Annual interest costs to the University for interest rates greater than 3.00% are subsidized by PHEFA.							

Debt issuance	Interest rate mode	Interest rates	Payment ranges and maturity (in thousands of dollars)			
Penn State Health E	Bonds					
Series 2019	Fixed	3.806%	\$200,000 due November 2049			
Cumberland County Municipal Authority Revenue Bonds						
Series 2019	Fixed	3.00% - 5.00%	\$4,915 to \$9,315 through November 2039 with \$52,355 and \$63,940 due November 2044 and November 2049, respectively			
Lancaster County H	ospital Aut	hority Revenue Bo	nds			
Series 2021	Fixed	5.00%	\$5,780 to \$13,690 through November 2041 with \$79,750 and \$152,421 due November 2046 and November 2051, respectively			
Lycoming County A	uthority Co	llege Revenue Bor	nds			
Series 2021A	Fixed	5.00%	\$2,015 to \$4,565 through July 2030			
Series 2021B	Fixed	0.782% - 3.014%	\$900 to \$1,930 through January 2038			
Series 2016	Fixed	2.125% - 5.00%	\$1,545 to \$4,075 through October 2037			
Series 2015	Fixed	2.75% - 5.00%	\$465 due January 2025			

The University believes it has complied with all financial debt covenants for the years ended June 30, 2024 and 2023.

Maturities and sinking fund requirements on bonds payable for each of the next five fiscal years and thereafter are summarized as follows:

Year	Annual Installments (in thousands of dollars)			
2025	\$ 96,885			
2026	105,690			
2027	109,270			
2028	113,105			
2029	116,940			
Thereafter	2,936,685			
Total	\$ 3,478,575			

The fair value of the University's bonds payable is estimated based on current rates offered for similar issues with similar security, terms and maturities using available market information as supplied by the various financial institutions who act as trustees or custodians for the University. At June 30, 2024, the carrying value and estimated fair value of the University's bonds payable, including issuance premiums and deferred bond costs, are \$3.702 billion and \$3.187 billion, respectively. At June 30, 2023, the carrying value and estimated fair value of the University's bonds payable, including issuance premiums and deferred bond costs, are \$3.810 billion and \$3.297 billion, respectively. Certain bond issues have associated issuance premiums; these issuance premiums total \$239.0 million and \$257.0 million at June 30, 2024 and 2023, respectively, and are presented within the statements of financial position as long-term debt. These issuance premiums will be amortized over the term of the respective outstanding bonds. Certain bond issues have associated deferred bond costs; these deferred bond costs total \$16.0 million and \$16.8 million at June 30, 2024 and 2023, respectively, and are presented within the statements of financial position as a reduction in long-term debt. These deferred bond costs will be amortized over the term of the respective outstanding bonds.

NOTES PAYABLE

The University has four notes payable included within the consolidated statements of financial position at June 30, 2024 with balances of \$1.2 million, \$2.4 million, \$5.6 million, and \$22.6 million. These notes have payments due through June 2025, March 2026, August 2039, and September 2040 and bear interest at 2.85%, 2.80%, 2.65%, and 2.65%, respectively.

Maturities on notes payable for each of the next five fiscal years and thereafter are summarized as follows:

Year	Annual Installments (in thousands of dollars)				
2025	\$	4,029			
2026		2,515			
2027		1,518			
2028		1,559			
2029		1,601			
Thereafter		20,588			
Total	\$	31,810			

LINE OF CREDIT

In April 2021, the Health System entered into a revolving line of credit agreement with PNC Bank in the amount of \$230 million, expiring in April 2024. In May 2023, the credit agreement was amended to convert its variable interest rate index from the one-month London Interbank Offered Rate (LIBOR) plus an applicable spread to the Secured Overnight Financing Rate (SOFR) plus an applicable spread, as defined in the agreement. The effective interest rate as of June 30, 2023 was 5.9%.

In April 2024, the Health System entered into another revolving line of credit agreement with PNC Bank in the amount of \$150 million to replace the expired line of credit. The new line of credit expires in April 2027. This credit bears interest at the SOFR plus 85 basis points (0.85%). In 2024, the Health System did not draw on this line of credit. The effective interest rate as of June 30, 2024 was 6.3%.

9. LEASES

The University leases certain equipment and buildings under operating and finance leases expiring at various dates through 2043. Rentals generally include insurance, taxes and maintenance costs.

Future maturities of lease liabilities at June 30, 2024 are as follows:

(in thousands of dollars)	(in thousands of dollars)						
Year	Finance Leases	Operating Leases					
2025	\$ 9,320	\$ 37,612					
2026	7,859	33,516					
2027	6,879	28,608					
2028	2,898	22,714					
2029	2,703	14,707					
Thereafter	16,820	71,187					
Total lease payments	46,479	208,344					
Less amount representing interest	(7,142)	(36,637)					
Total lease obligations	39,337	171,707					
Current portion	8,256	30,661					
Long-term portion	\$ 31,081	\$ 141,046					

Supplemental lease activity for the years ended June 30 is as follows:

(in thousands of dollars)	2024	2023
Components of Lease Expense		
Finance lease expense:		
Amortization of ROU assets	\$ 10,208	\$ 9,133
Interest on lease liabilities	1,365	1,465
Total finance lease expense	11,573	10,598
Operating lease expense	38,709	35,969
Total lease expense	\$ 50,282	\$ 46,567

The weighted-average remaining lease term and weighted-average discount rate at June 30 were as follows:

	Weighted-Average Remaining Lease Term (Years)		Dis	d-Average count ate			
	2024	2023	2024	2023			
University:							
Finance leases	11.12	10.97	4.00%	3.81%			
Operating leases	4.42	4.99	2.99%	2.89%			
Health System:							
Finance leases	3.90	3.50	2.00%	3.20%			
Operating leases	9.30	10.90	4.70%	4.00%			

Supplemental cash flow information related to leases for the years ended June 30 is as follows:

(in thousands of dollars)	202	4	202	3
ROU assets acquired in exchange for finance lease liabilities	\$	9,596	\$	7,400
ROU assets acquired in exchange for operating lease liabilities		38,135		20,491
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash outflows from finance leases		1,365		1,465
Operating cash outflows from operating leases		37,919		34,163
Financing cash outflows from finance leases		9,151		8,305

10. FUNCTIONAL AND NATURAL CLASSIFICATION OF EXPENSES

Functional expenses by natural classification as of June 30 are as follows:

(in thousands of dollars)	Educational	Auxiliary	Health	
2024	and General	Enterprises	System	Total
Salaries and wages	\$ 1,963,270	\$ 166,476	\$ 1,907,286	\$ 4,037,032
Benefits	707,504	62,714	476,173	1,246,391
Depreciation	340,504	45,663	173,399	559,566
Plant operations and maintenance	159,548	20,450	88,183	268,181
Other components of net periodic postretirement benefit cost	(26,232)	-	-	(26,232)
Interest	50,139	39,259	28,113	117,511
Supplies, services, and other	682,093	199,127	1,558,104	2,439,324
Total	\$ 3,876,826	\$ 533,689	\$ 4,231,258	\$ 8,641,773

(in thousands of dollars)	Educational	Auxiliary	Health	
2023	and General	Enterprises	System	Total
Salaries and wages	\$ 1,910,640	\$ 150,200	\$ 1,779,513	\$ 3,840,353
Benefits	708,108	70,482	455,531	1,234,121
Depreciation	322,697	46,617	180,260	549,574
Plant operations and maintenance	181,584	24,745	78,714	285,043
Other components of net periodic postretirement benefit cost	(21,313)	-	-	(21,313)
Interest	45,160	33,456	28,697	107,313
Supplies, services, and other	573,145	204,424	1,474,622	2,252,191
Total	\$ 3,720,021	\$ 529,924	\$ 3,997,337	\$ 8,247,282

Education and general is comprised of academic and student services (which consists of instruction, academic support and student services), research, public service and institutional support. The costs of plant operations and maintenance, depreciation, and interest have been allocated across all functional expense categories to reflect the full cost of those activities. Plant operations and maintenance and depreciation expense are allocated based on the total proportionate expenses of each functional classification. Interest expense is allocated based on the proportionate share of total debt-financed construction.

11. RETIREMENT BENEFITS

The University provides retirement benefits for substantially all regular employees, primarily through either contributory defined benefit plans administered by the Commonwealth of Pennsylvania State Employees' Retirement System (SERS) and The Public School Employees' Retirement System (PSERS) or defined contribution plans administered by the Teachers Insurance and Annuity Association (TIAA). The University is billed for its share of the estimated actuarial cost of the defined benefit plans (\$54.3 million and \$44.4 million, net of applied setoff credits of \$93.3 million for the years ended June 30, 2024 and 2023, respectively). The Health System provides retirement benefits for substantially all employees through one of three defined contribution plans administered by Empower Retirement. The University's total cost for retirement benefits, included in expenses, is \$260.5 million and \$240.7 million for the years ended June 30, 2024 and 2023, respectively.

The SERS is the administrator of a cost-sharing, multi-employer retirement system established by the Commonwealth of Pennsylvania to provide pension benefits for employees of state government and certain independent agencies. As provided by statute, the SERS Board of Trustees has exclusive control and management responsibility of the funds and full power to invest the funds. The SERS funding policy provides for periodic member contributions at statutory rates and employer contributions at actuarially determined rates (expressed as a percentage of annual gross pay) that are

sufficient to accumulate assets to pay benefits when due. In April 2020, the University entered into an agreement with SERS to prefund \$1.061 billion of the University's unfunded actuarial accrued liability in exchange for credits against future contributions. The University's contributions to this plan for the years ended June 30, 2024 and 2023 were \$50.3 million and \$39.5 million, respectively (net of applied setoff credits of \$93.3 million) and represent approximately 5.8% and 5.9% of total contributions to the plan based on projections for fiscal years 2024 and 2023, respectively. The funded ratio of the plan was 69.6% as of December 31, 2023.

12. POSTRETIREMENT BENEFITS

The University sponsors a retiree medical plan covering eligible retirees and eligible dependents. This program includes a Preferred Provider Organization (PPO) plan (both a traditional and a qualified high deductible option) for retirees and their dependents who are not eligible for Medicare, and a Medicare Advantage PPO plan. In addition, the University provides certain retiree life insurance benefits to eligible retirees as described below.

Employees who were hired prior to January 1, 2010 are eligible for medical coverage after they retire if either of the following requirements are satisfied:

- they are at least age 60 and have at least 15 years of continuous regular full-time employment and participation in a University-sponsored medical plan immediately preceding the retirement date
- regardless of age, if they have at least 25 years of regular full-time service. The last 10 of those 25 years of
 University service must be continuous, and they must participate in a University-sponsored medical plan during
 the last 10 years immediately preceding the retirement date.

Non-union employees retiring on or before December 31, 2020 received a \$5,000 term life insurance policy benefit at no cost to the employee. For certain union employees, a \$5,000 term life insurance policy is provided at no cost to the employee regardless of their retirement date.

The retiree PPO medical plan is a self-funded program, and all medical claims and other expenses are paid from net assets without donor restrictions of the University. The Medicare Advantage PPO plan and life insurance program are fully insured. The retirees pay varying amounts for coverage under the medical plan.

For those employees who were hired after December 31, 2009, the University will contribute funds each month on their behalf to a Retirement Healthcare Savings Plan. This plan is designed to help pay for qualified medical and health-related expenses in retirement, including the purchase of a health insurance policy.

Retirees will be eligible to access their Retirement Healthcare Savings Plan account when they are no longer actively employed at Penn State and have satisfied either of the following requirements:

- completed 25 years of continuous full-time service and are age 60 or older
- completed a minimum of 15 years of continuous full-time service and are age 65 or older.

The following sets forth the plan's benefit obligation, plan assets and funded status reconciled with the amounts recognized in the University's consolidated statements of financial position at June 30:

(in thousands of dollars)				
Change in benefit obligation:	2024		2023	
Benefit obligation at beginning of year	\$	1,221,009	\$	1,471,456
Service cost		14,057		16,947
Interest cost		60,518		60,115
Actuarial gain		(33,379)		(204,940)
Benefits paid		(50,700)		(56,219)
Plan amendment		883		_
Plan assumptions		(22,152)		(66,350)
Benefit obligation at end of year	\$	1,190,236	\$	1,221,009
Change in plan assets:				
Fair value of plan assets at beginning of year	\$	-	\$	-
Employer contributions		50,700		56,219
Benefits paid		(50,700)		(56,219)
Fair value of plan assets at end of year	\$	-	\$	-
Funded status	\$ (1,190,236)	\$	(1,221,009)
Unrecognized prior service cost (benefit)		-		-
Unrecognized net actuarial loss		-		-
Accrued postretirement benefit expense	\$ (1	1,190,236)	\$	(1,221,009)

Net periodic postretirement cost includes the following components for the years ended June 30:

(in thousands of dollars)				
Operating expenses:	:	2024	;	2023
Service cost	\$	14,057	\$	16,947
Nonoperating activities:				
Interest cost		60,518		60,115
Amortization of prior service cost		92		-
Amortization of unrecognized net loss		(87,634)		(81,428)
Net periodic postretirement cost	\$	(12,967)	\$	(4,366)

The assumed healthcare cost trend rate used in measuring the accumulated postretirement benefit obligation was 7.60% and 7.40% for the years ended June 30, 2024 and 2023, respectively, reduced to an ultimate level of 4.50% and 4.50%, respectively. The postretirement benefit obligation discount rate was 5.52% and 5.20% for the years ended June 30, 2024 and 2023, respectively. During 2024 and 2023, the plan had favorable claims experience compared to assumptions, and the liability decreased due to the increase in discount rates.

Gains and losses in excess of 10% of the accumulated postretirement benefit obligation are amortized over the average future service to assumed retirement of active participants.

Postretirement benefits expected to be paid for the years ended June 30 are as follows:

	,	ousands of dollars)
2025	\$	56,599
2026		60,867
2027		64,973
2028		68,437
2029		71,613
2030-34		391,632

13. PENN STATE HEALTH

Penn State Health was organized exclusively to promote, support and further the charitable, educational, and scientific purposes of the University. These purposes are defined and limited by Section 501(c)(3) of the Internal Revenue Code of 1986. The Health System is controlled by the University with a 20% membership by Highmark Health (HH). The University has recorded noncontrolling interest related to this membership, which is included in net assets without donor restrictions within the consolidated statements of financial position with a value at June 30, 2024 and 2023 of \$272.2 million and \$268.6 million, respectively.

The wholly owned subsidiaries of the Health System include the Milton S. Hershey Medical Center (MSHMC), Saint Joseph's Regional Health Network and Medical Group (SJRHN/SJMG), Penn State Community Medical Group (PSCMG), Holy Spirit Medical Center (HSMC), Nittany Health, Inc. ("Nittany"), Central PA Health Network (CIN), Penn State Health Hampden Medical Center ("Hampden"), Penn State Health Lancaster Medical Center (LMC), Penn State Health Life Lion, LLC (PSHLL), and Pennsylvania Psychiatric Institute (PPI), which was acquired during the year ended June 30, 2024. These subsidiaries provide a variety of health care services in the Dauphin, Centre, Berks, Cumberland, and Lancaster county regions of Pennsylvania.

The Health System, through its medical groups, operates a non-acute and ambulatory network that consists of a number of patient care sites in nine counties. The Heath System, through Nittany, jointly holds ownership interest in ambulatory surgical centers.

During 2024 and 2023, the Health System recorded \$951.3 million and \$854.2 million, respectively, of net patient service revenue received from HH. In 2023, the Health System transferred \$10.7 million of net assets to HH. During 2024 and 2023, the Health System paid HH \$276.9 million and \$272.7 million, respectively, of employee benefits expense. As of June 30, 2024 and 2023, the Health System has a liability due to HH in the amount of \$3.1 million and \$13.8 million, respectively. This liability is included in accounts payable and other accrued expenses in the consolidated statements of financial position.

14. CONTINGENCIES AND COMMITMENTS

CONTRACTUAL OBLIGATIONS

The University has contractual obligations for the construction of new buildings and for additions to existing buildings in the amount of \$1.806 billion, of which \$1.572 billion has been paid or accrued as of June 30, 2024. The contract costs are being financed from available resources and from borrowings.

LETTERS OF CREDIT

The University has available letters of credit in the amount of \$32.7 million and \$33.5 million as of June 30, 2024 and 2023, respectively. These letters of credit are used primarily to comply with minimum state and federal regulatory laws that govern various University activities. The fair value of these letters of credit approximates contract values based on the nature of the fee arrangements with the issuing banks.

GUARANTEES

The University has a contract with a third party whereby the third party acts as an agent of the University in connection with the procurement of electricity. The University guarantees the payment of the obligations of the third party incurred on behalf of the University to counterparties.

SELF-INSURANCE

The University has a coordinated program of commercial and self-insurance for medical malpractice claims for the Health System through the use of a qualified trust and a domestic captive insurance company in combination with a self-insured retention layer and is supplementing this program through participation in the Pennsylvania Medical Care Availability and Reduction of Error Fund, in accordance with Pennsylvania law. An estimate of the present value, discounted at 2% for the years ended June 30, 2024 and 2023, of the medical malpractice claims liability in the amount of \$235.0 million and \$212.7 million is recorded as of June 30, 2024 and 2023, respectively.

The subsidiaries of the Health System are self-insured for all medical malpractice claims asserted on or after July 1, 2001 that are below the coverage of excess insurance policies and not included in the insurance coverage of the Pennsylvania Medical Care Availability and Reduction of Error Fund. Under the self-insurance program, the Health System is required by the Commonwealth to maintain a malpractice trust fund in an amount equal to or greater than the expected loss of known claims. The balance of this trust fund was \$42.4 million and \$40.2 million at June 30, 2024 and 2023, respectively. The Health System intends to fund any claim payments due during the next year with cash flows from operations.

With approval from the Pennsylvania Department of Labor and Industry (PA-DLI), the University elected to self-insure potential obligations applicable to Pennsylvania workers' compensation. Claims under the program are contractually administered by a third-party administrator. The University purchased insurance coverage from a commercial insurer for claims in excess of \$600,000 per incident. An estimate of the self-insured workers' compensation claims liability in the amount of \$6.5 million and \$6.3 million, discounted at 4.33% and 4.13%, respectively, is recorded as of June 30, 2024 and 2023, respectively. The University has established a trust fund, in the amount of \$14.4 million and \$13.8 million at June 30, 2024 and 2023, respectively, as required by PA-DLI, to collateralize and to provide for the payment of claims under this self-insurance program. The Health System is also approved by the PA-DLI to self-insure Pennsylvania workers' compensation claims and has purchased an excess policy through a commercial insurer for claims in excess of \$750,000 per incident.

The University and the Health System are self-insured for certain health care benefits provided to employees. The University and the Health System have purchased excess insurance policies which cover employee health benefit claims in excess of \$1.0 million per employee per year. The University and the Health System provide for reported claims and claims incurred but not reported.

RELATED PARTY TRANSACTIONS

During 2024 and 2023, the University paid HH, a related party as defined in Note 13, \$338.7 million and \$162.6 million, respectively, of employee benefits expense. As of June 30, 2024 and 2023, the University has a liability due to HH in the amount of \$17.8 million and \$24.7 million, respectively.

LITIGATION AND CONTINGENCIES

Various legal proceedings have arisen in the normal course of conducting University business. The outcome of such litigation is not expected to have a material effect on the financial position of the University.

Based on its operation of the Health System (see Note 13), the University, like the rest of the healthcare industry, is subject to numerous laws and regulations of federal, state and local governments. Compliance with these laws and regulations can be subject to government review and interpretation, as well as regulatory actions. Government activity has continued with respect to investigations and allegations concerning possible violations of fraud and abuse statutes and regulations by healthcare providers. Although the University believes it has done its best to comply with these numerous regulations, such government reviews could result in significant repayments of previously billed and collected revenues from patient services.

15. SUBSEQUENT EVENTS

The University has evaluated subsequent events through November 7, 2024, the date on which the consolidated financial statements were issued. It did not identify any subsequent events to be disclosed other than those below or previously noted.

In August 2024, the University issued general obligation bonds, Series 2024, in the amount of \$157.9 million for the purpose of financing various construction and renovation projects.

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

Independent Auditor's Report

To the Board of Trustees
The Pennsylvania State University

We have audited the consolidated financial statements of The Pennsylvania State University as of and for the year ended June 30, 2024 and have issued our report thereon dated November 7, 2024, which contained an unmodified opinion on those consolidated financial statements. Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. We have not performed any procedures with respect to the audited consolidated financial statements subsequent to November 7, 2024.

The accompanying schedule of expenditures of federal awards is presented for the purpose of additional analysis, as required by the Uniform Guidance, and is not a required part of the consolidated 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 consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

Plante & Moran, PLLC

March 24, 2025



Plante & Moran, PLLC



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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*

Independent Auditor's Report

To Management and the Board of Trustees
The Pennsylvania State University

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 consolidated financial statements of The Pennsylvania State University (the "University"), which comprise the consolidated statement of financial position as of June 30, 2024 and the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements and have issued our report thereon dated November 7, 2024.

Report on Internal Control Over Financial Reporting

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



To Management and the Board of Trustees The Pennsylvania State University

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University'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 University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Plante & Moran, PLLC

November 7, 2024

Plante & Moran, PLLC



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Report on Compliance for Each Major Federal Program and Report on Internal Control Over Compliance
Required by the Uniform Guidance

Independent Auditor's Report

To the Board of Trustees
The Pennsylvania State University

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited The Pennsylvania State University's (the "University") compliance with the types of compliance requirements identified as subject to audit in the U.S. Office of Management and Budget (OMB) *Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2024. The University's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

In our opinion, the University complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of the major federal programs for the year ended June 30, 2024.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the "Uniform Guidance"). Our responsibilities under those standards and the Uniform Guidance 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 University and to meet our other ethical responsibilities in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the University's compliance with the compliance requirements referred to above.

Other Matter - Federal Expenditures Not Included in the Compliance Audit

The University's consolidated financial statements include the operations of Penn State Health, a Pennsylvania nonprofit corporation, and The Pennsylvania College of Technology, a wholly owned subsidiary of the University, which are not included in the University's schedule of expenditures of federal awards during the year ended June 30, 2024. Our compliance audit, described in the *Opinion on Each Major Federal Program* Section, does not include the operations of Penn State Health and The Pennsylvania College of Technology because they receive a separate financial statement audit and a separate single audit when required by the Uniform Guidance.

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 University's federal 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 University'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 Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the University's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with GAAS, Government Auditing Standards, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and
 perform audit procedures responsive to those risks. Such procedures include examining, on a test basis,
 evidence regarding the University'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 University's internal control over compliance relevant to the audit in order to
 design audit procedures that are appropriate in the circumstances and to test and report on internal control
 over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion
 on the effectiveness of the University'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.

Other Matter

The results of our auditing procedures disclosed an instance of noncompliance that is required to be reported in accordance with the Uniform Guidance, which is described in the accompanying schedule of findings and questioned costs as Finding 2024-001. Our opinion on each major federal program is not modified with respect to this matter.

Government Auditing Standards requires the auditor to perform limited procedures on the University's response to the noncompliance finding identified in our compliance audit and described in the accompanying schedule of findings and questioned costs. The University's response was not subjected to the other auditing procedures applied in the audit of compliance, and, accordingly, we express no opinion on it.

Report on Internal Control Over Compliance

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, and, therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we did identify certain deficiencies in internal control over compliance that we consider to be a material weakness and significant deficiencies.

To the Board of Trustees
The Pennsylvania State University

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 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. We consider the deficiency in internal control over compliance described in the accompanying schedule of findings and questioned costs as Finding 2024-001 to be a material weakness.

A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance. We consider the deficiencies in internal control over compliance described in the accompanying schedule of findings and questioned costs as Findings 2024-002, 2024-003, and 2024-004 to be significant deficiencies.

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.

Government Auditing Standards requires the auditor to perform limited procedures on the University's responses to the internal control over compliance findings identified in our audit and described in the accompanying schedule of findings and questioned costs. The University's responses were not subjected to the other auditing procedures applied in the audit of compliance, and, accordingly, we express no opinion on them.

