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

**The Pennsylvania State University
Fiscal Year Ended June 30, 2023**

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, 2023

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Financial Overview

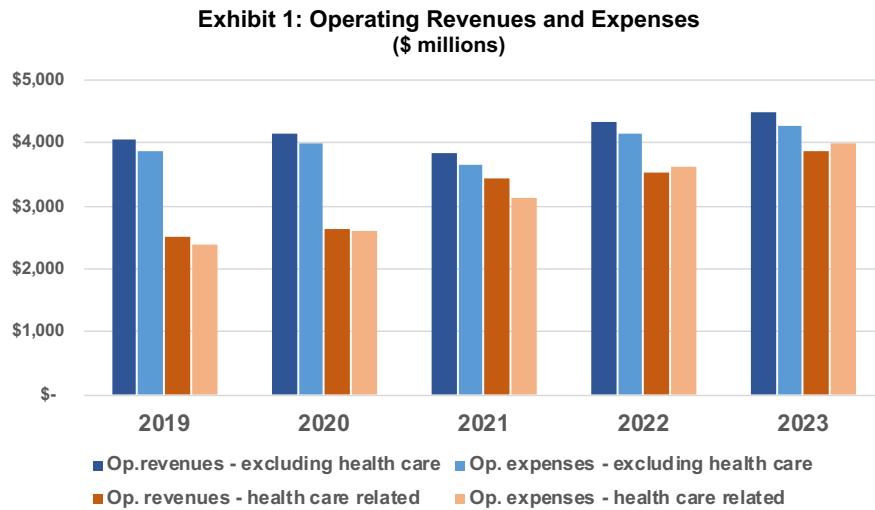
The following section provides summarized results of the financial performance and position of the Pennsylvania State University (“Penn State”, or the “University”), and as a result it should be read alongside the accompanying consolidated financial statements and notes to the financial statements. All 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 \$361 million during the fiscal year ended June 30, 2023 (FY2023), from growth in certain operating revenues, budgetary restraint of operating expenses, and a decline in the valuation of the University’s post-retirement liability. A condensed view of the consolidated statement of activities follows:

Condensed Statements of Activities (\$ millions)		
	2023	2022
Operating revenues		
University – excluding health care related	\$4,488	\$4,339
Health care related	3,867	3,529
Total	8,355	7,868
Operating expenses		
University – excluding health care related	4,272	4,155
Health care related	3,997	3,615
Total	8,269	7,770
Operating income (loss)		
University – excluding health care related	216	184
Health care related	(130)	(86)
Total	86	98
Nonoperating activities		
Related to postretirement benefit expense	211	567
Related to investments	68	(816)
Other	65	122
Total	344	(127)
Increase (decrease) in net assets – Penn State University	430	(29)
Less change in noncontrolling interest	(69)	15
Increase (decrease) in total net assets	361	(14)
Beginning net assets	12,393	12,407
Ending net assets	\$12,754	\$12,393

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

University operating revenues (excluding healthcare related revenues) increased by \$149 million, or 3.4%, in FY2023, with the most significant increases occurring in net tuition/fee revenues (increase of \$80 million, or 4.3%) and auxiliary enterprises (increase of \$58 million, or 11.9%, primarily in housing / food service and athletics).

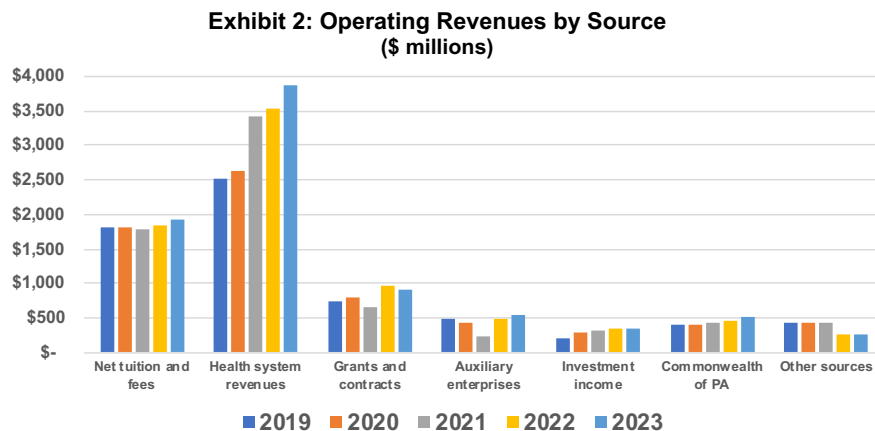
The Board of Trustees approved tuition increases for the 2022-23 academic year of 5% and 6% for University Park campus resident and nonresident undergraduates, respectively, and 2% and 3% for Commonwealth Campus resident and nonresident undergraduates, respectively. The Board also approved a 5% tuition increase for World Campus students and a 6% increase for graduate and professional students, regardless of campus or residency status.

University federal grants and contracts revenues decreased by \$93 million in FY2023, or 11.3%, due to COVID-related funding of \$150 million received in FY2022 that was not awarded in FY2023.

Health system operating revenues increased by \$338 million, or 9.6%, in FY2023. Penn State Health recognized consolidated net patient service revenue of \$3.4 billion for the year ended June 30, 2023, which increased approximately \$203.5 million, or 6.3%, from FY2022. This increase was primarily due to the full year of Hampden Medical Center, which opened in October 2021, and the addition of Lancaster Medical Center which opened October 2022. Consolidated net patient service revenue reflects amounts recognized from all other payors and patients.

Health system other income decreased \$35.1 million, or 10%, in FY2023, mainly due to the lack of COVID-related provider relief funds which were recognized during 2022.

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



Operating Expenses

University operating expenses (excluding healthcare related expenses) increased by \$117 million, or 2.8%, in FY2023, with most of the increase attributable to personnel costs (increase of \$161 million, or 6%). The growth in personnel costs is due to an across-the-board general salary increase of 2.5%, a modest increase in net FTEs, and increased benefits expense. Depreciation and interest expense increased \$24 million and \$9 million, respectively, while other non-personnel expenses decreased by \$80 million, or 7.5%.

Health system operating expenses increased by \$382 million, or 10.6%, in FY2023. Personnel cost increased by \$216.7 million, or 10.7%, primarily due to the full year of Hampden Medical Center (opened in October 2021) and the addition of Lancaster Medical Center in October 2022. During FY2023, Penn State Health also implemented staff salary increases, retention bonuses, and sign on bonuses to remain competitive in the local market and address staffing challenges. Additionally, Penn State Health purchased services increased by \$51.4 million, or 11.5%; contracted labor for clinical providers and physicians is the major driver of this increase. Lastly, interest expense increased by \$25.4 million, reflecting the interest on both Hampden and Lancaster Medical Center bonds.

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

Exhibit 3: Operating Expenses by Natural Classification
(\$ millions)

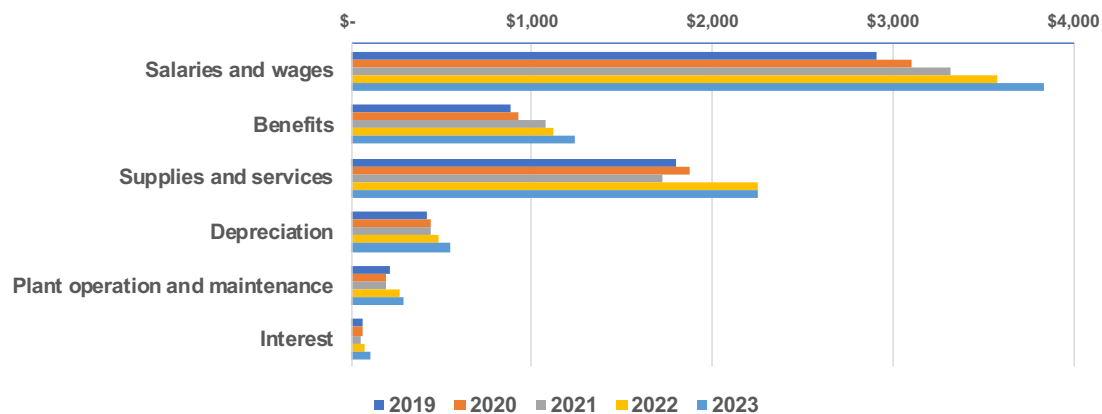
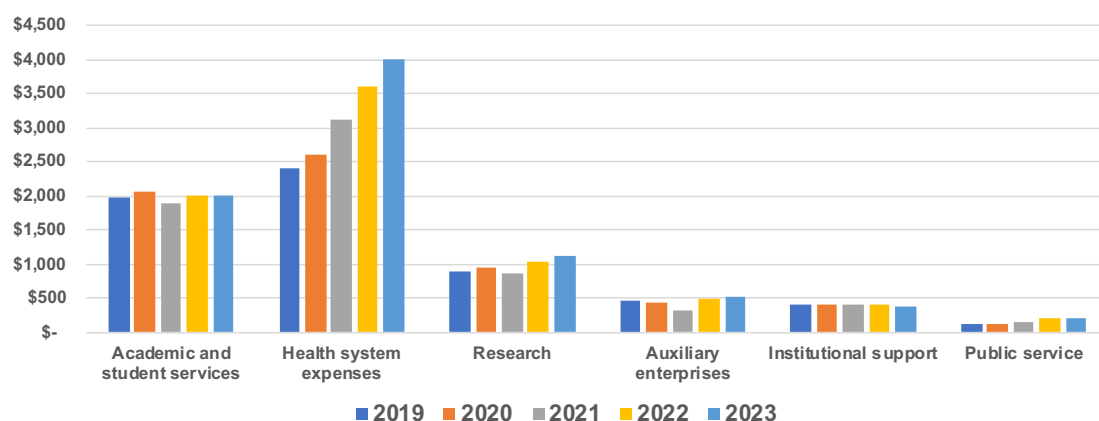


Exhibit 4: Operating Expenses by Function
(\$ millions)



(Note: FY2021 operating expenses in exhibit 4 include adjustments not included in audited financial statements)

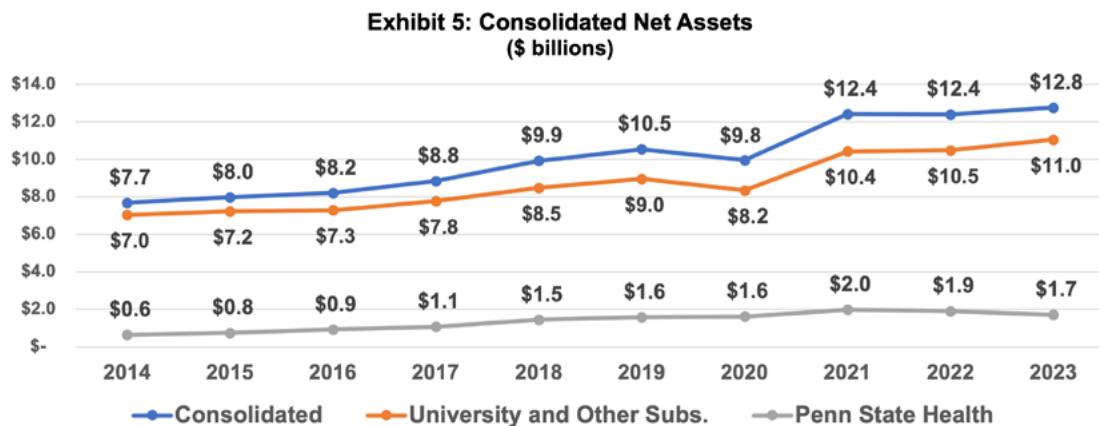
Non-Operating Activities

Penn State's increase in net assets in FY2023 is attributable largely to positive non-operating revenues, including non-operating investment return and favorable adjustments to the post-retirement liability. Favorable premium adjustments and resulting future claims assumptions alongside rising interest rates had the combined effect of lowering the valuation of the University's post-retirement liability by \$250 million, of which \$211 million is reflected as non-operating revenue.

FINANCIAL POSITION

Penn State's assets totaled \$19.7 billion at June 30, 2023, increasing by \$264 million, or 1.4%, during FY2023. On the other side of the balance sheet, Penn State's liabilities totaled \$7.0 billion at June 30, 2023, decreasing by \$97 million, or -1.4%, during FY2023.

Over the last ten fiscal years, Penn State's consolidated net assets have grown at an annualized rate of 5.8%. Exhibit 5 illustrates ending consolidated net asset balances for the last ten fiscal years.



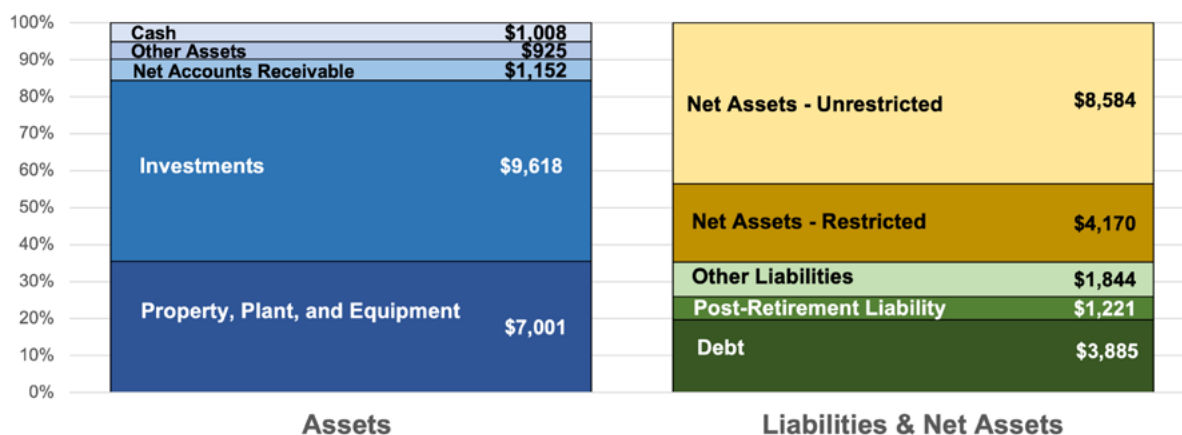
As described more fully in note two to the financial statements, the University restated beginning net assets for FY2022 (i.e. net assets as of July 1, 2021) and certain FY2022 activity to correct for certain errors related to the classification of net assets. While net assets *in total* were not adjusted as part of this restatement, \$442.3 million was reclassified from without donor restrictions to with donor restrictions as of June 30, 2021; ending FY2022 net assets were adjusted by \$477.6 million from what was previously reported. The funds reclassified and now presented with donor restrictions include (1) commitments made by the University (from institutional reserves) to match donor contributions, (2) funds formed from pooled donor contributions for specific purposes that have been invested long-term at the decision of the University, and (3) unspent distributions from donor-restricted endowments.

A condensed version of Penn State's statement of financial position follows, along with a graphical representation of the consolidated statement of financial position at June 30, 2023 in exhibit 6.

Condensed Statements of Financial Position
(\$ millions)

	June 30, 2023	June 30, 2022
Assets		<i>(Restated)</i>
Cash and cash equivalents	\$1,008	\$1,058
Receivables, net	1,152	1,070
Investments	9,618	9,596
Property, plant, and equipment, net	7,001	6,886
Other assets	925	830
Total assets	\$19,704	\$19,440
Liabilities		
Accounts payable and accrued expenses	\$932	\$984
Debt	3,885	3,769
Accrued post-retirement liability	1,221	1,471
Other liabilities	912	823
Total liabilities	6,950	7,047
Net Assets		
Without donor restrictions	8,584	8,379
With donor restrictions	4,170	4,014
Total net assets	12,754	12,393
Total liabilities and net assets	\$19,704	\$19,440

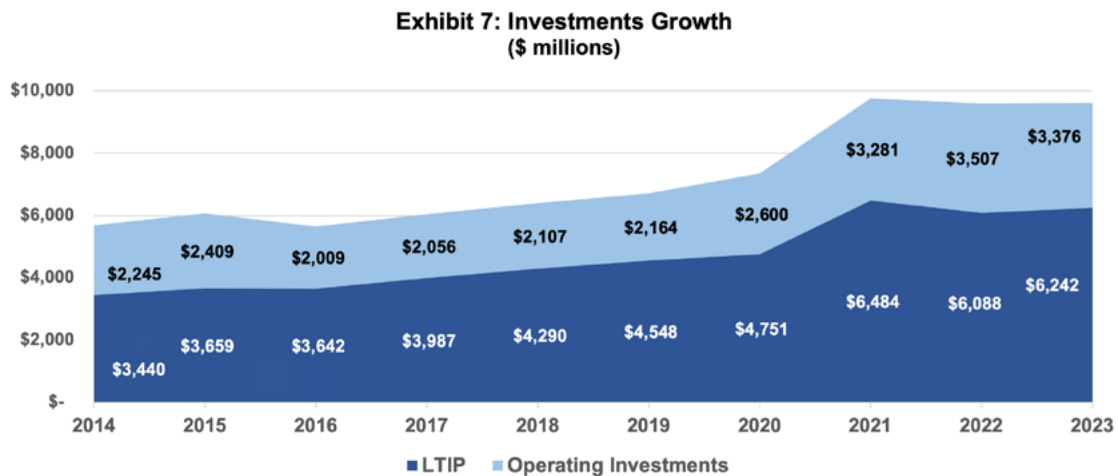
Exhibit 6: Consolidated Financial Position at June 30, 2023
(\$ millions)



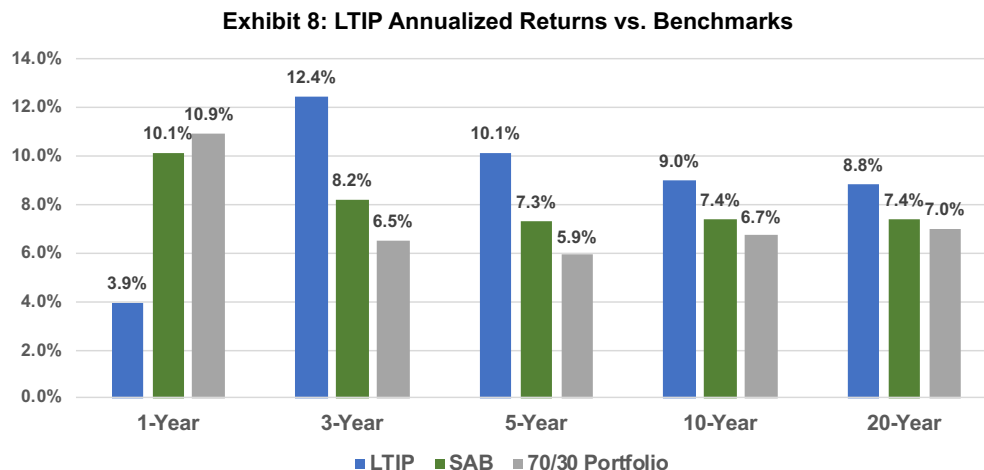
INVESTMENTS

The 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 on the University's investment policy statement, striving for desired risk-adjusted returns to fund short, medium, and long-range liquidity needs.