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

Flante & Moran, PLLC

March 24, 2025

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

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University of Personal					GNE22-280-AWD00000495		
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct		,		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-282-AWD00000495		4.787
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-285-AWD00000495		9,381
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-287-AWD00000495		8,077
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-293-AWD00000495		6,614
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-296-AWD00000495		587
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-298-AWD00000495		8,141
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	GNE22-302-AWD00000495		1,745
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	LNE20-404-34268		33,813
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	LNE22-447-AWD00000495		46,271
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	LNE23-463-AWD00001024		56,212
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	ONE19-352-33243		(767)
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	ONE21-382-35383		15,223
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	SNE20-011-PA-35383		5,339
U.S. Department of Agriculture	N 10.215	Sustainable Agriculture Research and Education	University of Vermont	SNE23 011 PA AWD00001024		28,260
U.S. Department of Agriculture	N 10.253	Consumer Data and Nutrition Research	RTI International Global Supply Chain, SSES Subcontracts	1-312-0217652-66074L		(4,350)
U.S. Department of Agriculture	N 10.303	Integrated Programs	Middle Tennessee State University	537403-77796		5,076
U.S. Department of Agriculture U.S. Department of Agriculture	N 10.303 N 10.307	Integrated Programs Organic Agriculture Research and Extension Initiative	Purdue University Cornell University	17000797-042 90033-20656		1,047 26,878
U.S. Department of Agriculture U.S. Department of Agriculture	N 10.307 N 10.309	Organic Agriculture Research and Extension Initiative Specialty Crop Research Initiative	Cornell University Cornell University	92884-20620		68,774
U.S. Department of Agriculture	N 10.309	Specialty Crop Research Initiative	Texas A&M University	M1900058		565
U.S. Department of Agriculture	N 10.309	Specialty Crop Research Initiative	Texas A&M University	M2002891		63,953
U.S. Department of Agriculture	N 10.309	Specialty Crop Research Initiative	University of California at Riverside	S-001490		62,777
U.S. Department of Agriculture	N 10.309	Specialty Crop Research Initiative	Washington State University	133321-SPC001388		46.879
U.S. Department of Agriculture	N 10.309	Specialty Crop Research Initiative	Washington State University	140349 SPC004077		125,985
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Auburn University	23-EPP-205270-PSU		94,920
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Colorado State University	G-50388-01		46,567
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Connecticut University of	149538888 PO# 457404		2,511
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Connecticut, University of	413623		49,357
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Cornell University	139013-21306		4,688
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Delaware, University of	UDR0000221		157,460
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Georgia, University of	SUB00002872		6,997
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Iowa State University	022496C		751,806
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Mississippi, University of	24-07-14		137,871
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	North Carolina State University	PAM-P19-001507-SA17		125,196
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	North Dakota State University	FAR0036980		7,045
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Pennsylvania, University of	580961 (PO 5093684)		142,675
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Pennsylvania, University of	584753		50,575
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Purdue University	17000585-011		2,779
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Purdue University	F0013585302011		56,811
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Purdue University	F0015520602016		26,321
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	The University of Tennessee Institute of Agriculture	A24-0019-S002		46,123
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	Tufts University	AG9046		31,788
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	University of Arkansas	UA2022-315 (SPC-002248)		76,780
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	University of Pittsburgh	AWD00008517 (420726-1)		15,567
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	University of Wisconsin-Madison	0000002723		13,143
U.S. Department of Agriculture	N 10.310	Agriculture and food Research initiative (AFRI)	West Virginia University	20-182-PSU PO MM000338770		220,975
U.S. Department of Agriculture	N 10.310 N 10.310	Agriculture and food Research initiative (AFRI)	West Virginia University	21-921-PSU 23-211-PSU (PO MM000529731)		49,302
U.S. Department of Agriculture U.S. Department of Agriculture	N 10.310 N 10.320	Agriculture and food Research initiative (AFRI) Sun Grant Program	West Virginia University South Dakota State University	3TD372		22,774 43,985
					40.500	
U.S. Department of Agriculture U.S. Department of Agriculture	N 10.320 N 10.320	Sun Grant Program Sun Grant Program	South Dakota State University University of Tennessee	3TD386 9500098679	13,530	157,936 18,686
U.S. Department of Agriculture	N 10.320	Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranch	COP Department of Agriculture	C940001346		23,397
U.S. Department of Agriculture	N 10.443	Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranch	COP Department of Agriculture	C940001346 C940001376		16.921
U.S. Department of Agriculture	N 10.500	Cooperative Extension Service	Minnesota. University of	A007363501	33,084	(11,460)
U.S. Department of Agriculture	N 10.500	Cooperative Extension Service	Minnesota, University of	H010225601	203.557	380,300
U.S. Department of Agriculture	N 10.902	Soil and Water Conservation	Colorado State University	G-70444-03	200,007	42,116
U.S. Department of Agriculture	N 10.912	Environmental Quality Incentives Program	Connecticut. University of	179476759 (PO#179476759)		4.035
U.S. Department of Agriculture	N 10.912	Environmental Quality Incentives Program	North Jersey RC&D	277369		2,275
U.S. Department of Agriculture	N 10.RD	U.S. Department of Agriculture Research and Development	COP Department of Agriculture	44209123		55,342
U.S. Department of Agriculture	N 10.RD	U.S. Department of Agriculture Research and Development	COP Department of Agriculture	C94000777		72
U.S. Department of Agriculture	N 10.RD	U.S. Department of Agriculture Research and Development	Mississippi State University	254709		70,207
U.S. Department of Agriculture	N 10.RD	U.S. Department of Agriculture Research and Development	University of Illinois	094525-17306		46,936
U.S. Department of Agriculture	N 10.RD	U.S. Department of Agriculture Research and Development	University of Maryland Eastern Shore	2021-34383-34848		1,340
U.S. Department of Agriculture	N 10.RD	U.S. Department of Agriculture Research and Development	University of Massachusetts Amherst	22-016782 A 00		14,502
U.S. Department of Agriculture Total					4,531,710	38,807,256
110 0	v	0010				4 4== ===
U.S. Department of Commerce	Y 11.417	Sea Grant Support			135,893	1,476,777
U.S. Department of Commerce	Y 11.431	Climate and Atmospheric Research			77,855	93,777
U.S. Department of Commerce	Y 11.457	Chesapeake Bay Studies				17,324
U.S. Department of Commerce U.S. Department of Commerce	Y 11.459 Y 11.482	Weather and Air Quality Research Coral Reef Conservation Program				2,944 181,033
	Y 11.482 Y 11.609				0.500	
U.S. Department of Commerce	Y 11.609 Y 11.RD	Measurement and Engineering Research and Standards U.S. Department of Commerce Research and Development			9,536	765,441 69.970
U.S. Department of Commerce U.S. Department of Commerce	Y 11.RD Y 11.RD	U.S. Department of Commerce Research and Development U.S. Department of Commerce Research and Development				69,970
U.S. Department of Commerce U.S. Department of Commerce	Y 11.RD Y 11.RD	U.S. Department of Commerce Research and Development U.S. Department of Commerce Research and Development				9,530
U.S. Department of Commerce	Y 11.RD	U.S. Department of Commerce Research and Development				9,550
U.S. Department of Commerce	Y 11.RD	U.S. Department of Commerce Research and Development				7,332
U.S. Department of Commerce	Y 11.RD	U.S. Department of Commerce Research and Development				(4)
U.S. Department of Commerce	Y 11.RD	U.S. Department of Commerce Research and Development				288,242
U.S. Department of Commerce	Y 11.RD	U.S. Department of Commerce Research and Development				1,835
U.S. Department of Commerce	N 11.417	Sea Grant Support	Minnesota, University of	D007941106		6,615
U.S. Department of Commerce	N 11.417	Sea Grant Support	Purdue University	18100090-104		54,704
U.S. Department of Commerce	N 11.417	Sea Grant Support	Purdue University	F0008309702056		33,443
U.S. Department of Commerce	N 11.417	Sea Grant Support	Purdue University	F0008309702115		31,343
U.S. Department of Commerce	N 11.419	Coastal Zone Management Administration Awards	COP: Department of Environmental Protect ion	C990003634		25,000
U.S. Department of Commerce	N 11.431	Climate and Atmospheric Research	RAND Corporation	SCON-00000037		(421)
U.S. Department of Commerce	N 11.431	Climate and Atmospheric Research	RAND Corporation	SCON-00000444		164,783
U.S. Department of Commerce	N 11.432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	THE UNIVERSITY OF ALABAMA UNIVERSITY OF ALABAMA CONTRACT AND GRANT	A22-0307-S003		211,782

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct		,		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Commerce	N 11.432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	THE UNIVERSITY OF ALABAMA UNIVERSITY OF ALABAMA CONTRACT AND GRANT	A23-0249-S001		43.141
U.S. Department of Commerce	N 11.432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	THE UNIVERSITY OF ALABAMA UNIVERSITY OF ALABAMA CONTRACT AND GRANT	A23-0252-S002		62,181
U.S. Department of Commerce	N 11.432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	THE UNIVERSITY OF ALABAMA UNIVERSITY OF ALABAMA CONTRACT AND GRANT	A23-0262-S002		25,607
U.S. Department of Commerce	N 11.432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	THE UNIVERSITY OF ALABAMA UNIVERSITY OF ALABAMA CONTRACT AND GRANT	A23-0271-S001		57,342
U.S. Department of Commerce	N 11.459	Weather and Air Quality Research	Texas Tech University	21B053-02		122,908
U.S. Department of Commerce	N 11.472	Unallied Science Program	SECORE International, Inc.	SECORE_PENNST_SUBAWARD2022		29,593
U.S. Department of Commerce	N 11.478	Center for Sponsored Coastal Ocean Research Coastal Ocean Program	Rhode Island, University of	0009205/110221 PSU		55,368
U.S. Department of Commerce	N 11.478	Center for Sponsored Coastal Ocean Research Coastal Ocean Program	Virginia Institute of Marine Science	720362-712683		8,373
U.S. Department of Commerce	N 11.481 N 11.609	Educational Partnership Program	Howard University	GRT000392 -10012446 4646169		6,209
U.S. Department of Commerce U.S. Department of Commerce	N 11.609 N 11.619	Measurement and Engineering Research and Standards Arrangements for Interdisciplinary Research Infrastructure	American Bureau of Shipping Delaware, University of	4646169 PC4 1-105		238 (452)
U.S. Department of Commerce U.S. Department of Commerce	N 11.619 N 11.619	Arrangements for Interdisciplinary Research Infrastructure Arrangements for Interdisciplinary Research Infrastructure	The Regents of the University of Michigan	SUBK00015959		(452) 64.495
U.S. Department of Commerce	N 11.RD	U.S. Department of Commerce Research and Development	American Bureau of Shipping	4580419		27,962
U.S. Department of Commerce	N 11.RD	U.S. Department of Commerce Research and Development	Consolidated Safety Services Inc	PO GSA8-24-PENN		34,904
U.S. Department of Commerce	N 11.RD	U.S. Department of Commerce Research and Development	CSS Industries. Inc.	PO GSA8-23-PENN		175,904
U.S. Department of Commerce	N 11.RD	U.S. Department of Commerce Research and Development	Rhode Island. University of	10305 11162023 (PO 0000207206)		25.797
U.S. Department of Commerce	N 11.RD	U.S. Department of Commerce Research and Development	Synoptic Data	S2020-142		12.301
U.S. Department of Commerce	N 11.RD	U.S. Department of Commerce Research and Development	Synoptic Data	S2020-142 AMENDMENT 9		31,283
U.S. Department of Commerce Total			, ,		223,284	4,224,633
U.S. Department of Defense	Y 12.007	Military Health Services Research - MHSR			12,398	105,079
U.S. Department of Defense	Y 12.300	Basic and Applied Scientific Research			1,643,706	11,228,892
U.S. Department of Defense	Y 12.330	Science, Technology, Engineering & Mathematics (STEM) Education, Outreach and Wo				87,194
U.S. Department of Defense	Y 12.351	Scientific Research - Combating Weapons of Mass Destruction			5,443,496	6,876,015
U.S. Department of Defense	Y 12.420	Military Medical Research and Development			895,761	4,626,763
U.S. Department of Defense	Y 12.431	COVID-19 - Basic Scientific Research				111,062
U.S. Department of Defense	Y 12.431 Y 12.556	Basic Scientific Research Competitive Grants: Promoting K-12 Student Achievement at Military-Connected Sch			321,587	1,917,095 542.576
U.S. Department of Defense U.S. Department of Defense	Y 12.598	Confective Grants, Promoting K-12 Student Achievement at Military-Connected Sch Centers for Academic Excellence			303,273	1,843,403
U.S. Department of Defense	Y 12.599	Congressionally Directed Assistance			11,300	117,173
U.S. Department of Defense	Y 12.630	Basic, Applied, and Advanced Research in Science and Engineering			3,004,370	3,916,547
U.S. Department of Defense	Y 12.800	Air Force Defense Research Sciences Program			2.465.182	11.159.395
U.S. Department of Defense	Y 12.902	Information Security Grants			2,400,102	263 292
U.S. Department of Defense	Y 12.910	Research and Technology Development			46,651	518.460
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			10,001	277,930
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(19,299)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				16
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(225)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			85,517	90,138
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			109,216	146,723
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(27,602)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(31,035)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(663)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				223,074
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				112,832
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			609,030	3,480,877
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				59,748
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,370,399	5,988,058
U.S. Department of Defense U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			154,150	176,475 856,338
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				(1,229)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			337.785	3.032.318
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			199,250	3,896,156
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			100,200	299,297
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				266,219
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				265.269
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				5,457
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				110,379
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				188
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				290,482
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(115)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				2,544
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				6,382
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				194,451 430
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				632,301
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				206,088
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				527,157
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				20
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(958)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(2,003)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(683)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(33)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				565,704
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				13,391
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(106)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(609)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				241,156
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				230,285
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				271,491 339,704
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				793.530
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				210,913
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				32,904
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,015,142	3,409,085
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				201,800
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				395,031
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct				Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development	• •	, , ,		551.766
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			216,177	554,495
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				495,238
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				499,973
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				361,920
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				241,893
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				340,029 457,350
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				349.041
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				378,886
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				103,908
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				54,344
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				114,507
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				6,725
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				5,324
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			35.557	189,956 267,147
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,261,701	3,876,435
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,201,701	699.107
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				3,281,704
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				676,931
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			11,310	133,835
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				62,503
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				312,616
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			3,552	2,538 (1,538)
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				1,726,865
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(884)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				363,733
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1,360
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			304,704	598,146
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				34,751
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				64,315
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			81.289	964,739 234,822
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			01,209	1.677.381
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			462.798	1,077,301
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			,	611.902
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				619,271
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				4,956,275
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				183,417
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,474,562	1,740,153
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			2,283,011	1,254,565 3,092,811
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			2,203,011	9.263
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				10.107
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				22,317
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				843
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				820
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			8,086	8,862
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				35,383
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				2.011
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			17.309	13.028
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			,	(8,021)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				2,120
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				935,256
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(34,902)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				91
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				(267) (478)
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			52,444	(478) 100,837
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			J2, 444	21,335
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				56,064
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				33,823
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(1,445)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			2,127	2,394
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1,534
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				28 2,554,076
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			19,288	2,554,076
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			13,200	(4,961)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			135,354	1,733,814
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(25)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			72,956	34,694
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			//	(31)
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development			(467,412)	29,816,162
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				3,304 (1,324)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(17,551)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				59.792
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(8,988)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				7,768
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(10,237)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(796)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				(13,240)
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				15 1,283
U.S. Department of Defense	1 12.KD	U.S. Department of Defense Research and Development				1,203

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Part				Direct			1323 00112 00, 2024		Subrecipient	
			Federal Agency			Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number		Expenditures
Company	11:	S Department of	Defense	Y	12 RD	LLS Denartment of Defense Research and Development			•	(1.312)
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1. 1. 1. 1. 1. 1. 1. 1.				Ý						(11.819)
1.				Ý		U.S. Department of Defense Research and Development				38,995
Property	U.	S. Department of	Defense	Y						
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	U.	Department of	Defense	Y		U.S. Department of Defense Research and Development				(297)
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1.5 Security of Control 1.5										
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1.5 Superior of Delators 7 1.50 Superior o	U.	Department of	Defense	Y	12.RD	U.S. Department of Defense Research and Development			226,163	1,707,814
1.5 September of Delates	U.	Department of	Defense	Y	12.RD	U.S. Department of Defense Research and Development				316,197
1.5 September of Delivers				Y						
15 Regiment of Informs 15 15 15 Regiment of Informs 15 R				Y						
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15 Department of Defaume 100 100 Department of Defaume Resource of Defaume R				Y						
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1.5 Designation of Definition 1.5 Designation of Designation of Definition 1.5 Designation of Desig	U.	 Department of 	Defense	Y	12.RD	U.S. Department of Defense Research and Development				1,007,509
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U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 497,571 U.S. Department of Defense Y 12.RD U.S. Department of Defense 2,757,921 U.S. Department of Defense Y 12.RD U.S. Department of Defense 68,719 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development (7,799) U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 596,978 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 45 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 593,441 20,62,479 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 593,441 20,62,479 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,04,249 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,46,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Develop				Ý						
U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 2,757,921 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development (17,499) U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development (17,499) U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 596,978 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 45 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 593,441 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 104,249 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,410,555 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,410,555 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,410,555 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and				Ý						
U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 68,719 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 17,499 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 596,978 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 45 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 593,441 2,662,479 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,014,249 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,014,249 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department o	U.	S. Department of	Defense	Υ						
U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 596,978 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 45 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 593,41 2,062,479 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,014,249 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,983 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department of Defense Research and Development 1,416,055 U.S. Department of Defense Y 12.RD U.S. Department	U.	Department of	Defense	Υ		U.S. Department of Defense Research and Development				68,719
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

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Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number Expenditures	Expenditures
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(798)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			37,836
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			152,256 5.827
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(1,841)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			3,230,428
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			124,764
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,291,845
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			478,968
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development		37,48	
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			5,134,708 530.325
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,200,722
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,466
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			451
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(3,057)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,291,445
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			315,252 97,643
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			2,260,971
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,743,781
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			22,184
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			12,975,884
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			453,320
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			5,404,239 197,788
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			197,766
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			137.111
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(107)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			2,745,427
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			7
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			7,866
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			(37,246)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			3,160
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,130,246
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		499,78	7 1,289,881
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		498,56	
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			553,088
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			133,939
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development		101,72	
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		43,08	(2,757) 8 130,259
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		40,00	1,880,313
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			58.491
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			27,658
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			174,996
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		374,89	
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		369,05	
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			186,027 291,682
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			2.879
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			157,496
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(305)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			197,727
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			514,982
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			91,237
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			567,999 1,890,034
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			347.417
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(3,047)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(286)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(3,826)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			657,724
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			1,229,404 254,909
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			254,909 754.791
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			504.585
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			61,043
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			3,016
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(1,573)
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development			201,443
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			283,332 283,221
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			688.362
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			2,976,115
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			(4,472)
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,513,593
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			428,571
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			316,735
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development		118,69	4 1,579,389 3,359,862
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			3,359,862 355,714
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			793
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			240,797
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			264,554
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development		13,85	
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			291,361

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct					Subrecipient	
Federal Agency	Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Defense	Y 1	12.RD	U.S. Department of Defense Research and Development				954 221
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				43,671
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				208.470
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				240,638
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				802,124
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				2,485,498
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				2,080,416
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			112,609	1,887,716
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				1,154,606
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				(114)
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				3,067,707 355,213
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				118.364
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				385,405
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				1,191,771
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				249,508
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				1,388,876
U.S. Department of Defense	Y 1	12.RD	U.S. Department of Defense Research and Development				(534)
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				2,328,853
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				4,005,494
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				1,213,043
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				505,938
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				576,687
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				7,254,717
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				54,835 950,077
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			414,442	2,461,754
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			414,442	992,930
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				695,345
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				274,814
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				263,325
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				610,636
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				224,896
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				319,899
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				220,630
U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development				209,627
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				250,549
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				815,811 1.538.673
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				399.865
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				988 477
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				436.042
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				27,356
U.S. Department of Defense	Y 1	12.RD	U.S. Department of Defense Research and Development				463,055
U.S. Department of Defense	Y 1	12.RD	U.S. Department of Defense Research and Development				65,169
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				144,963
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				14,196
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				200,481
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				64,241
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			227 556	149,423
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			227,556	498,591 93,506
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				396.149
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			222,241	5,446,789
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			LLL,L11	681,003
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			1,042,235	8,445,552
U.S. Department of Defense	Y 1	12.RD	U.S. Department of Defense Research and Development				515,661
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				307,196
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				293,230
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				304,172
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				92,982
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				594,832
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				1,006,854 915,783
U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				134.976
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			345,953	1.332.116
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development			0.0,000	2,167,083
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				24,996
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				513,839
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				595,402
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				1,221,796
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				213,377
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				189,425
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				229,026
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				16,478,237 520.669
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				315.466
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				1,209,049
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				43,519
U.S. Department of Defense	Y 1	12.RD	U.S. Department of Defense Research and Development				380,965
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				194,390
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				154,194
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				268,426
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				730,672
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				75,422
U.S. Department of Defense		12.RD	U.S. Department of Defense Research and Development				211,613
U.S. Department of Defense U.S. Department of Defense		12.RD 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			88,678	501,774 383,238
U.S. Department of Defense	T I	12.RD	o.o. Department of Defense Research and Development			00,078	303,238

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	FOR THE TE	EAR ENDED JUNE 30, 2024		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number		Expenditures
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development	r doo riirough Entity	r doo r modgii zindiy idonaliying italiibor		36.741
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1,063,887
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				182,560 3.748
U.S. Department of Defense U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				195,032
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				48,408
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				36,476
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				268,903 64 182
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				184,966
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			1,419,448	1,766,516
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				56,171 10.592
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				10,592
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				22,959
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				225
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				211,456 199,099
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				32,031
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1,590
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				35,611 70,232
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1,639,916
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				29,920
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				317,105
U.S. Department of Defense U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				61,625 146,265
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				5,509
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				3,577
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				205,388 4.004
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			354,474	752,774
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				295,223
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				284,711
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				155,014 218,738
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				8,546
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				246,447
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				69,349 155,064
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				266,236
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				404,119
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				328,208 67,054
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				270.147
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				268,496
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				302,688 202,613
U.S. Department of Defense U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				149,304
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				553,132
U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development				96,000
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				188,836 29,402
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				307,682
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			73,437	187,098
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			15,868	173,627 307.161
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				126,425
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			91,143	147,297
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				179,120 663,796
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				1.110.645
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				291,185
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development			165,356	1,931,051
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development			143,302	1,527,513 253,412
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				418,038
U.S. Department of Defense	Y 12.RD	U.S. Department of Defense Research and Development				144,586
U.S. Department of Defense U.S. Department of Defense	Y 12.RD Y 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development				349,355 109,098
U.S. Department of Defense	N 12.116	Department of Defense Appropriation Act of 2003	CFD Research Corporation	277380		2.804
U.S. Department of Defense	N 12.116	Department of Defense Appropriation Act of 2003	CFD Research Corporation	277386		4,708
U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	Cornell University Duke University	146585-22138 313000094		110,430 165,373
U.S. Department of Defense U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	Duke University Duke University	313000094 313-1092		165,373 397,650
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Iowa State University	027650A		79,930
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Minnesota, University of	A005988203		59,913
U.S. Department of Defense U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	New Mexico, University of University of New Mexico Health Sciences North Carolina State University	133755-873B 2015-1959-04		107,801 (9.817)
U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	Oregon, University of	2015-1959-04 234640B		(9,817)
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Purdue University	13000647-004		30,196
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Purdue University	40001859-027		3,220
U.S. Department of Defense U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	Resonado Labs University of California at San Diego	2307R1 FA864923P0928 705713		26,122 183,248
U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research	University of California at San Diego University of California at San Diego	706401		28,069
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	University of Illinois	099963-17891		250,879
U.S. Department of Defense	N 12.300 N 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	University of Southern California Vanderbilt University	141252736 OSA0000076		85,380 128,928
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct		,		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Virginia Polytechnic Institute and State University	450955-19079		131,404
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Washington University in St. Louis	WU-24-0004		38,293
U.S. Department of Defense	N 12.300	Basic and Applied Scientific Research	Washington, University of	UWSC11269 PO 41707		2,469
U.S. Department of Defense	N 12.351	Scientific Research - Combating Weapons of Mass Destruction	Minnesota, University of	H006536504		(2,714)
U.S. Department of Defense	N 12.351	Scientific Research - Combating Weapons of Mass Destruction	University of Texas at Austin	UTAUS-SUB00000288AM2		5,764
U.S. Department of Defense	N 12.420	Military Medical Research and Development	University of Maryland	19649 (KB5242)		2,100
U.S. Department of Defense	N 12.431	Basic Scientific Research	Carnegie Mellon University	1130288-463192		118,790
U.S. Department of Defense	N 12.431	Basic Scientific Research	Drexel University	940031		48,820
U.S. Department of Defense	N 12.431	Basic Scientific Research	General Opto Solutions, LLC	261682		260,351
U.S. Department of Defense	N 12.431	Basic Scientific Research	Michigan State University	RC113209-PSU		176,011
U.S. Department of Defense	N 12.431	Basic Scientific Research	North Carolina State University	PAM-P16-001652-SA04 SUB0000634		3,474
U.S. Department of Defense	N 12.431	Basic Scientific Research	Princeton University Office of Research & Project Administrat			356,512
U.S. Department of Defense	N 12.431	Basic Scientific Research	University of California at Berkeley	00010732 (BB01686780)		104,072
U.S. Department of Defense U.S. Department of Defense	N 12.431 N 12.431	Basic Scientific Research Basic Scientific Research	University of Iowa University of Missouri	S04556-01 C00076207-3		2,331 128,750
U.S. Department of Defense	N 12.431 N 12.431	Basic Scientific Research	University of Missouri University of Southern California	SCON-00004292		128,750
	N 12.431 N 12.630	Basic, Applied, and Advanced Research in Science and Engineering	Florida International University	000818		51.710
U.S. Department of Defense U.S. Department of Defense	N 12.630	Basic, Applied, and Advanced Research in Science and Engineering Basic, Applied, and Advanced Research in Science and Engineering	MyD	222202 TASK ORDER 20-11-13		26.782
U.S. Department of Defense	N 12.630	Basic, Applied, and Advanced Research in Science and Engineering Basic, Applied, and Advanced Research in Science and Engineering	University of California at San Diego	706278		52.106
U.S. Department of Defense	N 12.630	Basic, Applied, and Advanced Research in Science and Engineering	Virginia Polytechnic Institute and State University	450987-19079		89,063
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Applied Optimization	2101AMTAPSU01		(5)
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Applied Optimization Applied Optimization	2206AMRMPSU01		(666)
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Case Western Reserve University	RFS600322		106,933
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Delaware State University	23-335HEH		14,392
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Directed Energy Professional Society	980158		15,416
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Directed Energy Professional Society	982890		(763)
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Directed Energy Professional Society	983403		15,801
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Florida A & M University	C-5212		22,100
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Florida International University	800011034-02UG		132,853
U.S. Department of Defense	N 12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturing & Machining	983078	72,741	233,736
U.S. Department of Defense	N 12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturing & Machining	983079		28,625
U.S. Department of Defense	N 12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturing & Machining	983458		98,831
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Northwestern University	60066088 PENN		90,701
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Purdue University	13000716-052		188,753
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Purdue University	13000716-060		177,915
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Purdue University	13001346-055		167,946
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Rice University	X03093859		2,207
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Texas A&M Engineering Experiment Station	M2401106		42,448
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	The Board of Trustees of the Leland Stan ford Junior University (Stanford Univer	62680282-227888		11,053
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	The Board of Trustees of the Leland Stan ford Junior University (Stanford Univer	63163632-294322		66,122
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	The Research Foundation for SUNY on behalf of the University at Buffalo	R1304011		164,112
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	University of California at Merced CAMPUS CASHIERING SERVICES	A21-0047-S001		37,836
U.S. Department of Defense U.S. Department of Defense	N 12.800 N 12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	University of California at San Diego University of Maryland	KR-705478 131757-Z8615203		121,024 61,937
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	University of Tennessee - Knoxville	A20-1043-S002		56 178
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	University of Tennessee - Knoxville	A20-1043-5002 A22-0890-S001		159.997
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Utah, University of	10059059-PENN		93,443
U.S. Department of Defense	N 12.800	Air Force Defense Research Sciences Program	Washington, University of	UWSC12793		129,706
U.S. Department of Defense	N 12.900	Language Grant Program	University of North Georgia	451031-01		(150)
U.S. Department of Defense	N 12.910	Research and Technology Development	University of Tennessee	A24-0028-S002		183,330
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	4D Tech Solutions	2181		(127)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	4D Tech Solutions	D008SFP241003		3,570
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Cooling Technologies, Inc.	270259		548
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Cooling Technologies, Inc.	47044		104,427
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Sensor Technologies Program Office	OF69 DATED 01/26/24		108,617
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Sensor Technologies Program Office	OF69 DATED 2/1/2024		137,189
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2012532 TO 007		(46)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2018-867 TO #CWMD1907-001		(490)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019467 TO 001		(2,977)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019482 TO 003		(15,263)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019685 TO 001		9,446
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019685 TO 002		320,857
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2021-378 TO 1 NSTIC-20-01-041		462,177
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2021-378 TO 2 NSTIC-20-01-055		1,194,900
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2022301 TO 001 2018-457 TO 003		624,844 1.826
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	COVID-19 - U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Advanced Technology International AeroDvnamic Solutions, Inc.	2018-457 TO 003 265579		1,826 33,535
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development		P000036707		
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Alion Science and Technology Corporation American Lightweight Materials Manufactu ring Innovation Institute	F000036707 K00401		85,511 15.160
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	American Lightweight Materials Manufactu ring Innovation Institute American Lightweight Materials Manufactu ring Innovation Institute	K00401 K01601		406.500
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	American Lightweight Materials Manufactu ring Innovation Institute American Lightweight Materials Manufactu ring Innovation Institute	K02901		13.562
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	American regression waterials wandlacte mig innovation institute American regression and the second regression in the se	AMC001		4.770
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Amphionic LLC	983183		50,226
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Amphionic LLC	983420		36,763
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Analysis, Design & Diagnostics, Inc.	N68335-17-C-0037/1		315
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Apothym Technologies Group, LLC	ATG-SUB-2023-4015-0001		43,409
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Applied Optimization	1910086PSU01		35,348
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Applied Optimization	2301023PSU01		34,512
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Applied Optimization	26320PSU01		(5,038)
U.S. Department of Defense	N 12.RD	COVID-19 - U.S. Department of Defense Research and Development	Applied Physical Sciences Corporation	980976 APS2020		20,675
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Applied Research in Acoustics	274448		33,683
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Arete Associates	AZ-401724		29,779
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	413		176
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	437		322,623
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	443		181,101
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	478 292001PSU		35,486
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Azimuth Corporation	292001PSU 292-003-PSU		291,113
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Azimuth Corporation	292-003-P5U		7,469