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.



The LTIP had a one-year return of 3.9% in FY2023 and annualized 3-, 5-, 10-, and 20-year returns of 12.4%, 10.1%, 9.0%, and 8.8%, 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).



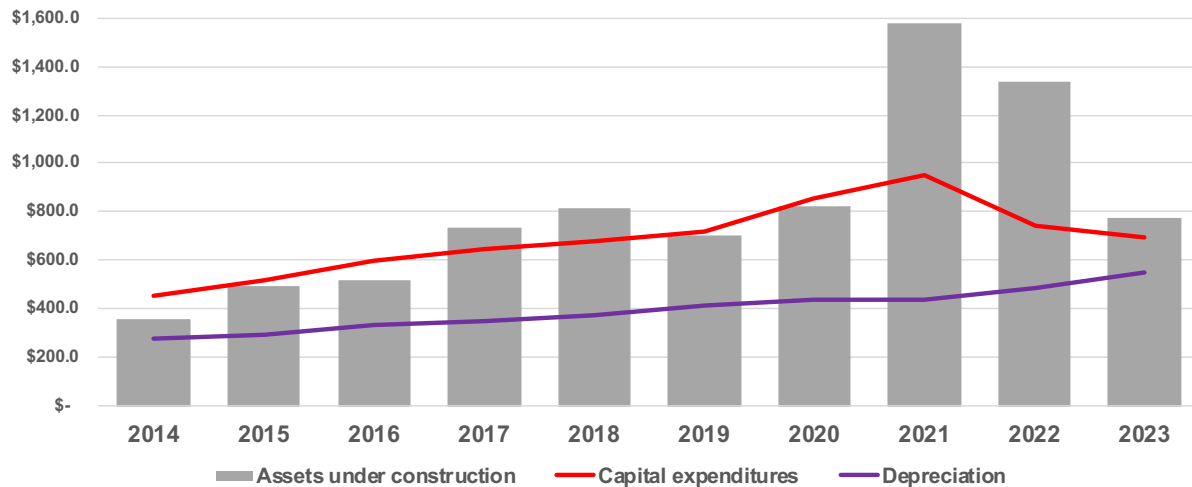
¹ SAB consists of index returns representing the following asset classes: public equities (46%), private equity (20%), fixed income (10%), diversifying strategies (12%), and real assets (12%).

CAPITAL ASSETS AND DEBT

In FY2023 the University is nearing the end of a multi-year capital plan, with capital expenditures exceeding \$3.9 billion over the last five years (including outlay for equipment). As of June 30, 2023, there are assets under construction (or *construction in progress*) of \$771 million, down from a peak of over \$1.5 billion at the end of FY2021.

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

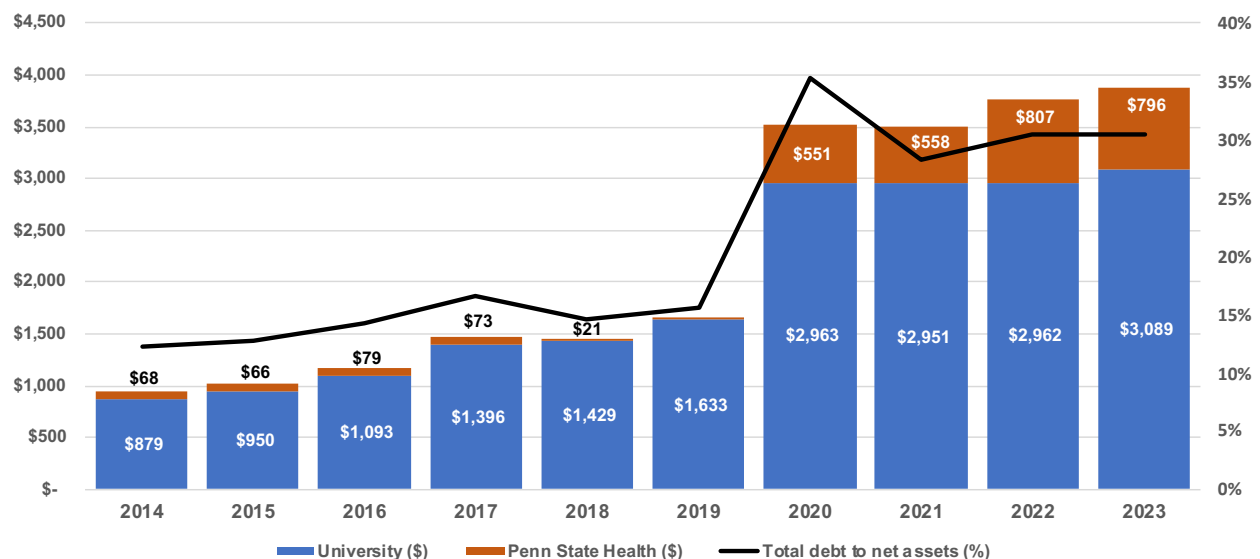
Exhibit 9: Assets Under Construction, Capital Expenditures, and Depreciation
(\$ millions)



Major capital expenditures in FY2023 included over \$379 million in building construction costs, with the new College of Engineering West building as the highest single project (\$62 million in FY2023, \$117 million total since commencement of project). Improvements to land and infrastructure totaled \$25 million in FY2023, and spend on equipment and information technology capital assets totaled \$82 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 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 FY2023 and FY2022). 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)

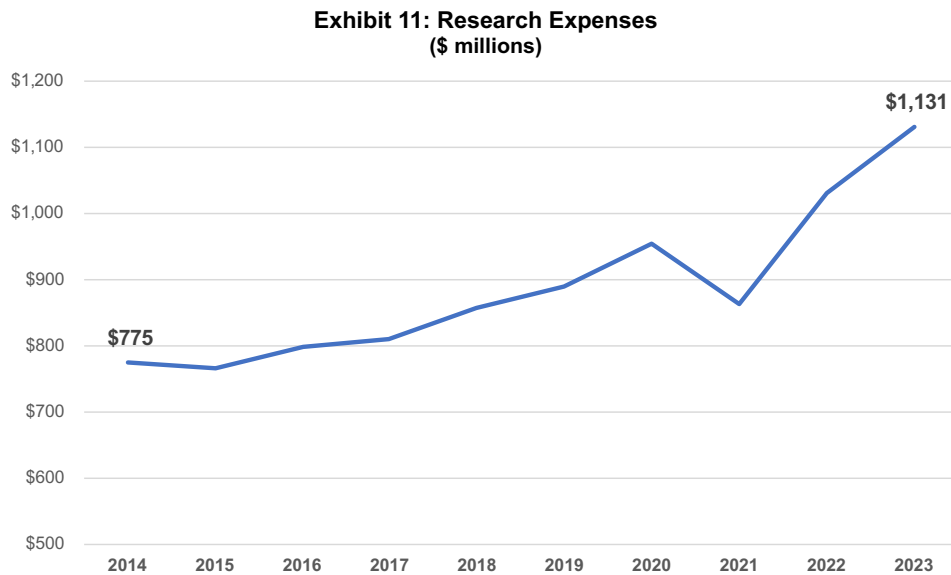


The University issued new tax-exempt bonds in June of 2023 (series 2023) in the amount of \$204 million, par, plus a premium of \$27 million, for total proceeds of \$231 million; the all-in cost of capital for the series 2023 bonds is 4.15%. The series 2023 bonds were issued to finance all or a portion of the costs of remaining East Halls renovations, Beaver Stadium renovations, construction and equipping of the Susan Welch Liberal Arts Building, and several other capital projects at University Park and at various Commonwealth Campuses.

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.

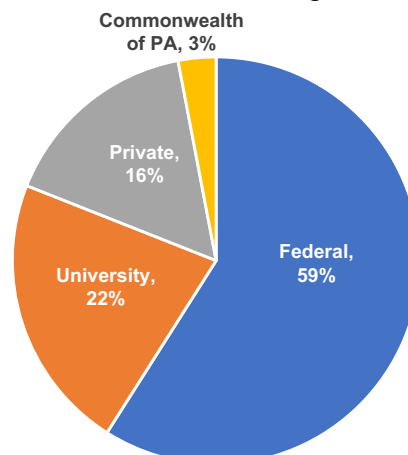
Exhibit 11 illustrates the growth in research expenditures over the last ten fiscal years.



Over the last ten years, research expenditures have grown at an annualized rate of 4.3%; the annualized growth since fiscal year 2021, however, is 14.4%, with FY2023 research spend exceeding \$1.1 billion.

The University's research expenditures 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 FY2023 research funding follows in exhibit 12.

Exhibit 12: Research Funding in FY2023



LOOKING AHEAD

New Budget Model

Beginning with fiscal year 2024, Penn State has rolled out a new, data-driven education and general funds budget allocation model. The University also developed all funds budgets for fiscal years 2024 and 2025, which have been approved by the Board of Trustees.

2024-2028 Capital Plan

The University's 2024-2028 Capital Plan is a maintenance-centric plan focused on system renewals and projects that support student success and enrollment. This plan – totaling \$2.2 billion – is a smaller investment in University general funds resources than the previous capital plan from a sheer dollars perspective, but it includes crucial updates to address aging campus facilities, infrastructure, and building systems.

Presidential Vision and Goals

President Neeli Bendapudi has established a vision for Penn State defined by building steadfastly on Penn State's purpose, enabling agility across the institution to respond to ever-changing needs, and leveraging the University's many strengths to realize strategic opportunities. The University will be working on the following strategic goals over the next five years.

- Enhance student success
- Grow interdisciplinary research excellence
- Increase Land-Grant impact
- Foster diversity, equity, inclusion, and belonging
- Transform internal operations
- Transform health through academic and clinical synergy

Independent Auditor's Report

To the Board of Trustees
The Pennsylvania State University

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of The Pennsylvania State University and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2023 and the related consolidated statements of activities and cash flows for the year 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, 2023 and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated 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 audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Report on Prior Year Consolidated Financial Statements and Restatement

The consolidated financial statements of the University as of June 30, 2022 were audited by other auditors, who expressed an unmodified opinion on those consolidated financial statements on November 21, 2022 prior to the restatement described in Note 2.

As part of our audit of the 2023 consolidated financial statements, we also audited the adjustments described in Note 2 that were applied to restate the 2022 consolidated financial statements. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2022 consolidated financial statements of the University other than with respect to the adjustments, and, accordingly, we do not express an opinion or any other form of assurance on the 2022 consolidated financial statements as a whole.

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.

To the Board of Trustees
The Pennsylvania State University

Auditor's Responsibilities for the Audit 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 an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the 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 audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of 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 audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Information

Management is responsible for the accompanying financial overview, which is presented for the purpose of additional analysis and is 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 9, 2023 on our consideration of The Pennsylvania State 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 Pennsylvania State 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 Pennsylvania State University's internal control over financial reporting and compliance.

Alente & Moran, PLLC

November 9, 2023

Consolidated Financial Statements

THE PENNSYLVANIA STATE UNIVERSITY
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
ASSETS
JUNE 30, 2023 AND 2022
(in thousands)

	June 30, 2023	June 30, 2022
Current assets:		
Cash and cash equivalents	\$ 1,007,504	\$ 1,058,303
Short-term investments	1,560,597	1,549,884
Deposits held by bond trustees	212,274	91,521
Deposits held for others	38,012	34,460
Accounts receivable, net of allowances	940,216	846,172
Contributions receivable, net	47,701	40,306
Loans to students, net of allowances	3,264	3,952
Inventories	90,572	85,662
Prepaid expenses and other assets	110,579	127,277
Total current assets	4,010,719	3,837,537
Noncurrent assets:		
Deposits held by bond trustees	56,215	100,097
Contributions receivable, net	136,385	152,443
Loans to students, net of allowances	25,474	28,052
Total investment in plant, net	7,001,411	6,885,672
Beneficial interest in perpetual trusts	28,117	26,240
Investments	8,057,417	8,045,673
Operating lease right-of-use assets, net	164,769	172,590
Other assets	223,789	191,385
Total noncurrent assets	15,693,577	15,602,152
Total assets	\$ 19,704,296	\$ 19,439,689

See notes to consolidated financial statements

THE PENNSYLVANIA STATE UNIVERSITY
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
LIABILITIES AND NET ASSETS (as restated)
JUNE 30, 2023 AND 2022
(in thousands)

	June 30, 2023	<i>(as restated)</i> June 30, 2022
Current liabilities:		
Accounts payable and other accrued expenses	\$ 932,120	\$ 984,226
Deferred revenue	216,382	180,066
Long-term debt	116,498	110,633
Present value of annuities payable	7,871	7,720
Accrued postretirement benefits	53,408	54,119
Refundable United States Government student loans	3,078	3,898
Operating lease liabilities	26,393	21,442
Total current liabilities	1,355,750	1,362,104
Noncurrent liabilities:		
Deposits held in custody for others	27,962	22,269
Deferred revenue	-	563
Long-term debt	3,769,425	3,658,417
Present value of annuities payable	59,702	56,275
Accrued postretirement benefits	1,167,601	1,417,337
Refundable United States Government student loans	13,103	17,233
Operating lease liabilities	144,114	150,800
Other liabilities	412,420	362,071
Total noncurrent liabilities	5,594,327	5,684,965
Total liabilities	6,950,077	7,047,069
Net assets:		
Without donor restrictions	8,584,561	8,379,319
With donor restrictions	4,169,658	4,013,301
Total net assets	12,754,219	12,392,620
Total liabilities and net assets	\$ 19,704,296	\$ 19,439,689

See notes to consolidated financial statements

THE PENNSYLVANIA STATE UNIVERSITY
CONSOLIDATED STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2023
(in thousands)

	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
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, as restated	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

See notes to consolidated financial statements

THE PENNSYLVANIA STATE UNIVERSITY
CONSOLIDATED STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2022 (as restated)
(in thousands)

	Without Donor Restrictions	With Donor Restrictions	Total
Operating revenues and other support:			
Tuition and fees, net of discounts of \$258,744	\$ 1,837,714	\$ -	\$ 1,837,714
Commonwealth of Pennsylvania -			
Appropriations	323,792	-	323,792
Special contracts	81,408	-	81,408
Department of General Services projects	50,023	-	50,023
United States Government grants and contracts	829,026	-	829,026
Private grants and contracts	141,371	-	141,371
Gifts and pledges	92,849	27,237	120,086
Investment return, net	221,938	112,439	334,377
Sales and services of educational activities	101,041	-	101,041
Auxiliary enterprises	485,062	-	485,062
Health System revenue	3,528,452	-	3,528,452
Other sources	35,025	-	35,025
Net assets released from restrictions	169,294	(169,294)	-
Total operating revenues and other support	7,896,995	(29,618)	7,867,377
Operating expenses:			
Educational and general -			
Academic and student services	2,013,944	-	2,013,944
Research	1,033,349	-	1,033,349
Public service	202,408	-	202,408
Institutional support	419,691	-	419,691
Total educational and general	3,669,392	-	3,669,392
Auxiliary enterprises	485,294	-	485,294
Health System expense	3,614,830	-	3,614,830
Total operating expenses	7,769,516	-	7,769,516
Increase (decrease) in net assets from operating activities	127,479	(29,618)	97,861
Nonoperating activities:			
Gifts and pledges	-	137,819	137,819
Current year investment returns	(478,361)	(337,832)	(816,193)
Changes in funds held by others in perpetuity	-	(3,691)	(3,691)
Loss on disposal of assets	(5,174)	-	(5,174)
Nonperiodic change in postretirement benefit plan	627,220	-	627,220
Other components of net periodic postretirement benefit cost	(60,067)	-	(60,067)
Actuarial adjustment on annuities payable	-	(6,802)	(6,802)
Net asset transfer due to donor intent	(20,060)	20,060	-
Increase (decrease) in net assets from nonoperating activities	63,558	(190,446)	(126,888)
Increase (decrease) in net assets - The Pennsylvania State University	191,037	(220,064)	(29,027)
Noncontrolling interest:			
Excess of revenues over expenses	14,976	-	14,976
Increase in net assets - noncontrolling interest	14,976	-	14,976
Increase (decrease) in total net assets	206,013	(220,064)	(14,051)
Net assets at the beginning of the year - as previously stated	8,615,611	3,791,060	12,406,671
Net asset reclassification	(442,305)	442,305	-
Net assets at the beginning of the year, as restated	8,173,306	4,233,365	12,406,671
Net assets at the end of the year, as restated	\$8,379,319	\$4,013,301	\$12,392,620

See notes to consolidated financial statements

THE PENNSYLVANIA STATE UNIVERSITY
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2023 AND 2022
(in thousands)

	June 30, 2023	June 30, 2022
Cash flows from operating activities:		
Increase (decrease) in net assets	\$ 361,599	\$ (14,051)
Adjustments to reconcile change in net assets to net cash provided by operating activities -		
Actuarial adjustment on annuities payable	11,454	6,805
Contributions restricted for long-term investment	(104,297)	(166,153)
Interest and dividends restricted for long-term investment	(22,551)	(43,692)
Net realized and unrealized (gains) losses on long-term investments	(301,052)	650,546
Depreciation and amortization expense	549,574	481,589
Noncash lease expense	6,086	(2,187)
Write-offs and disposals of assets	30,334	5,174
Contributions of land, buildings and equipment	(2,045)	(1,419)
Provision for bad debts	44,098	4,451
Decrease (increase) in deposits held for others	6,248	(2,917)
Increase in receivables	(126,565)	(171,305)
Increase in inventories	(4,910)	(13,059)
(Increase) decrease in prepaid expenses and other assets	(17,583)	82,991
Decrease in accounts payable and other accrued expenses	(1,757)	(113,135)
Increase in deferred revenue	35,753	9,971
Decrease in accrued postretirement benefits	(250,446)	(589,228)
Net cash provided by operating activities	213,940	124,381
Cash flows from investing activities:		
Purchase of land, buildings and equipment	(693,602)	(742,661)
Increase in deposits held by bond trustees	(140,454)	(106,334)
Repayments and advances on student loans	(1,461)	(1,235)
Collections on student loans	4,074	5,145
Purchase of investments	(3,934,661)	(4,076,999)
Proceeds from sale of investments	4,213,256	3,595,795
Net cash used in investing activities	(552,848)	(1,326,289)
Cash flows from financing activities:		
Contributions restricted for long-term investment	104,297	166,153
Interest and dividends restricted for long-term investment	22,551	43,692
Payments of annuity obligations	(7,876)	(7,727)
Proceeds from long-term debt	236,758	514,300
Principal payments on long-term debt	(119,885)	(262,580)
Refundable federal student loans	(7,211)	(7,317)
Net cash provided by financing activities	228,634	446,521
Net decrease in unrestricted and restricted cash and cash equivalents	(110,274)	(755,387)
Unrestricted and restricted cash and cash equivalents at the beginning of the year	1,149,601	1,904,988
Unrestricted and restricted cash and cash equivalents at the end of the year	\$1,039,327	\$1,149,601

Supplemental disclosures of cash flow information (Notes 2 and 9)
See notes to consolidated financial statements



Notes to Consolidated Financial Statements

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 twenty-three 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 \$326.5 million and \$323.8 million for the years ended June 30, 2023 and 2022, 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.