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	-	on		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	BAE Systems	1194760		13,514
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	BAE Systems	1202175 LINE ITEM 1		81,281
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	BAE Systems Ballydel Technologies, Inc	983392 BTI2021001		109,464 672
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	BAM Technologies LLC	2021-8-12		113,325
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Bechtel Plant Machinery, Inc.	C200398		(76)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Bechtel Plant Machinery, Inc.	G301665		22,977
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	BlueForge Alliance	PO 862 LINE 1		165,913
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	BlueForge Alliance BlueHalo	PO 862 LINE 2 0000010360	26,748	295,640
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Brimrose Technology Corporation	22941		81,008 (11,590)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Carnegie Mellon University	1990792-455728		1,611
U.S. Department of Defense	N 12.RD	COVID-19 - U.S. Department of Defense Research and Development	Carnegie Mellon University	23-00079-SUB-000 / PO 466279		256,483
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Cascade Technologies	237696		(3,620)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	CEPEDA Associates, Inc.	982466		(5)
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	CEPEDA Associates, Inc. CEPEDA Associates, Inc.	982931 983424		149 12,106
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	CFD Research Corporation	983424 0000006627		4,055
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Charles River Analytics, Inc.	SC2114503		87,704
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	ChromoLogic LLC	266253		110,016
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Clarkson Aerospace Corporation	PSU 21-1-0460		43,445
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Clarkson Aerospace Corporation	PSU 24-1-0004		6,688
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Collaborative Composite Solutions Corporation	METAL-002		149,516
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Computer Sciences Corporation Continuum Dynamics, Inc.	982633 22-014		55,150 9.633
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Continuum Dynamics, Inc. Continuum Dynamics, Inc.	23095		39,528
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Continuum Dynamics, Inc.	PO #23-115		49,448
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Cornerstone Research Group, Inc.	2023-2015		49,998
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Corvid Technologies	23-059		148,816
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Corvid Technologies	247806		23
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Craft Tech Critical Frequency Design LLC	19-C-0189/C802 983382		6,645 11,502
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Dagger Unmanned, LLC	983382 983510		30.920
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	D'Angelo Technologies, LLC	982543		151.946
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Defense Maritime Solutions, Inc.	P24-35296		29,095
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Denver Research Institute	MSRC-FY19-04		(337)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Eduras Autonomy LLC	983507		33,000
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Elementum 3D FAER Defense LLC	982781 983509		136,715 27.972
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Farragut Technical Analysis Center	OF69 DATED 13-APR-22		38.037
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Farragut Technical Analysis Center	OF69 DATED 27-JUL-2023		101,051
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	GE Global Research Center	DARPA-PA-23-03		54,339
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Gear Research Institute c/o Fiore Fedeli Snyder Carothers LLP	26977		147
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Gear Research Institute c/o Fiore Fedeli Snyder Carothers LLP Gear Research Institute c/o Fiore Fedeli Snyder Carothers LLP	982256 982834		409 28 239
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Gear Research Institute c/o Fiore Fedeli Snyder Carothers LLP Gear Research Institute c/o Fiore Fedeli Snyder Carothers LLP	982834 983013		28,239
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Gear Research Institute c/o Fiore Fedeli Snyder Carothers LLP	983034		56,392
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	General Dynamics Electric Boat	1000046124		1,627,194
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	General Dynamics Electric Boat	SNG227017		(5,801)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	General Electric Co. [MP]	PO# 401105828		(3,522)
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Georgia Institute of Technology Georgia Institute of Technology	AWD-003043-S1 AWD-103015-S2 PO-5287291		128,140 235,193
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Global Engineering and Materials, Inc.	FFP2023PSU0627		69.584
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	HAMR. Industries LLC	982357		53,240
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	982509		262
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	983014		174,115
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	983026		12
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	HAMR, Industries LLC Harmony Aeronautics	983539 257004		24,796 3,653
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Huntington Ingalls Industries, Inc.	4500740224		14,845
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Huntington Ingalls Industries, Inc.	4500756798		23,646
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Huntington Ingalls Industries, Inc.	983355		32,947
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Huntington Ingalls Industries, Inc.	P000045475		79,787
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Image Acoustics, Inc. In-Depth Engineering Corporation	24548 PSU-OARS-002-23-SCA		1,133 69,478
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	In-Depth Engineering Corporation Innovative Scientific Solutions, Inc.	PSU-UARS-002-23-5CA SB20314		69,478 41.901
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Integrated Solutions for Systems	107233.0001.0001-0003		130,614
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Karagozian & Case, Inc.	PSU 200474.000		87,177
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Kyma Technologies, Inc.	KB050P000PSU20230919		61,700
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Leidos	P010231342		(407)
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Leidos, Inc. Lockheed Martin Corporation, Inc. [MP]	PO10203201 U16-002 PROJECT NO. 038		(4,738) 28,190
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	COVID-19 - U.S. Department of Defense Research and Development	Lockneed Martin Rotary and Mission Systems	4104658663		28,190 4,372
U.S. Department of Defense	N 12.RD	COVID-19 - U.S. Department of Defense Research and Development	Lockheed Martin Space Systems Company	U16-002 PROJECT NUMBER 033		5,972
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	LP Resilient Services JV LLC	981476 (PHASE II)		2,358
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Luna Innovations, Inc.	3808NVY1SPSUARL		(2,030)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Luna Labs	7006-MDA-2S/PSU		117,915
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Lynntech, Inc. Lynntech. Inc.	257292 NAV 540		68,331
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Lynntech, Inc. Mainstream Engineering Corporation	NAV-540 26973		43,000
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	28198		8,434
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	980098		9,162
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	982417		(23,630)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	982993 (PO #0673822)		110,432
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	983162		(4,206)
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Mainstream Engineering Corporation Mainstream Engineering Corporation	983163 983367		63,840 134,252
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Mainstream Engineering Corporation Mainstream Engineering Corporation	983581		134,252 8.505
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct		•		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures Expenditures	es
U.S. Department of Defense	N 12.RD	COVID-19 - U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	983654	57,4	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Massachusetts Institute of Technology	280972		,842
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Motion Control Systems, Inc	39754 222205 PROJECT 211003		(82)
U.S. Department of Defense	N 12.RD N 12.RD		MxD Nanahmina lan	222205 PROJECT 211003 238127	16,3	
U.S. Department of Defense U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Nanohmics, Inc. NanoSonic, Inc.	238901		,304 (457)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	271309 PO 455100		.573
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	DL1-0063	29.8	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	MDI-7523		15
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	MDI-7527		7
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	NV1-0254	((38)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	NV20570	100,6	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	NV2-0570		,378
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	NanoSonic, Inc. NanoSonic. Inc.	SF1-A015 SF1-A046	23,3 35.0	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	NanoSonic, inc. National Center for Defense Manufacturing & Machining	28196	35,0 (12,4	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	National Center for Manufacturing & Macrining National Center for Manufacturing Sciences	2022104110435	19.3	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	New York University Sponsored Programs Administration	F2265-02	33,4	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	NextGen Aeronautics, Inc.	PO 21-01	42,3	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Noise Control Engineering, LLC	SUBCONTRACT 2018-038		99
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Northrop Grumman Space Systems	983118	1	100
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Orbital Bridge LLC	982743		,558
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Peraton Labs Inc.	PO-0018619 PHASE 2	319,9	
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Perspecta Engineering Inc.	PO 0029370 TO 8		305
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Perspecta, Inc. Perspecta. Inc.	PO-0018619 PHASE 2 PO0018668	(332,4	,412) (136)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Physical Sciences Inc.	SC10-29319-140064-46	44,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Piasecki Aircraft Corporation	230600	129,9	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Piasecki Aircraft Corporation	PO 86929		942
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	PJB Consulting	283409		840
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	PPG Industries [MP]	255906	108,2	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Pratt and Whitney	22205 TASK ORDER 145	((72)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Pratt and Whitney	22205 TASK ORDER 151	(4,9	,944)
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	QuesTek Innovations LLC	1875 982844	66,1	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	QuesTek Innovations LLC Radiance Technologies, Inc.	982844 0000004317	202,0	(842)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Raytheon Missiles & Defense	4202474469	(19,2	258)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Raytheon Technologies Research Center	1265063 AMENDMENT 2	361.5	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	REM Surface Engineering	982747	159,4	460
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	REM Surface Engineering	PORU22300258	27,6	,650
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Resdef Inc	FA864924P0064	26,4	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	RSL Fiber Systems	983314	13,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Sabre Systems, Inc.	1050-PSU	17,0	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Sabre Systems, Inc. Saint-Gobain Crystals	24296 982717	7,7 43.2	765
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Saxon Glass Technologies, Inc.	2303AFPH2PSU	21,2	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	SciTech Services, Inc.	23-22-F-0037-04	41,9	959
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	SciTech Services, Inc.	281400		775
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Siemens Corporation, Corporate Technology	S21401	34,5	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Southwest Range Services, LLC	R02953	(8,4	,452)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Spectral Energies, LLC	SB2223-001-1	60,3	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Stevens Institute of Technology	2103399-01	21,7	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Stevens Institute of Technology Strategic Technology Consulting	2103575-01 STC-19-02	155,2	,258 (1)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Swift Engineering Inc	74340	47,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Systems Innovation Engineering	982623	9,5	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Teledyne Scientific & Imaging, LLC	PO00177506 4T106	252,3	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Texas A&M Engineering Experiment Station	M2200284	285,336 579,4	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Texas A&M Engineering Experiment Station	M2203083	80,7	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Texas A&M Engineering Experiment Station	M2402206	31,9	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Phy sics Laboratory LLC	168340	11,7	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Phy sics Laboratory LLC The Johns Hopkins University Applied Phy sics Laboratory LLC	174551 178730	6. 466,9	624
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Physics Laboratory LLC The Johns Hopkins University Applied Physics Laboratory LLC	178730 181172	466,9 244.0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Physics Laboratory LLC The Johns Hopkins University Applied Physics Laboratory LLC	183559	244,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Physics Laboratory LLC	184578	24,9	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Phy sics Laboratory LLC	184706	120,3	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Phy sics Laboratory LLC	187747	194,6	,667
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Toyon Research Corporation	SC22C288-1-P4061	190,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Toyon Research Corporation	SC23F387-1-P8775	20,3	
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Trident Systems, Inc.	ICS2103 DO 001 ICS2201 DO 002	7 32 3	708
U.S. Department of Defense U.S. Department of Defense		U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Trident Systems, Inc.	TSI-5033-21-20207194	32,3 136,9	
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	Triton Systems, Inc. Triton Systems, Inc.	TSI-5033-21-20207194 TSI51082320210837	38,3	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	UES. Inc.	S184001001		(229)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	UES, Inc.	\$192000001	134,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	UES, Inc.	S-210-212-001	95,8	,803
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	UES, Inc.	S-210-216-002	50,9	,916
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	UES, Inc.	S-210-219-001	44,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Ultramet	19061	69,4	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	Ultramet	PO 18046	(3,4	
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	University of Central Florida University of Dayton Research Institute	16308A23 RSC20079	67,7 31.9	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	University of Hawaii	982901 PO Z10258939		115
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	University of Maryland	111161-Z8481201	81,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	University of Maryland Baltimore	21238 (1000017426)	70,0	
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	University of Miami	OS00000984 PO-SPC-002846	173,963 795,5	537
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	University of Pittsburgh Medical Center	AWD00005595 (418902-1)	12,0	,083

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	FOR THE TEAR	CENDED JONE 30, 2024		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	University of Tennessee - Knoxville	A20-0770-S001	Exponuntareo	8.265
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	UtopiaCompression Corporation	PSU2022-0790-01		20,619
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Vector Atomic Inc	980575		(72,213)
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Verus Research	1179-00104		36,219
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Viele Exploratory Sustainable Solutions LLC	983116		14,418
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Viele Exploratory Sustainable Solutions LLC	983394		208,981
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	Viele Exploratory Sustainable Solutions LLC	983395		185,849
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	VRC Metal Systems, LLC	27918 (N68335-19-C-0558-S)		6
U.S. Department of Defense U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development U.S. Department of Defense Research and Development	VRC Metal Systems, LLC X-Hab 3D, Inc.	983050 (W912HZ22C0042-19.12) 260481		187,781
U.S. Department of Defense	N 12.RD N 12.RD	U.S. Department of Defense Research and Development	X-Hab 3D, Inc. X-Hab 3D, Inc.	277729		7 32 997
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	X-Maye Innovations Inc.	1082-1 (N68335-24-C-0106)		30,264
U.S. Department of Defense	N 12.RD	U.S. Department of Defense Research and Development	ZETA Associates Inc.	220046SC-PSU-ARL-01		146,088
U.S. Department of Defense Total					33,074,693	418,257,311
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Central Intelligence Agency Central Intelligence Agency Total	N 13.RD	Central Intelligence Agency Research and Development	DEFENSEWERX	RDA DATED 2/24/23		991,890 991,890
Central Intelligence Agency Total						991,090
U.S. Department of Housing and Urban Development	N 14.RD	Housing and Urban Development Research and Development	Xtreme Habitats Institute	0901PSU1		178,345
U.S. Department of Housing and Urban Devel	opment Total					178,345
U.S. Department of the Interior	Y 15.232	Wildland Fire Research and Studies				16,228
U.S. Department of the Interior U.S. Department of the Interior	Y 15.805 Y 15.808	Assistance to State Water Resources Research Institutes U.S. Geological Survey Research and Data Collection			23,235	123,094 115,790
U.S. Department of the Interior U.S. Department of the Interior	Y 15.808 Y 15.812	Cooperative Research Units				519,354
U.S. Department of the Interior	Y 15.012	Cooperative Research Onlis Cooperative Research and Training Programs – Resources of the National Park Syst			926	249.461
U.S. Department of the Interior	Y 15.8D	U.S. Department of the Interior Research and Development			320	1,932
U.S. Department of the Interior	Y 15.RD	U.S. Department of the Interior Research and Development				(6,169)
U.S. Department of the Interior	Y 15.RD	U.S. Department of the Interior Research and Development				6,662
U.S. Department of the Interior	Y 15.RD	U.S. Department of the Interior Research and Development			28,376	45,837
U.S. Department of the Interior	N 15.808	U.S. Geological Survey Research and Data Collection	Michigan Technological University	2108003Z1 AMENDMENT 1		31,659
U.S. Department of the Interior	N 15.815	National Land Remote Sensing Education Outreach and Research	California University of Pennsylvania	2021ST001-S4		(13)
U.S. Department of the Interior	N 15.815 N 15.945	National Land Remote Sensing Education Outreach and Research	Pennsylvania Western University	MUELLER-2223-003		4,001
U.S. Department of the Interior U.S. Department of the Interior	N 15.945 N 15.945	Cooperative Research and Training Programs – Resources of the National Park Syst Cooperative Research and Training Programs – Resources of the National Park Syst	Boise State University Pennsylvania. University of	9906-PO139230 582838		8,776 49,630
U.S. Department of the Interior U.S. Department of the Interior	N 15.945 N 15.945	Cooperative Research and Training Programs – Resources of the National Park Syst Cooperative Research and Training Programs – Resources of the National Park Syst	Pennsylvania, University of University of Montana	582838 PG23-62146-01		49,630 5,868
U.S. Department of the Interior	N 15.RD	U.S. Department of the Interior Research and Development	COP: Game Commission	4300795368		52,122
U.S. Department of the Interior	N 15.RD	U.S. Department of the Interior Research and Development	Resource Systems Group, Inc.	248635		3,596
U.S. Department of the Interior	N 15.RD	U.S. Department of the Interior Research and Development	Western Pennsylvania Conservancy	279268		5,198
U.S. Department of the Interior		· ·	•		52,537	1,233,026
U.S. Department of Justice	Y 16.560 N 16.738	National Institute of Justice Research, Evaluation, and Development Project Gran	COP: State Police	234434	36,734	497,287 70.947
U.S. Department of Justice U.S. Department of Justice		Edward Byrne Memorial Justice Assistance Grant Program		4300682773		70,947 6.625
U.S. Department of Justice U.S. Department of Justice	N 16.754 N 16.754	Harold Rogers Prescription Drug Monitoring Program Harold Rogers Prescription Drug Monitoring Program	PA Prescription Drug Monitoring Programs PA Prescription Drug Monitoring Programs	4300082773		(1,690)
U.S. Department of Justice	N 16.754	U.S. Department of Justice Research and Development	COP: Board of Probation and Parole	4300704173		(250)
U.S. Department of Justice	N 16.RD	U.S. Department of Justice Research and Development	COP: Department of Corrections	4300727370		50,952
U.S. Department of Justice Total					36,734	623,871
U.S. Department of Labor	N 17.401	International Labor Programs	Solidarity Center	202214-38256 280874		223,396
U.S. Department of Labor U.S. Department of Labor	N 17.401 N 17.RD	International Labor Programs U.S. Department of Labor Research and Development	Solidarity Center ICF Incorporated LLC	280874 53556		74,130
U.S. Department of Labor Total	N II.KU	0.5. Department of Labor Research and Development	ICF Incorporated ELC	53550		137,927 435,453
olo. Doparation of Easter Folds						100,100
U.S. Department of State	Y 19.RD	U.S. Department of State Research and Development				(35)
U.S. Department of State	N 19.040	Public Diplomacy Programs	American Councils	254389		1
U.S. Department of State Total						(34)
U.S. Department of Transportation	Y 20.108	Aviation Research Grants				3,276
U.S. Department of Transportation U.S. Department of Transportation	Y 20.108 Y 20.109	Aviation Research Grants Air Transportation Centers of Excellence			674,248	2,870,959
U.S. Department of Transportation	Y 20.200	Highway Research and Development Program			10.563	40.813
U.S. Department of Transportation	Y 20.529	Bus Testing Facility			27,860	4,425,320
U.S. Department of Transportation	Y 20.701	University Transportation Centers Program			1,739,038	2,321,008
U.S. Department of Transportation	Y 20.723	PHMSA Pipeline Safety Research and Development "Other Transaction Agreements"				27,851
U.S. Department of Transportation	Y 20.RD	U.S. Department of Transportation Research and Development				144,064
U.S. Department of Transportation	Y 20.RD	U.S. Department of Transportation Research and Development				642,050
U.S. Department of Transportation U.S. Department of Transportation	Y 20.RD Y 20.RD	U.S. Department of Transportation Research and Development U.S. Department of Transportation Research and Development			25,000	304,220
U.S. Department of Transportation U.S. Department of Transportation	Y 20.RD Y 20.RD	U.S. Department of Transportation Research and Development U.S. Department of Transportation Research and Development			34,788	118,723
U.S. Department of Transportation	Y 20.RD	U.S. Department of Transportation Research and Development			34,700	201,805 758
U.S. Department of Transportation	N 20.200	Highway Research and Development Program	Texas A&M University	M2304072		5,458
U.S. Department of Transportation	N 20.205	Highway Planning and Construction	COP: Department of Transportation	4300732731		129,379
U.S. Department of Transportation	N 20.205	Highway Planning and Construction	COP: Department of Transportation	4300740444		110,614
U.S. Department of Transportation	N 20.205	Highway Planning and Construction	COP: Department of Transportation	4300740455		174,035
U.S. Department of Transportation	N 20.205	Highway Planning and Construction	COP: Department of Transportation	4300740464		52,355
U.S. Department of Transportation	N 20.205	Highway Planning and Construction	COP: Department of Transportation	4300740472		59,252
U.S. Department of Transportation	N 20.205 N 20.205	Highway Planning and Construction	COP: Department of Transportation COP: Department of Transportation	4300741101 4300743883		20,148 192,646
U.S. Department of Transportation U.S. Department of Transportation	N 20.205 N 20.205	Highway Planning and Construction Highway Planning and Construction	COP: Department of Transportation Montana Department of Transportation	4300743883 9932-820 CONTRACT #314039		192,646 14,173
U.S. Department of Transportation U.S. Department of Transportation	N 20.205 N 20.219	Recreational Trails Program	COP: Department of Transportation COP: Department of Conservation and Natu ral Resources	9932-820 CONTRACT #314039 BRC-PRT-25-273		201.097
U.S. Department of Transportation	N 20.219	Consolidated Rail Infrastructure and Safety Improvements	Kansas State University	A20-0537-S001	39,930	196,350
U.S. Department of Transportation	N 20.RD	U.S. Department of Transportation Research and Development	Acrow Corporation of America	981735	22,300	(581)
U.S. Department of Transportation	N 20.RD	U.S. Department of Transportation Research and Development	Callentis Consulting Group, LLC	261411		157,740
U.S. Department of Transportation	N 20.RD	U.S. Department of Transportation Research and Development	COP: Department of Transportation	PENNSTATEADS2021		739,920
U.S. Department of Transportation	N 20.RD	U.S. Department of Transportation Research and Development	Michigan Technological University	2009035Z2		29,505
U.S. Department of Transportation	N 20.RD	U.S. Department of Transportation Research and Development	National Academy of Sciences	HR 20-05(54-10)		43,312
U.S. Department of Transportation U.S. Department of Transportation	N 20.RD N 20.RD	U.S. Department of Transportation Research and Development U.S. Department of Transportation Research and Development	Purdue University Vanasse Hangen Brustlin, Inc.	19200267-030 39541-12		16,462 83,254
O.O. Department of Transportation	IN ZU.RD	0.0. Department of Transportation Nescardi and Development	vanasse Hangeri Diusum, me.	3504 I=12		03,234