RESTATEMENT

The accompanying financial statements for the year ended June 30, 2022 have been restated to correct certain errors related to the classification of certain donor gifts and related matching restrictions that should have been reported as with donor restrictions in prior years. There was no impact to total net assets or to cash flows. The following financial statement line items at were affected by the change:

<i>(in thousands of dollars)</i>	As previously reported	Adjustment	As restated
Net assets as of July 1, 2021:			
Without donor restrictions	\$ 8,615,611	\$ (442,305)	\$ 8,173,306
With donor restrictions	3,791,060	442,305	4,233,365
Total	\$ 12,406,671	\$ -	\$ 12,406,671
Fiscal year 2022 activity:			
Operating revenues:			
Gifts and pledges without donor restrictions	\$ 95,753	\$ (2,904)	\$ 92,849
Gifts and pledges with donor restrictions	24,333	2,904	27,237
Investment return, net without donor restrictions	332,803	(110,865)	221,938
Investment return, net with donor restrictions	1,574	110,865	112,439
Net assets released from restrictions without donor restrictions	50,545	118,749	169,294
Net assets released from restrictions with donor restrictions	(50,545)	(118,749)	(169,294)
Nonoperating activities:			
Current year investment returns without donor restrictions	(458,155)	(20,206)	(478,361)
Current year investment returns with donor restrictions	(358,038)	20,206	(337,832)
Net asset transfer due to donor intent without donor restrictions	-	(20,060)	(20,060)
Net asset transfer due to donor intent with donor restrictions	\$ -	\$ 20,060	\$ 20,060
Net assets as of June 30, 2022:			
Without donor restrictions	\$ 8,856,910	\$ (477,591)	\$ 8,379,319
With donor restrictions	3,535,710	477,591	4,013,301
Total	\$ 12,392,620	\$ -	\$ 12,392,620

RECLASSIFICATION

Certain 2022 revenue amounts have been reclassified to conform to the 2023 presentation to reflect recovery of indirect costs in Commonwealth of Pennsylvania – special contracts, United States Government grants and contracts, and private grants and contracts revenue line items. Additionally, certain 2022 operating expense amounts have been reclassified to conform to the 2023 presentation related to subsidiary eliminations within academic and student services, research, public service, institutional support, and auxiliary enterprises.

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 \$71.8 million, included in deferred revenue at June 30, 2022, were recognized during the year ended June 30, 2023. Tuition receipts of \$72.0 million, included in deferred revenue at June 30, 2021, were recognized during the year ended June 30, 2022. 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 \$36.9 million, included in deferred revenue at June 30, 2022, were recognized during the year ended June 30, 2023. Grants and contracts receipts of \$32.9 million, included in deferred revenue at June 30, 2021, were recognized during the year ended June 30, 2022. The University has entered into numerous grants and contracts, with periods of performance ending at various dates from July 1, 2023 through December 31, 2050. The estimated performance obligations remaining under these grants and contracts as of June 30, 2023 total \$1.142 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, 2022 and 2021 were recognized during the years ended June 30, 2023 and 2022. 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 includes 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 acute-care 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, 2023 and 2022, 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 \$90.6 million and \$81.9 million for the years ended June 30, 2023 and 2022, 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 \$40.8 million and \$38.6 million for the years ended June 30, 2023 and 2022, 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. Adjustments arising from a change in the transaction price were not significant in 2023 or 2022.

Additionally, during 2023 and 2022, the Health System recognized \$6.2 million and \$6.3 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 \$120.6 million and \$90.5 million during the years ended June 30, 2023 and 2022, 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, 2023 and 2022. 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, 2023 and 2022 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:

<i>(in thousands of dollars)</i>	2023	2022
Supplemental reconciliation data:		
Cash and cash equivalents as shown in the statements of financial position	\$ 1,007,504	\$ 1,058,303
Restricted cash and cash equivalents included in deposits held by bond trustees	3,779	67,362
Restricted cash and cash equivalents included in deposits held for others	28,044	23,936
Total unrestricted and restricted cash and cash equivalents as shown in the statements of cash flows	\$ 1,039,327	\$ 1,149,601
Other supplemental data:	2023	2022
Interest paid	\$ 136,092	\$ 115,323

Capitalized costs accrued related to construction are \$84.5 million and \$78.8 million as of June 30, 2023 and 2022, respectively. Taxes paid for 2023 and 2022 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:

<i>(in thousands of dollars)</i>	2023	2022
Grants and contracts, net of allowance of \$3,100 and \$2,330	\$ 255,462	\$ 212,050
Patient accounts receivable	568,116	531,271
Student receivables, net of allowance of \$63,525 and \$14,845	54,802	49,780
Other, net of allowance of \$12 and \$8,263	61,836	53,071
Total accounts receivable, net	\$ 940,216	\$ 846,172

The University maintains allowances for doubtful accounts to reflect management's best estimate of probable losses inherent in receivable balances. Management determines the allowances for doubtful accounts based on known factors, historical experience, and other currently available evidence. 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.

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 \$16.2 million and \$21.1 million at June 30, 2023 and 2022, 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:

<i>(in thousands of dollars)</i>	2023	2022
Loans to students:		
Federal government loan programs:		
Perkins loan program	\$ 14,250	\$ 20,641
Health Professions Student Loans and Loans for Disadvantaged Students	-	1
Federal government loan programs	14,250	20,642
Institutional loan programs	18,411	18,806
	32,661	39,448
Less allowance for doubtful accounts:		
Balance, beginning of year	(7,444)	(3,050)
Provision for doubtful accounts	3,521	(4,394)
Balance, end of year	(3,923)	(7,444)
Loans to students, net	\$ 28,738	\$ 32,004

Allowances for doubtful accounts are established based on prior collection experience and current economic factors which, in management's judgment, could influence the ability of loan recipients to repay the amounts according to the terms of the loan. 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. When loans to students are deemed uncollectible, an allowance for doubtful accounts is established.

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:

<i>(in thousands of dollars)</i>					
2023	45 days or less	46-75 days	76-105 days	Over 105 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
Allowance for doubtful accounts:					
Federal government loan programs					(1,421)
Institutional loan programs					(2,502)
Total allowance for doubtful accounts					(3,923)
Total loans to students, net					\$ 28,738

<i>(in thousands of dollars)</i>					
2022	45 days or less	46-75 days	76-105 days	Over 105 days	Total
Loans to students:					
Federal government loan programs	\$ 17,468	\$ 33	\$ 30	\$ 3,111	\$ 20,642
Institutional loan programs	16,485	26	25	2,270	18,806
Total loans to students	\$ 33,953	\$ 59	\$ 55	\$ 5,381	39,448
Allowance for doubtful accounts:					
Federal government loan programs					(4,889)
Institutional loan programs					(2,555)
Total allowance for doubtful accounts					(7,444)
Total loans to students, net					\$ 32,004

INVENTORIES

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, 2023 and 2022. 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 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:

<i>(in thousands of dollars)</i>	2023	2022
Land	\$ 187,985	\$ 181,833
Buildings	9,243,547	8,892,700
Improvements other than buildings	887,180	807,507
Equipment	2,195,927	2,071,893
Assets under construction	771,342	850,068
Total plant	13,285,981	12,804,001
Less accumulated depreciation	(6,284,570)	(5,918,329)
Total investment in plant, net	\$ 7,001,411	\$ 6,885,672

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 \$549.6 million and \$484.5 million for the fiscal years ended June 30, 2023 and 2022, 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 \$42.3 million and \$50.4 million at June 30, 2023 and 2022, 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:

<i>(in thousands of dollars)</i>	2023	2022
Accounts payable (non-Health System)	\$ 253,577	\$ 249,140
Health System accounts payable and other accrued expenses	539,664	535,351
Health System Medicare APP	-	37,631
Accrued payroll and other related liabilities	103,583	127,464
Accrued interest	31,664	30,835
Student deposits	3,632	3,805
Total accounts payable and other accrued expenses	\$ 932,120	\$ 984,226

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:

<i>(in thousands of dollars)</i>	
Balance as of June 30, 2021	\$ 102,925
Adjustment to liability	4,972
Accretion expense	5,697
Liabilities settled	(7,198)
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

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:

<i>(in thousands of dollars)</i>			
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

<i>(in thousands of dollars)</i>			
2022 (as restated)	Without donor restrictions	With donor restrictions	Total
Net assets by category:			
Endowment funds	\$ 834,280	\$ 3,460,316	\$ 4,294,596
University capital activities	1,418,581	16,007	1,434,588
Operating general funds carryforward	962,139	-	962,139
Other unit non-general fund reserves	353,498	198,932	552,430
University other reserves	183,404	-	183,404
Pledges	-	214,669	214,669
Split-interest agreements	-	103,775	103,775
Student loan funds	21,302	19,602	40,904
Net investment in plant	3,606,865	-	3,606,865
Postretirement benefits and pension prefunding	(880,161)	-	(880,161)
Penn State Health operations	1,542,270	-	1,542,270
Non-controlling interest in Penn State Health	337,141	-	337,141
Total net assets	\$ 8,379,319	\$ 4,013,301	\$ 12,392,620

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 is effective for the University beginning July 1, 2023. Upon adoption, the ASU will be applied using a modified retrospective transition method to the beginning of the year of adoption. The University is currently evaluating the impact this guidance may have on its consolidated financial statements.

CORONAVIRUS PANDEMIC

In March 2020, the World Health Organization declared the novel coronavirus ("COVID-19") a pandemic. The COVID-19 pandemic has negatively affected national, state, and local economies and global financial markets, and the higher education landscape in general. The pandemic may continue to adversely affect operations and financial condition, including, among other things, (i) the ability of the University to conduct its operations and/or the cost of operations, (ii) governmental and non-governmental funding, and (iii) financial markets impacting investments valuation and interest rates.

The federal government has taken several actions to provide financial assistance during this pandemic. Congress set aside approximately \$76.6 billion between the Coronavirus Aid, Relief and Economic Security Act (CARES), Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA), and the American Rescue Plan (ARP) allotted to the Educational Stabilization Fund through the Higher Education Emergency Relief Fund (HEERF).

Under CARES, CRRSAA, and ARP, the University received a total allocation of \$131.2 million for emergency aid to students and \$158.8 million for institutional needs. The University distributed student emergency grants of \$76.2 million during 2022, with the disbursement of funds presented within academic and student services expense and the associated revenue captured in United States Government grants and contracts in the consolidated statement of activities. Revenues of \$73.8 million were also recognized as United States Government grants and contracts in the consolidated statement of activities in 2022, related to the institutional portion of the allotted funds. The institutional funds were used to offset lost tuition revenues including student bad debt, refunds for housing and dining services, and COVID testing costs. CARES, CRRSAA, and ARP funding were fully utilized at June 30, 2022.

As allowed by the CARES Act, the University had deferred payment of \$34.0 million for the employer portion of Social Security payroll tax at June 30, 2022, which is included in accounts payable and other accrued expenses and other liabilities in the consolidated statement of financial position. In December 2022, this amount was paid.

During the years ended June 30, 2023 and 2022, the Health System received payments of \$8.1 million and \$8.5 million, respectively, as part of general and targeted distributions of the CARES Act Provider Relief Fund and ARP Rural payments. These payments are not subject to repayment, provided the Health System is able to attest to and comply with the terms and conditions of the funding including demonstrating that the distributions received have been used for health care-related expenses or lost revenue attributed to COVID-19. Based on an analysis of compliance and reporting requirements of the Provider Relief Fund and ARP programs and the impact of the pandemic on the Health System's operating results through June 30, 2023, the Health System believes there is reasonable assurance the applicable terms and conditions required to retain the funds are met as of June 30, 2023 and 2022. The Health System has also received funding from various other grants and had funding sources obligated through the Federal Emergency Management Agency (FEMA). The Health System has recognized \$19.9 million and \$8.5 million for the years ended June 30, 2023 and 2022, respectively, from CARES Act and FEMA funding.

The U.S. Department of Health and Human Services' requirements for the uses of the Provider Relief Fund and the ARP payments are subject to change and are open to interpretation and clarification; therefore, there may be changes in the amounts recognized as revenue during the years ended June 30, 2023 and 2022. If the Health System is unable

to attest to or comply with future terms and conditions, the ability to retain some or all of the distributions received may be impacted. Any changes in amounts recognized as a result of new guidance, interpretation, or clarification will be recognized in the period in which the change occurred.

The CARES Act revised the Medicare accelerated payment program ("Medicare APP"). During the year ended June 30, 2020, the Health System requested accelerated Medicare payments, which allows for eligible health care facilities to request up to six months of advance Medicare payments for acute-care hospitals. Effective October 1, 2020, the repayment terms of the accelerated Medicare payments began one year after the first payment was issued and were recouped at 25 percent of the Medicare payments to the Health System for 11 months. After 11 months, the recoupment increased to 50 percent of the Medicare payments to the Health System for 6 additional months. Unapplied accelerated payment amounts that were unpaid after this 17-month period were due to the Centers for Medicare and Medicaid Services, plus interest at a rate of 4 percent on the outstanding balance. During the year ended June 30, 2020, the Health System received approximately \$160.3 million from these accelerated Medicare payment requests. As of June 30, 2022 and 2021, \$37.6 million and \$117.1 million, respectively, remained as a liability; the remaining outstanding balance was recouped during the year ended June 30, 2023.

The federal COVID-19 Public Health Emergency (PHE) declaration ended on May 11, 2023.

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 as well as the conduct of services undertaken to support those 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, 2023 and 2022.

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, 2023 and 2022, 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.

<i>(in thousands of dollars)</i>	2023	2022
Total assets	\$ 19,704,296	\$ 19,439,689
Less:		
Inventories	(90,572)	(85,662)
Prepaid expenses and other assets	(110,579)	(127,277)
Total investment in plant, net	(7,001,411)	(6,885,672)
Beneficial interest in perpetual trusts	(28,117)	(26,240)
Operating lease right-of-use assets	(164,769)	(172,590)
Other assets	(223,789)	(191,385)
Total financial assets	12,085,059	11,950,863
Less:		
Noncurrent investments	(8,057,417)	(8,045,673)
Contractual or donor-imposed restrictions:		
Deposits held by bond trustees	(268,489)	(191,618)
Deposits held for others	(38,012)	(34,460)
Receivables subject to time restrictions	(38,676)	(42,793)
Receivables subject to donor-imposed restrictions	(120,426)	(127,333)
Loans to students, net	(28,738)	(32,004)
Financial assets available to meet cash needs for general expenditures within one year	\$ 3,533,301	\$ 3,476,982

4. INVESTMENTS

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

<i>(in thousands of dollars)</i>	2023	2022
Fixed income	\$ 3,594,516	\$ 3,912,368
Equity investments	4,319,325	4,217,348
Real assets	827,249	642,506
Opportunistic	876,924	823,335
Total	\$ 9,618,014	\$ 9,595,557

Fixed income investments are comprised of public and private fixed income strategies, which include government and corporate debt, mortgage-backed, and other asset-backed related debt. Equity investments include public and private strategies across global, U.S., developed non-U.S., and emerging markets. Real asset investments include public and private strategies utilizing both equity and debt structures that are focused on producing a positive real return during an inflationary environment. Real asset strategies include real estate, natural resources, and commodities. Opportunistic investments include 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, 2023 and 2022, 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. Derivative Securities were immaterial as of June 30, 2023 and 2022.

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.

As a result of the restatement mentioned in Note 2, some of the fiscal year 2022 data below has been restated.

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, 2023 and 2022, funds with an original gift value of \$171.9 million and \$142.1 million were "underwater" by \$12.2 million and \$12.8 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:

<i>(in thousands of dollars)</i>			
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

<i>(in thousands of dollars)</i>			
2022 (restated)	Without donor restrictions	With donor restrictions	Total
Donor-restricted endowment funds	\$ -	\$ 3,460,316	\$ 3,460,316
Funds functioning as endowments	834,280	-	834,280
Total net assets	\$ 834,280	\$ 3,460,316	\$ 4,294,596

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

<i>(in thousands of dollars)</i>			
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

<i>(in thousands of dollars)</i>			
2022 (restated)	Without donor restrictions	With donor restrictions	Total
Endowment net assets, beginning of the year	\$ 902,974	\$ 3,621,975	\$ 4,524,949
Endowment return, net	(68,638)	(204,962)	(273,600)
Contributions	-	144,044	144,044
Endowment spending	(25,210)	(110,170)	(135,380)
Transfers to create funds functioning as endowments	25,154	-	25,154
Net asset transfer due to donor intent	-	9,429	9,429
Endowment net assets, end of the year	\$ 834,280	\$ 3,460,316	\$ 4,294,596

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 allow its endowment to provide generous current spending while preserving "intergenerational equity". The spending amount for fiscal year 2023 and 2022 was based on 5.0% and 4.5%, respectively, 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.