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	. •			Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Transportation Total					2,551,427	13,325,966
U.S. Department of the Treasury	N 21.027	COVID-19 - Coronavirus State and Local Fiscal Recovery Funds	COP Department of Agriculture	ME# 442310287		72.399
U.S. Department of the Treasury Total	N 21.027	COVID-15 - Colonavilus State and Eccal Fiscal Necovery Funds	COF Department of Agriculture	WE# 442310207		72,399
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National Aeronautics and Space Administration National Aeronautics and Space Administration	Y 43.001 Y 43.002	Science Aeronautics			1,509,657 1,237,817	8,984,943 2,063,693
National Aeronautics and Space Administration	Y 43.002	Space Operations			1,237,017	2,063,693
National Aeronautics and Space Administration	Y 43.008	Education			334,485	917,324
National Aeronautics and Space Administration	Y 43.012	Space Technology			23,078	508,488
National Aeronautics and Space Administration National Aeronautics and Space Administration	Y 43.RD Y 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development				1,854 3,019
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development				(149)
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development				(19,771)
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development				285
National Aeronautics and Space Administration National Aeronautics and Space Administration	Y 43.RD Y 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development				(283) 2,833
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development				197.178
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development				(1,001)
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development				33,801
National Aeronautics and Space Administration National Aeronautics and Space Administration	Y 43.RD Y 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development				6,064 23.316
National Aeronautics and Space Administration	Y 43.RD	National Aeronautics and Space Administration Research and Development			1,425,640	2,873,809
National Aeronautics and Space Administration	N 43.001	Science	Arizona State University	ASUB00001499	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12,097
National Aeronautics and Space Administration	N 43.001	Science	CARLETON COLLEGE Attn: Business Office	PSU-0298		5,044
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	Cornell University Cornell University	138591-21054 91922-20470		23,695 11,453
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science	Georgetown University	91922-20470 AWD7773186-GR205805		11,453 48,008
National Aeronautics and Space Administration	N 43.001	Science	Georgia, University of	SUB00002227		3,730
National Aeronautics and Space Administration	N 43.001	Science	Georgia, University of	SUB00002734		16,220
National Aeronautics and Space Administration	N 43.001	Science	Johns Hopkins University	186931		14,068
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	Montana State University Ohio State University	G102-17-W6067 SPC-1000007126 GR127925		(2,487) 12,499
National Aeronautics and Space Administration	N 43.001	Science	Ohio State University	SPC-1000007120 GR127923 SPC-1000007144 GR129438		909
National Aeronautics and Space Administration	N 43.001	Science	PRESIDENT AND FELLOWS OF HARVARD COLLEGE HARVARD UNIVERSITY	131605-5120713		120,945
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	AR1-22006X		14,445
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	Smithsonian Astrophysical Observatory (T he) Smithsonian Astrophysical Observatory (T he)	AR3-24003B GO0-21064B		11,478 12,971
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	GO1-22037X		27,349
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	GO1-22055C		13,448
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	GO2-23041X		13,287
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science	Smithsonian Astrophysical Observatory (T he) Smithsonian Astrophysical Observatory (T he)	GO2-23046X GO2-23080X		21,932 781
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	Smithsonian Astrophysical Observatory (Tine) Smithsonian Astrophysical Observatory (Tine)	GO2-23080X GO3-24007X		43.848
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (The)	GO3-24010X		9,935
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	GO3-24047X		6,240
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	GO3-24053X GO3-24058X		11,643 15.416
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	Smithsonian Astrophysical Observatory (T he) Smithsonian Astrophysical Observatory (T he)	GO3-24058X GO8-19076X		15,416
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	TM1-22001B		1,022
National Aeronautics and Space Administration	N 43.001	Science	Smithsonian Astrophysical Observatory (T he)	TM4-25001A		24,373
National Aeronautics and Space Administration	N 43.001	Science	Space Telescope Science Institute	HST-AR-16146.008-A		3,491
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	Space Telescope Science Institute Space Telescope Science Institute	HST-GO-16200.003-A JWST-GO-04233.009-A		2,598 38,963
National Aeronautics and Space Administration	N 43.001	Science	Texas A&M University	M2101865		87,699
National Aeronautics and Space Administration	N 43.001	Science	University of Chicago	AWD101560 (SUB00000391)		2,503
National Aeronautics and Space Administration	N 43.001	Science	University of Chicago	AWD101921 (SUB00000467)		423,755
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.001	Science Science	University of Chicago University of Colorado at Boulder	AWD104040 (SUB00000990) 1563149 (PO 1001853547)		133,672 20.853
National Aeronautics and Space Administration	N 43.001	Science	University of Iowa	S03065-01		63,885
National Aeronautics and Space Administration	N 43.001	Science	University of Maryland	121334-Z6500201		41,103
National Aeronautics and Space Administration	N 43.001	Science	Vanderbilt University	OSA00000130		44,075
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.001 N 43.002	Science Aeronautics	Washington University in St. Louis Brown University	WU-23-0279 00001765		173,397 66,671
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.002 N 43.002	Aeronautics	University of Tennessee - Knoxville	A18-0139-S002		(1.936)
National Aeronautics and Space Administration	N 43.008	Education	Florida International University	000061		49,494
National Aeronautics and Space Administration	N 43.012	Space Technology	Astrobotic Technology, Inc.	273040		142,893
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.012 N 43.RD	Space Technology National Aeronautics and Space Administration Research and Development	Clarkson University	102453-1 268810		22,105 24,904
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.RD N 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development	Astrobotic Technology, Inc. Blue Ridge Research and Consulting	220299F-501		24,904 1,643
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Blue Ridge Research and Consulting	240331F-501		46,256
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Continuum Dynamics, Inc.	21-067		1,794
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Continuum Dynamics, Inc.	22-109		168,581
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.RD N 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development	Continuum Dynamics, Inc. Hunter College, CUNY	23-066 CM00013020-00		28,969 8,937
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Innovative Dynamics Inc.	252606		75,171
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Innovative Scientific Solutions, Inc.	SB20277		(1,555)
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Masten Space Systems	MSS-AGM-1716-005		(101)
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.RD N 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development	PhotonFoils Pratt and Whitney	258958 22205 TASK 146		98,578 393,653
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.RD N 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development	QuantCAD LLC	80NSSC23CA 145 PSU		393,653 9.550
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Relative Dynamics	276100		24,400
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Science Systems and Applications, Inc.	PO-0007605		103,487
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Smithsonian Astrophysical Observatory (T he)	GO0-21080X		15,937
National Aeronautics and Space Administration National Aeronautics and Space Administration	N 43.RD N 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development	Smithsonian Astrophysical Observatory (T he) Smithsonian Astrophysical Observatory (T he)	GO2-23074X SV4-74018		7,799 383,079
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	HST-AR-16607.001-A		89,673
National Aeronautics and Space Administration	N 43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	HST-AR-16620.002-A		8,509
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct		FOR THE TEAR EN	DED JONE 30, 2024		Subrecipient	
Federal Agency	Award		Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	HST-GO-16772.001-A	Exponditured	20,623
National Aeronautics and Space Administration	N N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute Space Telescope Science Institute	HST-GO-177232 011-A		3.526
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	HST-GO-17585.007-A		5,951
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-AR-02354.001-A		103,448
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-GO-01759.002-A		59,901
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-GO-01810.004-A		58,676
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-GO-02561.022-A		119,844
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-GO-02571.009-A		103,511
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-GO-02635.001-A		14,266
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	JWST-GO-02692.003-A		865
National Aeronautics and Space Administration National Aeronautics and Space Administration	N N	43.RD 43.RD	National Aeronautics and Space Administration Research and Development National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute Space Telescope Science Institute	JWST-GO-03171.007-A JWST-GO-03315.001-A		59,042 25,114
National Aeronautics and Space Administration	N N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute Space Telescope Science Institute	JWST-GO-03315.001-A JWST-GO-04111.014-A		25,114
National Aeronautics and Space Administration	N N	43.RD	National Aeronautics and Space Administration Research and Development	Systems Technology, Inc.	261976		108.597
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Talos Tech LLC	279366		29,363
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	The Johns Hopkins University Applied Phy sics Laboratory LLC	174395	53,485	138,569
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	UES, Inc.	S-196-000-001	,	24.742
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	University of Texas at Dallas	23011727 (PO S402701)		65,529
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	X-Hab 3D, Inc.	277726		16,235
National Aeronautics and Space Administration	Total					4,584,162	19,862,255
	.,						
National Endowment for the Humanities National Endowment for the Humanities	Y	45.161 45.163	Promotion of the Humanities Research Promotion of the Humanities Professional Development			96,336	352,733 85,895
National Endowment for the Humanities National Endowment for the Humanities	Y	45.163	Promotion of the Humanities Professional Development Promotion of the Humanities Office of Digital Humanities				35,234
National Endowment for the Humanities Total	1	45.109	Promotion of the numarities office of Digital numarities			96.336	473,862
rational Endownion for the Hamanitoo Fotal							170,002
The Institute of Museum and Library Services			National Leadership Grants			2,928	17,832
The Institute of Museum and Library Services		45.312	National Leadership Grants	Middle Country Library Foundation	264764		72,485
The Institute of Museum and Library Services To	otal					2,928	90,317
National Science Foundation	Y	47.041	Engineering			554.558	13 738 613
National Science Foundation National Science Foundation	v	47.041	COVID-19 - Mathematical and Physical Sciences			554,556	107,812
National Science Foundation	Ý	47.049	Mathematical and Physical Sciences			418,582	19,691,779
National Science Foundation	Ý	47.050	COVID-19 - Geosciences			110,002	669,929
National Science Foundation	Ý	47.050	Geosciences			837,831	8,543,070
National Science Foundation	Υ	47.070	COVID-19 - Computer and Information Science and Engineering			,	87,977
National Science Foundation	Υ	47.070	Computer and Information Science and Engineering			345,494	11,043,116
National Science Foundation	Υ	47.074	COVID-19 - Biological Sciences				599,831
National Science Foundation	Y	47.074	Biological Sciences			340,883	9,832,890
National Science Foundation	Y	47.075	Social, Behavioral, and Economic Sciences			172,578	2,619,883
National Science Foundation	Y	47.076	Education and Human Resources			371,320	10,226,338
National Science Foundation National Science Foundation	Y	47.078 47.078	COVID-19 - Polar Programs Polar Programs			394.789	11,246 1,140,194
National Science Foundation	, , ,	47.078	Office of International Science and Engineering			282,736	957,489
National Science Foundation	Ÿ	47.083	Integrative Activities			133,802	750,791
National Science Foundation	Ý	47.084	NSF Technology, Innovation, and Partnerships			204.376	650.588
National Science Foundation	Ý	47.RD	National Science Foundation Research and Development			,	173,841
National Science Foundation	Υ	47.RD	National Science Foundation Research and Development				173,304
National Science Foundation	Υ	47.RD	National Science Foundation Research and Development				67,681
National Science Foundation	Υ	47.RD	National Science Foundation Research and Development				1
National Science Foundation	Y	47.RD	National Science Foundation Research and Development				169,359
National Science Foundation	Y	47.RD	National Science Foundation Research and Development				9,105
National Science Foundation	Y	47.RD 47.RD	National Science Foundation Research and Development			55,000	1,147,668
National Science Foundation National Science Foundation	Y N	47.RD 47.041	National Science Foundation Research and Development Engineering	Chromatir Technologies, LLC	264125		203,425 14,090
National Science Foundation	N	47.041	Engineering	Delaware, University of	UDR0000429		4,071
National Science Foundation	N	47.041	Engineering	Florida Institute of Technology	AWD-000627		25.003
National Science Foundation	N	47.041	Engineering	Georgia Institute of Technology	AWD-005486-G1		206.565
National Science Foundation	N	47.041	Engineering	Louisville, University of	ULRF_22-0394-01		43,515
National Science Foundation	N	47.041	Engineering	Massachusetts Institute of Technology	S5672		249,216
National Science Foundation	N	47.041	Engineering	North Carolina State University	2012-1067-01 AMEND 4		3,575
National Science Foundation	N	47.041	Engineering	Ohio State University	231898 60076652/GR119343		60,247
National Science Foundation	N	47.041	Engineering	Ohio State University	60078805 PO RF01616347		9,934
National Science Foundation	N	47.041	Engineering	Ohio State University	GR125415 SPC-1000006646		200
National Science Foundation	N	47.041	Engineering	spotLESS Materials LLC	237140		119,600
National Science Foundation National Science Foundation	N N	47.041 47.041	Engineering Engineering	The Board of Trustees of the University of Illinois The Trustees of the University of Pennsy Ivania	115910-19939 570440 PO 4580783	(38)	9,637 157,592
National Science Foundation	N N	47.041	Engineering	Trinity University	250762	(30)	(7,789)
National Science Foundation	N	47.041	Engineering	University of Maryland	104749-Z3822201		361.823
National Science Foundation	N	47.041	Engineering	University of Texas at Austin	UTAUS-SUB00000838		12,169
National Science Foundation	N	47.041	Engineering	VentureWell	2220329-1		7,204
National Science Foundation	N	47.041	Engineering	Virginia, University of	GR012362.SUB00000285		42,198
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Colorado School of Mines	402135-5802		94,960
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Florida International University	000543		103,389
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Massachusetts Institute of Technology	S6130		30,146
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Missouri University of Science and Technology	00068654-01		11,708
National Science Foundation National Science Foundation	N N	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	North Carolina Central University The Recents of the University of Michigan	24-0028-A0001-SUB01 SUBK00018670		102,722
National Science Foundation National Science Foundation	N N	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	The Regents of the University of Michigan University Auxiliary Services, Inc. (Cal ifornia State University)	PSU231221		63,829 (86)
National Science Foundation	N N	47.049	Mathematical and Physical Sciences	University Adxinary Services, Inc. (Carlioffia State Offiversity)	UA2022-292		(2,707)
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Chicago	AWD104376 (SUB00001123)		25,418
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Illinois at Urbana-Champai gn	101433-18143		135,844
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Nebraska Lincoln	25-1125-0048-002		90,946
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Pittsburgh	AWD00002876 (2036164-1)		9,977
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Tennessee	A22-0253-S002		174,455
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	000000032		(14,081)
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	000000453		(11,423)
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000001204		32,404

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct				Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
National Science Foundation	N 47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000002370		20,050
National Science Foundation	N 47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000002388		339,022
National Science Foundation National Science Foundation	N 47.049 N 47.050	Mathematical and Physical Sciences Geosciences	University of Wisconsin-Milwaukee Colorado School of Mines	223405530 401574-5803		543,767 17,809
National Science Foundation	N 47.050	Geosciences	Consortium of Universities for the Advan cement of Hydrologic Science, Inc.	EAR-2012893 - 1		136,525
National Science Foundation	N 47.050	Geosciences	Michigan Technological University	2105003Z5 AMENDMENT 2		49,013
National Science Foundation	N 47.050	Geosciences	New York University Sponsored Programs Administration	F0691-03 PO IB00505421		12,071
National Science Foundation National Science Foundation	N 47.050 N 47.050	Geosciences Geosciences	University of Colorado at Boulder University of Colorado at Boulder	1559669 PO 1001413789 1560925		156,944 1,093
National Science Foundation	N 47.050 N 47.050	Geosciences	University of Colorado at Boulder University of Maine	UMS1440		5,612
National Science Foundation	N 47.050	Geosciences	University of Vermont	AWD00000206SUB00000111		63,676
National Science Foundation	N 47.070	Computer and Information Science and Engineering	The Regents of the University of Colorad o	1563695		97,018
National Science Foundation	N 47.070	Computer and Information Science and Engineering	University of Cincinnati	014678-00003 PO# 4600014440		470,256
National Science Foundation National Science Foundation	N 47.070 N 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	University of Illinois at Urbana-Champai gn University of Nebraska Lincoln	113662-19593 25-1108-0007-006		23,835 90.710
National Science Foundation	N 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	University of Wisconsin-Madison	0000002950		198,477
National Science Foundation	N 47.070	Computer and Information Science and Engineering	Vanderbilt University	OSA00000231 P23057993		60,434
National Science Foundation	N 47.070	Computer and Information Science and Engineering	Yale University	GR109665(CON-80002380)		16,003
National Science Foundation	N 47.074	Biological Sciences	Cornell University	145157-21992		109,430
National Science Foundation National Science Foundation	N 47.074 N 47.074	Biological Sciences Biological Sciences	Mississippi, University of Oklahoma State University	24-02-41 1-505352 PENN STATE		4,578 25,337
National Science Foundation	N 47.074	Biological Sciences	Saint Louis University	FRS#RD45339		52,288
National Science Foundation	N 47.074	Biological Sciences	The Regents of the University of Califor nia	00011116 (BB01656455)		110,178
National Science Foundation	N 47.074	Biological Sciences	University of Colorado at Boulder	1559643		151,324
National Science Foundation	N 47.074 N 47.074	Biological Sciences	University of Pittsburgh	AWD00004485 (012686-9)		174,064
National Science Foundation National Science Foundation	N 47.074 N 47.074	Biological Sciences Biological Sciences	University of Vermont Virginia Institute of Marine Science	AWD00001464SUB00000488 721653-712683		63,723 (1,091)
National Science Foundation	N 47.074 N 47.074	Biological Sciences	Virginia institute of Marine Science Virginia Polytechnic Institute and State University	480146-19079		179,944
National Science Foundation	N 47.075	Social, Behavioral, and Economic Sciences	City University of New York	CM00007584-00		2,118
National Science Foundation	N 47.075	Social, Behavioral, and Economic Sciences	Minnesota, University of	H006974401		14,423
National Science Foundation	N 47.075	Social, Behavioral, and Economic Sciences	San Diego State University	SA0000655 59475A P3541 7802211		32,779
National Science Foundation National Science Foundation	N 47.076 N 47.076	Education and Human Resources Education and Human Resources	Board of Regents of the University Syste m of Georgia Concord Consortium (The)	SUB00002988 327.18.03		49,087 22,169
National Science Foundation	N 47.076	Education and Human Resources	Concord Consortium (The)	341.21.01		35.983
National Science Foundation	N 47.076	Education and Human Resources	Concord Consortium (The)	353.21.02		183,263
National Science Foundation	N 47.076	Education and Human Resources	Louisville, University of	ULRF_22-0557-01		68,287
National Science Foundation	N 47.076	Education and Human Resources	Pasadena City College	B210057		96,106
National Science Foundation National Science Foundation	N 47.076 N 47.076	Education and Human Resources Education and Human Resources	SUNY Polytechnic Institute The Research Foundation for SUNY on beha if of the University at Buffalo	2023-15 R1340095		31,067 67,309
National Science Foundation	N 47.076	Education and Human Resources	University Corporation at Monterey Bay	5057001A-092623		25.141
National Science Foundation	N 47.076	Education and Human Resources	UNIVERSITY OF ARIZONA	680650		27,926
National Science Foundation	N 47.076	Education and Human Resources	University of Puerto Rico	SA-2021-22-002UPRAG		49,301
National Science Foundation	N 47.076	Education and Human Resources	Virginia Polytechnic Institute and State University	480801-19079A		1,090
National Science Foundation National Science Foundation	N 47.076 N 47.083	Education and Human Resources Integrative Activities	Washington State University Boise State University	140262-SPC003496 6800-PO124294		5,687 44.813
National Science Foundation	N 47.084	NSF Technology, Innovation, and Partnerships	Astrabeam LLC	264208		51.181
National Science Foundation	N 47.084	NSF Technology, Innovation, and Partnerships	Carnegie Mellon University	1123036-471111 AMEND 1		87,828
National Science Foundation	N 47.084	NSF Technology, Innovation, and Partnerships	Kansas, University of	FY2023-005		49,750
National Science Foundation	N 47.084	NSF Technology, Innovation, and Partnerships	Kansas, University of	FY2023-086		11,458
National Science Foundation National Science Foundation	N 47.084 N 47.084	NSF Technology, Innovation, and Partnerships NSF Technology, Innovation, and Partnerships	The Regents of the University of Michigan University of Kansas Center For Research , Inc.	SUBK00017992 FY2024-027		16,131 56,989
National Science Foundation	N 47.084	NSF Technology, Innovation, and Partnerships	University of Maryland, Center for Envir onmental Science	SA75231900 PO 134573		45.057
National Science Foundation	N 47.084	NSF Technology, Innovation, and Partnerships	Vytal Plant Science Research	0001		121,187
National Science Foundation	N 47.RD	National Science Foundation Research and Development	American Astronomical Society	283307		4,657
National Science Foundation	N 47.RD	National Science Foundation Research and Development	Amgen	IIP-1841474 PO 3056166	(55,000)	(1,057,901)
National Science Foundation National Science Foundation	N 47.RD N 47.RD	National Science Foundation Research and Development National Science Foundation Research and Development	Association of Public and Land Grant Uni versities Bates College	214173 284397		2,843 7.502
National Science Foundation National Science Foundation	N 47.RD N 47.RD	National Science Foundation Research and Development National Science Foundation Research and Development	International Business Machines Corporat ion	284397 CW3563975		7,502 39.042
National Science Foundation	N 47.RD	National Science Foundation Research and Development	Nebraska, University of	25-6238-0918-002		28,253
National Science Foundation	N 47.RD	National Science Foundation Research and Development	North Carolina State University	2020-0856-01		5,047
National Science Foundation	N 47.RD	National Science Foundation Research and Development	Purdue University	10001564-008		39
National Science Foundation National Science Foundation	N 47.RD N 47.RD	National Science Foundation Research and Development National Science Foundation Research and Development	Purdue University Rutgers-The State University of New Jersey	10002325-007 00002240		52,520 7,473
National Science Foundation National Science Foundation	N 47.RD N 47.RD	National Science Foundation Research and Development National Science Foundation Research and Development	Rutgers-The State University of New Jersey Rutgers-The State University of New Jersey	2229		230,748
National Science Foundation	N 47.RD	National Science Foundation Research and Development	UNIVERSITY OF ARIZONA	694407		222,340
National Science Foundation	N 47.RD	National Science Foundation Research and Development	Virginia Polytechnic Institute and State University	480167-19079		34,074
National Science Foundation	N 47.RD	National Science Foundation Research and Development	Virginia Polytechnic Institute and State University	480963-19079	4.050.511	7,594
National Science Foundation Total					4,056,911	88,734,732
Small Business Administration	N 59.RD	Small Business Administration Research and Development	GaNify, LLC	266952		28,514
Small Business Administration Total		, ,	· • •			28,514
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Environmental Protection Agency Environmental Protection Agency	Y 66.436 Y 66.466	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Coc Chesapeake Bay Program	oper			21,227 229,455
Environmental Protection Agency Environmental Protection Agency	Y 66.466 Y 66.708	Pollution Prevention Grants Program				229,455 71,507
Environmental Protection Agency	N 66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Coo		237971		(26)
Environmental Protection Agency	N 66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Coo	oper Rural Community Assistance Partnership	250245		(110)
Environmental Protection Agency	N 66.509	Science To Achieve Results (STAR) Research Program	Texas Tech University	21J003-02		10,225
Environmental Protection Agency Environmental Protection Agency	N 66.511 N 66.RD	Office of Research and Development Consolidated Research/Training/Fellowsl Environmental Protection Agency Research and Development	hips Purdue University Health Effects Institute	16200038-032 4989-RFA E20-2/21-12	518	(12,078) 56,752
Environmental Protection Agency Environmental Protection Agency	N 66.RD N 66.RD	Environmental Protection Agency Research and Development Environmental Protection Agency Research and Development	Health Effects Institute Health Effects Institute	4989-RFA E20-2/21-12 5004RFOF23-1/24-8	518	56,752 39,512
Environmental Protection Agency	N 66.RD	Environmental Protection Agency Research and Development	WSP USA Environment and Infrastructure INC	TTR2021-006		9,557
Environmental Protection Agency Total		, , , , , , , , , , , , , , , , , , , ,			518	426,021
Nuclear Regulatory Commission Nuclear Regulatory Commission	Y 77.008 Y 77.RD	U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program Nuclear Regulatory Commission Research and Development			29,454	478,489 (359)
Nuclear Regulatory Commission Nuclear Regulatory Commission	Y 77.RD Y 77.RD	Nuclear Regulatory Commission Research and Development Nuclear Regulatory Commission Research and Development			99 999	360,089
Nuclear Regulatory Commission	Y 77.RD	Nuclear Regulatory Commission Research and Development			55,555	2,585
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

The state of the				FOR THE Y	EAR ENDED JUNE 30, 2024			
Description Community Co	Federal Agency	Direct Award	ΔΙΝ	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
Section Process							Exponentaroo	34,170
1.	Nuclear Regulatory Commission							69,058
Management Man	Nuclear Regulatory Commission Total						129,453	944,032
Management Man	U.S. Department of Energy	Y 81	1.049	Office of Science Financial Assistance Program			3.296.354	15.675.101
10 September Group 1 10 10 10 10 10 10 10								95,588
10.								1,827,336 738,791
10	U.S. Department of Energy							2.002.772
1.0 Comment of Tengry	U.S. Department of Energy	Y 81	1.121	Nuclear Energy Research, Development and Demonstration			619,615	2,415,502
10 Departed of Group V 10 10 2 Departed of English September 10 Departed of English September	U.S. Department of Energy			Advanced Research Projects Agency - Energy			322,972	889,476
10.				U.S. Department of Energy Research and Development				94,202 60,010
1. Department of Energy				U.S. Department of Energy Research and Development				(3,226)
1.0 December of Person				U.S. Department of Energy Research and Development				56,944
1.0. Department of Serging 1 1 1 1 1 1 1 1 1	U.S. Department of Energy			U.S. Department of Energy Research and Development				104,220 27,012
List Department of Electron Y 185 List	U.S. Department of Energy			U.S. Department of Energy Research and Development				143,788
10. Superior of Freign								22,798
La Department of Energy Y 1876 1.0 Completion of Energy Y 1870 1.0 C	U.S. Department of Energy			U.S. Department of Energy Research and Development				37,322 (1,189)
U.B. Department of Energy								153,540
U.S. Degrateried of Congress V 10 10 10 Degrateried in Congress V 10 10 Degrateried in Congress V								(478)
U.S. Department of Energy V 1850 U.S. Department				U.S. Department of Energy Research and Development				119,566
1.6. Department of Emergy V 1.5 Company V 1.5 Comp								69,923
1.6. Department of Energy 7 1870 1.0.	U.S. Department of Energy			U.S. Department of Energy Research and Development				48,724
1.6. Department of Flurgy V 815 1.6. Department of Flurgy Shazesh and Development V 100 1.5. Department of	U.S. Department of Energy	Y 81	1.RD	U.S. Department of Energy Research and Development				42,647
U.S. Department of Energy V 1879 U.S. Department of Energy Network and Development U.S. Department of Energy Net				U.S. Department of Energy Research and Development				87,852
1.5 Deptement of Financy 1.5 Deptemen	U.S. Department of Energy			U.S. Department of Energy Research and Development				171,652 6,993
U.S. Department of Emergy V. B. B. D. S. Department of Emergy V. B. D. D. Department of Emergy V. B. D. D. Department of Emergy V. B. D. D. D. Department of Emergy Places in Am Development V. D. D. Department of Emergy V. B. D. D. Department of Emergy Places in Am Development V. D. D. Department of Emergy V. B. D. D. Department of Emergy Places in Am Development V. D. D. Department of Emergy Places in Am Development V. D. D. Department of Emergy V. B. D. D. Department of Emergy Places in Am Development V. D. D. Department of Emergy V. B. D. D. Department of Emergy V. B. D. D. Department of Emergy Places in Am Development V. D. D. Department of Emergy V. B. D. D. Department of Emergy V. B. D. D. D. Department of Emergy V. B. D. D. Department of Emergy Department of Emergy V. B. D. D. Department of Emergy Department of Emergy Department of Emergy V. B. D. D. Department of Emergy Department of Emergy Department of Emergy Department of Emergy	U.S. Department of Energy			U.S. Department of Energy Research and Development				152,958
U.S. Department of Corrupt V St.				U.S. Department of Energy Research and Development				9,459
U.S. Department of Entrary Y 91 RD U.S. Department of Entrary (Present) and Development U.S. Department of Entrary Y 91 RD U.S. Department of Entrary Present and Development U.S. Department of Entrary U.S. Departm	U.S. Department of Energy			U.S. Department of Energy Research and Development				63,383 (94)
U.S. Department of Energy V 1870				U.S. Department of Energy Research and Development				74,552
U.S. Department of Energy	U.S. Department of Energy			U.S. Department of Energy Research and Development				36,131
U.S. Department of Energy V BLRD S. Operatment of Energy V BLR								27,220 63,098
U.S. Department of Energy Y. 81 RD U.S. Department of Energy Research and Downstroament V.S. Department of Energy				U.S. Department of Energy Research and Development				38.034
U.S. Department of Energy	U.S. Department of Energy	Y 81	1.RD	U.S. Department of Energy Research and Development				224,896
U.S. Department of Energy								232
U.S. Department of Energy V	U.S. Department of Energy			U.S. Department of Energy Research and Development				39,234 360,690
U.S. Department of Energy	U.S. Department of Energy			U.S. Department of Energy Research and Development				(399)
U.S. Department of Energy V 51,870 U.S. Department of Energy Research and Development 1 1 1 1 1 1 1 1 1								132,832
U.S. Department of Emergy Y 81 RD U.S. Department of Emergy Research and Development Separation of Emergy Y 81 RD U.S. Department of Emergy Y 81 R		1 01						237,374 169,840
U.S. Department of Energy				U.S. Department of Energy Research and Development				144.302
U.S. Department of Energy	U.S. Department of Energy			U.S. Department of Energy Research and Development				35,533
U.S. Department of Energy Y 8 1RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 8 1RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 8 1RD U.S. Department of Energy Y 8 1RD U.S. Department of Energy Y 8 1RD U.S. Department of Energy Research and Development U.S. Department of Energy Research and D								60,585 24.347
U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Y 8 1 RD U.S. Department of Energy Reseach and Development U.S. Department of Energy Reseach and Development U.S. Department of Energy Reseach and Development U.S. Department of Energy Reseach and Developm	U.S. Department of Energy U.S. Department of Energy			U.S. Department of Energy Research and Development U.S. Department of Energy Research and Development				75,719
U.S. Department of Energy Y 81 FD U.S. Department of Energy Research and Development U.S. Department of Energy Search and Development U.S. Department of Energy Y 81 FD U.S. Department of Energy Y 81 FD U.S. Department of Energy Search and Development U.S. Department of Energy Y 81 FD U.S. Department of Energy Search and Development U.S. Department of Energy Y 81 FD U.S. Departm	U.S. Department of Energy	Y 81	1.RD	U.S. Department of Energy Research and Development				24,148
U.S. Department of Energy								15,376
U.S. Department of Energy				U.S. Department of Energy Research and Development				55,659 (4,310)
U.S. Department of Energy								17,996
U.S. Department of Energy	U.S. Department of Energy			U.S. Department of Energy Research and Development				39,417
U.S. Department of Energy				U.S. Department of Energy Research and Development				30,182 36,794
U.S. Department of Energy				U.S. Department of Energy Research and Development				119,136
U.S. Department of Energy	U.S. Department of Energy	Y 81	1.RD	U.S. Department of Energy Research and Development				183,034
U.S. Department of Energy Y 81 RD U.S. Department of Energy Research and Development U.S. Department of Energy Feason and Development U.S. Department of Energy Y 81 RD U.S. Department of Energy Y 81 RD U.S. Department of Energy Season and Development U.S. Department of Energy Y 81 RD U.S. Department of Energy Season and Development U.S. Department of Energy Y 81 RD U.S. Department of Energy Season and Development U.S. Department of Energy N 81 RD U.S. Department of Energy Season and Development U.S. Department of Energy N 81 RD U.S.								51,676
U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy Y 81,RD U.S. Department of Energy Research and Development U.S. Department of Energy N 81,049 U.S. Department of Energy Normal Arizona State University U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Cornel University 889,042,285 1 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Dartmouth College R17,03 1 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Dartmouth College R17,03 1 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Dartmouth College R17,03 1 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Dartmouth College R17,03 1 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Dartmouth College R17,03 1 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL89,2410 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL89,246 U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Luna Innovations, Inc. U.S. Department of Energy N 81,049 Office of Science Financial Assistance Program Luna Innovations, Inc. U.S. Department of Energy N 81,049 Office of Science Financial Assistan								460,740 64.283
U.S. Department of Energy Y 8 1,RD U.S. Department of Energy Research and Development U.S. Department of Energy V 8 1,RD U.S. Department of Energy Research and Development U.S. Department of Energy V 8 1,RD U.S. Department of Energy Research and Development U.S. Department of Energy V 8 1,RD U.S	U.S. Department of Energy	Y 81	1.RD	U.S. Department of Energy Research and Development				51,906
U.S. Department of Energy Y 81,RD U.S. Department of Energy N 81049 State Energy Program COP: Department of Energy 1.S. Department of Energy N 81049 Office of Science Financial Assistance Program Airzona State University 17-108 U.S. Department of Energy N 81049 Office of Science Financial Assistance Program Airzona State University AIRZONA AIRZON	U.S. Department of Energy	Y 81	1.RD	U.S. Department of Energy Research and Development				415,626
U.S. Department of Energy N 8 10.41 State Energy Program CDP: Department of Energy (N S) Edited Front (Part of Energy N) 8 10.49 Office of Science Financial Assistance Program Arizona State University 17-108 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Arizona State University ASUB00001287 1 17-108 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Carnegie Melon University 1070142-450640 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	U.S. Department of Energy							(4,671)
U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Arizona State University Arizona State	U.S. Department of Energy U.S. Department of Energy			State Energy Program	COP: Department of Environmental Protect ion	4300748299		125,044 67,125
U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Camegin Mellon University U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Camegin Mellon University Office of Science Financial Assistance Program Dartmouth College N 8 10.49 Office of Science Financial Assistance Program Dartmouth College N 8 10.49 Office of Science Financial Assistance Program Dartmouth College N 8 10.49 Office of Science Financial Assistance Program Dartmouth College N 8 10.49 Office of Science Financial Assistance Program Dartmouth College N 8 10.49 Office of Science Financial Assistance Program Dartmouth College N 8 10.49 Office of Science Financial Assistance Program Duyea Technologies U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. 272121 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARLBS3456 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARLBS3456 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARLBS3456 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARLBS3456 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Louisiand State University PO-0000184816 U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Luna Innovations, Inc. U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Luna Innovations, Inc. U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program Luna Innovations, Inc. U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program North Carolina Agricultural & Technology Luna Innovations, Inc. U.S. Department of Energy N 8 10.49 Office of Science Financial Assistance Program North Carolin	U.S. Department of Energy	N 81	1.049	Office of Science Financial Assistance Program	Arizona State University	17-108		14,462
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program 1 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Datmouth College R15.56 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Datmouth College R1703 2 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Duryea Technologies 235822 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. 272121 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL89346 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL89345 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Georgia Institute of Technology AWD-100498-G6 AMENDMENT 4 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program	U.S. Department of Energy			Office of Science Financial Assistance Program				173,084
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Dartmouth College R1556 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Dartmouth College R1703 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Duryea Technologies LLC. 235822 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. 272121 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL982410 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL982410 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Georgia Institute of Technology AMD-100498-66 AMENDMENT 4 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Louisiana State University PO-000184816 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 367802/PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 4804444 U.S. De								117,620 135,256
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Datmouth College R1703 2 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies 235822 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL982410 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL982410 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Georgia Institute of Technology AVD-100498-G6 AMENDMENT 4 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Louisian State University PO-0000184816 2 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357801PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357801PSU U.S. Department of Energy N	U.S. Department of Energy	N 81	1.049	Office of Science Financial Assistance Program	Dartmouth College	R1556		74,912
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. 272121 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL982410 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Georgia Institute of Technology AVD-100498-G6 AMENDMENT 4 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Louislaina State University PO-0000184816 2 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Nano Sonic, Inc. EN2.9844 U.S. Department of Energy N 81.049 <td>U.S. Department of Energy</td> <td></td> <td></td> <td>Office of Science Financial Assistance Program</td> <td>Dartmouth College</td> <td>R1703</td> <td></td> <td>261,566</td>	U.S. Department of Energy			Office of Science Financial Assistance Program	Dartmouth College	R1703		261,566
U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL982410 U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL983456 U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program Georgia Institute of Technology AWD-100498-G6 AMENDMENT 4 U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program Louisiana State University PO-0000184816 2 U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901FSU U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 367802/PSU U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program NanoSonic, Inc. EN2-9844 U.S. Department of Energy N 8 1.049 Office of Science Financial Assistance Program North Carolina Agricultural & Technical State University 2701970								(8,838)
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Energy Driven Technologies, LLC. ARL883456 AWD-100498-84 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Louisiana State University PO-0000184816 2 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. 87802/PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. EN2-9844 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program North Carolina State University EN2-9844					Energy Driven Technologies, LLC. Energy Driven Technologies, LLC.			3,829 18,207
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Georgia Institute of Technology AWD-100498-66 AMENDMENT 4 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Louisiana State University PC-0000184816 2 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 367802/PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. EN2-9844 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program North Carolina Agricultural & Technical State University 2701970	U.S. Department of Energy	N 81	1.049	Office of Science Financial Assistance Program	Energy Driven Technologies, LLC.	ARL983456		951
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 357901PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 367802/PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. EN2-9844 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program North Carolina Agricultural & Technical State University 2701970	U.S. Department of Energy			Office of Science Financial Assistance Program	Georgia Institute of Technology			19,857
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program Luna Innovations, Inc. 367802/PSU U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. EN2-9844 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program North Carolina Agricultural & Technical State University 2701970								234,876 10.997
U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program NanoSonic, Inc. EN2-9844 U.S. Department of Energy N 81.049 Office of Science Financial Assistance Program North Carolina Agricultural & Technical State University 270197D	U.S. Department of Energy							50,579
	U.S. Department of Energy	N 81	1.049	Office of Science Financial Assistance Program	NanoSonic, Inc.	EN2-9844		6,312
U.S. Department of Energy N 81.049 Unice of Science Financial Assistance Program North Carolina State University PAM-P24-000783-SA02								98,641
	U.S. Department of Energy	N 81	1.049	Oπice of Science Financial Assistance Program	North Carolina State University	PAM-P24-000783-SA02		65,344