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, 2023 and 2022:

<i>(in thousands of dollars)</i>					
2023	Level 1	Level 2	Level 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					
Public separate accounts	\$ 173	\$ 2,423,970	\$ -	\$ -	\$ 2,424,143
Public funds	174,186	-	-	-	174,186
Private funds	-	-	-	94,885	94,885
Equity investments					
Public separate accounts	35,633	-	-	-	35,633
Private separate accounts	-	-	3,125	-	3,125
Public funds	281,855	-	-	-	281,855
Private funds	-	-	4,284	85,923	90,207
Real assets					
Public funds	1,039	-	-	-	1,039
Private funds	-	-	7	682	689
Opportunistic					
Public funds	68	-	-	-	68
Private funds	-	-	-	270,619	270,619
Total	\$ 492,954	\$ 2,423,970	\$ 7,416	\$ 452,109	\$ 3,376,449
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:					
Present value of annuities payable	\$ -	\$ -	\$ 67,573	\$ -	\$ 67,573

<i>(in thousands of dollars)</i>					
2022	Level 1	Level 2	Level 3	NAV	Total
Assets:					
Long-term Investment Pool:					
Fixed income					
Public separate accounts	\$ 173	\$ 493,275	\$ -	\$ -	\$ 493,448
Public funds	210,562	-	-	-	210,562
Private funds	-	-	-	328,267	328,267
Equity investments					
Public separate accounts	572,676	-	-	-	572,676
Private separate accounts	-	-	1,525	-	1,525
Public funds	79,326	-	-	-	79,326
Private funds	-	-	-	3,200,355	3,200,355
Real assets					
Public funds	88,306	-	-	-	88,306
Private funds	-	-	-	552,442	552,442
Opportunistic					
Private funds	-	-	-	561,089	561,089
Total	\$ 951,043	\$ 493,275	\$ 1,525	\$ 4,642,153	\$ 6,087,996
Operating Investments:					
Fixed income					
Public separate accounts	\$ 4,792	\$ 2,519,101	\$ -	\$ -	\$ 2,523,893
Public funds	259,562	-	-	-	259,562
Private funds	-	-	-	96,636	96,636
Equity investments					
Public separate accounts	31,065	1	-	-	31,066
Private separate accounts	388	-	136	-	524
Public funds	250,165	-	-	-	250,165
Private funds	-	-	4,452	77,079	81,531
Real assets					
Public funds	1,586	-	-	-	1,586
Private funds	-	-	7	165	172
Opportunistic					
Public funds	74	-	-	-	74
Private funds	-	-	-	262,172	262,172
Total	\$ 547,632	\$ 2,519,102	\$ 4,595	\$ 436,052	\$ 3,507,381
Deposits held by bond trustees:					
Fixed income					
Public funds	\$ 124,256	\$ -	\$ -	\$ -	\$ 124,256
Deposits held for others	\$ -	\$ 10,524	\$ -	\$ -	\$ 10,524
Beneficial interest in perpetual trusts	\$ -	\$ -	\$ 26,240	\$ -	\$ 26,240
Liabilities:					
Present value of annuities payable	\$ -	\$ -	\$ 63,995	\$ -	\$ 63,995

Public separate accounts hold public fixed income and equity investments owned directly by the University. 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 a mutual fund-like vehicle 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, 2023 and 2022:

<i>(in thousands of dollars)</i>	Long-Term Investment Pool	Operating Investments	Beneficial Interest in Perpetual Trusts
Assets:			
Balance as of June 30, 2021	\$ 1,308	\$ 4,791	\$ 29,931
Purchases	-	136	-
Total realized and unrealized (losses) gains	217	(332)	(3,691)
Balance as of June 30, 2022	1,525	4,595	26,240
Gifts	-	-	1,029
Total realized and unrealized (losses) gains	-	1,296	848
Net transfers in (out)	(1,525)	1,525	-
Balance as of June 30, 2023	\$ -	\$ 7,416	\$ 28,117
Liabilities:			
	Present Value of Annuities Payable		
Balance as of June 30, 2021	\$ 64,917		
Actuarial adjustment of liability	1,726		
Gifts	772		
Sales	(3,420)		
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		

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 Value		Unfunded Commitments At June 30, 2023	Redemption Frequency	Redemption Notice Period
(in thousands of dollars)	2023	2022			
Private Funds With Redemption Ability:					
Fixed income investments	\$ 393,545	\$ 247,426	\$ 59,812	Various	2-90 days
Equity investments	1,273,408	1,661,652	-	Various	2-90 days
Real asset investments	256,643	237,814	81,803	Various	2-90 days
Opportunistic investments	750,127	730,960	-	Various	2-90 days
Subtotal	\$ 2,673,723	\$ 2,877,852	\$ 141,615		
Private Funds Without Redemption Ability:					
Fixed income investments	\$ 125,786	\$ 177,477	\$ 80,973		
Equity investments	1,575,846	1,615,782	461,384		
Real asset investments	345,081	314,793	237,842		
Opportunistic investments	126,729	92,301	108,667		
Subtotal	\$ 2,173,442	\$ 2,200,353	\$ 888,866		
Total					
Total	\$ 4,847,165	\$ 5,078,205	\$ 1,030,481		

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 quarterly 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, 2023 that are due to be invested in the future.

7. CONTRIBUTIONS RECEIVABLE

Contributions receivable are summarized as follows as of June 30:

<i>(in thousands of dollars)</i>	2023	2022
In one year or less	\$ 50,316	\$ 42,361
Between one year and five years	54,756	68,283
More than five years	131,382	133,463
Contributions receivable, gross	236,454	244,107
Less allowance	(1,757)	(1,656)
Less discount	(50,611)	(49,702)
Contributions receivable, net	\$ 184,086	\$ 192,749

Contributions received during the years ended June 30, 2023 and 2022 are discounted at rates ranging from 3.96% to 5.40% and 2.80% to 3.18%, respectively. The discount rates for prior periods ranged from 0.11% to 6.28%.

At June 30, 2023 and 2022 the University has received bequest intentions of \$865.1 million and \$797.5 million, respectively, and certain other conditional promises to give of \$59.7 million and \$65.5 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 capital lease obligations that are included in long-term debt in the statement of financial position consist of the following at June 30:

<i>(in thousands of dollars)</i>	2023	2022
The Pennsylvania State University Bonds		
Series 2023	\$ 203,990	\$ -
Series 2022A	125,450	125,450
Series 2022B	26,500	26,500
Series 2020A	78,045	79,300
Series 2020B	303,795	314,675
Series 2020D	1,013,920	1,039,685
Series 2020E	47,585	52,330
Series 2019A	102,030	103,770
Series 2019B	111,165	113,835
Series 2018	60,025	61,140
Series 2017A	143,920	146,780
Series 2017B	111,260	114,115
Series 2016A	104,730	107,995
Series 2016B	169,050	180,645
Series 2015A	53,990	55,820
Series 2015B	83,345	87,965
Series 2007B	26,875	31,455
Pennsylvania Higher Educational Facilities Authority University Revenue Bonds (issued for The Pennsylvania State University)		
Series 2006	1,015	1,320
Series 2004	820	1,200
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	26,305	28,025
Series 2021B	21,180	21,980
Series 2016	42,735	44,865
Series 2015	1,090	1,700
Total bonds payable	3,569,660	3,451,390
Unamortized bond premiums	256,979	247,135
Unamortized deferred bond costs	(16,847)	(16,526)

<i>(in thousands of dollars)</i>	2023	2022
Notes payable and finance leases		
Notes payable	36,958	41,968
Finance lease obligations	39,173	45,083
Total notes payable and finance leases	76,131	87,051
Total long-term debt	\$ 3,885,923	\$ 3,769,050

Debt issuance	Interest rate mode	Interest rates	Payment ranges and maturity <i>(in thousands of dollars)</i>
The Pennsylvania State University 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%	\$1,845 to \$4,770 through September 2042 with \$27,765 and \$35,890 due September 2047 and 2052, respectively
Series 2022B	Fixed	2.773% - 4.673%	\$890 to \$1,550 through September 2037 with \$8,940 due September 2042
Series 2020A	Fixed	4.00% - 5.00%	\$1,320 to \$3,090 through September 2040 with \$17,980 and \$22,490 due September 2045 and 2050, respectively
Series 2020B	Fixed	1.587% - 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	1.353% - 2.84%	\$26,085 to \$33,545 through September 2035 with \$304,225 and \$328,000 due September 2043 and 2050, respectively
Series 2020E	Fixed	5.00%	\$4,985 to \$7,010 through March 2031
Series 2019A	Fixed	5.00%	\$1,830 to \$6,720 through September 2049
Series 2019B	Fixed	2.20% - 3.50%	\$2,735 to \$3,720 through September 2034 with \$20,455 and \$52,515 due September 2039 and September 2049, respectively
Series 2018	Fixed	5.00%	\$1,155 to \$2,320 through September 2037 with \$16,650 and \$18,255 due September 2043 and September 2048, respectively
Series 2017A	Fixed	5.00%	\$2,965 to \$5,965 through September 2037 with \$34,750 and \$44,620 due September 2042 and September 2047, respectively
Series 2017B	Fixed	2.416% - 3.793%	\$2,920 to \$3,830 through September 2032 with \$21,305 and \$56,595 due September 2037 and September 2047, respectively
Series 2016A	Fixed	5.00%	\$3,430 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%	\$1,920 to \$3,445 through September 2035 with \$20,000 due September 2040
Series 2015B	Fixed	5.00%	\$4,860 to \$8,435 through September 2035
Series 2007B	Fixed	5.25%	\$4,825 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	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 <i>(in thousands of dollars)</i>
Penn State Health 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 Hospital Authority Revenue Bonds			
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 Authority College Revenue Bonds			
Series 2021A	Fixed	5.00%	\$2,015 to \$4,565 through July 2030
Series 2021B	Fixed	0.782% - 3.014%	\$835 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 to \$625 through January 2025

The Series 2023 Bonds are general obligation bonds issued in June 2023 for the purpose of financing various construction and renovation projects. The Series 2023 Bonds are subject to early redemption provisions, at the option of the University, beginning September 2033. The bonds maturing September 2048 and September 2053 are subject to mandatory sinking fund redemption.

The University believes it has complied with all financial debt covenants for the years ended June 30, 2023 and 2022.

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 <i>(in thousands of dollars)</i>
2024	\$ 91,085
2025	96,885
2026	105,690
2027	109,270
2028	113,105
Thereafter	3,053,625
Total	\$ 3,569,660

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, 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. At June 30, 2022, the carrying value and estimated fair value of the University's bonds payable, including issuance premiums and deferred bond costs, are \$3.682 billion and \$3.289 billion, respectively. Certain bond issues have associated issuance premiums; these issuance premiums total \$257.0 million and \$247.1 million at June 30, 2023 and 2022, 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 \$16.8 million and \$16.5 million at June 30, 2023 and 2022, 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 five notes payable included within the consolidated statements of financial position at June 30, 2023 with balances of \$1.2 million, \$2.5 million, \$3.7 million, \$5.8 million, and \$23.8 million. These notes have payments due through June 2024, June 2025, March 2026, August 2039, and September 2040 and bear interest at 2.60%, 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 <i>(in thousands of dollars)</i>
2024	\$ 5,148
2025	4,029
2026	2,515
2027	1,518
2028	1,559
Thereafter	22,189
Total	\$ 36,958

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, 2023 are as follows:

<i>(in thousands of dollars)</i>		
Year	Finance Leases	Operating Leases
2024	\$ 8,720	\$ 31,406
2025	7,525	28,333
2026	6,078	24,447
2027	5,433	22,587
2028	1,760	17,647
Thereafter	17,930	76,865
Total lease payments	47,446	201,285
Less amount representing interest	(8,273)	(30,778)
Total lease obligations	39,173	170,507
Current portion	7,541	26,393
Long-term portion	\$ 31,632	\$ 144,114

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

<i>(in thousands of dollars)</i>	2023	2022
Components of Lease Expense		
Finance lease expense:		
Amortization of ROU assets	\$ 9,133	\$ 7,573
Interest on lease liabilities	1,465	1,762
Total finance lease expense	10,598	9,335
Operating lease expense	35,969	41,959
Total lease expense	\$ 46,567	\$ 51,294

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

	Weighted-Average Remaining Lease Term (Years)		Weighted-Average Discount Rate	
	2023	2022	2023	2022
University:				
Finance leases	10.97	12.17	3.81%	4.10%
Operating leases	4.99	5.62	2.89%	3.62%
Health System:				
Finance leases	3.50	3.90	3.20%	3.30%
Operating leases	10.90	11.70	4.00%	4.30%

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

<i>(in thousands of dollars)</i>	2023	2022
ROU assets acquired in exchange for finance lease liabilities	\$ 7,400	\$ 8,553
ROU assets acquired in exchange for operating lease liabilities	20,491	51,793
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash outflows from finance leases	1,465	1,762
Operating cash outflows from operating leases	34,163	30,459
Financing cash outflows from finance leases	8,305	8,161

10. FUNCTIONAL AND NATURAL CLASSIFICATION OF EXPENSES

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

<i>(in thousands of dollars)</i>				
2023	Educational and General	Auxiliary Enterprises	Health 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

<i>(in thousands of dollars)</i>				
2022	Educational and General	Auxiliary Enterprises	Health System	Total
Salaries and wages	\$ 1,828,618	\$ 139,481	\$ 1,612,756	\$ 3,580,855
Benefits	642,514	66,767	405,583	1,114,864
Depreciation	304,081	41,942	138,456	484,479
Plant operations and maintenance	149,085	18,997	96,458	264,540
Other components of net periodic postretirement benefit cost	60,067	-	-	60,067
Interest	37,510	30,654	9,345	77,509
Supplies, services, and other	707,584	187,453	1,352,232	2,247,269
Total	\$ 3,729,459	\$ 485,294	\$ 3,614,830	\$ 7,829,583

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 (\$44.4 million and \$38.0 million, net of applied setoff credits of \$93.3 million for the years ended June 30, 2023 and 2022). 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 \$240.7 million and \$224.1 million for the years ended June 30, 2023 and 2022, 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, 2023 and 2022 were \$39.5 million and \$34.1 million, respectively (net of applied setoff credits of \$93.3 million) and represent approximately 5.9% and 5.8% of total contributions to the plan based on projections for fiscal years 2023 and 2022, respectively. The funded ratio of the plan was 68.0% as of December 31, 2022.

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:

<i>(in thousands of dollars)</i>		
Change in benefit obligation:	2023	2022
Benefit obligation at beginning of year	\$ 1,471,456	\$ 2,060,684
Service cost	16,947	31,758
Interest cost	60,115	59,566
Actuarial gain	(204,940)	(185,469)
Benefits paid	(56,219)	(53,834)
Plan assumptions	(66,350)	(441,249)
Benefit obligation at end of year	\$ 1,221,009	\$ 1,471,456
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ -	\$ -
Employer contributions	56,219	53,834
Benefits paid	(56,219)	(53,834)
Fair value of plan assets at end of year	\$ -	\$ -
Funded status	\$ (1,221,009)	\$ (1,471,456)
Unrecognized prior service cost (benefit)	-	-
Unrecognized net actuarial loss	-	-
Accrued postretirement benefit expense	\$ (1,221,009)	\$ (1,471,456)

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

<i>(in thousands of dollars)</i>		
Operating expenses:	2023	2022
Service cost	\$ 16,947	\$ 31,758
Nonoperating activities:		
Interest cost	60,115	59,566
Amortization of prior service cost	-	(4)
Amortization of unrecognized net loss	(81,428)	505
Net periodic postretirement cost	\$ (4,366)	\$ 91,825

The assumed healthcare cost trend rate used in measuring the accumulated postretirement benefit obligation was 7.40% and 7.60% for the years ended June 30, 2023 and 2022, respectively, reduced to an ultimate level of 4.50% and 4.50%, respectively. The postretirement benefit obligation discount rate was 5.20% and 4.87% for the years ended June 30, 2023 and 2022, respectively. During 2023, the plan had favorable claims experience compared to assumptions, and the liability decreased due to the increase in discount rates. During 2022, the plan had favorable claims experience compared to assumptions, and the liability decreased significantly 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:

	<i>(in thousands of dollars)</i>
2024	\$ 53,408
2025	57,594
2026	61,401
2027	65,070
2028	68,202
2029-33	377,486

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 recorded noncontrolling interest related to this membership. Total noncontrolling interest is recorded in net assets without donor restrictions within the consolidated statements of financial position with a value at June 30, 2023 and 2022 of \$268.6 million and \$337.1 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") which opened in October 2021, Penn State Health Lancaster Medical Center (LMC) which opened in October 2022, and Penn State Health Life Lion, LLC (PSHLL). The 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 which consists of a number of patient care sites in nine counties. The Health System, through Nittany, jointly holds ownership interest in ambulatory surgical centers.

During 2023 and 2022, the Health System recorded \$854.2 million and \$659.8 million, respectively, of net patient service revenue received from HH. During 2022, the Health System received cash contributions of \$30.0 million from HH related to the Community Health Reinvestment Act. Additionally, in 2023, the Health System transferred \$10.7 million of net assets to HH. During 2023 and 2022, the Health System paid HH \$272.7 million and \$243.2 million, respectively, of employee benefits expense. As of June 30, 2023 and 2022, the Health System has a liability due to HH in the amount of \$13.8 million and \$3.1 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 \$1.719 billion, of which \$1.358 billion has been paid or accrued as of June 30, 2023. 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 \$33.5 million and \$38.4 million as of June 30, 2023 and 2022, 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 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 ("MCARE Fund"), in accordance with Pennsylvania law. An estimate of the present value, discounted at 2% for the years ended June 30, 2023 and 2022, of the medical malpractice claims liability in the amount of \$212.7 million and \$186.4 million is recorded as of June 30, 2023 and 2022, respectively.

The subsidiaries of the Health System are self-insured for all medical malpractice claims asserted on or after July 1, 2001, for all amounts that are below the coverage of excess insurance policies and not included in the insurance coverage of the MCARE Fund. Under the self-insurance program, the Health System is required to maintain a malpractice trust fund in an amount at least equal to the expected loss of known claims. The balance of this trust fund was \$40.2 million and \$33.6 million at June 30, 2023 and 2022, respectively. The Health System intends to fund any claims due during the next year from 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 \$6.3 million and \$5.8 million, discounted at 4.13% and 3.01%, respectively, is recorded as of June 30, 2023 and 2022, respectively. The University has established a trust fund, in the amount of \$13.8 million and \$13.9 million at June 30, 2023 and 2022, 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 self-insured for workers' compensation claims and has purchased excess policies through commercial insurers which cover individual claims in excess of \$750,000 per incident for workers' compensation claims.

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 \$750,000 per employee per year. The University and the Health System provide for reported claims and claims incurred but not reported.

RELATED PARTY TRANSACTIONS

During 2023 and 2022, the University paid HH, a related party as defined in Note 13, \$162.6 million and \$36.6 million, respectively, of employee benefits expense. As of June 30, 2023, the University has a liability due to HH in the amount of \$24.7 million.

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 9, 2023, 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.

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 (the "University") as of and for the year ended June 30, 2023 and have issued our report thereon dated November 9, 2023, 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 9, 2023.

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. The schedule of expenditures of federal awards excludes those operations because they receive a separate financial statement audit and a separate single audit when required by the Uniform Guidance.

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.

A handwritten signature in black ink that reads "Plante & Moran, PLLC".

March 7, 2024

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 statements of financial position as of June 30, 2023 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 9, 2023.

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 preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies, and, therefore, material weaknesses or significant deficiencies may exist that were not identified. We identified a certain deficiency in internal control, described in the accompanying schedule of findings and questioned costs as Finding 2023-001, that we consider to be a material weakness.

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

The University's Response to the Finding

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

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 & Moreau, PLLC

November 9, 2023

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, 2023. 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, 2023.

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, 2023. Our compliance audit, described in the *Opinion on Each Major Federal Program* paragraph, 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 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 and is described in the accompanying schedule of findings and questioned costs as Finding 2023-003. 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 a certain deficiency in internal control over compliance that we consider to be a material weakness and another deficiency that we consider to be a significant deficiency.

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 2023-003 to be a material weakness.

To the Board of Trustees
The Pennsylvania State University

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 deficiency in internal control over compliance described in the accompanying schedule of findings and questioned costs as Finding 2023-002 to be a significant deficiency.

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 compliance 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.

Plante & Moreau, PLLC

March 7, 2024

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
Research and Development Cluster							
U.S. Department of Agriculture	Y	10.001	Agricultural Research Basic and Applied Research			\$ -	\$ 1,490,328
U.S. Department of Agriculture	Y	10.025	COVID-19 - Plant and Animal Disease, Pest Control, and Animal Care			-	140,381
U.S. Department of Agriculture	Y	10.025	Plant and Animal Disease, Pest Control, and Animal Care			-	371,775
U.S. Department of Agriculture	Y	10.028	COVID-19 - Wildlife Services			-	112,260
U.S. Department of Agriculture	Y	10.028	Wildlife Services			-	101,832
U.S. Department of Agriculture	Y	10.202	Cooperative Forestry Research			-	697,546
U.S. Department of Agriculture	Y	10.203	Payments to Agricultural Experiment Stations Under the Hatch Act			-	7,472,463
U.S. Department of Agriculture	Y	10.207	Animal Health and Disease Research			-	59,076
U.S. Department of Agriculture	Y	10.210	Higher Education – Graduate Fellowships Grant Program			-	156,471
U.S. Department of Agriculture	Y	10.217	Higher Education - Institution Challenge Grants Program			-	23,811
U.S. Department of Agriculture	Y	10.250	Agricultural and Rural Economic Research, Cooperative Agreements and Collaborati			-	138,639
U.S. Department of Agriculture	Y	10.253	Consumer Data and Nutrition Research			-	18,633
U.S. Department of Agriculture	Y	10.303	Integrated Programs			36,827	916,820
U.S. Department of Agriculture	Y	10.307	Organic Agriculture Research and Extension Initiative			295,951	881,703
U.S. Department of Agriculture	Y	10.309	Specialty Crop Research Initiative			1,222,986	2,792,162
U.S. Department of Agriculture	Y	10.310	Agriculture and Food Research Initiative (AFRI)			1,782,888	8,993,316
U.S. Department of Agriculture	Y	10.329	Crop Protection and Pest Management Competitive Grants Program			39,851	324,646
U.S. Department of Agriculture	Y	10.500	Cooperative Extension Service			249,113	4,960,654
U.S. Department of Agriculture	Y	10.516	Rural Health and Safety Education Competitive Grants Program			-	55,343
U.S. Department of Agriculture	Y	10.519	Equipment Grants Program (EGP)			-	85,455
U.S. Department of Agriculture	Y	10.680	Forest Health Protection			-	49,513
U.S. Department of Agriculture	Y	10.707	Research Joint Venture and Cost Reimbursable Agreements			-	98,151
U.S. Department of Agriculture	Y	10.777	Norman E. Borlaug International Agricultural Science and Technology Fellowship			-	36,768
U.S. Department of Agriculture	Y	10.902	Soil and Water Conservation			-	252,462
U.S. Department of Agriculture	Y	10.912	Environmental Quality Incentives Program			-	157,113
U.S. Department of Agriculture	Y	10.960	Technical Agricultural Assistance			-	57,698
U.S. Department of Agriculture	Y	10.RD	U.S. Department of Agriculture Research and Development			-	20,971
U.S. Department of Agriculture	Y	10.RD	U.S. Department of Agriculture Research and Development			-	5,586
U.S. Department of Agriculture	Y	10.RD	U.S. Department of Agriculture Research and Development			-	429
U.S. Department of Agriculture	N	10.001	Agricultural Research Basic and Applied Research	Geisinger Clinic	646515PSU01	-	30,248
U.S. Department of Agriculture	N	10.001	Agricultural Research Basic and Applied Research	Oregon State University OREGON STATE UNIVERSITY OFFICE OF	R0777A-A	-	18,971
U.S. Department of Agriculture	N	10.001	Agricultural Research Basic and Applied Research	Research Corporation for Science Advancement	28359	-	14,663
U.S. Department of Agriculture	N	10.001	Agricultural Research Basic and Applied Research	Research Corporation for Science Advancement	28375	-	14,026
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	University of Arkansas	UA AES 05665-02	-	60,555
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	Bioprodex, Inc.	225377	-	37,091
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	Bioprodex, Inc.	245486	-	24,656
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	COP Department of Agriculture	44229530	-	(1)
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	COP Department of Agriculture	44229916	-	62,480
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	Georgia, University of	SUB00002241	-	7,034
U.S. Department of Agriculture	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	State of Minnesota	244327 193081	-	5,373
U.S. Department of Agriculture	N	10.069	Conservation Reserve Program	Ducks Unlimited	US-RS-55-1 (PSU)	-	5,330
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	Carnegie Mellon University	1060162-440846	-	(4,535)
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	44187029	8,286	8,131
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	44187030	24,514	23,045
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	44219435	-	92,117
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C940000031	-	38,128
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C940000037	-	29,310
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000523	-	30,070
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000524	-	29,053
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000525	-	15,264
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000527	-	17,609
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000528	-	7,218
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000530	-	25,990
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000532	-	26,272
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000775	-	70,189
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000819	-	25,036
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000820	-	10,050
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000823	-	72,716
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000824	-	43,244
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000973	-	34,108
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000977	-	17,433
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000978	-	37,395
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000979	-	140,619
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C940001096	-	9,339
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C940001101	-	25,343
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	Pennsylvania Co-Operative Potato Growers , Inc.	258531	-	49,998
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	University of Florida	SUB00002346 P0175090	-	156,245
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	University of New Hampshire	L0071	-	4,202
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	Washington State University	137512 SPC002135	-	107,729
U.S. Department of Agriculture	N	10.200	Grants for Agricultural Research, Special Research Grants	University of Maine	UMS1240	-	(276)
U.S. Department of Agriculture	N	10.200	Grants for Agricultural Research, Special Research Grants	University of Maine	UMS1314	-	4,513
U.S. Department of Agriculture	N	10.200	Grants for Agricultural Research, Special Research Grants	University of Maryland Eastern Shore	2021-34383-34848	-	13,334
U.S. Department of Agriculture	N	10.200	Grants for Agricultural Research, Special Research Grants	University of Maryland Eastern Shore	IR4524327370BRUNHAROPENN	-	2,000
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	University of Maryland Eastern Shore	IR4524327370DEMCHAKPENN	-	5,111
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE19-215-33243	-	3,007
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE20-227-34268	-	2,263
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE20-232-34268	-	2,731
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE20-234-34268	-	9,568
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE20-237-34268	-	2,852
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE20-239-34268	-	1,955
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE20-243-34268	-	1,899
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-258-35383	-	2,181
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-261-35383	-	6,863
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-262-35383	-	(314)
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-263-35383	-	8,993
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-266-35383	-	8,763
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-267-35383	-	8,348
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-270-35383	-	6,612
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE21-274-35383	-	7,802
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-275-AWD00000495	-	4,257

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-276-AWD00000495	-	8,209
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-278-AWD00000495	-	13,892
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-280-AWD00000495	-	4,787
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-282-AWD00000495	-	10,286
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-285-AWD00000495	-	5,525
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-287-AWD00000495	-	6,789
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-293-AWD00000495	-	5,245
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-296-AWD00000495	-	3,355
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-298-AWD00000495	-	2,684
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	GNE22-302-AWD00000495	-	362
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	LNE19-378-33243	-	51,041
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	LNE19-389R-33243	1,095	20,140
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	LNE20-404-34268	53,362	116,660
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	LNE22-447-AWD00000495	-	86,483
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	ONE21-382-35383	-	9,558
U.S. Department of Agriculture	N	10.217	Higher Education - Institution Challenge Grants Program	California Polytechnic State University	2022-5-53734	-	40,289
U.S. Department of Agriculture	N	10.217	Higher Education - Institution Challenge Grants Program	Purdue University	F0003792902017	-	5,494
U.S. Department of Agriculture	N	10.253	Consumer Data and Nutrition Research	RTI International	1-312-0217652-66074L	40,182	62,318
U.S. Department of Agriculture	N	10.307	Organic Agriculture Research and Extension Initiative	Cornell University	90033-20656	-	14,578
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	Cornell University	92884-20620	-	60,170
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	North Carolina State University	2016-1498-10	-	(66)
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	Texas A&M University	M1900058	-	55,036
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	Texas A&M University	M2002891	-	68,528
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	University of California at Riverside	S-001490	-	17,079
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	Washington State University	133321-SPC001388	-	27,870
U.S. Department of Agriculture	N	10.309	Specialty Crop Research Initiative	Washington State University	140349-SPC04077	-	27,378
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Alabama A&M University	A18-0315-S001	-	9,013
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Colorado School of Mines	401541-S802	-	1,058
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Connecticut, University of	413623	-	64,250
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Cornell University	84041-11058	-	(6,328)
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Delaware, University of	UDR0000221	-	14,885
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Iowa State University	022496C	-	901,862
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Minnesota, University of	H008728802	-	(1,975)
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	North Carolina State University	2019-1507-17	-	67,093
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Ohio State University	60066131 PO RF01572582	-	15,866
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Pennsylvania, University of	580961	-	36,633
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Pennsylvania, University of	584753	-	12,197
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Purdue University	F0013585302011	-	82,979
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Purdue University	F0016275102011	-	35,824
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Purdue University	F1000224802008	-	(2,205)
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Tufts University	AG9046	-	58,028
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	University of Arkansas	AWD-100319-04	-	(4,451)
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	University of Arkansas	UA0222-315	-	228,925
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	University of California at Davis	A18-1616-S004	-	17
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	University of California at Davis	A21-0187-S003	-	21,651
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	University of Florida	SUB00002415	-	233
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	University of Wisconsin-Madison	0000002723	-	11,552
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	West Virginia University	20-182-PSU PO MM0000338770	-	252,272
U.S. Department of Agriculture	N	10.320	Sun Grant Program	South Dakota State University	3TD372	-	1,252
U.S. Department of Agriculture	N	10.320	Sun Grant Program	University of Tennessee	9500098679	-	18,960
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Minnesota, University of	A007363501	135,995	214,888
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Minnesota, University of	H010225601	-	94,347
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Nebraska, University of	35-5420-2004-003	-	986
U.S. Department of Agriculture	N	10.902	Soil and Water Conservation	Colorado State University	G-70444-03	-	9,080
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	Children's Hospital of Philadelphia	3201480822	-	296
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	Commonwealth of Pennsylvania Department of Education	4500644404	10,250	10,893
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	COP Department of Agriculture	C940000777	-	(1,302)
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	COP Department of Agriculture	C940001087	-	15,763
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	Mississippi State University	254709	-	18,481
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	University of Illinois	094525-17306	-	180,070
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	University of Massachusetts Amherst	22-016782 A 00	-	14,244
U.S. Department of Agriculture	N	10.RD	U.S. Department of Agriculture Research and Development	University of Wisconsin-Madison	0000000154	-	5,566
U.S. Department of Agriculture Total						3,901,300	35,104,835
U.S. Department of Commerce	Y	11.417	Sea Grant Support			99,760	1,633,276
U.S. Department of Commerce	Y	11.431	Climate and Atmospheric Research			69,458	283,137
U.S. Department of Commerce	Y	11.457	Chesapeake Bay Studies			-	80,336
U.S. Department of Commerce	Y	11.459	Weather and Air Quality Research			-	74,729
U.S. Department of Commerce	Y	11.482	Coral Reef Conservation Program			-	233,119
U.S. Department of Commerce	Y	11.609	Measurement and Engineering Research and Standards			-	761,197
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	1
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	47,641
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	39,650
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	10,724
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	1
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	67,164
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	2,804
U.S. Department of Commerce	Y	11.RD	U.S. Department of Commerce Research and Development			-	37,094
U.S. Department of Commerce	N	11.417	Sea Grant Support	Minnesota, University of	D007941106	-	2,993
U.S. Department of Commerce	N	11.417	Sea Grant Support	Purdue University	F0008309702056	-	60,361
U.S. Department of Commerce	N	11.417	Sea Grant Support	Purdue University	F0008309702080	-	102,021
U.S. Department of Commerce	N	11.417	Sea Grant Support	University of Illinois	097126-17812	-	7,927
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	-	177,860
U.S. Department of Commerce	N	11.431	Climate and Atmospheric Research	The Regents of the University of Michigan	SUBK00012213 PO 3005773548	-	17,188
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	-	170,527
U.S. Department of Commerce	N	11.459	Weather and Air Quality Research	Texas Tech University	218053-02	-	100,057
U.S. Department of Commerce	N	11.472	Unalied Science Program	SECORE International, Inc.	SECORE_PENNST_SUBAWARD2022	-	20,227
U.S. Department of Commerce	N	11.478	Center for Sponsored Coastal Ocean Research Coastal Ocean Program	Rhode Island, University of	0009205/110221 PSU	-	104,200
U.S. Department of Commerce	N	11.481	Educational Partnership Program	Howard University	0008971-1000067102	-	5,361

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Commerce	N	11.481	Educational Partnership Program	Howard University	0008971-1000088506	-	12,060
U.S. Department of Commerce	N	11.481	Educational Partnership Program	Howard University	GRT000392 - 10012446	-	31,671
U.S. Department of Commerce	N	11.609	Measurement and Engineering Research and Standards	American Bureau of Shipping	4646169	-	153,264
U.S. Department of Commerce	N	11.619	Arrangements for Interdisciplinary Research Infrastructure	Delaware, University of	PC4.1-105	-	67,421
U.S. Department of Commerce	N	11.619	Arrangements for Interdisciplinary Research Infrastructure	The Regents of the University of Michiga	SUBK00015959	-	68,388
U.S. Department of Commerce	N	11.RD	U.S. Department of Commerce Research and Development	Synoptic Data	S2020-142	-	55,213
U.S. Department of Commerce Total						169,218	4,428,033
U.S. Department of Defense	Y	12.300	Basic and Applied Scientific Research			828,811	9,420,316
U.S. Department of Defense	Y	12.330	Science, Technology, Engineering & Mathematics (STEM) Education, Outreach and Wo			-	58,128
U.S. Department of Defense	Y	12.351	Scientific Research - Combating Weapons of Mass Destruction			4,563,797	6,142,333
U.S. Department of Defense	Y	12.420	Military Medical Research and Development			326,488	4,142,473
U.S. Department of Defense	Y	12.431	COVID-19 - Basic Scientific Research			-	32,624
U.S. Department of Defense	Y	12.431	Basic Scientific Research			319,870	1,524,336
U.S. Department of Defense	Y	12.556	Competitive Grants: Promoting K-12 Student Achievement at Military-Connected Sch			-	777,419
U.S. Department of Defense	Y	12.598	Centers for Academic Excellence			56,517	1,294,636
U.S. Department of Defense	Y	12.599	Congressionally Directed Assistance			133,580	247,507
U.S. Department of Defense	Y	12.630	Basic, Applied, and Advanced Research in Science and Engineering			2,849,169	3,584,561
U.S. Department of Defense	Y	12.800	COVID-19 - Air Force Defense Research Sciences Program			-	4,878
U.S. Department of Defense	Y	12.800	Air Force Defense Research Sciences Program			1,913,089	6,032,732
U.S. Department of Defense	Y	12.902	Information Security Grants			-	534,961
U.S. Department of Defense	Y	12.910	COVID-19 - Research and Technology Development			-	696
U.S. Department of Defense	Y	12.910	Research and Technology Development			513,257	1,475,129
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	128,609
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			1,171,899	6,529,568
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			746,153	813,012
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			5,348,306	5,927,676
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			5,759,069	6,360,666
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	55,298
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	491,212
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	391,350
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	8,718
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,376
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	617,459
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			788,948	4,022,399
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	81,233
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			165,876	1,349,719
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			1,351,326	3,574,756
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	938,135
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(3,418)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			80,023	964,082
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	254,027
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,451,335
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(71,863)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	162,135
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	62,272
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	207,148
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	25,962
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(155)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(42,350)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(3,859)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	969
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(9)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(13,374)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(5,874)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(9,096)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	18,077
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	65,915
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	59
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	159
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	102
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	649
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(22,333)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	98,469
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	60,115
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	167,739
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	179,242
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	20,625
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	125,000
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	15,141
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,194,926
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	252
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	43,793
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	80
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	67
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	685,093
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	5,354
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	299,171
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	89,291
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	47,343
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	268,844
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	543,908
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	218,064
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	30,522
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	243,829
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,296,395
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	981,776
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	504,887
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	148,128
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	174,204

See notes to schedule of expenditures of federal awards.