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct		,		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	Pennsylvania, University of	578218		45,174
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	Quantum Ventura Inc.	260986		230,732
U.S. Department of Energy U.S. Department of Energy	N 81.049 N 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	Rensselaer Polytechnic Institute Rutgers-The State University of New Jersey	A08-0003-S001 SUB00002555 AMENDMENT 1		116,639 43,868
U.S. Department of Energy U.S. Department of Energy	N 81.049 N 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	Starfire Industries, LLC	980099		43,868 26,553
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	Structured Materials Industries, Inc.	SMI42195-022123-03		6.887
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	The Board of Trustees of the Leland Stan ford Junior University (Stanford Univer	61351724-124215	87.500	888.627
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	The Board of Trustees of the Leland Stan ford Junior University (Stanford Univer	62690786-226486	07,000	102.165
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	The Trustees of Columbia University in the City of New York	1(GG018299-01)		111,486
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	UHV Technologies, Inc.	279316		9,916
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	Ultramet	983147 (PO 19835)		75,009
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	University of California at Davis	A17-0309-S002 (201603457-02)		488
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	University of California at Davis	A23-1053-S004		297,411
U.S. Department of Energy	N 81.049 N 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	University of Colorado at Boulder University of Illinois	1563093 PO 1001731752 088955-16609		37,803 94,745
U.S. Department of Energy U.S. Department of Energy	N 81.049 N 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	University of Illinois University of Illinois	088955-16609 090634-17760		
U.S. Department of Energy U.S. Department of Energy	N 81.049 N 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	University of Texas at Dallas	1301151		488,384 945
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	Utah, University of	10049491-PENN PO U000154267		47,698
U.S. Department of Energy	N 81.049	Office of Science Financial Assistance Program	Zanskar Geothermal & Minerals, Inc.	278355		23,397
U.S. Department of Energy	N 81.086	Conservation Research and Development	Louisiana State University	PO-0000192171		594
U.S. Department of Energy	N 81.086	Conservation Research and Development	Metropolitan Energy Center, Inc.	S-EVST07		10,442
U.S. Department of Energy	N 81.086	Conservation Research and Development	The Regents of the University of Michigan	SUBK00013989		88,277
U.S. Department of Energy	N 81.086	Conservation Research and Development	University of Colorado at Boulder	1562473		385,997
U.S. Department of Energy	N 81.087	Renewable Energy Research and Development	Arizona State University	ASUB00001127		84,874
U.S. Department of Energy	N 81.087	Renewable Energy Research and Development	General Motors Company	255177 PO 4301458996		111,657
U.S. Department of Energy	N 81.087	Renewable Energy Research and Development	The REMADE Institute	SA-20-08		1,179
U.S. Department of Energy	N 81.087	Renewable Energy Research and Development	University of California at Davis	A22-1852-S006		43,779
U.S. Department of Energy	N 81.087 N 81.089	Renewable Energy Research and Development	Utah, University of Colorado State University	10039612-PSU-5-2419-AF1 G-40616-02		396,659 232,125
U.S. Department of Energy U.S. Department of Energy	N 81.089 N 81.089	Fossil Energy Research and Development Fossil Energy Research and Development	Illinois Institute of Technology Research Institute	SA21-0045-S002		232,125 59.197
U.S. Department of Energy	N 81.089	Fossil Energy Research and Development	Oklahoma. University of	2024-40		87.443
U.S. Department of Energy	N 81.089	Fossil Energy Research and Development	Penncara Energy	256751		(42,240)
U.S. Department of Energy	N 81.089	Fossil Energy Research and Development	Rice University	PO #X03017142		98,923
U.S. Department of Energy	N 81.089	Fossil Energy Research and Development	University of Texas at Austin	UTA19-000910		52.497
U.S. Department of Energy	N 81.113	Defense Nuclear Nonproliferation Research	The Regents of the University of Michiga n	SUBK00016733		60,262
U.S. Department of Energy	N 81.113	Defense Nuclear Nonproliferation Research	The Regents of the University of Michigan	SUBK00009799 PO 3005799149		165,687
U.S. Department of Energy	N 81.113	Defense Nuclear Nonproliferation Research	University of Florida Board of Trustees	SUB00003929		88,865
U.S. Department of Energy	N 81.121	Nuclear Energy Research, Development and Demonstration	Massachusetts Institute of Technology	S5885 PO #831321		156,965
U.S. Department of Energy	N 81.121	Nuclear Energy Research, Development and Demonstration	Texas A&M Engineering Experiment Station	M2200879-28-520730-00002		68,524
U.S. Department of Energy	N 81.121	Nuclear Energy Research, Development and Demonstration	Texas A&M University	M2100511		17,362
U.S. Department of Energy	N 81.121	Nuclear Energy Research, Development and Demonstration	Texas A&M University	M2300738		6,888
U.S. Department of Energy	N 81.121	Nuclear Energy Research, Development and Demonstration	The Regents of the University of Michigan	SUBK00018631		129,508
U.S. Department of Energy U.S. Department of Energy	N 81.135 N 81.135	Advanced Research Projects Agency - Energy Advanced Research Projects Agency - Energy	Board of Regents of The University of Wi sconsin System Energy Trading Analytics, LLC	0000002446 238198		299,747 92,798
U.S. Department of Energy	N 81.135	Advanced Research Projects Agency - Energy Advanced Research Projects Agency - Energy	University of Maryland	124759-Z7166201		92,796 95,415
U.S. Department of Energy	N 81.135	Advanced Research Projects Agency - Energy Advanced Research Projects Agency - Energy	University of Nevada, Reno	UNR-23-63		171,415
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Bechtel Plant Machinery, Inc.	A303144		8,593
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Bechtel Plant Machinery, Inc.	G302801		2,863
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Bettis Atomic Power Laboratory	137358		209,217
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Chattanooga Area Regional Transportation Authority (CARTA)	266475		100,452
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Energy Driven Technologies, LLC.	283193		114
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Corporation	132121		147,053
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	138219		3,097
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	140424		30,596
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	141967		(8)
U.S. Department of Energy	N 81.RD N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC Fluor Marine Propulsion, LLC	142087 142711		(1,280) 178,687
U.S. Department of Energy U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC Fluor Marine Propulsion, LLC	144548 RELEASE 18		36,403
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 11		73,291
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 12		91.533
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 15		64.723
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 2		12,515
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 3		242,175
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 4		119,722
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 7		161,732
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 8		90,000
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	145306		118,532
U.S. Department of Energy	N 81.RD N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	149104 149434		123,409
U.S. Department of Energy U.S. Department of Energy	N 81.RD N 81.RD	U.S. Department of Energy Research and Development U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC Fluor Marine Propulsion, LLC	149434		316,647 121,461
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	151667		77.050
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	151669		76,930
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	152235		19,552
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	152650		109,441
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 17		104,916
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 10		165,247
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 13		40,827
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 16		89,459
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 19		15,337
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 5		57,661
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 6		26,249
U.S. Department of Energy	N 81.RD N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC	N000507684 N000509831		45,116 22,623
U.S. Department of Energy		COVID-19 - U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC			
U.S. Department of Energy U.S. Department of Energy	N 81.RD N 81.RD	U.S. Department of Energy Research and Development U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC Honeywell Federal Manufacturing & Technologies, LLC	N000480909 N000481598		51,312 87,394
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	InnoSvs. Inc.	265711		92.326
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 14		23,323
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 15		85,193
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Federal Agency	Direct Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 16		106,000
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 17		62,903
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 18		79,254
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 19		77,243
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 9		68
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Littoral Power Systems, Inc.	LPS-22831-001		(19,349)
U.S. Department of Energy U.S. Department of Energy	N 81.RD N 81.RD	U.S. Department of Energy Research and Development U.S. Department of Energy Research and Development	Luna Innovations, Inc. Luna Innovations, Inc.	7064-DOE-1S 800501 SBIR PSU		(49) 64,180
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Mainstream Engineering Corporation	983582		3.764
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Mission Support and Test Services, LLC	215257 TASK ORDER 03		(29,886)
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Mission Support and Test Services, LLC	215257 TASK ORDER 05		346.246
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Pacific Ocean Energy Trust	ARL PENN STATE_4_PTEROFIN		20,252
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	The Regents of the University of Michigan	SUBK00008626 PO 3004992137		110,207
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	The REMADE Institute	20-01-RR-4034	200,824	449,359
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	20487 CW20487		106,302
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	587178 13088		131,324
U.S. Department of Energy	N 81.RD	COVID-19 - U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	C3848 587178		192,201
U.S. Department of Energy U.S. Department of Energy	N 81.RD N 81.RD	COVID-19 - U.S. Department of Energy Research and Development U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL) ULC Technologies, LLC	CW20612/CF8467 980550		139,270
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	University of Illinois at Urbana-Champai gn	279377 (P2586969)		4.940
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	University of Illinois Board of Trustees	265054 232912 P2408679		4,910
U.S. Department of Energy	N 81.RD	U.S. Department of Energy Research and Development	University of Texas at Austin	282865		873
U.S. Department of Energy Total			,		5,516,765	40,787,871
U.S. Department of Education	Y 84.016A					65,290
U.S. Department of Education	Y 84.017	International Research and Studies				50,157
U.S. Department of Education	Y 84.021	Overseas Programs - Group Projects Abroad				37,400
U.S. Department of Education	Y 84.022	Overseas Programs - Doctoral Dissertation Research Abroad				49,648
U.S. Department of Education U.S. Department of Education	Y 84.200 Y 84.229	Graduate Assistance in Areas of National Need Language Resource Centers			(132)	(118,937) (107)
U.S. Department of Education U.S. Department of Education	Y 84.229 Y 84.229A	Language Resource Centers Language Resource Centers			(132) 54.581	(107) 205.001
U.S. Department of Education	Y 84.305	Education Research, Development and Dissemination			173.989	1.088.846
U.S. Department of Education	Y 84.305A	Education Research, Development and Dissemination			170,000	872,051
U.S. Department of Education	Y 84.324	Research in Special Education			212,404	555,571
U.S. Department of Education	Y 84.324A	Research in Special Education				241
U.S. Department of Education	Y 84.327	Special Education Educational Technology Media, and Materials for Individuals wi				60,810
U.S. Department of Education	N 84.305A	Education Research, Development and Dissemination	Pennsylvania, University of	569644		(1)
U.S. Department of Education	N 84.305A		Portland State University	100018		66,700
U.S. Department of Education	N 84.324	Research in Special Education	Northern Illinois University	G1A62873/22-479		105,835
U.S. Department of Education Total					440,842	3,038,505
U.S. Department of Health and Human Services	Y 93.077	Family Smoking Prevention and Tobacco Control Act Regulatory Research				1,858,711
U.S. Department of Health and Human Services	Y 93.085	Research on Research Integrity			44,066	131,384
U.S. Department of Health and Human Services	Y 93.103	Food and Drug Administration Research			,	168,354
U.S. Department of Health and Human Services	Y 93.110	Maternal and Child Health Federal Consolidated Programs			94,087	307,092
U.S. Department of Health and Human Services	Y 93.113	Environmental Health			154,637	2,194,756
U.S. Department of Health and Human Services	Y 93.121	Oral Diseases and Disorders Research			256,343	1,919,440
U.S. Department of Health and Human Services	Y 93.172	Human Genome Research			969,557	2,961,603
U.S. Department of Health and Human Services	Y 93.173 Y 93.186	Research Related to Deafness and Communication Disorders				1,168,570
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.186 Y 93.213	National Research Service Award in Primary Care Medicine Research and Training in Complementary and Integrative Health			150.197	410,917 1,206,295
U.S. Department of Health and Human Services	Y 93.226	Research on Healthcare Costs, Quality and Outcomes			30,326	1,158,035
U.S. Department of Health and Human Services	Y 93.233	National Center on Sleep Disorders Research			531,351	1.501.631
U.S. Department of Health and Human Services	Y 93.242	Mental Health Research Grants			876,415	4,625,893
U.S. Department of Health and Human Services	Y 93.243	COVID-19 - Substance Abuse and Mental Health Services Projects of Regional and National Sig			222,839	444,313
U.S. Department of Health and Human Services	Y 93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig			45,857	1,220,092
U.S. Department of Health and Human Services	Y 93.262	Occupational Safety and Health Program				7,401
U.S. Department of Health and Human Services	Y 93.273	Alcohol Research Programs			386,608	3,896,145
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.279 Y 93.286	Drug Abuse and Addiction Research Programs Discovery and Applied Research for Technological Innovations to Improve Human He			290,758 723,097	5,642,316 4,018,887
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.286 Y 93.304	COVID-19 - Racial and Ethnic Approaches to Community Health			723,097 143.850	4,018,887
U.S. Department of Health and Human Services	Y 93.304	Racial and Ethnic Approaches to Community Health			140,000	173.615
U.S. Department of Health and Human Services	Y 93.307	Minority Health and Health Disparities Research			410,481	1,910,146
U.S. Department of Health and Human Services	Y 93.310	Trans-NIH Research Support			54,839	436,522
U.S. Department of Health and Human Services	Y 93.315	Rare Disorders: Research, Surveillance, Health Promotion, and Education				74,007
U.S. Department of Health and Human Services	Y 93.350	National Center for Advancing Translational Sciences			81,849	3,867,909
U.S. Department of Health and Human Services	Y 93.351	Research Infrastructure Programs			12,499	765,409
U.S. Department of Health and Human Services	Y 93.361	Nursing Research			220,489	662,960
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.393 Y 93.394	Cancer Cause and Prevention Research Cancer Detection and Diagnosis Research			443,713 3.517	4,413,142 170.307
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.394 Y 93.395	Cancer Detection and Diagnosis Research Cancer Treatment Research			3,517 176,435	1,400,696
U.S. Department of Health and Human Services	Y 93.396	Cancer Biology Research			747,082	3,171,503
U.S. Department of Health and Human Services	Y 93.398	Cancer Research Manpower				290,994
U.S. Department of Health and Human Services	Y 93.433	ACL National Institute on Disability, Independent Living, and Rehabilitation Res			260,247	1,086,980
U.S. Department of Health and Human Services	Y 93.493	Congressional Directives				446,620
U.S. Department of Health and Human Services	Y 93.788	Opioid STR				71,310
U.S. Department of Health and Human Services	Y 93.837	Cardiovascular Diseases Research			1,816,642	14,237,111
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.838 Y 93.839	Lung Diseases Research Blood Diseases and Resources Research			134.437	357,667 1 228 949
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.839 Y 93.846	Blood Diseases and Resources Research Arthritis, Musculoskeletal and Skin Diseases Research			134,437 429,796	1,228,949 3.862.603
U.S. Department of Health and Human Services	Y 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research			4,051,164	17,557,598
U.S. Department of Health and Human Services	Y 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders			820,610	9,474,750
U.S. Department of Health and Human Services	Y 93.855	Allergy and Infectious Diseases Research			1,167,571	11,915,979
U.S. Department of Health and Human Services	Y 93.859	Biomedical Research and Research Training			448,137	24,233,279
U.S. Department of Health and Human Services	Y 93.860	Emerging Infections Sentinel Networks			72,293	917,876
U.S. Department of Health and Human Services	Y 93.865	Child Health and Human Development Extramural Research			995,535	8,710,153
U.S. Department of Health and Human Services	Y 93.866	Aging Research			2,011,291	11,698,101
U.S. Department of Health and Human Services	Y 93.867	Vision Research			233,203	1,830,189

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

		FOR THE YEAR	RENDED JUNE 30, 2024			
Federal Agency	Direct Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Health and Human Services	Y 93.877	Autism Collaboration, Accountability, Research, Education, and Support	Pass-I flough Endly	Pass-Inrough Entity Identifying Number	Expenditures	109,654
U.S. Department of Health and Human Services	Y 93.879	Medical Library Assistance				140.252
U.S. Department of Health and Human Services	Y 93.918	Grants to Provide Outpatient Early Intervention Services with Respect to HIV Dis				600,896
U.S. Department of Health and Human Services	Y 93.976	Primary Care Medicine and Dentistry Clinician Educator Career Development Awards			26,416	43,030
U.S. Department of Health and Human Services	Y 93.989 Y 93.RD	International Research and Research Training				404,150 31,747
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.RD Y 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development				31,747 55.099
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development				181,133
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development				565,150
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development				66,111
U.S. Department of Health and Human Services	Y 93.RD Y 93.RD	U.S. Department of Health and Human Services Research and Development				390,731
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.RD Y 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development			180,377	1,127,266 188,293
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development			100,377	778,049
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development				419,463
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development			15,145	145,817
U.S. Department of Health and Human Services	Y 93.RD Y 93.RD	U.S. Department of Health and Human Services Research and Development				200,152
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.RD Y 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development				53,504 156,609
U.S. Department of Health and Human Services	Y 93 RD	U.S. Department of Health and Human Services Research and Development				43 638
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development				59,059
U.S. Department of Health and Human Services	Y 93.RD	U.S. Department of Health and Human Services Research and Development				6,888
U.S. Department of Health and Human Services	Y 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development				316,639
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	Y 93.RD N 93.077	U.S. Department of Health and Human Services Research and Development Family Smoking Prevention and Tobacco Control Act Regulatory Research	Rutgers-The State University of New Jersey	3230 PO 25547578		18,140 29,504
U.S. Department of Health and Human Services	N 93.080	Blood Disorder Program: Prevention, Surveillance, and Research	Lehigh Valley Health Network	ATHN 22 23 011		5.478
U.S. Department of Health and Human Services	N 93.080	Blood Disorder Program: Prevention, Surveillance, and Research	Lehigh Valley Health Network	ATHN_23_24_011		20,939
U.S. Department of Health and Human Services	N 93.110	Maternal and Child Health Federal Consolidated Programs	Children's Hospital of Philadelphia	GRT-00002160-0624		14,626
U.S. Department of Health and Human Services	N 93.110	Maternal and Child Health Federal Consolidated Programs	Lehigh Valley Hospital, Inc.	HRSA_23_24_008		53,149
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.110 N 93.110	Maternal and Child Health Federal Consolidated Programs Maternal and Child Health Federal Consolidated Programs	Lehigh Valley Hospital, Inc. The Regents of the University of Califor nia, Los Angeles	HRSA_24_25_011 1638 G WA051		4,831 6,507
U.S. Department of Health and Human Services	N 93.113	Environmental Health	Brigham & Women's Hospital	121157		18,022
U.S. Department of Health and Human Services	N 93.113	Environmental Health	Cornell University	141673-22537		117,388
U.S. Department of Health and Human Services	N 93.113	Environmental Health	Michigan State University	RC109570PSU		21,834
U.S. Department of Health and Human Services	N 93.113	Environmental Health	The Trustees of the University of Pennsy Ivania	577005		141,047
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.121 N 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	Icahn School of Medicine at Mount Sinai Phoenix Children's Hospital	0255-F431-4609 SITZMAN-20-07 AMEND 1		84,424 (7,182)
U.S. Department of Health and Human Services	N 93.121	Oral Diseases and Disorders Research	Phoenix Children's Hospital	SITZMAN-20-07 AMEND 1		21.910
U.S. Department of Health and Human Services	N 93.121	Oral Diseases and Disorders Research	University of Pittsburgh	CNVA00055576 (134310-1)		51,329
U.S. Department of Health and Human Services	N 93.136	Injury Prevention and Control Research and State and Community Based Programs	AWARE, Inc.	250106		1,039
U.S. Department of Health and Human Services	N 93.137	COVID-19 - Community Programs to Improve Minority Health Grant Program	City of Reading	001-002		45,465
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.137 N 93.172	Community Programs to Improve Minority Health Grant Program Human Genome Research	City of Reading Johns Hopkins University	001-002 2003978433 AMENDMENT 6		192,006 3,551
U.S. Department of Health and Human Services	N 93.172 N 93.172	Human Genome Research	Johns Hopkins University	2003978433 AMENDMENT 6 2006185992		156.266
U.S. Department of Health and Human Services	N 93.172	Human Genome Research	Northwestern University	60059128 PSU A01,A02		46,747
U.S. Department of Health and Human Services	N 93.172	Human Genome Research	University of Southern California	SCON-00005611		10,707
U.S. Department of Health and Human Services	N 93.173	Research Related to Deafness and Communication Disorders	Veterans Health Foundation	NIH 2019-1001		31,306
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.213 N 93.242	Research and Training in Complementary and Integrative Health Mental Health Research Grants	The Regents of the University of Michiga n Actuated Medical, Inc.	SUBK00014654 5082-S01		145,306 25,703
U.S. Department of Health and Human Services	N 93.242 N 93.242	Mental Health Research Grants	Colorado, University of	1562735		146.354
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	DePaul University	501455SG173-55		34,581
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	Harvard Medical School	151969.5125640.0002		36,370
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	McLean Hospital	401643		36,584
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.242 N 93.242	Mental Health Research Grants Mental Health Research Grants	North Carolina, University of Quadrant Biosciences Inc.	5121314 1293481860000		15,035 (10,260)
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	South Carolina University of	23-5345 USC 10012964		58 856
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	University of Massachusetts	SUB00000252 (POWA01353608)		34,951
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	University of Texas	2109586 (PO S338397)		24,836
U.S. Department of Health and Human Services	N 93.242	Mental Health Research Grants	Washington University in St. Louis	WU-19-103 PO ST00000471		45,388
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.242 N 93.243	Mental Health Research Grants Substance Abuse and Mental Health Services Projects of Regional and National Sig	Weill Cornell Medicine CensClear Child Services Inc	226874 233453		(15,676) 59.782
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.243 N 93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig Substance Abuse and Mental Health Services Projects of Regional and National Sig	Cen-Clear Child Services, inc. Child Health and Development Institute of Connecticut, Inc.	233453 221-580		59,782 87.023
U.S. Department of Health and Human Services	N 93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	COP: Department of Drug and Alcohol Program	4300655082		(8,258)
U.S. Department of Health and Human Services	N 93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	York/Adams Mental Health Intellectual an d Developmental Disabilities Program	230674 178623		7,992
U.S. Department of Health and Human Services	N 93.262 N 93.262	Occupational Safety and Health Program	Icahn School of Medicine at Mount Sinai	0255-F921-4609 606935-00		52,467
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.262 N 93.262	Occupational Safety and Health Program Occupational Safety and Health Program	Marshfield Clinic Research Foundation PolyK Technologies, LLC	606935-00 PK-S22B		7,334 11,937
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.262 N 93.262	Occupational Safety and Health Program Occupational Safety and Health Program	University of Iowa	S02874-01		6,347
U.S. Department of Health and Human Services	N 93.273	Alcohol Research Programs	New Mexico, University of University of New Mexico Health Sciences	028382-873B		323
U.S. Department of Health and Human Services	N 93.273	Alcohol Research Programs	State University of New York - Binghamto n	92036-1169863-PSU		(12,005)
U.S. Department of Health and Human Services	N 93.273	Alcohol Research Programs	State University of New York - Binghamto n	95308-1177353-PSU		23,543
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.273 N 93.273	Alcohol Research Programs Alcohol Research Programs	The Regents of the University of Michigan University of California at San Francisc o	SUBK00014961 PO 3006465570 12773SC		1,726 162.917
U.S. Department of Health and Human Services	N 93.273 N 93.273	Alcohol Research Programs	Utah State University	204328-818		102,917
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	Brigham & Women's Hospital	129004		162,027
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	Emory University	A756929		12,552
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	Fordham University	FORD0113-30290		4,063
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.279 N 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	Indiana University (State of Indiana) Massachusetts General Hospital	9403 240567		359,862 8.052
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.279 N 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	North Carolina, University of	5114624		8,052 28.175
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	Purdue University	11001159-010		79,798
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	State University of New York - Buffalo	R1277664		41,991
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	The University of Texas Health Science Center at San Antonio	SA0000341		343,732
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.279 N 93.279	Drug Abuse and Addiction Research Programs	University of California at San Diego University of Pittsburgh	705048 AWD00000584 (137465-1)	(4,476)	81,568 68.497
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.279 N 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	University of Pittsburgh University of Pittsburgh	AWD00000584 (137465-1) AWD0000584 (139105-1)		68,497 44.189
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	University of Tennessee - Knoxville	A20-0184-S003		32,300
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	University of Texas at Dallas	2109182		29,011

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

1	Direct		•		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Health and Human Services	N 93.279	Drug Abuse and Addiction Research Programs	University of Texas Health Science Center at Houston	SA0003098 (PO UTH189865)		121,806
U.S. Department of Health and Human Services	N 93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	Minnesota, University of	N006925701 AMENDMENT 7		37,811
U.S. Department of Health and Human Services	N 93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	Virginia Polytechnic Institute and State University	412873-19079		101,242
U.S. Department of Health and Human Services	N 93.307	Minority Health and Health Disparities Research	Clemson University	ADVANCED ACCOUNT REQUEST		274,364
U.S. Department of Health and Human Services	N 93.307	Minority Health and Health Disparities Research	Northwestern University	60056121 PENN COM		12,625
U.S. Department of Health and Human Services	N 93.307	Minority Health and Health Disparities Research	RAND Corporation	SCON-00000539		47,261
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.307	Minority Health and Health Disparities Research	South Carolina, University of UNIVERSITY OF ARIZONA	21-4269 (PO 2000056233)		49,698
	N 93.307 N 93.307	Minority Health and Health Disparities Research		458879 AWD101843 (SUB00000451)		73,906
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.307 N 93.310	Minority Health and Health Disparities Research COVID-19 - Trans-NIH Research Support	University of Chicago Central Michigan University	F64627		54,412 32
U.S. Department of Health and Human Services	N 93.310	COVID-19 - Trans-NIH Research Support	Central Michigan University	F65409		74.263
U.S. Department of Health and Human Services	N 93.310	COVID-19 - Trans-NIH Research Support	Central Michigan University	F65409-HP		70.150
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Central Michigan University	F65066		(38,844)
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Drexel University	900245		14,041
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Duke University	303001143		5,491
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Duke University	303-001157		69,333
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	New York University Sponsored Programs Administration	19-A0-00-1003237 PROJ #114579		89
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Oregon, University of	2180A0A		230,465
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Oregon, University of	281210C AMENDMENT NO. 9	158,496	462,407
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	University of California at Los Angeles	16850000084090 (1685 G LB959)		99,844
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Yale University	CON-80003956 (GR118087)		25,878
U.S. Department of Health and Human Services	N 93.310	Trans-NIH Research Support	Yale University	CON-80004977 (GR123318)		6,481 18,814
U.S. Department of Health and Human Services	N 93.323	Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	COP: Department of Health	4300735795 4300781487		
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.336 N 93.350	Behavioral Risk Factor Surveillance System National Center for Advancing Translational Sciences	COP: Department of Health Clinical and Translational Science Institute	2 UL1TR002014-05A1		486,461 243,269
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.350 N 93.350	National Center for Advancing Translational Sciences National Center for Advancing Translational Sciences	Columbia University	1(GG019007-01)		243,269 39,083
U.S. Department of Health and Human Services	N 93.350	National Center for Advancing Translational Sciences	Oregon State University OREGON STATE UNIVERSITY OFFICE OF	P0500A-B		360,567
U.S. Department of Health and Human Services	N 93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	VaxSvna. Inc	7002		31,931
U.S. Department of Health and Human Services	N 93.361	Nursing Research	Duke University	A03-5516		266.066
U.S. Department of Health and Human Services	N 93.361	Nursing Research	Emory University	A679203		22.817
U.S. Department of Health and Human Services	N 93.361	Nursing Research	The Regents of the University of Michiga n	SUBK00021491		4,108
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	Geisinger Clinic	646031PSU04		18,216
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	H. Lee Moffitt Cancer Center and Research Institute	10-21752-99-01-G1		11,800
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	The University of Toledo	F-2019-01		(406)
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	Thomas Jefferson University	080-27000-S47401		108,771
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	University of Chicago	AWD101813 (SUB00001019)		39,576
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	University of North Carolina Chapel Hill	5123629		43,771
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	University of Pittsburgh	AWD00003953 (135993-1)		2,976
U.S. Department of Health and Human Services	N 93.393	Cancer Cause and Prevention Research	University of Pittsburgh	AWD00006749 (138927-1)		68,362
U.S. Department of Health and Human Services	N 93.394	Cancer Detection and Diagnosis Research	Carnegie Mellon University	1090613-434032		101,667
U.S. Department of Health and Human Services	N 93.394 N 93.394	Cancer Detection and Diagnosis Research	Carnegie Mellon University	1090614-435042 RES602452		34,032 5.432
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.394 N 93.394	Cancer Detection and Diagnosis Research	Case Western Reserve University Johns Hopkins University	2005175844		5,432 97,908
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.394 N 93.394	Cancer Detection and Diagnosis Research Cancer Detection and Diagnosis Research	The Regents of the University of Michigan	SUBK00011540		97,908 16.384
U.S. Department of Health and Human Services	N 93.394	Cancer Detection and Diagnosis Research	University of Cincinnati	013381-140228		10,364
U.S. Department of Health and Human Services	N 93.394	Cancer Detection and Diagnosis Research	University of Pittsburgh	AWD00006737 (138883-1)		189,105
U.S. Department of Health and Human Services	N 93.394	Cancer Detection and Diagnosis Research	University of Pittsburgh	AWD00006914 (138979-3)		(2,094)
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	Children's Hospital of Philadelphia	BIQSFP-COG AALL1131 11XS1		22
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	ECOG-ACRIN Medical Research Foundation, Inc.	177860 U10CA180820		59.457
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	ECOG-ACRIN Medical Research Foundation, Inc.	U10CA180820-06-PSCI1A		6,329
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	NRG Oncology	NRG-MACHTAY-GY7		46,747
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	Rector and Visitors of the University of Virginia	GB10832 / PO2323865		(617)
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	Texas A&M University	M2102794		213,748
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	University of Pittsburgh Medical Center	AWD00006702 (139018-1)		42,061
U.S. Department of Health and Human Services	N 93.395	Cancer Treatment Research	Virginia Polytechnic Institute and State University	412536-19079		4,748
U.S. Department of Health and Human Services	N 93.396	Cancer Biology Research	Case Western Reserve University	RES517178		10,093
U.S. Department of Health and Human Services	N 93.396 N 93.396	Cancer Biology Research	Cleveland Clinic Lerner College of Medic ine	CCF22607970		323,773
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.396 N 93.396	Cancer Biology Research Cancer Biology Research	Cleveland Clinic Lerner College of Medic ine Oregon Health & Sciences University	CCF22762337 1013137_PENNSTATE		19,557 7,535
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.396 N 93.396	Cancer Biology Research	University of Pittsburgh	AWD00003405 (135524-2)		7,535 2,977
U.S. Department of Health and Human Services	N 93.396	Cancer Biology Research	University of Pittsburgh	AWD00003405 (135524-2) AWD00004233 (136288-2)		16.916
U.S. Department of Health and Human Services	N 93.397	Cancer Centers Support Grants	Virginia, University of	AWD-004132.SUB00000874		33,116
U.S. Department of Health and Human Services	N 93.398	Cancer Research Manpower	H. Lee Moffitt Cancer Center and Research Institute	275334		7,053
U.S. Department of Health and Human Services	N 93.421	Strengthening Public Health Systems and Services through National Partnerships t	Task Force for Global Health, Inc.	6NU38OT000316-05-04		37,305
U.S. Department of Health and Human Services	N 93.433	ACL National Institute on Disability, Independent Living, and Rehabilitation Res	North Carolina State University	PAM-P22-002352-SA03		55,018
U.S. Department of Health and Human Services	N 93.433	ACL National Institute on Disability, Independent Living, and Rehabilitation Res	Utah State University	204517-824		64,048
U.S. Department of Health and Human Services	N 93.788	Opioid STR	COP: Department of Drug and Alcohol Program	4300703501	988,833	2,105,119
U.S. Department of Health and Human Services	N 93.788	Opioid STR	Houston, University of	R-24-0189		41,379
U.S. Department of Health and Human Services	N 93.800	Organized Approaches to Increase Colorectal Cancer Screening	University of Chicago	AWD101193 SUB00001065		448,483
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	Duke University	2037894		(314)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.837 N 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	Kansas State University Minnesota, University of	A22-0645-S001 N007979201		221,657 312,273
		Cardiovascular Diseases Research Cardiovascular Diseases Research		5127674		
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.837 N 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	North Carolina, University of Princeton University Office of Research & Project Administrat	5127674 SUB0000507		58,258 114,861
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.837 N 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	Rush University Medical Center	20042007-SUB01		114,861
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.837 N 93.837	Cardiovascular Diseases Research	The Regents of the University of Michigan	SUBK00016700		19,884
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of California at Davis	A21-1682-S002		67,351
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Chicago	AWD104265 (SUB00001021)		116,380
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Massachusetts	SUB00000209		72,152
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004314 (138609-3)		7,196
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004314 (139454-3)		54,605
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004314 (139454-30A)		10,342
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004406 (136498-1)		96,510
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Tennessee - Knoxville	A24-0425-S001		78,480
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Texas at Arlington	2021GC1903		179,966
U.S. Department of Health and Human Services	N 93.837	Cardiovascular Diseases Research	University of Texas at Austin	UTA16-000756		(280)
U.S. Department of Health and Human Services	N 93.837 N 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	University of Vermont	AWD00000123SUB00000060		60,851
U.S. Department of Health and Human Services	iv 93.03/	Calulovasculai Discases (ASBAICI)	Wayne State University	WSU21073 GRANT INDEX:340655		11,677

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	FOR THE Y	EAR ENDED JUNE 30, 2024		Subrecipient
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	
U.S. Department of Health and Human Services	N 93.838	Lung Diseases Research	Brigham & Women's Hospital	122869	491,267
U.S. Department of Health and Human Services	N 93.838	Lung Diseases Research	Columbia University	13(GG015997-03)	35,795
U.S. Department of Health and Human Services	N 93.838	Lung Diseases Research	Sage Bionetworks	239077 2022.02, 2022.01	344,983
U.S. Department of Health and Human Services	N 93.838	Lung Diseases Research	The Regents of the University of Michigan	SUBK00015550	47
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.838 N 93.838	Lung Diseases Research Lung Diseases Research	The Trustees of the University of Pennsy Ivania UNIVERSITY OF ARIZONA	581435 745529	7,430 315,777
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.838 N 93.838	Lung Diseases Research	University of Colorado Denver	FY20.988.002 FY24.988.004_AMD5	23.886
U.S. Department of Health and Human Services	N 93.838	Lung Diseases Research	Weill Cornell Medicine	230557-6	41,591
U.S. Department of Health and Human Services	N 93.839	Blood Diseases and Resources Research	Actuated Medical, Inc.	5075-S01	9,705
U.S. Department of Health and Human Services	N 93.839	Blood Diseases and Resources Research	Actuated Medical, Inc.	5075-S02	1,920
U.S. Department of Health and Human Services	N 93.839	Blood Diseases and Resources Research	Children's Hospital of Philadelphia	GRT-00002850	145,590
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.839 N 93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	HMH Hospitals Corporation KaloCyte, Inc	2203-G10159 273324	101,388 121,738
U.S. Department of Health and Human Services	N 93.839	Blood Diseases and Resources Research	The University of Texas Health Science Center at San Antonio	166829/165808	5.182
U.S. Department of Health and Human Services	N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	New York University Medical Center	19-A1-00-1000432; PROJ#113189	39,993
U.S. Department of Health and Human Services	N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	New York University School of Medicine NYU LANGONE HEALTH	22-A0-00-1006837	45,352
U.S. Department of Health and Human Services	N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	SUNY Upstate Medical University	1162484-97631	4,686
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.846 N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	The Jackson Laboratory University of Maryland, School of Medici ne	210425-0925-02 3000491 REQUEST: 4304	64,084 21,270
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.846 N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	University of Maryland, School of Medici ne University of Massachusetts	OSP2018039 PO WA00617531	(337)
U.S. Department of Health and Human Services	N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	University of Massachusetts	SUB0000301	33,262
U.S. Department of Health and Human Services	N 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	Yale University	CON-80003783 (GR117196)	87,072
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Aleo BME, Inc.	PSU-DK130756	9,601
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Carnegie Mellon University	1090670-449374	12,774
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Children's Hospital of Philadelphia	GRT-00002004	186,122
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.847 N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	Duke University Georgia State University	A03-4702 SP00014262-01	78,626 51,241
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	McLean Hospital	401536	11.396
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	SUNY Upstate Medical University	1098984-96328	89,213
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Temple University	265300-PSU	29,089
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	The University of Texas Health Science Center at San Antonio	171154/171153	36,388
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	The University of Toledo	N-2023-19	381,853
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.847 N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	University of Ćalifornia at San Francisc o University of Pittsburgh	12271SC AWD00007375 (139217-1)	31,327 2.411
U.S. Department of Health and Human Services	N 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	University of Texas at Dallas	23011000	58,649
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Actuated Medical. Inc.	5080-S01	48.020
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Actuated Medical, Inc.	5080-S02	7,365
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Icahn School of Medicine at Mount Sinai	0255-G621-4609	147,628
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Johns Hopkins University	2005543037	35,852
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.853 N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic Mayo Clinic	BER-224063-08 /PO 66638152 HMC-224063	30,987 353
U.S. Department of Health and Human Services	N 93.653	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic Mayo Clinic Jacksonville	BER-290195	300
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Rutgers-The State University of New Jersey	3145	24.167
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	SUNY Upstate Medical University	1174786-94259	50,393
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Cincinnati	011337-140228	9,092
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.853 N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Cincinnati University of Cincinnati	012043-140228 012044-140228	2,033 4,827
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.853 N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Cincinnati University of Florida Board of Trustees	012044-140228 SUB00003122	4,827 (2,124)
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Florida Board of Trustees	SUB00003778	46,245
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of North Carolina Chapel Hill	5128458	29,739
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Rochester	SUB00000410/UR FAO: GR533048	598,049
U.S. Department of Health and Human Services	N 93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Southern California	SCON-00004427	(1)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.853 N 93.855	Extramural Research Programs in the Neurosciences and Neurological Disorders COVID-19 - Allergy and Infectious Diseases Research	University of Texas at Dallas Benaroya Research Institute at Virginia Mason	22010311 (PO S372101) FY23ITN591	21,696 24,374
U.S. Department of Health and Human Services	N 93.655	Allergy and Infectious Diseases Research	Boston Children's Hospital	GENFD0002047665	737,401
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Boston Children's Hospital	GENFD0002340605	304.142
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Carnegie Mellon University	1090598-425264	(2,359)
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Colorado State University	G-45094-01	23,162
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Cornell University	81060-10895	(4,400)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	COVID-19 - Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	Emory University	A742052 PO21001645	19,518 2,815
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Georgetown University Medical Center	425905_GR425830-PSU	42.616
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Hennepin Healthcare Research Institute	14384-15 18X107CF9 STRIVE	70,817
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Johns Hopkins University	2005681817	396,192
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Michigan Technological University	2206040Z1	89,049
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	Minnesota, University of North Carolina, University of	P011071601 5124364	140,671 25,203
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	COVID-19 - Allergy and Infectious Diseases Research	Purdue University or	11001048-006 AMENDMENT 4	25,203 28,367
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Respana Therapeutics, Inc.	PSU-RES Al162590-02	460,593
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Respana Therapeutics, Inc.	PSU-RESAI162590	2,114
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	South Carolina, University of	24-5685 (PO 2000074008)	2,870
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	South Carolina, University of	24-5686 (PO 2000074045)	97,520
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	Allergy and Infectious Diseases Research COVID-19 - Allergy and Infectious Diseases Research	Stanford Medicine The Jackson Laboratory	62402848-165639 210310-0222-10	413,259
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	COVID-19 - Allergy and Infectious Diseases Research COVID-19 - Allergy and Infectious Diseases Research	The Jackson Laboratory The Jackson Laboratory	210310-0222-10 210310-0224-10	36 429
U.S. Department of Health and Human Services	N 93.855	COVID-19 - Allergy and Infectious Diseases Research	The Jackson Laboratory	210310-0225-15	13,405
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	The Jackson Laboratory	210310-0223-10	(1,461)
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	The Regents of the University of Califor nia, Los Angeles	1625 G IB 133	23,161
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	The Regents of the University of Michigan	SUBK00009188 PO 3005415261	33,842 5,693
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	University of North Carolina Chapel Hill University of Pittsburgh Medical Center	5120489 AWD00005335 (137255-1)	5,693 21,318
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.855 N 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	University of Pittsburgh Medical Center University of Texas Southwestern Medical Center	GMO 230502 PO0000002986	21,318
U.S. Department of Health and Human Services	N 93.855	Allergy and Infectious Diseases Research	Utah, University of	10054720-02 PENN	127,142
U.S. Department of Health and Human Services	N 93.859	Biomedical Research and Research Training	Aleo BME, Inc.	PSU-GM146574	83,443
U.S. Department of Health and Human Services	N 93.859	Biomedical Research and Research Training	Drexel University	900281	8,357
U.S. Department of Health and Human Services	N 93.859 N 93.859	Biomedical Research and Research Training	Florida State University University of Texas Southwestern Medical Center	R000003213 GMO:200801 PO 0000002034	80,000
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.859 N 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	University of Texas Southwestern Medical Center Virginia University of	GMO:200801 PO 000002034 AWD-004661.GR101363	(30,502)
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SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct				Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	Actuated Medical, Inc. Arizona State University	5073-S02 ASUB00000125		(281) 138.161
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research	Arizona State University Arizona State University	ASUB00000125 ASUB00000830		82,104
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Baylor University	7000001045		21,437
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Boston Children's Hospital	GENFD0001754391		(867)
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Brown University	00002326		26,425
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	Children's Hospital of Philadelphia Children's Hospital of Philadelphia	GRT-00001459 GRT-00002485/PO20442644		1,769 20,993
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Colorado State University	50421-03		15,101
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Colorado State University	G-63798-02		11,793
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	Colorado, University of Delaware, University of	FY20.812.002 57652		9,723 8,511
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research	Delaware, University of Duke Clinical Research Institute	75N94023F00001		23.942
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Lundquist Institute for Biomedical Innov ation	MR-32035-02/PO# 23005000		61,363
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Metabolon, Inc.	R43HD114271		55,267
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	Minnesota, University of New York University School of Medicine NYU LANGONE HEALTH	A010994701 22-A1-00-1006710 PRJ ID 260679		38,324 43,274
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	New York University Sponsored Programs Administration	F0998-01		94,936
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	New York University Sponsored Programs Administration	F0998-29		85
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	North Carolina State University	2021-1051-01		(588)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	Northwestern University The Board of Trustees of the Leland Stan ford Junior University (Stanford Univer	60056369 PSU 63196014-232980		150,589 118,239
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	THE RESEARCH FOUNDATION FOR STATE UNIVERSITY OF NEW YORK	86675/2/1158241		253.318
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	University of Pittsburgh	AWD00001006 (133613-14)		6,000
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	University of Texas Medical Branch at Ga Iveston	23-86262-06		6,229
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.865 N 93.865	Child Health and Human Development Extramural Research Child Health and Human Development Extramural Research	University of Wisconsin-Madison University of Wisconsin-Madison	000001938 000003074		12,062 19,174
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Utah, University of	10058860-23-PENN		30,856
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Yale University	CON-80003642 (GR116282)		4,496
U.S. Department of Health and Human Services	N 93.865	Child Health and Human Development Extramural Research	Yale University	CON-80004163 (GR119247)		73,547
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	Albert Einstein College of Medicine Albert Einstein College of Medicine	311216 PO #986009 311437		10,913 (38,185)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research	Albert Einstein College of Medicine Albert Einstein College of Medicine	311437 312121		(38,185) 24,610
U.S. Department of Health and Human Services	N 93.866	Aging Research	Albert Einstein College of Medicine	31229A PO #985014		33,446
U.S. Department of Health and Human Services	N 93.866	Aging Research	Albert Einstein College of Medicine	31229C PO #985015		61,981
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	Albert Einstein College of Medicine Albert Einstein College of Medicine	31229D 31229G PO #981078		162,244 327,399
U.S. Department of Health and Human Services	N 93.866	Aging Research	Albert Einstein College of Medicine	31229G PO #981078 31229H PO #981079	32,480	572,261
U.S. Department of Health and Human Services	N 93.866	Aging Research	Albert Einstein College of Medicine	312291	,	18,476
U.S. Department of Health and Human Services	N 93.866	Aging Research	Albert Einstein College of Medicine	ADVANCE ACCOUNT REQUEST		20,155
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	Ann & Robert H. Lurie Children's Hospital of Chicago Beth Israel Deaconess Medical Center	AWD001614 - PENN STATE GRT65005		180,426 17.668
U.S. Department of Health and Human Services	N 93.866	Aging Research	Board of Regents of the University of Ok lahoma	RS2024011101		5,270
U.S. Department of Health and Human Services	N 93.866	Aging Research	Board of Regents of The University of Wi sconsin System	0000003213	125,222	494,891
U.S. Department of Health and Human Services	N 93.866	COVID-19 - Aging Research	Brown University	00001381		39,359
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	Brown University Clemson University	00001381 2466-209-2015467		5,269 13,351
U.S. Department of Health and Human Services	N 93.866	Aging Research	Elon University	OVERMAN 21-002		9,820
U.S. Department of Health and Human Services	N 93.866	Aging Research	Klein Buendel, Inc.	0327-0177-000		31,986
U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research	Klein Buendel, Inc.	0336-0183-000 G03767		53,274
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	Miami University (of Ohio) Miami University (of Ohio)	G03767 G03853		(10) 40,104
U.S. Department of Health and Human Services	N 93.866	Aging Research	Michigan State University	RC113018D		65,159
U.S. Department of Health and Human Services	N 93.866	Aging Research	Pennington Biomedical Research Center	PB210020-AG073204-PENN-01		299
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	Proactive Life, Inc. Syracuse University Office of Sponsored Programs	234190 30917-05467-S23		16,303 36,810
U.S. Department of Health and Human Services	N 93.666	Aging Research	The Regents of the University of Michiga n	SUBK00021130		10 489
U.S. Department of Health and Human Services	N 93.866	Aging Research	Tulane University	TUL-SCC-560973-22/23		10,586
U.S. Department of Health and Human Services	N 93.866	Aging Research	University of Colorado at Boulder	1564144 (PO 1001929469)		8,864
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research	University of Florida Board of Trustees University of Illinois	SUB00003743 17783-00		171,022 2.837
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	University of Illinois University of Kentucky Research Foundation	3200001467-21-046		2,837 25,590
U.S. Department of Health and Human Services	N 93.866	Aging Research	University of Maryland	18829		197,893
U.S. Department of Health and Human Services	N 93.866	Aging Research	University of Southern California	115487434 PO 10782313		23,807
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.866 N 93.866	Aging Research Aging Research	University of Southern California University of Texas at Austin	SCON-00003492 UTAUS-SUB00001185		(3,207) 32,516
U.S. Department of Health and Human Services	N 93.866	Aging Research	University of Visconsin-Madison	0000002492	76,708	140,473
U.S. Department of Health and Human Services	N 93.866	Aging Research	Yale University	CON-80004270(GR119693)		31,692
U.S. Department of Health and Human Services	N 93.866	Aging Research	Yale University	CON-80004693 GR122123		22,991
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.867 N 93.867	Vision Research Vision Research	Praetego, LLC Skyran Biologics, Inc.	PSU-R41EY034725 1 R41 EY0351180-01		139,852 71,317
U.S. Department of Health and Human Services	N 93.867	Vision Research	Skyran Biologics, Inc.	2R42EY029192-02A1A		133,494
U.S. Department of Health and Human Services	N 93.991	Preventive Health and Health Services Block Grant	COP: Department of Health	4100096485		83,747
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Arizona State University	ASUB00000567		18,926
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Benaroya Research Institute at Virginia Mason Boston Children's Hospital	FY23ITN448 GENFD0002021281		25,796 2.948
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Boston Children's Hospital	GENFD0002021281		10,888
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Children's Hospital of Philadelphia	139164 R01 CA212190-01A1		(3,811)
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Children's Hospital of Philadelphia	ADVANCE		(9,144)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Children's Hospital of Philadelphia Children's Research Institute	GRT-00003193 272340		15,479
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Clemson University	ADVANCED ACCOUNT REQUEST		79,747
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Cleveland Clinic Lerner College of Medic ine	CCF21143188		128
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Cleveland Clinic Lerner College of Medic ine	CCF22607970		3,392
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Columbia University COP: Department of Drug and Alcohol Program	ADVANCED ACCOUNT REQUEST 4300736720		13,586 143,244
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	COP: Department of Health	4300776546		5,038
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	COP: Department of Human Services Office of Developmental Programs	4300743303		39,277