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Federal Agency	Direct		Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient	
	Award	ALN				Expenditures	Expenditures
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	195,205
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	223,294
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	105,264
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	12,057
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	52,615
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	6,338
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	164,058
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	20,354
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	313
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			36,789	271,364
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			1,678,033	4,491,925
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	64,831
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			26,850	3,191,299
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	25,111
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	67,133
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	329,480
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			7,940	8,954
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(2,264)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	519,063
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(2,217)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	2
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	87
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	859,868
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	29,106
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	639,155
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(27,136)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	105,392
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	38,498
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			822,752	2,449,913
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,861,963
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	73,996
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	164,925
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	908,846
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,112,548
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			182,923	955,303
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,669,107
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			1,382,540	3,188,453
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	599,405
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	426,328
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	5,652,084
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	34,532
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			211,767	306,613
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			268,000	329,324
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	45,959
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	3,999
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	10,176
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			-	(2,237)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(13,649)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(1,585)
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			-	307
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(6,910)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	67,610
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(4,238)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(811)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	15,367
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(17,598)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	20,994
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	766
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	314,958
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	50
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(25,234)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			240,070	1,074,554
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	7,376
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(347)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	6
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	18,719
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(929)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(6,820)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	18,542
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	30
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	586
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			-	2,360,095
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	3,610
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	223
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,850
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	154,461
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	557
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(423)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	805
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(3,859)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(3,867)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	407
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	133,696
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	143
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	2,783
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	(6,013)
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	14,204

See notes to schedule of expenditures of federal awards

**THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023**

[illegible]

See notes to schedule of expenditures of federal awards

**THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023**

[illegible]

See notes to schedule of expenditures of federal awards

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(1,722)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	288,160
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	3,159,523
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	71,914
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			203,785	422,596
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			174,158	791,106
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	38,708
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(101)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	53,730
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	690,937
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	4,402,690
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	4,836,922
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	574,651
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	284,871
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			20,375	10,684,764
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	2,651,260
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	121,889
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	4,772
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	368,956
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	115,752
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	(172)
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	206,431
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	728,065
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			131,839	956,072
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	429,877
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	96,820
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	289,299
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,069,856
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	810,442
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			160,449	1,445,752
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	461,387
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	433,819
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			738,249	2,316,381
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	651,243
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	348,202
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	529,358
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,505,217
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,659,424
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,276,573
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	150,400
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	57,554
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,077,531
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,261,607
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	111,000
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	66,014
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	150,923
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	448,823
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	816,888
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	2,192,434
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	865,605
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	992,784
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	630,917
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			537,738	1,905,601
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	3,528,735
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	855,240
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,719,752
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	466,526
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	145,595
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	264,831
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	146,729
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,299,987
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	23,811
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	90,830
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,237,865
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,439,009
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	149,196
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	15,928,417
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	661,396
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	4,657,354
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	199,525
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	316,114
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	104,345
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	250,107
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,225,932
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	214,856
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	136,587
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	262,246
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	29,779
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	88,285
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	2,319,277
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			83,858	5,308,543
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			48,206	4,488,441
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,082,376
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	111,164
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			148,324	752,536
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	201,204
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			103,017	2,048,552
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	1,027,192
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	141,466
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	29,110

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct		Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient	
	Award	ALN				Expenditures	Expenditures
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,570,868
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			174,521	1,616,954
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			135,911	494,961
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	103,612
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	104,686
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	76,560
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	190,970
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	700,305
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	195,509
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	484,793
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	279,547
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	338,670
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,718,095
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,648,044
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	250,491
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	326,786
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	174,750
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	715,344
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	207,062
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	842,593
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	102,860
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,620,521
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	320,112
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	449,090
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	93,146
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	51,573
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	181,496
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	247,128
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	24,886
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	492,883
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	3,427,590
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	154,472
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	215,180
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	428,386
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	256
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	488,513
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,419,289
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	369,235
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	150,294
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	321,792
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	83,652
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			22,892	348,342
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	190,663
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	382,502
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	91,083
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	209,283
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	156,644
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	14,568
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	34,122
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	169,877
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	75,114
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	91,929
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	43,856
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,574
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	214,595
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	307,772
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	111,124
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	52,223
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	59,566
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	4,533
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	195,412
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	120,415
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	235,283
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	17,523
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	389,639
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	241,173
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	16,644
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	34,891
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	24,891
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	63,468
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	15,423
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	10,534
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	31,957
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	53,982
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	7,442
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,103
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	308,689
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,389
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	268,471
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	1,848
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	269,954
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	129,965
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	253,827
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	75,231
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	344,506
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	99,144
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	94,782
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	290,750
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	20,361
U.S. Department of Defense	Y	12 RD	U.S. Department of Defense Research and Development			-	27,717

See notes to schedule of expenditures of federal awards

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	26,043
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	268,700
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	67,720
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	240,002
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	307,209
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	252,133
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	664,833
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	29,507
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	2,491
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	200,209
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	203,820
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	295,808
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	23,149
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	17,079
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	271,254
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	865,438
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	152,081
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			33,165	102,885
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	118,467
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	938,764
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	982,521
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	9,884
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	81,163
U.S. Department of Defense	Y	12.RD	U.S. Department of Defense Research and Development			-	7,495
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Duke University	313-1092	-	446,158
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Houston, University of	R-22-0074	-	216,152
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Minnesota, University of	A005988203	-	27,419
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	New Mexico, University of University of New Mexico Health Sciences	133755-873B	-	107,836
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	North Carolina State University	2015-1959-04	-	(33)
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Oregon, University of	234640B	-	333,851
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Purdue University	13000647-004	-	115,885
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Purdue University	13001044-017	-	25,000
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Purdue University	40001859-027	-	198,329
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	University of California at San Diego	705713	-	31,048
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	University of Illinois	099963-17891	-	101,987
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	University of Southern California	141252736	-	30,722
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Vanderbilt University	OSA00000076	-	53,382
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Virginia Polytechnic Institute and State University	418305-19079	-	64,842
U.S. Department of Defense	N	12.300	Basic and Applied Scientific Research	Washington, University of	UWSC11269 PO 41707	-	28,652
U.S. Department of Defense	N	12.351	Scientific Research - Combating Weapons of Mass Destruction	Minnesota, University of	H006536504	-	(1,647)
U.S. Department of Defense	N	12.351	Scientific Research - Combating Weapons of Mass Destruction	University of Texas at Austin	UTAUS-SUB00000288AM2	-	103,850
U.S. Department of Defense	N	12.420	Military Medical Research and Development	Drexel University	940009	-	50,361
U.S. Department of Defense	N	12.420	Military Medical Research and Development	Iowa State University	019123A	-	28,345
U.S. Department of Defense	N	12.420	Military Medical Research and Development	Microbiotix, Inc.	PSEFTU2019	-	(57)
U.S. Department of Defense	N	12.431	Basic Scientific Research	Carnegie Mellon University	1130288-463192	-	36,328
U.S. Department of Defense	N	12.431	Basic Scientific Research	General Opto Solutions, LLC	261682	-	181,307
U.S. Department of Defense	N	12.431	Basic Scientific Research	Michigan State University	RC113209-PSU	-	258,372
U.S. Department of Defense	N	12.431	Basic Scientific Research	North Carolina State University	2016-1652-04	-	219,103
U.S. Department of Defense	N	12.431	Basic Scientific Research	Princeton University Office of Research & Project Administrat	SUB0000634	-	222,063
U.S. Department of Defense	N	12.431	Basic Scientific Research	Purdue University	13000802-017	-	16,969
U.S. Department of Defense	N	12.431	Basic Scientific Research	University of California at Berkeley	00010732	-	147,631
U.S. Department of Defense	N	12.431	Basic Scientific Research	University of Missouri	C00076207-3	-	35,200
U.S. Department of Defense	N	12.431	Basic Scientific Research	University of Southern California	SCON-00004292	-	66,151
U.S. Department of Defense	N	12.630	Basic, Applied, and Advanced Research in Science and Engineering	MxD	222202 TASK ORDER 20-11-13	-	2,486
U.S. Department of Defense	N	12.630	Basic, Applied, and Advanced Research in Science and Engineering	Texas A&M Engineering Experiment Station	M2000357	-	11,328
U.S. Department of Defense	N	12.630	COVID-19 - Basic, Applied, and Advanced Research in Science and Engineering	University of Iowa	S02280-01	-	26,974
U.S. Department of Defense	N	12.630	Basic, Applied, and Advanced Research in Science and Engineering	University of Maryland	11161-Z8481201	-	48,500
U.S. Department of Defense	N	12.630	Basic, Applied, and Advanced Research in Science and Engineering	Utah, University of	10028801-PENN-APP	-	24,300
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Applied Optimization	2101AMTAPSU01	-	62
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Applied Optimization	2206AMRMPSU01	-	20,666
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Case Western Reserve University	RES600322	-	89,681
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Delaware State University	23-335HEH	-	45,018
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Directed Energy Professional Society	980158	-	5,615
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Directed Energy Professional Society	982890	-	16,019
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Florida International University	800011034-02UG	-	121,185
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	GE Global Research Center	401159717	-	26,969
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	National Center for Defense Manufacturin g & Machining	27453	13,704	25,421
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	National Center for Defense Manufacturin g & Machining	980212	-	7,472
U.S. Department of Defense	N	12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturin g & Machining	982512	4,532	4,868
U.S. Department of Defense	N	12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturin g & Machining	982529	48,840	52,454
U.S. Department of Defense	N	12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturin g & Machining	983078	-	29,901
U.S. Department of Defense	N	12.800	COVID-19 - Air Force Defense Research Sciences Program	National Center for Defense Manufacturin g & Machining	983079	-	71,375
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Purdue University	13000716-052	-	278,692
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Purdue University	13000716-060	-	465,443
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	-	34,635
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	The Research Foundation for SUNY on beha if of the University at Buffalo	R1304011	-	269,723
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	-	189,065
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	University of California at San Diego	KR-705478	-	195,407
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	University of Tennessee - Knoxville	A22-0890-S001	-	75,433
U.S. Department of Defense	N	12.800	COVID-19 - Air Force Defense Research Sciences Program	University of Texas at Arlington	2016GC8246	-	15,836
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	University of Wisconsin-Madison	0000000220	-	67,453
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Utah, University of	10059059-PENN	-	126,494
U.S. Department of Defense	N	12.800	Air Force Defense Research Sciences Program	Washington, University of	UWSC12793	-	108,138
U.S. Department of Defense	N	12.900	Language Grant Program	University of North Georgia	451031-01	-	28,377
U.S. Department of Defense	N	12.910	Research and Technology Development	Center for Open Science	250929	-	6,043
U.S. Department of Defense	N	12.910	Research and Technology Development	Montana State University	G169-18-W7329	-	(340)
U.S. Department of Defense	N	12.910	Research and Technology Development	Virginia Polytechnic Institute and State University	450369-19079	-	124,450
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	4D Tech Solutions	2181	-	(266)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Actuated Medical, Inc.	233337	-	(129)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Cooling Technologies, Inc.	270259	-	3,808

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Cooling Technologies, Inc.	270262	-	1,173
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Cooling Technologies, Inc.	41768	-	(1,946)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2012532 TO 007	-	5,019
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2014-309	-	(36,430)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2018-457 TO 002	-	299,724
U.S. Department of Defense	N	12.RD	COVID-19 - U.S. Department of Defense Research and Development	Advanced Technology International	2018-457 TO 003	-	190,254
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2018-867 TO #CWMD1907-001	-	147,345
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019467 TO 001	-	140,456
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019-482-01	-	129
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019685 TO 001	-	8,415
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2019685 TO 002	-	31,283
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	-	271,905
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2021-378 TO 2 NSTIC-20-01-055	-	709,016
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Advanced Technology International	2022301 TO 001	-	291,698
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	AeroDynamic Solutions, Inc.	265579	-	16,298
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Alcon Science and Technology Corporation	P000036707	-	292
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	American Lightweight Materials Manufactu ring Innovation Institute	K00401	-	480,168
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	AnalysSwift	267251	-	49,072
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Applied Optimization	1902084PSU01	-	(191)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Applied Optimization	1910086PSU01	-	17,832
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Applied Optimization	2106022PSU01	-	24,181
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Applied Optimization	2201074PSU01	-	33,568
U.S. Department of Defense	N	12.RD	COVID-19 - U.S. Department of Defense Research and Development	Applied Physical Sciences Corporation	980976 APS2020	-	8,515
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Arete Associates	AZ-401724	-	40,531
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Arrow Tech Associates, Inc.	PO 19006 & PO 28318	-	39,993
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Assurance Technology Corporation	911175	-	7,732
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	413	-	62,381
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	437	-	179,751
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	AVX Aircraft Company	443	-	59,204
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Azimuth Corporation	292001PSU	-	6,924
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	BAE Systems	1124569	-	18,723
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	BAM Technologies LLC	2021-8-12	-	142,721
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Battelle (Ohio)	PO US001-0000812865	-	(16,668)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Bechtel Plant Machinery, Inc.	G301665	-	211,677
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	BlueHalo	0000010360	-	19,168
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	BlueHalo	227838	-	5,733
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Boeing Company	2166311	-	67,366
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Bolder Flight Systems, Inc.	255466	-	180,013
U.S. Department of Defense	N	12.RD	COVID-19 - U.S. Department of Defense Research and Development	Carnegie Mellon University	1990682-437338	-	344
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Carnegie Mellon University	1990792-455728	-	122,525
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	-	89,447
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Cascade Technologies	237696	-	161,308
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	N	12.RD	U.S. Department of Defense Research and Development	CEPEDA Associates, Inc.	982931	-	10,550
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	CFD Research Corporation	0000003143	-	42,969
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	CFD Research Corporation	20200658	-	91,708
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Charles River Analytics, Inc.	SC2114503	-	140,765
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	ChromoLogic LLC	266253	-	6,678
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Clarkson Aerospace Corporation	PSU 21-1-0460	-	114,154
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Colorado School of Mines	237314	-	(39,344)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Colorado School of Mines	401733-5801	-	64,931
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Computer Sciences Corporation	982633	-	80,897
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Continuum Dynamics, Inc.	22-014	-	192,687
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Continuum Dynamics, Inc.	22-062B	-	37,202
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Corvid Technologies	247806	-	(1,164)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Craft Tech	19-C-0189/C802	-	88,200
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	DiAngelo Technologies, LLC	982543	-	65,239
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Denver Research Institute	MSRC-FY19-04	-	109,734
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	EC Power	239972	-	(345)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	EC Power	249232	-	53,503
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Farragut Technical Analysis Center	OF69 DATED 13-APR-22	-	82,229
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Galois, Inc.	2019-021	-	(15,969)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Galois, Inc.	2019-021 MOD 9, 11, 12	-	263,180
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Gear Research Institute	26977	-	48,266
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Gear Research Institute	980734	-	143,830
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Gear Research Institute	982258	-	8,020
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Gear Research Institute	982834	-	72,093
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Gear Research Institute	983013	-	87,838
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Gear Research Institute	983034	-	921
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	General Dynamics Electric Boat	1000035342	-	40,829
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	General Dynamics Electric Boat	1000046124	-	89,366
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	General Dynamics Electric Boat	SNG227017	-	116,554
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	General Electric Co. [MP]	PO# 401105828	-	88,781
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Georgia Institute of Technology	AWD-103015-S2 PO-5287291	-	30,841
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Global Point Consulting LLC	RSA 983029	-	21,397
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	2862	-	42
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	982357	-	301,253
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	982509	-	(94)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	983014	-	89,708
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	HAMR, Industries LLC	983026	-	52,762
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Harmony Aeronautics LLC	257004	-	127,246
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	H-Nu Systems LLC	201826	-	(99)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	IBM Watson Research Center	CW3033969	-	13,427
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	II-VI Aerospace & Defense	110637	-	28,977
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Innovative Scientific Solutions, Inc.	S620265	-	17,751
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Innovveering, LLC	5235-01	-	25,497
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Intelligent Automation, Inc.	2532-1	-	14,693
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Karagozian & Case, Inc.	PSU 200474.000	-	95,385
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	KCF Technologies, Inc.	25294 174037	-	27
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Kitware, Inc.	K004015-00-S01	-	60,313

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Leidos, Inc.	P010237053	-	429
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Leidos, Inc.	P010256846	-	(11,242)
U.S. Department of Defense	N	12.RD	COVID-19 - U.S. Department of Defense Research and Development	Leidos, Inc.	P010203201	-	5,000
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Leidos, Inc.	P010203201	-	48,748
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lockheed Martin Advanced Technology Laboratories	PO 4105371380	-	45,225
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lockheed Martin Corporation, Inc. [MP]	U16-002 PO 4104511686 022	-	(7,773)
U.S. Department of Defense	N	12.RD	COVID-19 - U.S. Department of Defense Research and Development	Lockheed Martin Rotary and Mission Systems	4104658663	-	95,116
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lockheed Martin Rotary and Mission Systems	PO 41005571951	-	47,853
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lockheed Martin Space Systems Company	U16-002 PROJECT NO 034	-	3,331
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lockheed Martin Space Systems Company	U16-002 PROJECT NUMBER 033	-	8,204
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lockheed Martin Space Systems Company	U16-002 TASK ORDER 022	-	7,773
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	LP Resilient Services JV LLC	981476 (PHASE II)	-	235,250
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lyntech, Inc.	257292	-	44,089
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Lyntech, Inc.	NAV-2204	-	39,499
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	26973	-	628
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	980098	-	85,827
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	982417	-	(1,669)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	982993 (PO #0673822)	-	216,163
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	983162	-	34,206
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Mainstream Engineering Corporation	983163	-	32,268
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Micros Components, Inc.	260484	-	7,406
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	M-Mech Defense, Inc.	236236	-	92,410
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	MSI Transducers Corp	L1144-01	-	12,350
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	M&D	222205 PROJECT 211003	-	70,880
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Nanohmics, Inc.	238127	-	214,292
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	271309 PO 455100	-	5,275
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	982679	-	7,730
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	MDI-7523	-	44,689
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	MDI-7527	-	44,865
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	NV1-0254	-	38,575
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	NV20570	-	34,511
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	NV2-0570	-	187,370
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NanoSonic, Inc.	SF1-A015	-	5,906
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	National Center for Manufacturing Sciences	2022104110435	-	17,485
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	New York University	F2285-02	-	66,660
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	NestGen Aeronautics, Inc.	PO 21-01	-	363,076
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Northrop Grumman Defense Systems	MP00302615	-	(7,542)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Northrop Grumman Space Systems	983118	-	3,008
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Optimax Systems, Inc.	982750	-	55,129
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Orbital Bridge LLC	982743	-	54,793
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Oshkosh Corporation	1024 PO 27139094	-	146,380
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Peraton Labs Inc.	PO-0018619 PHASE 2	-	4,114
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Perspecta Engineering Inc.	PO 0029370 TO 8	73,690	318,062
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Perspecta Engineering Inc.	PO0024766	-	416
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Perspecta Engineering Inc.	PO-0028863	-	(2,797)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Perspecta, Inc.	PO-0018619 PHASE 2	-	33,424
U.S. Department of Defense	N	12.RD	COVID-19 - U.S. Department of Defense Research and Development	Physical Sciences Inc.	SC 10 -10226-8006-46	-	142
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Piasecki Aircraft Corporation	230600	-	197,399
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Piasecki Aircraft Corporation	PO 86929	-	122,322
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	PPG Industries [MP]	255906	-	90,161
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Pratt and Whitney	22205 TASK ORDER 145	-	46,372
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Pratt and Whitney	22205 TASK ORDER 151	-	174,944
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Precision Combustion, Inc.	2996	-	31,235
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	QuesTek Innovations LLC	156118-983061	-	42,800
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	QuesTek Innovations LLC	1875	-	74,789
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	QuesTek Innovations LLC	2701	-	168
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	QuesTek Innovations LLC	982844	-	45,484
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Raytheon Company	1257406	-	(782)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Raytheon Intelligence & Space	4202551104	-	19,823
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Raytheon Missiles & Defense	4202474469	-	141,660
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Raytheon Technologies Research Center	1265063 AMENDMENT 2	-	321,207
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	REM Surface Engineering	982747	-	92,194
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	RMD, Inc.	C21-27	-	(194)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Sabre Systems, Inc.	24296	-	9,331
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Saint-Gobain Crystals	982717	-	144,632
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Saint-Gobain Crystals	C32788	-	24
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Saxon Glass Technologies, Inc.	264205	-	4,811
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	SciTech Services, Inc.	23-22-F-0037-04	-	38,972
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	SciTech Services, Inc.	SCITECH 21-21-F-0027-04	-	50,127
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Siemens Corporation, Corporate Technology	S21401	-	38,823
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Southwest Range Services, LLC	R02953	-	1,017
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	spotLESS Materials LLC	222595	-	2,873
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Stevens Institute of Technology	2103269-01	-	111,601
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Stevens Institute of Technology	2103399-01	-	33,877
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	SURVICE Engineering Company, LLC	S21-095001	-	(412)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Systems Innovation Engineering	982623	-	121,565
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Systems Technology, Inc.	982687	-	7,108
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Systima Technologies, Inc.	208699	-	(154)
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	TE Connectivity LTD	982682	-	2,258
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Texas A&M Engineering Experiment Station	M2200284	(37,342)	135,335
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Texas A&M Engineering Experiment Station	M2203083	-	2,469
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Physics Laboratory LLC	168340	-	92,086
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Physics Laboratory LLC	178730	-	334,379
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	The Johns Hopkins University Applied Physics Laboratory LLC	181172	-	15,387
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Toyon Research Corporation	SC22C288-1-P4061	-	41,816
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Trident Systems, Inc.	ICS2103 DO 001	-	173,687
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Trident Systems, Inc.	ICS2104 DO 001	-	261,391
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Trident Systems, Inc.	ICS2201 DO 001	-	50,963
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Trident Systems, Inc.	ICS2201 DO 002	-	5,240
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Trident Systems, Inc.	ISEG1802 DO 001	-	(270)