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

		FOR THE YE	AR ENDED JUNE 30, 2024		
Federal Agency	Direct Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures Expenditures
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	COP: Department of Human Services Office of Developmental Programs	4300771488	240,672
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Duke Clinical Research Institute	129210 NICHD-2019-POP02	932
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Duke Clinical Research Institute	203-7903	(74)
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Duke Clinical Research Institute	215359 NICHD-2019-POP02	7,497
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Duke Clinical Research Institute	215359 NICHD-2019-POP02-8485	732
U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development	Duke Clinical Research Institute	ADVANCED ACCOUNT REQUEST	1,809
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	ECOG-ACRIN Medical Research Foundation, Inc. Emory University	U10CA180820-09-PSCI1A 269237	20,000 5,486
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Emory University	276633	3,612
U.S. Department of Health and Human Services	N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Emory University	A763527	347,800
U.S. Department of Health and Human Services	N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Emory University	A874316 75N93021C00017 COA #1	104,676
U.S. Department of Health and Human Services	N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Emory University	ADVANCE ACCOUNT REQUEST	32,318
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Emory University Family Health Council of Central PA	IRB00101506 STUDY14730 225529	8,083
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Genesis Laboratories. Inc.	243824	852,312 (980)
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Hoosier Cancer Research Network	BRE 15-016	25
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Houston, University of	R-22-0070	7,500
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Idaho Department of Health and Welfare	RC085400	326,638
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Johns Hopkins University	2006047654	135,287
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Johns Hopkins University Kaiser Foundation Research Institute	HHSN272201400007C OOS030544-PSU	(3,952) 54,015
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Massachusetts General Hospital	280617	145,566
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Massachusetts General Hospital	RTB-004	6,067
U.S. Department of Health and Human Services	N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Massachusetts Institute of Technology	S5491	198,156
U.S. Department of Health and Human Services	N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Massachusetts Institute of Technology	S5889	248,546
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Massachusetts Institute of Technology	S5491	76,017
U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development	Massachusetts Institute of Technology	S5889 #PSU-02-4577 MOD #01	137,141
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	McKing Consulting Corporation McKing Consulting Corporation	20066-02D	16,766 (27)
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Minnesota, University of	N006925701	1,522
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	National Opinion Research Center	8622.PSU.01	51,624
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	New Mexico Institute of Mining and Techn ology	P0019419	92,280
U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development	New Mexico Institute of Mining and Techn ology	P0023541 19-A0-00-1003237 PROJ#114579	58,787 252,307
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	New York University School of Medicine NYU LANGONE HEALTH North Texas, University of	GF50027-2 (PO NT00005722)	252,307 208 828
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	NRG Oncology	NRG-MACHTAY-GY7	24,453
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Oregon, University of	2180A0A	13,223
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Penngood LLC	242964	(13,739)
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Penngood LLC	243109	(2,121)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Pennsylvania, University of Pennsylvania, University of	578130 AMENDMENT 3 585496 PO 4963997	21,765 400
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	RAND Corporation	SCON-0000119	5,780
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Rector and Visitors of the University of Virginia	GR013337.SUB00000451	342,695
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Task Force for Global Health, Inc.	239503	11,850
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	The Trustees of the University of Pennsy Ivania	577005	15,272
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	The Trustees of the University of Pennsy Ivania	RIS#35476 AMENDMENT 5	652
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Triad National Security, LLC (was LANL) University of Chicago	587178 SUB 614004 233531	11,936 11,167
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	University of Cincinnati	013055-00012	129.116
U.S. Department of Health and Human Services	N 93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	University of Maryland Baltimore	20929 (PO 1000015390)	583,732
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	University of Massachusetts	SUB00000360	5,751
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	University of Pittsburgh	ADVANCED ACCOUNT REQUEST	41,949
U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development	University of Pittsburgh	AW D00006914 (139334-3) 24-0576-PSU	22,992 1.500
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	University of Tennessee Health Science C enter University of Texas Health Science Center at Houston	SA0001044	64,126
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	University of Vermont	AWD0000483SUB00000228	17,179
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Utah State University	201267-770	239,877
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Utah, University of	10050533-04 PO U000467023	39,684
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Utah, University of	10050533-04 PO# U000404383	18,479
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Utah, University of	10058860-23-PENN	(6,615)
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Vanderbilt University Medical Center Wake Forest University Attn: Grants Accounting	VUMC87503 21-032	2,206 401.532
U.S. Department of Health and Human Services U.S. Department of Health and Human Services	N 93.RD N 93.RD	U.S. Department of Health and Human Services Research and Development U.S. Department of Health and Human Services Research and Development	Wake Forest University Attn: Grants Accounting Wayne State University	WSU22014-A2	167,739
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Weill Cornell Medicine	220367-6	38,299
U.S. Department of Health and Human Services	N 93.RD	U.S. Department of Health and Human Services Research and Development	Yale University	CON-80003412 (GR114888)	12,353
U.S. Department of Health and Human Service	es Total				21,111,019 197,034,628
II.C. Department of Home I I County	Y 97.045	Connecting Technical Partners			9.864
U.S. Department of Homeland Security U.S. Department of Homeland Security	Y 97.045 Y 97.077	Cooperating Technical Partners Homeland Security Research, Development, Testing, Evaluation, and Demonstration			9,864 359,338 514,273
U.S. Department of Homeland Security U.S. Department of Homeland Security	Y 97.077 Y 97.RD	U.S. Department of Homeland Security Research and Development			359,338 514,273 14,025
U.S. Department of Homeland Security	N 97.039	COVID-19 - Hazard Mitigation Grant	COP: Emergency Management Agency	PEMA-2023-058	237,889
U.S. Department of Homeland Security	N 97.047	Pre-Disaster Mitigation	COP: Emergency Management Agency	4300767554	1,891
U.S. Department of Homeland Security	N 97.061	Centers for Homeland Security	Arizona State University	ASUB00001581	132,374
U.S. Department of Homeland Security	N 97.061	Centers for Homeland Security	University of Nebraska Omaha	44-0108-1001-417 5122044 AMENDMENT #1,#2,#3	75,517
U.S. Department of Homeland Security U.S. Department of Homeland Security	N 97.061 N 97.RD	Centers for Homeland Security U.S. Department of Homeland Security Research and Development	University of North Carolina Chapel Hill Dayton, University of	5122044 AMENDMENT #1,#2,#3 RSC22031 SUB-22-000033	51,550 32,184
U.S. Department of Homeland Security U.S. Department of Homeland Security	N 97.RD N 97.RD	U.S. Department of Homeland Security Research and Development U.S. Department of Homeland Security Research and Development	George Mason University	E206378B	32,184 171,713
U.S. Department of Homeland Security	N 97.RD	U.S. Department of Homeland Security Research and Development	Southern Mississippi, University of	8006828-02.01 PSU	168,865
U.S. Department of Homeland Security Total		. ,	11 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 /		359,338 1,410,145
Agency for International Development	Y 98.001	USAID Foreign Assistance for Programs Overseas	K		1,565,708 2,890,088
Agency for International Development	N 98.001	USAID Foreign Assistance for Programs Overseas	Kansas State University	A21-0346-S004	11,689
Agency for International Development Agency for International Development	N 98.001 N 98.007	USAID Foreign Assistance for Programs Overseas Food for Peace Development Assistance Program (DAP)	The University of Tennessee Institute of Agriculture Catholic Relief Services	9500096166 NE23 SUBAGR 20611.65348.010.00	21,016 45,840
Agency for International Development	N 98.RD	Agency for International Development Research and Development	Georgia, University of	SUB00002026	850 17,095
Agency for International Development Total		• ,	. , ,		1,566,558 2,985,728
U.S. Government	Y 99.RD	USG Awards Research and Development			319,347

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	TOR THE TEA	AR ENDED JONE 30, 2024		Subrecipient	
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Expenditures	Expenditures
U.S. Government	Y 99.RD	USG Awards Research and Development	· ••• · · · · · · · · · · · · · · · · ·			(12)
U.S. Government	Y 99.RD	USG Awards Research and Development			88 415	99.746
U.S. Government	Y 99.RD	USG Awards Research and Development			,	97,929
U.S. Government	Y 99.RD	USG Awards Research and Development				40,881
U.S. Government	Y 99.RD	USG Awards Research and Development			9,256	10,803
U.S. Government	Y 99.RD	USG Awards Research and Development				447,927
U.S. Government	Y 99.RD	USG Awards Research and Development				361,364
U.S. Government U.S. Government	Y 99.RD Y 99.RD	USG Awards Research and Development USG Awards Research and Development				653,250 130
U.S. Government	Y 99.RD	USG Awards Research and Development				49,795
U.S. Government	Y 99.RD	USG Awards Research and Development			55,259	2,378,124
U.S. Government	Y 99.RD	USG Awards Research and Development			00,200	454,837
U.S. Government	Y 99.RD	USG Awards Research and Development				1,331,254
U.S. Government	Y 99.RD	USG Awards Research and Development			739,048	858,101
U.S. Government	Y 99.RD	USG Awards Research and Development			5,275,618	6,131,401
U.S. Government	Y 99.RD Y 99.RD	USG Awards Research and Development			1,034,135	1,168,349
U.S. Government U.S. Government	Y 99.RD Y 99.RD	USG Awards Research and Development USG Awards Research and Development				26,287 (41)
U.S. Government	Y 99.RD	USG Awards Research and Development				(6,304)
U.S. Government	Y 99.RD	USG Awards Research and Development			37,150	41,816
U.S. Government	Y 99.RD	USG Awards Research and Development			36,253	42,200
U.S. Government	Y 99.RD	USG Awards Research and Development				829,475
U.S. Government	Y 99.RD	USG Awards Research and Development			1,869,259	2,230,034
U.S. Government	Y 99.RD	USG Awards Research and Development				52,603
U.S. Government	Y 99.RD Y 99.RD	USG Awards Research and Development				121,000
U.S. Government U.S. Government	Y 99.RD	USG Awards Research and Development USG Awards Research and Development				24 464,895
U.S. Government	Y 99.RD	USG Awards Research and Development			1.202	1.291
U.S. Government	Y 99.RD	USG Awards Research and Development			1,202	110,433
U.S. Government	Y 99.RD	USG Awards Research and Development				23,093
U.S. Government	Y 99.RD	USG Awards Research and Development				233,909
U.S. Government	Y 99.RD	USG Awards Research and Development				2,247
U.S. Government	N 99.RD	USG Awards Research and Development	American Systems Corporation (ASC)	S23018		104,273
U.S. Government U.S. Government	N 99.RD N 99.RD	USG Awards Research and Development USG Awards Research and Development	Composite Technology Development Inc. NASK Incorporated	16855 1087-SC-PENN STATE-09		294 128,745
U.S. Government	N 99.RD	USG Awards Research and Development	Ravtheon Company	1007-3C-PENN STATE-09		(36)
U.S. Government	N 99.RD	USG Awards Research and Development	ZETA Associates Inc.	090051SC-PSU-ARL-01		719,848
U.S. Government	N 99.RD	USG Awards Research and Development	ZETA Associates Inc.	160151-PSU-ARL-01		25
U.S. Government Total					9,145,595	25 19,529,337
Research and Development Cluster Total	I				87,480,810	853,496,063
Student Financial Assistance Cluster	Y 84 007					
U.S. Department of Education U.S. Department of Education	Y 84.007 Y 84.033	Federal Supplemental Educational Opportunity Grants Federal Work-Study Program				5,270,203 2,658,227
U.S. Department of Education	Y 84.038	Federal Perkins Loan Program				10,904,946
U.S. Department of Education	Y 84.063	Federal Pell Grant Program				90.932.133
U.S. Department of Education	Y 84.268	Federal Direct Student Loans				459,210,300
Student Financial Assistance Cluster Tot	tal					568,975,809
SNAP Cluster						
U.S. Department of Agriculture SNAP Cluster Total	N 10.561	State Administrative Matching Grants for the Supplemental Nutrition Assistance P	COP: Department of Human Services Office of Developmental Programs	4100088743	18,985,309 18,985,309	22,469,877 22,469,877
SNAF Cluster Total					10,500,305	22,403,077
Economic Development Cluster						
U.S. Department of Commerce	N 11.307	Economic Adjustment Assistance	Advanced Robotics for Manufacturing Inst	268057 ARM-RMH-22-F-04		512,567
U.S. Department of Commerce	N 11.307	COVID-19 - Économic Adjustment Assistance	Catalyst Connection	267417		199,662
U.S. Department of Commerce	N 11.307	COVID-19 - Economic Adjustment Assistance	Southwestern Pennsylvania Commission	22-15316-11		295,482
U.S. Department of Commerce	N 11.307	COVID-19 - Economic Adjustment Assistance	Southwestern Pennsylvania Commission	22-15316-19		233,296
Economic Development Cluster Total						1,241,007
Fish and Wildlife Cluster						
U.S. Department of the Interior	N 15.611	Wildlife Restoration and Basic Hunter Education	COP: Game Commission	4300716716		93,982
Fish and Wildlife Cluster Total	14 10.011	Wildlife Nestoration and Dasie Hunter Education	COI : Carrie Commission	4000710710		93,982
WIOA Cluster						
U.S. Department of Labor	N 17.259	WIOA Youth Activities	Corry Higher Education Council	261205		3,770
U.S. Department of Labor	N 17.259	WIOA Youth Activities	Delaware County Workforce Development Board	246286		(50) 3,720
WIOA Cluster Total						3,720
Special Education (IDEA) Cluster						
U.S. Department of Education	N 84.027	Special Education Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	062-24-0042		411,712
U.S. Department of Education	N 84.027	Special Education Grants to States Special Education Grants to States	COP: Bureau of Special Education	062-23-0042		138,632
U.S. Department of Education	N 84.027	Special Education Grants to States	COP: Bureau of Special Education	260923		8,764
U.S. Department of Education	N 84.027	Special Education Grants to States	Intermediate Unit 1	273112		58,660
Special Education (IDEA) Cluster Total						617,768
TRIO Cluster U.S. Department of Education	Y 84.042A	Office of Postsoconday Education (OPE): Student Support Services Program				650,877
U.S. Department of Education U.S. Department of Education	Y 84.042A Y 84.044	A Office of Postsecondary Education (OPE): Student Support Services Program TRIO Talent Search				1,161,829
U.S. Department of Education U.S. Department of Education	Y 84.044 Y 84.047	TRIO Talent Search TRIO Upward Bound				1,161,829
U.S. Department of Education	Y 84.217	TRIO McNair Post-Baccalaureate Achievement				385,760
U.S. Department of Education	N 84.047	TRIO Upward Bound	Northwest Tri-County Intermediate Unit	71031		1,763
TRIO Cluster Total			•			4,067,822
CCDF Cluster	N 00 00	Oblid Occurred Boundary and Block Occur	Overly Department of Early Overly 11	40000 000 V04P2 00 15		
U.S. Department of Health and Human Services CCDF Cluster Total	N 93.575	Child Care and Development Block Grant	Georgia Department of Early Care and Lea rning	46900-820-V24PSC015		9,846 9,846
CCDF Cluster (Otal						3,040

THE PENNSYLVANIA STATE UNIVERSITY SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
Medicaid Cluster U.S. Department of Health and Human Services Medicaid Cluster Total	N	93.778	Medical Assistance Program	COP: Department of Human Services Office of Developmental Programs	4100095018	846,092 846,092	1,672,178 1,672,178
Other Federal Programs Peace Corps	Y	08.U01	Peace Corps Other				24,862
U.S. Department of Agriculture	Υ	10.025	Plant and Animal Disease, Pest Control, and Animal Care				405,576
U.S. Department of Agriculture	N	10.146	Farm Service agency Taxpayer Outreach Education and Technical Assistance	Delaware, University of	UDR0000333		13,730
U.S. Department of Agriculture	Υ	10.163	Market Protection and Promotion				65,163
U.S. Department of Agriculture	N	10.174	Acer Access Development Program	Ohio State University	SPC-1000004087 GR117635		1,529
U.S. Department of Agriculture	Υ	10.175	Farmers Market and Local Food Promotion Program				187,804
U.S. Department of Agriculture	N	10.176	Dairy Business Innovation Initiatives	University of Tennessee	9500096725		17,897
U.S. Department of Agriculture U.S. Department of Agriculture 10.217 Total	Y N	10.217 10.217	Higher Education - Institution Challenge Grants Program Higher Education - Institution Challenge Grants Program	California Polytechnic State University	2022-5-53734	31,340 31,340	212,010 31,684 243,694
U.S. Department of Agriculture	N	10.226	Secondary and Two-Year Postsecondary Agriculture Education Challenge Grants	Idaho, University of	AE5629-850937		(7,436)
U.S. Department of Agriculture	N	10.229	Extension Collaborative on Immunization Teaching & Engagement (EXCITE)	eXtension Foundation c/o Grafton & Associates PC	EXC3-2023-2401		40,534
U.S. Department of Agriculture	N	10.304	Homeland Security Agricultural	University of Maine	UMS1424		12,244
U.S. Department of Agriculture	Υ	10.311	Beginning Farmer and Rancher Development Program				35,907
U.S. Department of Agriculture	N	10.319	Farm Business Management and Benchmarking Competitive Grants Program	Minnesota, University of	P010062905		8,684
U.S. Department of Agriculture	N	10.326	Capacity Building for Non-Land Grant Colleges of Agriculture (NLGCA)	University of Tennessee Martin	UTM-2022-70001-37582		31,081
U.S. Department of Agriculture	N	10.328	National Food Safety Training, Education, Extension, Outreach, and Technical Assist	University of Vermont	AWD0000639SUB00000273		13,003
U.S. Department of Agriculture U.S. Department of Agriculture 10.329 Total	Y N	10.329 10.329	Crop Protection and Pest Management Competitive Grants Program Crop Protection and Pest Management Competitive Grants Program	Ohio State University	GR124290 / SPC-1000005247		157,163 30,497 187,660
U.S. Department of Agriculture	Υ	10.336	Veterinary Services Grant Program				3,600
U.S. Department of Agriculture 10.50.0 Total	Y N N N	10.500 10.500 10.500 10.500 10.500	Cooperative Extension Service	Delaware, University of eXtension Foundation c/o Grafton & Associates PC Nebraska, University of Nebraska, University of	UDR0000357 NTAE-2022-2239 35-5420-2009-002 35-5420-2009-003	75,536	178,603 2,699 (498) 9,233 16,082 206,119
U.S. Department of Agriculture	Υ	10.511	Smith-Lever Extension Funding				12,048,993
U.S. Department of Agriculture		10.514	Expanded Food and Nutrition Education Program				2,174,158
U.S. Department of Agriculture	Υ	10.515	Renewable Resources Extension Act				108,342
U.S. Department of Agriculture U.S. Department of Agriculture U.S. Department of Agriculture 10.520 Total	N N N	10.520 10.520 10.520	Agriculture Risk Management Education Partnerships Competitive Grants Program Agriculture Risk Management Education Partnerships Competitive Grants Program Agriculture Risk Management Education Partnerships Competitive Grants Program	Delaware, University of Delaware, University of Delaware, University of	UDR0000356 UDR0000529 UDR0000532	-	29,452 674 851 30,977
U.S. Department of Agriculture	N	10.522	Food and Agriculture Service Learning Program	Delaware, University of	UDR0000373		30,535
U.S. Department of Agriculture	N	10.558	Child and Adult Care Food Program	COP: Department of Education			90,595
U.S. Department of Agriculture	N	10.560	State Administrative Expenses for Child Nutrition	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300727899		145,753
U.S. Department of Agriculture	N	10.574	Team Nutrition Grants	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300739633	23,841	115,411
U.S. Department of Agriculture	N	10.575	Farm to School Grant Program	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300745854		112,137
U.S. Department of Agriculture	N	10.579	Child Nutrition Discretionary Grants Limited Availability	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300793546		562,294
U.S. Department of Agriculture	N	10.645	Farm to School State Formula Grant	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300763531		95,292
U.S. Department of Agriculture	Υ	10.674	Wood Utilization Assistance				(536)
U.S. Department of Agriculture	Υ	10.675	Urban and Community Forestry Program				565,807
U.S. Department of Agriculture U.S. Department of Agriculture 10.678 Total	Y N	10.678 10.678	Forest Stewardship Program Forest Stewardship Program	COP: Department of Conservation and Natu ral Resources	4300788325		168,014 10,637 178,651
U.S. Department of Agriculture	Υ	10.868	Rural Energy for America Program				103,224
U.S. Department of Agriculture U.S. Department of Agriculture U.S. Department of Agriculture		10.U01 10.U01 10.U01	U.S. Department of Agriculture Other U.S. Department of Agriculture Other U.S. Department of Agriculture Other	Commonwealth of Pennsylvania Pennsylvania Department of Education Commonwealth of Pennsylvania Pennsylvania Department of Education	4300682959 4300770397		60,784 (5,954) 119,369

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

Federal Agency	Direct Award		Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures Expenditures
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other	COP Department of Agriculture	ADVANCE ACCT REQUEST	90,439
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other	COP: Department of Conservation and Natu ral Resources	4300794120	13.175
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other	COP: Department of Conservation and Natu ral Resources	4300814774	7,264
U.S. Department of Agriculture	N N	10.U01	U.S. Department of Agriculture Other	Delaware, University of	UDR0000157	4,892
U.S. Department of Agriculture	N	10 U01	U.S. Department of Agriculture Other	National 4-H Council	2023-224	4.705
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other	University of Maryland	99698-Z5188202	47,062
10.U01 Total				, ···,	******	- 341,736
U.S. Department of Commerce	Y	11.024	Build to Scale			639,058
•						
U.S. Department of Commerce	N	11.039	Regional Technology and Innovation Hubs	North Central Pennsylvania Regional Plan ning and Development Commission	284275	16,588
U.S. Department of Commerce	Y	11.303	Economic Development Technical Assistance			119,299
U.S. Department of Commerce	Y	11.417	Sea Grant Support			(75,790)
U.S. Department of Commerce	N	11.457	Chesapeake Bay Studies	Stroud Water Research Center	380254-55900	10,907
	.,					
U.S. Department of Commerce	Y	11.620	Science, Technology, Business and/or Education Outreach			6,773
	.,		110.0			
U.S. Department of Defense	Y	12.U01	U.S. Department of Defense Other			96,200
III O December of the Interior	Υ	45.000	William d Flor Processing and Obselfer			440.000
U.S. Department of the Interior	Y	15.232	Wildland Fire Research and Studies			119,329
II.O. Donordon and affile describe		45.000	Fish and MANUARS Advances of Assistance	COD Fire A Dead Commission	440000000	0.500
U.S. Department of the Interior	N N	15.608 15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission COP: Fish & Boat Commission	4100089233 4100090436	2,596 16,761 19,069
U.S. Department of the Interior			Fish and Wildlife Management Assistance			
U.S. Department of the Interior	N	15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission	4100094320	39,374
U.S. Department of the Interior 15.608 Total	N	15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission	4100096580275508	13,091
15.608 TOTAL						16,761 74,130
II.C. Department of the Interior	Υ	15.662	Creat Lakes Postavation			206 402 050 540
U.S. Department of the Interior	Y	10.002	Great Lakes Restoration			296,193 950,540
U.S. Department of Justice	N	16.575	Crime Victim Assistance	COP: Commission on Crime and Delinquency	2020-VF-01-37702-2	74,647
U.S. Department of Justice	N	16.575	Crime Victim Assistance	COP: Commission on Crime and Delinquency	2020-VF-05-37702 2020-VF-05-37702	64,865
16.575 Total	IN	10.575	Chille Victim Assistance	COF. Commission on Crime and Delinquency	2020-VI-03-37702	- 139,512
10.070 10tal						- 100,012
U.S. Department of Justice	Y	16.582	Crime Victim Assistance/Discretionary Grants			42,258
o.o. Department of outdoor		10.002	omio vienna desamo de la compania del compania de la compania del compania de la compania del la compania de la compania del la compania			12,200
U.S. Department of Justice	N	16.726	Juvenile Mentoring Program	National 4-H Council	258895	404
U.S. Department of Justice	N	16.U01	U.S. Department of Justice Other	COP: Commission on Crime and Delinquency	28932	12,958
				, ,		
U.S. Department of Labor	N	17.245	Trade Adjustment Assistance	COP: Department of Labor and Industry	T000020220	53,198
U.S. Department of Labor	Y	17.280	WIOA Dislocated Worker National Reserve Demonstration Grants			395,001
U.S. Department of State	N	19.010	Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	Institute of International Education	3000303470	244,042
U.S. Department of State	Υ	19.022	Educational and Cultural Exchange Programs Appropriation Overseas Grants			30,554
U.S. Department of Transportation	Y	20.106	COVID-19 - Airport Improvement Program, Infrastructure Investment and Jobs Act Programs			630,405
U.S. Department of Transportation	Y	20.106	Airport Improvement Program, Infrastructure Investment and Jobs Act Programs			7,405,326
20.106 Total						- 8,035,731
				0. 100 - 0. 100 -	01170 070100 57000	
U.S. Department of the Treasury	N	21.019	COVID-19 - Coronavirus Relief Fund	Stroud Water Research Center	SWRC 370139-55900	10,345
U.S. Department of the Treasury	N	21.027	COVID-19 - Coronavirus State and Local Fiscal Recovery Funds	COP: Commission on Crime and Delinquency	2022-CV-VI-39809 4300768873	47,003 353,014 13,455
U.S. Department of the Treasury	N	21.027	COVID-19 - Coronavirus State and Local Fiscal Recovery Funds	COP: State Conservation Commission		
U.S. Department of the Treasury	N	21.027	COVID-19 - Coronavirus State and Local Fiscal Recovery Funds	COP: State Conservation Commission	442310369	1,131,885
21.027 Total						47,003 1,498,354
U.S. Department of the Treasury	N1	21.029	COVID-19 - Coronavirus Capital Projects Fund	COP: Dep. Community & Economic Develop.	4300758349	492
U.S. Department of the Treasury	14	21.025	COVID-19 - Colonavirus Capital Flojects Fund	COF. Dep. Community & Economic Develop.	4300730349	492
U.S. Department of the Treasury	N	21.U01	U.S. Department of the Treasury Other	COP: Broadband Development Authority	ADVANCED ACCOUNT REQUEST	(97,943)
U.S. Department of the Treasury	IN	21.001	U.S. Department of the Treasury Office	COF. Broadband Development Additionty	ADVANCED ACCOUNT REQUEST	(91,943)
Appalachian Regional Commission	Y	23.002	Appalachian Area Development			261,776 622,529
Appalachian Regional Commission	N	23.002	Appalachian Area Development	Erie County Redevelopment Authority	279614	19,308
Appalachian Regional Commission	N	23.002	Appalachian Area Development	Tennessee Technological University	BL180447749	48.644
23.002 Total			· +			261,776 690,481
Appalachian Regional Commission	Y	23.U01	Appalachian Regional Commission Other			518,577
"						
General Services Administration	Y	39.U01	General Services Administration Other			308,707
General Services Administration	N	39.U01	General Services Administration Other	COP: Department of General Services	2016-OCC7209	109,016
General Services Administration	N	39.U01	General Services Administration Other	COP: Department of General Services	4300556762	32,838
General Services Administration	N	39.U01	General Services Administration Other	COP: Department of General Services	4300685025	(32,838)
General Services Administration	N	39.U01	General Services Administration Other	COP: Department of General Services	4400016637	2,250
39.U01 Total						- 419,973
National Endowment for the Arts	N	45.024	Promotion of the Arts Grants to Organizations and Individuals	Arts Midwest	2022-1213	19,950
National Endowment for the Arts	N	45.024	Promotion of the Arts Grants to Organizations and Individuals	Mid-Atlantic Arts Foundation	2024-5885	4,900
45.024 Total						- 24,850
National Endowment for the Arts	N	45.025	Promotion of the Arts Partnership Agreements	Mid-Atlantic Arts Foundation	2024-4238	6,600
National Endowment for the Arts	N	45.025	Promotion of the Arts Partnership Agreements	Mid-Atlantic Arts Foundation	2024-4993	4,900
45.025 Total						- 11,500
National Endowment for the Humanities	N	45.162	Promotion of the Humanities Teaching and Learning Resources and Curriculum Devel	The Teagle Foundation	2005501	185,216