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Triton Systems, Inc.	TSI-2666-20-20201708	-	8
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Triton Systems, Inc.	TSI-5033-21-20207194	-	228,003
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Triton Systems, Inc.	TSI51082320210837	-	49,612
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	UES, Inc.	S163001001	-	277
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	UES, Inc.	S192000001	-	205,278
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	UES, Inc.	S-210-212-001	-	6,989
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Ultramet	15061	-	160,990
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	United Technologies Research Center	1254302	-	24,454
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	University of Central Florida	16308423	-	108,426
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	University of Dayton Research Institute	RSC20079	-	41,061
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	University of Hawaii	982901 PO Z10258939	-	17,118
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	University of Miami	OS00000984 PO-SPC-002846	-	595,148
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	University of Pittsburgh Medical Center	AWD00005595 (418902-1)	-	16,437
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	University of Texas at Austin	2023C00740	-	19,704
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	UtopiaCompression Corporation	PSU20222-0790-01	-	182,534
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Vector Atomic, Inc.	980875	-	72,213
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Viele Exploratory Sustainable Solutions LLC	983116	-	47,274
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Virginia Polytechnic Institute and State University	450487-19079	-	(2,971)
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)	-	81,460
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	VRC Metal Systems, LLC	982429 W912HZ21C0017-19.08	-	282
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	VRC Metal Systems, LLC	983050 (W912HZ22C0042-19.12)	-	41,082
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	Xact Metal, Inc.	983002	-	19,295
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	X-Hab 3D, Inc.	260481	-	64,993
U.S. Department of Defense	N	12.RD	U.S. Department of Defense Research and Development	ZETA Associates Inc.	220046SC-PSU-ARL-01	-	132,001
U.S. Department of Defense Total						<u>36,739,135</u>	<u>381,543,082</u>
Central Intelligence Agency	N	13.RD	Central Intelligence Agency Research and Development	DEFENSEWERX	RDA DATED 1/10/22	-	174,391
Central Intelligence Agency	N	13.RD	Central Intelligence Agency Research and Development	DEFENSEWERX	RDA DATED 1/31/22	-	441,478
Central Intelligence Agency	N	13.RD	Central Intelligence Agency Research and Development	DEFENSEWERX	RDA DATED 2/24/23	-	381,961
Central Intelligence Agency Total						<u>-</u>	<u>997,830</u>
U.S. Department of Housing and Urban Development	N	14.906	Healthy Homes Technical Studies Grants	George Washington University	20-M02	-	(2,960)
U.S. Department of Housing and Urban Development Total						<u>-</u>	<u>(2,960)</u>
U.S. Department of the Interior	Y	15.232	Wildland Fire Research and Studies			-	16,067
U.S. Department of the Interior	Y	15.862	Great Lakes Restoration			248,093	832,690
U.S. Department of the Interior	Y	15.805	Assistance to State Water Resources Research Institutes			-	125,273
U.S. Department of the Interior	Y	15.808	U.S. Geological Survey Research and Data Collection			-	71,819
U.S. Department of the Interior	Y	15.812	Cooperative Research Units			-	708,194
U.S. Department of the Interior	Y	15.923	National Center for Preservation Technology and Training			-	(9,046)
U.S. Department of the Interior	Y	15.945	Cooperative Research and Training Programs – Resources of the National Park Syst			19,024	326,464
U.S. Department of the Interior	Y	15.RD	U.S. Department of Interior Research and Development			-	11,395
U.S. Department of the Interior	Y	15.RD	U.S. Department of Interior Research and Development			-	7,761
U.S. Department of the Interior	Y	15.RD	U.S. Department of Interior Research and Development			-	23,557
U.S. Department of the Interior	Y	15.RD	U.S. Department of Interior Research and Development			-	13,333
U.S. Department of the Interior	Y	15.RD	U.S. Department of Interior Research and Development			-	(5,422)
U.S. Department of the Interior	Y	15.RD	U.S. Department of Interior Research and Development			-	19,190
U.S. Department of the Interior	N	15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission	4100086809	-	7,323
U.S. Department of the Interior	N	15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission	4100089233	-	31,618
U.S. Department of the Interior	N	15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission	4100090436	6,493	40,240
U.S. Department of the Interior	N	15.634	State Wildlife Grants	COP: Fish & Boat Commission	4100084552	-	21,791
U.S. Department of the Interior	N	15.808	U.S. Geological Survey Research and Data Collection	Michigan Technological University	2108003Z1 AMENDMENT 1	-	12,484
U.S. Department of the Interior	N	15.815	National Land Remote Sensing Education Outreach and Research	California University of Pennsylvania	2122ST001-S3	-	3,999
U.S. Department of the Interior	N	15.945	Cooperative Research and Training Programs – Resources of the National Park Syst	Boise State University	9906-PO139230	-	28,659
U.S. Department of the Interior	N	15.RD	U.S. Department of Interior Research and Development	COP: Game Commission	RES PROJ 30	-	3,493
U.S. Department of the Interior	N	15.RD	U.S. Department of Interior Research and Development	Resource Systems Group, Inc.	248635	-	23,390
U.S. Department of the Interior						<u>273,610</u>	<u>2,314,242</u>
U.S. Department of Justice	Y	16.560	National Institute of Justice Research, Evaluation, and Development Project Gran			151,329	420,509
U.S. Department of Justice	N	16.560	National Institute of Justice Research, Evaluation, and Development Project Gran	Iowa State University	021595A	-	54,619
U.S. Department of Justice	N	16.560	National Institute of Justice Research, Evaluation, and Development Project Gran	University of Texas at San Antonio	1000003945	-	212,132
U.S. Department of Justice	N	16.738	Edward Byrne Memorial Justice Assistance Grant Program	COP: State Police	234434	-	64,990
U.S. Department of Justice	N	16.754	Harold Rogers Prescription Drug Monitoring Program	PA Prescription Drug Monitoring Programs	4300682773	-	26,874
U.S. Department of Justice	N	16.754	Harold Rogers Prescription Drug Monitoring Program	PA Prescription Drug Monitoring Programs	4300704173	17,140	27,060
U.S. Department of Justice	N	16.RD	U.S. Department of Justice Research and Development	COP: Board of Probation and Parole	4300727362	-	24,638
U.S. Department of Justice	N	16.RD	U.S. Department of Justice Research and Development	COP: Department of Corrections	4300727370	-	74,119
U.S. Department of Justice	N	16.RD	U.S. Department of Justice Research and Development	YWCA of Greater Pittsburgh	2019-VT-BX-0109	-	4,335
U.S. Department of Justice Total						<u>168,469</u>	<u>909,276</u>
U.S. Department of Labor	N	17.401	International Labor Programs	Solidarity Center	202214-38256	-	120,125
U.S. Department of Labor	N	17.RD	U.S. Department of Labor Research and Development	ICF Incorporated LLC	53556	-	98,594
U.S. Department of Labor Total						<u>-</u>	<u>218,719</u>
U.S. Department of State	Y	19.040	Public Diplomacy Programs			-	2,749
U.S. Department of State	Y	19.RD	U.S. Department of State Research and Development			-	12,022
U.S. Department of State	N	19.040	Public Diplomacy Programs	American Councils	254389	-	6,205
U.S. Department of State	N	19.900	AEECA/ESF PD Programs	American Councils	254435	-	17,708
U.S. Department of State Total						<u>-</u>	<u>38,684</u>
U.S. Department of Transportation	Y	20.108	Aviation Research Grants			-	166,374
U.S. Department of Transportation	Y	20.109	Air Transportation Centers of Excellence			211,697	1,563,043
U.S. Department of Transportation	Y	20.529	Bus Testing			38,352	2,287,279
U.S. Department of Transportation	Y	20.701	University Transportation Centers Program			1,498,492	2,172,549
U.S. Department of Transportation	Y	20.RD	U.S. Department of Transportation Research and Development			-	29,815
U.S. Department of Transportation	Y	20.RD	U.S. Department of Transportation Research and Development			-	11,848
U.S. Department of Transportation	Y	20.RD	U.S. Department of Transportation Research and Development			-	157,647
U.S. Department of Transportation	Y	20.RD	U.S. Department of Transportation Research and Development			-	40,395
U.S. Department of Transportation	Y	20.RD	U.S. Department of Transportation Research and Development			-	35,733
U.S. Department of Transportation	Y	20.RD	U.S. Department of Transportation Research and Development			-	2,210,179
U.S. Department of Transportation	N	20.200	Highway Research and Development Program	National Cooperative Highway Research Program	HR 24-49	22,195	165,924

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	Montana Department of Transportation	9932-820 CONTRACT #314039	-	9,839
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300730112	-	77,539
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300732731	-	51,849
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300740444	-	76,797
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300740455	-	83,469
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300740464	-	76,153
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300740472	-	46,049
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300740978	-	78,839
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300741101	-	74,525
U.S. Department of Transportation	N	20.205	Highway Planning and Construction	PennDOT	4300743883	-	32,898
U.S. Department of Transportation	N	20.325	Consolidated Rail Infrastructure and Safety Improvements	Kansas State University	A20-0537-S001	-	243,766
U.S. Department of Transportation	N	20.701	University Transportation Centers Program	Missouri University of Science and Technology	00076844-01	-	10,088
U.S. Department of Transportation	N	20.701	University Transportation Centers Program	Missouri University of Science and Technology	00076848-01	-	26,747
U.S. Department of Transportation	N	20.RD	U.S. Department of Transportation Research and Development	Acrow Corporation of America	981735	-	717
U.S. Department of Transportation	N	20.RD	U.S. Department of Transportation Research and Development	Callentis Consulting Group, LLC	261411	-	70,850
U.S. Department of Transportation	N	20.RD	U.S. Department of Transportation Research and Development	FBS, Inc. (Feature Based Systems)	228213	-	588
U.S. Department of Transportation	N	20.RD	U.S. Department of Transportation Research and Development	PennDOT	PENNSTATEADS2021	-	235,876
U.S. Department of Transportation	N	20.RD	U.S. Department of Transportation Research and Development	Purdue University	19200267-030	-	90,160
U.S. Department of Transportation	N	20.RD	U.S. Department of Transportation Research and Development	Vanasse Hangen Brustlin, Inc.	39541-12	-	(3)
U.S. Department of Transportation Total						1,770,736	10,127,462
General Services Administration	N	39.RD	General Services Administration Research and Development	COP: Department of General Services	2016-OCC7209	-	78,704
General Services Administration	N	39.RD	General Services Administration Research and Development	COP: Department of General Services	4300556762	-	23,431
General Services Administration	N	39.RD	General Services Administration Research and Development	COP: Department of General Services	4400016637	-	11,401
General Services Administration Total						-	113,536
Library of Congress	N	42.RD	Library of Congress Research and Development	Waynesburg University	235563	-	2,957
Library of Congress Total						-	2,957
National Aeronautics and Space Administration	Y	43.001	Science			2,533,220	9,987,812
National Aeronautics and Space Administration	Y	43.002	Aeronautics			882,446	1,660,995
National Aeronautics and Space Administration	Y	43.007	Space Operations			-	9,970
National Aeronautics and Space Administration	Y	43.008	Education			267,877	764,092
National Aeronautics and Space Administration	Y	43.012	Space Technology			94,691	811,889
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	(719)
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	7,294
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	(1)
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	1,389
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	11,209
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	12,969
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	2,681
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	149,771
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	3,282
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	124,383
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	4,999
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	10,000
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	10,000
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	17,915
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			-	11,199
National Aeronautics and Space Administration	Y	43.RD	National Aeronautics and Space Administration Research and Development			980,711	1,986,421
National Aeronautics and Space Administration	N	43.001	Science	CARLETON COLLEGE Attn: Business Office	PSU-0298	-	32,334
National Aeronautics and Space Administration	N	43.001	Science	Cornell University	138591-21054	-	26,798
National Aeronautics and Space Administration	N	43.001	Science	Cornell University	91922-20470	-	9,591
National Aeronautics and Space Administration	N	43.001	Science	Georgetown University	AWD7773186-GR205805	-	140,633
National Aeronautics and Space Administration	N	43.001	Science	Georgia, University of	SUB00002227	-	32,925
National Aeronautics and Space Administration	N	43.001	Science	Ohio State University	SPC-1000007126 GR127925	-	7,930
National Aeronautics and Space Administration	N	43.001	Science	Ohio State University	SPC-1000007144 GR129438	-	12,091
National Aeronautics and Space Administration	N	43.001	Science	PRESIDENT AND FELLOWS OF HARVARD COLLEGE HARVARD UNIVERSITY	131605-5120713	-	83,925
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	AR1-22006X	-	26,298
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	AR1-22008X	-	(1,347)
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	AR3-24003B	-	2,176
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	DDO-21113X	-	15,012
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G00-21049X	-	9,798
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G00-21064B	-	20,404
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G01-22037X	-	20,463
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G01-22055C	-	17,430
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G02-23003X	-	23,969
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G02-23041X	-	2,176
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G02-23046X	-	15,103
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G02-23083X	-	5,002
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G03-24053X	-	1,740
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G09-20011X	-	55,789
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G09-20051A	-	8,512
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	G09-20099X	-	11,228
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	SV9-89016	-	33,946
National Aeronautics and Space Administration	N	43.001	Science	Smithsonian Astrophysical Observatory (T he)	SV9-89025	-	22,583
National Aeronautics and Space Administration	N	43.001	Science	Southwest Research Institute	M99031 CEP	-	(4,339)
National Aeronautics and Space Administration	N	43.001	Science	Space Telescope Science Institute	HST-AR-16146.008-A	-	200
National Aeronautics and Space Administration	N	43.001	Science	Space Telescope Science Institute	HST-GO-16064.001-A	-	13,687
National Aeronautics and Space Administration	N	43.001	Science	Space Telescope Science Institute	HST-GO-16200.003-A	-	1,083
National Aeronautics and Space Administration	N	43.001	Science	Texas A&M University	M2101865	-	86,335
National Aeronautics and Space Administration	N	43.001	Science	University of Chicago	AWD101560 (SUB00000391)	-	204,417
National Aeronautics and Space Administration	N	43.001	Science	University of Chicago	AWD101921 (SUB00000467)	-	353,148
National Aeronautics and Space Administration	N	43.001	Science	University of Iowa	S03065-01	-	156,484
National Aeronautics and Space Administration	N	43.001	Science	University of Maryland	121334-26500201	-	7,690
National Aeronautics and Space Administration	N	43.001	Science	University of Maryland Baltimore County	NASA0015-01	-	60,784
National Aeronautics and Space Administration	N	43.001	Science	Yanderbilt University	OSA00000130	-	4,225
National Aeronautics and Space Administration	N	43.001	Science	Washington University in St. Louis	WU-23-0279	-	83,295
National Aeronautics and Space Administration	N	43.002	Aeronautics	Brown University	00001765	-	163,109
National Aeronautics and Space Administration	N	43.002	Aeronautics	University of Tennessee - Knoxville	A18-0139-S002	-	105,255