THE PENNSYLVANIA STATE UNIVERSITY SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	FOR THE YEAR ENDED JUNE 30, 2024				
Federal Agency	Award ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures Expenditures	
Small Business Administration	N 59.037	Small Business Development Centers	Kutztown University of Pennsylvania	SBA20230106	86,37	
Small Business Administration	Y 59.075	COVID-19 - Shuttered Venue Operators Grants (SVOG), U.S. Small Business Administration			(1,61	
Small Business Administration	N 59.U01	Small Business Administration Other	Kutztown University of Pennsylvania	SBA20240106	96,15	
U.S. Department of Veterans Affairs U.S. Department of Veterans Affairs 64.U01 Total	Y 64.U01 N 64.U01	U.S. Department of Veterans Affairs Other U.S. Department of Veterans Affairs Other	Cathexis Corporation	VAAASCMS-41-PSU-20-0001	56,99 650,81 - 707,81	
Environmental Protection Agency Environmental Protection Agency Environmental Protection Agency Environmental Protection Agency 66.466 Total	N 66.466 N 66.466 N 66.466 N 66.466	Chesapeake Bay Program Chesapeake Bay Program Chesapeake Bay Program Chesapeake Bay Program	Conservation Foundation of Lancaster Cou nty Cumberland County, PA National Fish and Wildlife Foundation National Fish and Wildlife Foundation	260063 PC22-0171 0602.19.065295 0602.23.078392	23,22 4,36 148,656 301,60 26,37 148,656 355,57	
Environmental Protection Agency	N 66.468	Capitalization Grants for Drinking Water State Revolving Funds	COP: Department of Environmental Protect ion	4300775431	43,27	
Environmental Protection Agency	N 66.469	Great Lakes Program	COP: Department of Environmental Protect ion	4300808087	15,41	
Environmental Protection Agency	Y 66.708	Pollution Prevention Grants Program			258,96	
Environmental Protection Agency	N 66.716	Research, Development, Monitoring, Public Education, Outreach, Training, Demonst	eXtension Foundation c/o Grafton & Associates PC	PSEFMP-2024-2417	10,84	
Environmental Protection Agency	N 66.805	Leaking Underground Storage Tank Trust Fund Corrective Action Program	COP: Department of Environmental Protect ion	201912193060	3,17	
Environmental Protection Agency	N 66.964	Geographic Programs Chesapeake Bay Prog Implem, Regulatory Acct Monitoring Grant	COP: Department of Environmental Protect ion	4300782829	40,98	
Environmental Protection Agency Environmental Protection Agency 66.U01 Total	N 66.U01 N 66.U01	Environmental Protection Agency Other Environmental Protection Agency Other	COP: Department of Environmental Protect ion COP: Department of Environmental Protect ion	4300732903 4300744857	4,73 - 4,73	
U.S. Department of Energy U.S. Department of Energy 81.117 Total	Y 81.117 N 81.117	Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Trai Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Trai	COP: Department of Environmental Protect ion	4300788342	269,842 606,70 92,28 269,842 698,99	
U.S. Department of Energy U.S. Department of Energy U.S. Department of Energy 81.U01 Total	Y 81.U01 N 81.U01 N 81.U01	U.S. Department of Energy Other U.S. Department of Energy Other U.S. Department of Energy Other	Pennsylvania College of Technology The Regents of the University of Califor nia	23WTB-PHR 4550 G ZA366	25,91 240,26 66,42 - 332,60	
U.S. Department of Education 84.002 Total	N 84.002 N 84.002 N 84.002 N 84.002 N 84.002 N 84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	099-22-0005 FA-084-24-0025 FA-099-23-0002 FA-099-24-0005 FA-099-24-0005 FA-099-24-0007	350.31 15.015 15.05 19.890 188.13 248,77 51.32 34.905 853.56	
U.S. Department of Education U.S. Department of Education 84.015 Total	Y 84.015 Y 84.015A	National Resource Centers Program for Foreign Language and Area Studies or Forei National Resource Centers (NRC) Program			381,06 267,37 - 648,43	
U.S. Department of Education	N 84.031	Higher Education Institutional Aid	UNIVERSITY OF ARIZONA	596336	1,48	
U.S. Department of Education U.S. Department of Education 84.048 Total	N 84.048 N 84.048	Career and Technical Education Basic Grants to States Career and Technical Education Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education Commonwealth of Pennsylvania Pennsylvania Department of Education	FA-119-23-0001 FA-119-24-0002	(7,87 80,17 - 72,30	
U.S. Department of Education	Y 84.116	Fund for the Improvement of Postsecondary Education			140,88	
U.S. Department of Education 84.126 Total	N 84.126 N 84.126 N 84.126 N 84.126 N 84.126	Rehabilitation Services Vocational Rehabilitation Grants to States	COP: Office of Vocational Rehabilitation	4300772740 4300773751 4300807753 4300808180	326,61 138,83 106,00 63,26 3,073,91 - 3,708,62	
U.S. Department of Education	Y 84.129	Rehabilitation Long-Term Training			57,45	
U.S. Department of Education	N 84.295	Ready-To-Learn Television	Corporation for Public Broadcasting	35470-EDU	60,37	
U.S. Department of Education U.S. Department of Education 84.325 Total	Y 84.325 N 84.325	Special Education - Personnel Development to Improve Services and Results for Ch Special Education - Personnel Development to Improve Services and Results for Ch	Michigan State University	RC114207 - PSU	26,447 537,99 221,08 26,447 759,08	
U.S. Department of Education	Y 84.335	Child Care Access Means Parents in School			260,87	
U.S. Department of Education	Y 84.365	English Language Acquisition State Grants			(3,496) (3,49	
U.S. Department of Education	N 84.425U	COVID-19 - Education Stabilization Fund	Stroud Water Research Center	380245-55900	14,74	
U.S. Department of Education U.S. Department of Education 84.U01 Total	Y 84.U01 N 84.U01	U.S. Department of Education Other U.S. Department of Education Other	Commonwealth of Pennsylvania Pennsylvania Department of Education	524-23-0005	57,95 57,94	
U.S. Department of Health and Human Services	N 93.070	Environmental Public Health and Emergency Response	COP: Department of Health	4300714241	(14	

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

	Direct	FUR THE YEAR E	NDED JUNE 30, 2024		0	
Federal Agency	Award AL	N Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Health and Human Services 93.070 Total	N 93.07	Environmental Public Health and Emergency Response	COP: Department of Health	4300759299		36,512 36,364
U.S. Department of Health and Human Services	Y 93.08	Prevention of Disease, Disability, and Death by Infectious Diseases			68,330	321,477
U.S. Department of Health and Human Services	Y 93.10	7 Area Health Education Centers			818,288	1,051,590
U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.236 Total	N 93.23 N 93.23		PA Coalition for Oral Health PA Coalition for Oral Health	214728 266007 AMENDMENT 3		(1) 14,500 14,499
U.S. Department of Health and Human Services	Y 93.24	1 State Rural Hospital Flexibility Program				535,779
U.S. Department of Health and Human Services	Y 93.24	7 Advanced Nursing Education Workforce Grant Program				529,782
U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.262 Total	N 93.26 N 93.26		Mary Imogene Bassett Hospital Mary Imogene Bassett Hospital	U54OH007542-22PS1 U54OH007542-22PS2		4,112 16,923 21,035
U.S. Department of Health and Human Services	Y 93.30	1 Small Rural Hospital Improvement Grant Program				319,509
U.S. Department of Health and Human Services	N 93.32	3 COVID-19 - Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	COP: Department of Health	4100090875		4,670,348
U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.391 Total	N 93.39 N 93.39		COP: Department of Health COP: Department of Health	4100090128 4100090744	435,160 435,160	160,596 803,195 963,791
U.S. Department of Health and Human Services	Y 93.51	6 COVID-19 - Public Health Training Centers Program			625,353	766,652
U.S. Department of Health and Human Services	N 93.56	3 Child Support Enforcement	COP: Department of Human Services Office of Developmental Programs	4000024443		2,669,332
U.S. Department of Health and Human Services	Y 93.73	2 Mental and Behavioral Health Education and Training Grants				421,434
U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.738 Total	Y 93.73 Y 93.73				133,794 133,794	205,056 274,435 479,491
U.S. Department of Health and Human Services 93.788 Total	N 93.78 N 93.78 N 93.78 N 93.78	3 Opioid STR 8 Opioid STR	COP: Commission on Crime and Delinquency COP: Commission on Crime and Delinquency COP: Commission on Crime and Delinquency COP: Department of Health	2022-OG-OM039136 2023-OG-OM-39136-2 35680 4300784912	121,419 121,419	62,915 220,195 (2,846) 328,554 608,818
U.S. Department of Health and Human Services	N 93.91	2 Rural Health Care Services Outreach, Rural Health Network Development and Small	The Wright Center for Community Health	PSU RCOPR-NAS 2023-1		73,486
U.S. Department of Health and Human Services	Y 93.91	Grants to States for Operation of State Offices of Rural Health				242,102
U.S. Department of Health and Human Services U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.959 Total	N 93.95 N 93.95 N 93.95	Block Grants for Prevention and Treatment of Substance Abuse Block Grants for Prevention and Treatment of Substance Abuse	COP: Commission on Crime and Delinquency COP: Commission on Crime and Delinquency COP: Department of Drug and Alcohol Program	2022-DZ-01-37645 37644 4300703336		150,253 185,257 35,491 371,001
U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.969 Total	Y 93.96 N 93.96		Virginia Commonwealth University	FP00009788_SA008	312,209	884,362 (16,543) 867,819
U.S. Department of Health and Human Services U.S. Department of Health and Human Services U.S. Department of Health and Human Services 93.U01 Total	N 93.U0 N 93.U0 N 93.U0	1 COVID-19 - U.S. Department of Health and Human Services Other	COP: Department of Health National Association of County & City He alth Officials The Pennsylvania Coalition Against Domes tic Violence	4300787769 2023-060903 284050		25,872 544,044 3,198 573,114
U.S. Department of Homeland Security Other Federal Programs Total	N 97.U0	1 U.S. Department of Homeland Security Other	Children's National Medical Center	30007648-11	3,743,357	8,000 57,198,528
Total Federal Expenditures					\$ 111,055,568	\$ 1,509,846,600

THE PENNSYLVANIA STATE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED JUNE 30, 2024

1. BASIS OF PRESENTATION AND ACCOUNTING

The purpose of the Schedule of Expenditures of Federal Awards ("the Schedule") is to present a summary of the activities of The Pennsylvania State University ("the University") for the year ended June 30, 2024, which have been financed by the United States Government. The federal award information is presented in accordance with the provisions of Office of Management and Budget ("OMB") Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* ("Uniform Guidance"). The Schedule is prepared on the accrual basis of accounting.

The University's consolidated financial statements include the operations of Penn State Health and its subsidiaries and The Pennsylvania College of Technology. The Schedule excludes those operations because they receive a separate financial statement audit and a separate Single Audit as required by Uniform Guidance (as applicable).

Expenditures for federal awards are determined using the cost principles contained in Uniform Guidance. Amounts passed through to subrecipients represent amounts paid to a third party for effort performed in support of the University's federal awards.

Because the Schedule presents only a selected portion of the activities of the University, it is not intended to, and does not, present the financial position, results of operations or cash flows of the University.

The University's consolidated financial statements are prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (GAAP). The Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) is the source of Authoritative GAAP. The University's consolidated financial statements include statements of financial position, activities and cash flows. In accordance with FASB ASC requirements, net assets and the changes in net assets are classified as with donor restrictions or without donor restrictions.

Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. Pass-through entity identifying numbers are presented where available.

2. INDIRECT COST RATE

The University has not elected to use the 10% de minimis indirect cost rate.

3. FEDERAL LOAN PROGRAMS

The University administers the following federal loan program:

		Federal Capital Contribution for the Year Ended	Loan Expenditures And	Outstanding Balance at
Title	ALN	June 30, 2024	Disbursements	June 30, 2024
Federal Perkins Loan Program	84.038	\$ -	\$ -	\$ 10,904,946

The above expenditures for the loan programs include disbursements and expenditures such as loans to students and administrative expenditures. The Schedule only includes administrative allowances charged to the loan program.

Schedule of Findings and Questioned Costs

Year Ended June 30, 2024

Section I - Summary of Auditor's Results

Financial Statements				
Type of auditor's report issued:	Unmodified			
Internal control over financial reporting:				
 Material weakness(es) identified? 	Yes <u>X</u> No			
Significant deficiency(ies) identified that are not considered to be material weaknesses?	Yes X None reported			
Noncompliance material to financial statements noted?	Yes X None reported			
Federal Awards				
Internal control over major programs:				
Material weakness(es) identified?	X YesNo			
 Significant deficiency(ies) identified that are not considered to be material weaknesses? 	X Yes 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 Section 2 CFR 200.516(a)?	XYesNo			
Identification of major programs:				
Assistance Listing Number Name of Federal Progr	ram or Cluster			
84.007, 84.033, 84.038, 84.063, and 84.268 Student Financial Assistance Cluster Various Research and Development Cluster 93.323 Epidemiology and Laboratory Capacity for Infecti	ous Diseases (ELC)			
Dollar threshold used to distinguish between type A and type B programs: \$4,529,540				
Auditee qualified as low-risk auditee?	Yes <u>X</u> No			

Section II - Financial Statement Audit Findings

None

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2024

Section III - Federal Program Audit Findings

Reference Number	Finding
2024-001	Assistance Listing Number, Federal Agency, and Program Name - 93.323, U.S. Department of Health and Human Services, Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)
	Federal Award Identification Number and Year - NU50CK000527 - 2023 and 2024
	Pass-through Entity - Commonwealth of Pennsylvania Department of Health
	Finding Type - Material weakness and material noncompliance with laws and regulations
	Repeat Finding - No
	Criteria - Pursuant to 2 CFR 180.300, before entering into covered transactions with contractors, the University is required to confirm that the entities it intends to do business with are not excluded or disqualified using one of three prescribed ways, including checking SAM.gov for exclusions.

Condition - The University's policy is to check SAM.gov for exclusions prior to entering into transactions that are subject to 2 CFR 180.300. During the year, there were certain contractors that the University paid (using federal funds) in advance of the SAM.gov check being completed.

Questioned Costs - None

Identification of How Questioned Costs Were Computed - All contractors tested were confirmed to not be suspended or debarred.

Context - Of the four contractors tested, the University did not check SAM.gov before entering into a covered transaction with two contractors.

Cause and Effect - The University uses a third-party service provider to perform SAM.gov checks. During the year, this part of the vendor onboarding process was not completed timely by the third party for certain vendors because of limitations in the agreement between the service provider and the University. This award is administered by the College of Medicine, which did not have controls in place to ensure that the check was completed prior to incurring expenses and paying contractors.

Recommendation - The University needs to implement controls to ensure that the requirements of 2 CFR 180.300 are met before entering into a covered transaction.

Views of Responsible Officials and Planned Corrective Actions - The University concurs with the audit finding. To strengthen procurement controls, the College of Medicine's procurement operations will put procedures in place to ensure vendors are reviewed in SAM.gov prior to processing transactions subject to 2 CFR 180.300.

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2024

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2024-002	Assistance Listing Number, Federal Agency, and Program Name - R&D Cluster - All awards
	Federal Award Identification Number and Year - R&D Cluster - See SEFA for details
	Pass-through Entity - R&D Cluster - See SEFA for details
	Finding Type - Significant deficiency
	Repeat Finding - No
	Critoria Per 2 CEP 200 303(a) a nonfederal entity must establish document and maintain

Criteria - Per 2 CFR 200.303(a), a nonfederal entity must establish, document, and maintain effective internal control over the federal award that provides reasonable assurance that the recipient or subrecipient is managing the federal award in compliance with federal statutes, regulations, and the terms and conditions of the federal award. These internal controls should align with the guidance in *Standards for Internal Control in the Federal Government*, issued by the Comptroller General of the United States, or the *Internal Control - Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Condition - One of the internal controls that the University designed relates to ensuring that personnel expenses charged to federal grants are accurate through effort certifications that are completed at least annually. This control was not operating effectively during the year ended June 30, 2024, as certain effort certifications were not completed timely.

Questioned Costs - None

Identification of How Questioned Costs Were Computed - No unallowable costs were identified related to the testing completed.

Context - The breakdown in controls was identified by management. There were several grants within the R&D Cluster that did not have effort certifications, which are typically performed through a workflow, completed during the year.

Cause and Effect - The University's control was ineffective, as it allowed effort certifications to remain outstanding with no detective control to ensure that the certifications were completed timely, resulting in numerous effort certifications that were completed well after the time that would be effective for identifying any adjustments to federal payroll expenditures that would need to be made. As a result, effort certifications were not completed timely.

Recommendation - We recommend implementing a control to ensure that all effort certifications are completed within an effective time frame.

The Pennsylvania State University

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2024

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2024-002 (Cont.)	Views of Responsible Officials and Planned Corrective Actions - The University concurs with the audit finding.
	The University has maintained a compliant effort certification system for decades. Our leadership remains wholly committed to addressing the concerns that were brought to our attention last fall.
	The FY 2024 annual effort certification process was launched on July 25, 2024. All business areas were informed at that time that effort confirmation is a "critical financial responsibility" and that final approvals were to be secured by September 30, 2024.
	It was brought to leadership's attention that several effort reports were not timely certified. This was investigated by our Research Accounting Office in accordance with the University's policy. As a result of frequent follow-up, by the end of October 2024, virtually all such effort reports were resolved. A small number of such effort reports was certified later in fall 2024, generally due to system errors and/or special challenges associated with personnel changes.

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2024

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2024-003	Assistance Listing Number, Federal Agency, and Program Name - R&D Cluster:
	12.RD, U.S. Department of Defense, Unidentified
	 12.351, U.S. Department of Defense, Scientific Research - Combating Weapons of Mass Destruction
	20.701, U.S. Department of Transportation, University Transportation Centers Program
	 93.847, U.S. Department of Health and Human Services, Diabetes, Digestive, and Kidney Diseases Extramural Research
	93.866, U.S. Department of Health and Human Services, Aging Research
	Federal Award Identification Number and Year -
	• 12.RD: N0002420F8355, 2022
	• 12 351: HDTRA1-20-2-0002 2020

12.351: HDTRA1-20-2-0002, 2020

20.701: 69A3551847103, 2019

• 93.847: 1 U01 DK127384-01, 2023

93.866: 1 U2C AG060408-01, 2024

Pass-through Entity - N/A - All direct funded awards

Finding Type - Significant deficiency

Repeat Finding - No

Criteria - As outlined in 2 CFR 200.305(b)(3), for recipients and subrecipients other than states, payment methods must minimize the time elapsing between the transfer of funds from the federal agency or the pass-through entity and the disbursement of funds by the recipient or subrecipient, regardless of whether the payment is made by electronic funds transfer or by other means. Further, when the reimbursement method is used for payment, organizations must make a payment within 30 calendar days after receipt of the billing unless the federal awarding agency or pass-through entity reasonably believes the request to be improper.

Condition - The University did not have adequate controls in place to ensure invoices to subrecipients were paid timely within the 30-calendar-day requirement.

Questioned Costs - None

Identification of How Questioned Costs Were Computed - There were no questioned costs identified.

Context - Out of 40 payments to subrecipients that were tested, 16 were made after the 30-calendar-day requirement. In all samples tested, payment was made to the subrecipient; however, the delayed payments ranged from 39 to 441 days between the invoice being received by the University and payment being made to the subrecipient.

The Pennsylvania State University

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2024

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2024-003 (Cont.)	Cause and Effect - The University's controls are not designed to ensure payment for all subrecipients was made in accordance with the 2 CFR 200.305(b)(3).
	Recommendation - The University should implement a control to ensure that payments made to subrecipients are completed within the 30-calendar-day requirement.
	Views of Responsible Officials and Planned Corrective Actions - The University concurs with the audit finding and is already implementing stronger internal controls to ensure its subrecipients are paid timely.

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2024

Section III - Federal Program Audit Findings (Continued)

Reference	
Number	Finding
-	

2024-004 Assistance Listing Number, Federal Agency, and Program Name - R&D Cluster:

- 10.203, U.S. Department of Agriculture, Payments to Agricultural Experiment Stations Under the Hatch Act
- 47.049, National Science Foundation, Mathematical and Physical Sciences

Federal Award Identification Number and Year -

- 10.203: N/A Ag Federal, 2023
- 47.049: DMR-2011839, 2020

Pass-through Entity - N/A

Finding Type - Significant deficiency

Repeat Finding - No

Criteria - Pursuant to 2 CFR 180.300, before entering into covered transactions with contractors, the University is required to confirm that the entities it intends to do business with are not excluded or disqualified using one of three prescribed ways, including checking SAM.gov for exclusions.

Condition - The University's policy is to check SAM.gov for exclusions prior to entering into transactions that are subject to 2 CFR 180.300. During the year, there were certain contractors that the University paid (using federal funds) in advance of the SAM.gov check being completed.

Questioned Costs - None

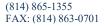
Identification of How Questioned Costs Were Computed - The contractors tested were confirmed to not be suspended or debarred.

Context - Of the 37 contractors tested, the University did not check SAM.gov before entering into a covered transaction with 1 contractor. Additionally, for 1 other contractor, the University was not able to provide evidence that the SAM.gov check was completed before entering into transactions with that contractor.

Cause and Effect - The University uses a third-party service provider to perform SAM.gov checks. During the year, this part of the vendor onboarding process was not completed timely by the third party for certain vendors because of limitations in the agreement between the service provider and the University. A secondary control that is in place for the University to complete the SAM.gov check by manually going out to the website to confirm that the contractor is not suspended or debarred was not operating effectively.

Recommendation - The University needs to implement controls to ensure that the requirements of 2 CFR 180.300 are met before entering into a covered transaction.

Views of Responsible Officials and Corrective Action Plan - The University concurs with the audit finding; however, the University's Office of Central Procurement has established procedures in place requiring vendor checks in SAM.gov before processing transactions subject to 2 CFR 180.300. The identified instances were isolated occurrences.





The Pennsylvania State University 308 Old Main University Park, PA 16802-1505

The Pennsylvania State University Summary Schedule of Prior Audit Findings June 30, 2024

Prior Year Finding Number:

2023-001

Fiscal Year in Which the Finding Initially Occurred:

2023

Finding Type:

Financial statement finding

Original Finding Description:

Certain net asset funds within net assets without donor restrictions should have been classified as net assets with donor restrictions on the statements of financial position and activities, as the University's process for reporting donor gifts at the time of receipt did not consider all donor restrictions. As a result, the University moved \$442 million from net assets without donor restrictions to net assets with donor restrictions due to review of donor documentation and other support. This change effectively restated beginning net assets by classification. Total net assets remained unchanged.

Status/Partial Corrective Action (as applicable):

Fully corrected

Planned Corrective Action:

N/A

Prior Year Finding Number:

2023-002

Fiscal Year in Which the Finding Initially Occurred:

2023

Federal Program, Assistance Listing Number and Name:

Student Financial Assistance Cluster – Federal Pell Grants ALN 84.063 and Direct Student Loan Program ALN 84.268

Original Finding Description:

The University did not report certain students' status changes timely to the National Student Loan Data System (NSLDS). Of the 40 students tested, the University did not report status changes timely to NSLDS for six students who withdrew, ceasing to be enrolled on at least a half-time basis. For all six students, accurate status changes were reported within 75 days of the effective date.

Status/Partial Corrective Action (as applicable):

Fully corrected

Planned Corrective Action:

N/A

Prior Year Finding Number:

2023-003

Fiscal Year in Which the Finding Initially Occurred:

2023

Federal Program, Assistance Listing Number and Name:

Student Financial Assistance Cluster – Federal Pell Grants ALN 84.063 and Direct Student Loan Program ALN 84.268

Original Finding Description:

The University did not return all Title IV funds in a timely manner due to a lack of communication and review. The University identified all returns that should have been calculated during the fiscal year and performed the calculation for amounts not returned, resulting in questioned costs of \$485,231. Of the 60 students tested, for six students, the University did not calculate the required return in a timely manner and did not return funds to the Department of Education within the required time frame. All Title IV funds that were required to be returned were returned as of December 14, 2023.

Status/Partial Corrective Action (as applicable):

Fully corrected

Planned Corrective Action:

N/A



The Pennsylvania State University 308 Old Main University Park, PA 16802-1505

The Pennsylvania State University Corrective Action Plan June 30, 2024

Finding Number: 2024-001, 93.323 Procurement Suspension and Debarment Checks

Condition: The University's policy is to check sam.gov for exclusions prior to entering into transactions that are subject to 2 CFR 180.300. During the year, there were certain contractors that the University paid (using federal funds) in advance of the sam.gov check being completed.

Planned Corrective Action: The College of Medicine's procurement operations will perform compliance checks to ensure vendors are reviewed in SAM.gov prior to processing transactions subject to 2 CFR 180.300.

The College of Medicine will implement a procedure requiring vendor checks in SAM.gov during the purchase requisition phase for applicable transactions. Once the purchase requisition identifies grant funding, the procurement office will ensure venders are reviewed in SAM.gov prior to processing. These checks will be documented and retained with the corresponding purchase requisition files before submission to the Office of Budget and Finance for payment.

For new vendors, before being created in Penn State's Financial ERP system, a check will be made in SAM.gov to ensure compliance.

Contact person responsible for corrective action: Sharon Sowers, Financial Manager

Anticipated Completion Date: June 30, 2025



The Pennsylvania State University 308 Old Main University Park, PA 16802-1505

The Pennsylvania State University Corrective Action Plan June 30, 2024

Finding Number: 2024-002, Effort Certification

Condition: One of the internal controls that the University has designed related to ensuring that personnel expenses charged to federal grants were accurate is an effort certification that is completed at least annually. This control was not operating effectively during the year ended June 30, 2024, as certain effort certifications were not completed timely.

Planned Corrective Action: Penn State raised awareness of the late effort certification issue at various committee and council meetings during Fall 2024 and enforced compliance with our existing policy. These meetings involve research leadership at all colleges, such as Associate Deans for Research, College Research Administration Officers, and College Financial Officers. Penn State followed its policy on overdue effort certifications, and we have implemented additional internal controls in the process.

The University's Office of the Senior Vice President for Research has restructured oversight of effort certification, along with many other post award financial matters, to a newly created office, Post Award Contractual Compliance (PACC). This office includes the existing Research Accounting Office (which was part of the Office of Budget and Finance prior to July 1, 2024), and Penn State has hired an Assistant Vice President to oversee this team. A new suboffice, led by a new director, within PACC is the Financial Analysis and Compliance Office (FACO), which is responsible for central oversight and training over the effort certification process. This office has recently created a new dashboard to monitor the completion of effort certifications and works closely with business units within Penn State to ensure timely completion via sending out reminders, holding meetings, and providing training on the process.

Contact person responsible for corrective action: John Hanold, Associate Vice President for Research; Director, Office of Research Administrative Services

Anticipated Completion Date: June 30, 2025



The Pennsylvania State University 308 Old Main University Park, PA 16802-1505

The Pennsylvania State University Corrective Action Plan June 30, 2024

Finding Number: 2024-003, Subrecipient Payments

Condition: The University did not have adequate controls in place to ensure invoices to subrecipients were paid timely within the 30-calendar-day requirement.

Planned Corrective Action: Penn State has created a new Subaward Administration and Compliance Office (SACO), which is part of the new Post Award Contractual Compliance Office. The SACO is led by its own director and will provide central oversight over key subaward compliance processes, such as subrecipient payments, and provide training to campus on subrecipient processes. This function has previously not existed in a central office at Penn State. The creation of this office demonstrates Penn State's commitment to compliance for subaward activities.

Contact person responsible for corrective action: John Hanold, Associate Vice President for Research; Director, Office of Research Administrative Services

Anticipated Completion Date: June 30, 2025



The Pennsylvania State University 308 Old Main University Park, PA 16802-1505

The Pennsylvania State University Corrective Action Plan June 30, 2024

Finding Number: 2024-004, R&D Procurement Suspension and Debarment Checks

Condition: The University's policy is to check sam.gov for exclusions prior to entering into transactions that are subject to 2 CFR 180.300. During the year, there were certain contractors that the University paid (using federal funds) in advance of the sam.gov check being completed.

Planned Corrective Action: To prevent future exceptions, the University's Office of Central Procurement has implemented, and will continue to provide, semi-annual refresher training for all buyers. This training reinforces the importance of vendor checks and proper retention of documentation within the purchase order files. The initial refresher session was conducted in March 2025.

Contact person responsible for corrective action: Duane Elmore, Chief Procurement Officer

Anticipated Completion Date: March 31, 2025