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
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Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
National Aeronautics and Space Administration	N	43.008	Education	Florida International University	000061	-	91,548
National Aeronautics and Space Administration	N	43.008	Education	National Institute of Aerospace	C20-201030-PSU	-	14,917
National Aeronautics and Space Administration	N	43.008	Education	National Institute of Aerospace	C20-202010-PSU SUPPL 4, 5	-	31,551
National Aeronautics and Space Administration	N	43.012	Space Technology	Clarkson University	102453-1	-	5,590
National Aeronautics and Space Administration	N	43.012	Space Technology	Michigan Technological University	160706028	-	26,627
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Advanced Cooling Technologies, Inc.	254787	-	17,624
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	American GNC Corporation	PSU072522	-	29,298
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Ballydel Technologies, Inc	981089	-	84
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Blue Ridge Research and Consulting	220299F-501	-	52,255
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Colorado, University of	1559104	-	(2)
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Continuum Dynamics, Inc.	21-067	-	112,300
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Continuum Dynamics, Inc.	22-109	-	21,781
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Continuum Dynamics, Inc.	PO 21-013A	-	137,189
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	D&P, LLC	DP-PSU-072522-C	-	26,600
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Innovative Dynamics Inc.	252606	-	49,336
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Innovative Scientific Solutions, Inc.	S820277	-	46,055
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	JPL Integrated Communications, Inc.	1651833	-	146
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Masten Space Systems	235820	-	43,920
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Masten Space Systems	MSS-AGM-1716-005	-	4,025
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Nokomis, Inc.	257204	-	37,498
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Phoenix Analysis & Design Technologies	250566	-	92,207
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	PhotonFolts	258958	-	31,901
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Pratt and Whitney	22205 TASK 146	-	851,116
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Smithsonian Astrophysical Observatory (T he	GOO-21079A	-	158
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Smithsonian Astrophysical Observatory (T he	GOO-21080X	-	49,644
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Smithsonian Astrophysical Observatory (T he	SV4-74018	-	303,386
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	HST-AR-15005.001-A	-	6,309
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	-	43,492
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Space Telescope Science Institute	HST-GO-15705.003-A	-	4,878
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	-	14,404
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	-	5,439
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	Systems Technology, Inc.	261976	-	57,701
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	145170	-	(26,011)
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	147577	-	(16,024)
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	-	790,702
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	UES, Inc.	S-196-000-001	-	223,639
National Aeronautics and Space Administration	N	43.RD	National Aeronautics and Space Administration Research and Development	University of Texas at Dallas	2109377 (S372440)	-	13,689
National Aeronautics and Space Administration Total						4,758,945	20,650,804
National Endowment for the Arts	Y	45.024	Promotion of the Arts Grants to Organizations and Individuals			-	4,879
National Endowment for the Arts Total						-	4,879
National Endowment for the Humanities	Y	45.161	Promotion of the Humanities Research			36,950	240,592
National Endowment for the Humanities	Y	45.163	Promotion of the Humanities Professional Development			-	70,711
National Endowment for the Humanities	Y	45.169	Promotion of the Humanities Office of Digital Humanities			-	19,064
National Endowment for the Humanities Total						36,950	330,367
The Institute of Museum and Library Services	Y	45.301	Museums for America			-	21,442
The Institute of Museum and Library Services	Y	45.312	National Leadership Grants			17,242	43,370
The Institute of Museum and Library Services	N	45.312	National Leadership Grants	Middle Country Library Foundation	264764	-	63,784
The Institute of Museum and Library Services	N	45.313	Laura Bush 21st Century Librarian Program	University of Pittsburgh	AWD00001158 (415653-3)	-	14,177
The Institute of Museum and Library Services Total						17,242	142,773
National Science Foundation	Y	47.041	Engineering			524,275	14,311,028
National Science Foundation	Y	47.049	COVID-19 - Mathematical and Physical Sciences			-	71,779
National Science Foundation	Y	47.049	Mathematical and Physical Sciences			680,219	19,713,178
National Science Foundation	Y	47.050	COVID-19 - Geosciences			-	698,771
National Science Foundation	Y	47.050	Geosciences			759,175	8,725,742
National Science Foundation	Y	47.070	COVID-19 - Computer and Information Science and Engineering			-	62,856
National Science Foundation	Y	47.070	Computer and Information Science and Engineering			80,416	12,716,612
National Science Foundation	Y	47.074	COVID-19 - Biological Sciences			-	337,841
National Science Foundation	Y	47.074	Biological Sciences			642,129	9,712,748
National Science Foundation	Y	47.075	Social, Behavioral, and Economic Sciences			229,487	2,197,922
National Science Foundation	Y	47.076	Education and Human Resources			164,160	10,563,883
National Science Foundation	Y	47.078	COVID-19 - Polar Programs			-	35,432
National Science Foundation	Y	47.078	Polar Programs			315,688	1,148,078
National Science Foundation	Y	47.079	Office of International Science and Engineering			35,987	328,225
National Science Foundation	Y	47.083	COVID-19 - Integrative Activities			57,126	57,211
National Science Foundation	Y	47.083	Integrative Activities			127,883	1,017,942
National Science Foundation	Y	47.084	NSF Technology, Innovation, and Partnerships			11,316	197,516
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	(289,337)
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	108,464
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	169,075
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	242,140
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	217,718
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	130,019
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	93,520
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	3,214
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	102,773
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	9,596
National Science Foundation	Y	47.RD	National Science Foundation Research and Development			-	8,914
National Science Foundation	N	47.041	Engineering	Chromatir Technologies, LLC	264125	-	31,381
National Science Foundation	N	47.041	Engineering	Florida Atlantic University	PR-K301	-	20,916
National Science Foundation	N	47.041	Engineering	Louisville, University of	ULRF_22-0394-01	-	9,897
National Science Foundation	N	47.041	Engineering	Michigan Technological University	160304022	-	48,692
National Science Foundation	N	47.041	Engineering	North Carolina State University	2012-1067-01 AMEND 4	-	239,079
National Science Foundation	N	47.041	Engineering	Ohio State University	60078805 PO RF01616347	-	82,753
National Science Foundation	N	47.041	Engineering	Ohio State University	GR122545	-	52,665
National Science Foundation	N	47.041	Engineering	Ohio State University	GR125415 SPC-1000006846	-	41,105
National Science Foundation	N	47.041	Engineering	spotLESS Materials LLC	218110	-	(176)

See notes to schedule of expenditures of federal awards.

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Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
National Science Foundation	N	47.041	Engineering	spotLESS Materials LLC	237140	-	71,321
National Science Foundation	N	47.041	Engineering	Texas Tech University	21P680-01	-	29,879
National Science Foundation	N	47.041	Engineering	The Trustees of the University of Pennsylvania	570440 PO 4580783	17,523	65,988
National Science Foundation	N	47.041	Engineering	Trinity University	250762	-	44,796
National Science Foundation	N	47.041	Engineering	University of Maryland	104749-23822201	-	291,402
National Science Foundation	N	47.041	Engineering	University of Texas at Austin	UTATLS-SUB00000838	-	102,045
National Science Foundation	N	47.041	Engineering	VentureWell	2220329-1	-	12,629
National Science Foundation	N	47.041	Engineering	Virginia Polytechnic Institute and State University	445588-19079	-	45,088
National Science Foundation	N	47.041	Engineering	Virginia Polytechnic Institute and State University	445588-19079A	-	110,745
National Science Foundation	N	47.041	Engineering	Virginia Polytechnic Institute and State University	480359-19079	-	33,147
National Science Foundation	N	47.041	Engineering	Virginia, University of	GR012362.SUB00000285	-	75,032
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Colorado School of Mines	402135-5802	-	79,069
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Florida International University	000543	-	32,734
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Missouri University of Science and Technology	00068654-01	-	29,913
National Science Foundation	N	47.049	Mathematical and Physical Sciences	National Radio Astronomy Observatory	PO 372390	-	18,413
National Science Foundation	N	47.049	Mathematical and Physical Sciences	Norfolk State University	F1040101	-	(2,272)
National Science Foundation	N	47.049	Mathematical and Physical Sciences	North Carolina Central University	A21-0013-S001	-	38,364
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University Auxiliary Services, Inc. (California State University)	PSU231221	-	21,128
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Arkansas	UA022-292	-	77,754
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Illinois at Urbana-Champaign	101433-18143	-	80,427
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Nebraska Lincoln	25-1125-0048-002	-	11,245
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Pittsburgh	AWD00002876 (2036164-1)	-	21,204
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Tennessee	A22-0253-S002	-	67,336
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000000032	-	103,681
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000000453	-	171,732
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000001204	-	23,819
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Madison	0000002388	-	55,098
National Science Foundation	N	47.049	Mathematical and Physical Sciences	University of Wisconsin-Milwaukee	223405530	-	228,650
National Science Foundation	N	47.050	Geosciences	Consortium of Universities for the Advancement of Hydrologic Science, Inc.	EAR-2012893 - 1	-	170,422
National Science Foundation	N	47.050	Geosciences	Michigan Technological University	210500325 AMENDMENT 2	-	46,584
National Science Foundation	N	47.050	Geosciences	New York University	F0691-03 PO IB00505421	-	106,265
National Science Foundation	N	47.050	Geosciences	Rutgers-The State University of New Jersey	1953	-	128,489
National Science Foundation	N	47.050	Geosciences	University of Colorado at Boulder	1559669 PO 1001413789	-	31,197
National Science Foundation	N	47.050	Geosciences	University of Colorado at Boulder	1560925	-	3,334
National Science Foundation	N	47.050	Geosciences	Vermont, University of	AWD00000206SUB00000111	-	121,574
National Science Foundation	N	47.070	Computer and Information Science and Engineering	Board of Regents of The University of Wisconsin System	203405438	-	1,384
National Science Foundation	N	47.070	Computer and Information Science and Engineering	University of Cincinnati	014678-00003 PO# 4600014440	-	90,183
National Science Foundation	N	47.070	Computer and Information Science and Engineering	Virginia Commonwealth University	FP00014908_SA001	-	28,449
National Science Foundation	N	47.070	Computer and Information Science and Engineering	Yale University	GR109665(CON-80002380)	-	45,149
National Science Foundation	N	47.074	Biological Sciences	Cornell University	145157-21992	-	2,478
National Science Foundation	N	47.074	Biological Sciences	Michigan State University	RC108280PSU	-	52,286
National Science Foundation	N	47.074	Biological Sciences	Minnesota, University of	P007478102	-	14,984
National Science Foundation	N	47.074	Biological Sciences	Oklahoma State University	1-505352 PENN STATE	-	34,570
National Science Foundation	N	47.074	Biological Sciences	Purdue University	10001383-003	-	38,291
National Science Foundation	N	47.074	Biological Sciences	Saint Louis University	ERS#RD45339	-	28,638
National Science Foundation	N	47.074	Biological Sciences	The Regents of the University of California	00011116	-	6,529
National Science Foundation	N	47.074	Biological Sciences	University of California at Los Angeles	0830 G XB618	-	4,174
National Science Foundation	N	47.074	Biological Sciences	University of Colorado at Boulder	1559643	-	201,001
National Science Foundation	N	47.074	Biological Sciences	University of Pittsburgh	AWD00004485 (012686-9)	-	138,588
National Science Foundation	N	47.074	Biological Sciences	Virginia Institute of Marine Science	721653-712683	-	8,807
National Science Foundation	N	47.074	Biological Sciences	Virginia Polytechnic Institute and State University	480146-19079	-	183,460
National Science Foundation	N	47.075	Social, Behavioral, and Economic Sciences	City University of New York	CM00007584-00	-	32,872
National Science Foundation	N	47.075	Social, Behavioral, and Economic Sciences	Indiana University (State of Indiana)	18-027-2	-	1,471
National Science Foundation	N	47.075	Social, Behavioral, and Economic Sciences	Ohio State University	60068034-PSU	-	10,931
National Science Foundation	N	47.075	Social, Behavioral, and Economic Sciences	San Diego State University	SA0000655 59475A P3541 7802211	-	119,143
National Science Foundation	N	47.076	Education and Human Resources	Board of Regents of the University System of Georgia	SUB00002988	-	15,486
National Science Foundation	N	47.076	Education and Human Resources	Concord Consortium (The)	327.18.03	-	92,858
National Science Foundation	N	47.076	Education and Human Resources	Concord Consortium (The)	341.21.01	-	131,545
National Science Foundation	N	47.076	Education and Human Resources	Concord Consortium (The)	353.21.02	-	95,139
National Science Foundation	N	47.076	Education and Human Resources	Louisville, University of	ULRF 22-0557-01	-	48,269
National Science Foundation	N	47.076	Education and Human Resources	Norfolk State University	F1040086	-	25,000
National Science Foundation	N	47.076	Education and Human Resources	North Carolina State University	2018-0676-01	-	29,647
National Science Foundation	N	47.076	Education and Human Resources	Northern Arizona University	1003968-01	-	3,837
National Science Foundation	N	47.076	Education and Human Resources	Pasadena City College	B210057	-	163,917
National Science Foundation	N	47.076	Education and Human Resources	The Research Foundation for SUNY on behalf of the University at Buffalo	R1340095	-	37,494
National Science Foundation	N	47.076	Education and Human Resources	UNIVERSITY OF ARIZONA	680650	-	16,644
National Science Foundation	N	47.076	Education and Human Resources	University of Illinois	083962-18471	-	22,171
National Science Foundation	N	47.076	Education and Human Resources	University of Puerto Rico	SA-2021-22-002UPRAG	-	33,530
National Science Foundation	N	47.076	Education and Human Resources	University of Texas at Arlington	2022GC1101	-	18,814
National Science Foundation	N	47.076	Education and Human Resources	Virginia Polytechnic Institute and State University	480801-19079	-	14,463
National Science Foundation	N	47.076	Education and Human Resources	Virginia Polytechnic Institute and State University	480801-19079A	-	13,816
National Science Foundation	N	47.076	Education and Human Resources	Washington State University	140262-SPC003496	-	11,327
National Science Foundation	N	47.078	Polar Programs	Ohio State University	238472 PO# RF01620872	-	1,935
National Science Foundation	N	47.078	Polar Programs	University of Wisconsin-Madison	0000001311	-	920
National Science Foundation	N	47.083	Integrative Activities	Boise State University	6800-PO124294	-	3,825
National Science Foundation	N	47.084	NSF Technology, Innovation, and Partnerships	Astrabeam LLC	264208	-	48,819
National Science Foundation	N	47.084	NSF Technology, Innovation, and Partnerships	Kansas, University of	FY2023-005	-	7,914
National Science Foundation	N	47.084	NSF Technology, Innovation, and Partnerships	Kansas, University of	FY2023-086	-	6,959
National Science Foundation	N	47.RD	National Science Foundation Research and Development	American Sociological Association	257021	-	13,723
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Amgen	IIP-1841474 PO 3056166	-	287,869
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Association of Public and Land Grant Universities	214173	-	15,977
National Science Foundation	N	47.RD	National Science Foundation Research and Development	International Business Machines Corporation	CW3563975	-	99,594
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Nebraska, University of	25-6238-0918-002	-	31,192
National Science Foundation	N	47.RD	National Science Foundation Research and Development	North Carolina Central University	181223 PO101204	-	(240)
National Science Foundation	N	47.RD	National Science Foundation Research and Development	North Carolina State University	2020-0856-01	-	37,700
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Purdue University	10001564-008	-	9,668
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Rutgers-The State University of New Jersey	00002240	-	17,594
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Rutgers-The State University of New Jersey	2229	-	167,971
National Science Foundation	N	47.RD	National Science Foundation Research and Development	UNIVERSITY OF ARIZONA	694407	-	146,117
National Science Foundation	N	47.RD	National Science Foundation Research and Development	University of Florida	SUB00002345	-	12,157

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Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
National Science Foundation	N	47.RD	National Science Foundation Research and Development	University of Wisconsin-Madison	000000533	-	5,420
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Utah, University of	10061920-01-PSU	-	90,749
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Virginia Commonwealth University	FP00001220_SA001	-	(4,674)
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Virginia Polytechnic Institute and State University	480167-19079	-	3,327
National Science Foundation	N	47.RD	National Science Foundation Research and Development	Virginia Polytechnic Institute and State University	480963-19079	-	15,439
National Science Foundation Total						3,645,384	88,604,633
Small Business Administration	N	59.RD	U.S. Small Business Administration Research and Development	GaNiLy, LLC	266952	-	18,765
Small Business Administration Total						-	18,765
Environmental Protection Agency	Y	66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper			-	124,894
Environmental Protection Agency	Y	66.466	Chesapeake Bay Program			-	206,349
Environmental Protection Agency	N	66.456	National Estuary Program	Partnership for the Delaware Estuary	PDE-384-03	-	5,032
Environmental Protection Agency	N	66.466	Chesapeake Bay Program	COP Department of Agriculture	44209123	-	112,017
Environmental Protection Agency	N	66.511	Office of Research and Development Consolidated Research/Training/Fellowships	Purdue University	16200038-032	-	188,629
Environmental Protection Agency	N	66.RD	Environmental Protection Agency Research and Development	COP: Department of Environmental Protection	4300640900	-	(1,205)
Environmental Protection Agency	N	66.RD	Environmental Protection Agency Research and Development	COP: Department of Environmental Protection	4300754297	-	35,000
Environmental Protection Agency	N	66.RD	Environmental Protection Agency Research and Development	Health Effects Institute	4989-RFA E20-2/21-12	6,667	118,590
Environmental Protection Agency	N	66.RD	Environmental Protection Agency Research and Development	Wood Environment & Infrastructure Solutions, Inc.	TTR2021-006	-	9,289
Environmental Protection Agency Total						6,667	798,595
Nuclear Regulatory Commission	Y	77.008	U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program			-	291,435
Nuclear Regulatory Commission	Y	77.RD	U.S. Nuclear Regulatory Commission Research and Development			-	89,536
Nuclear Regulatory Commission	N	77.008	U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program	Texas A&M University	M2100412	-	65,830
Nuclear Regulatory Commission	N	77.008	U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program	The Regents of the University of Michigan	SUBK00013077	-	101,090
Nuclear Regulatory Commission Total						-	547,891
U.S. Department of Energy	Y	81.049	Office of Science Financial Assistance Program			3,169,663	15,972,569
U.S. Department of Energy	Y	81.057	University Coal Research			-	29,560
U.S. Department of Energy	Y	81.086	Conservation Research and Development			662,737	2,472,867
U.S. Department of Energy	Y	81.087	Renewable Energy Research and Development			107,660	1,043,222
U.S. Department of Energy	Y	81.089	Fossil Energy Research and Development			2,314,587	4,454,086
U.S. Department of Energy	Y	81.117	Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Trai			209,964	650,828
U.S. Department of Energy	Y	81.121	Nuclear Energy Research, Development and Demonstration			795,966	2,542,535
U.S. Department of Energy	Y	81.135	Advanced Research Projects Agency - Energy			803,911	1,870,039
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	91,412
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	101,422
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	34,671
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	(2,588)
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	106,702
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	68,255
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	15,702
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	37,202
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	42,678
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	734
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	27,164
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	(27)
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	44,198
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	96,742
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	515
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	1,279
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	24,240
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	69,893
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	41,525
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	(23,684)
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	48,737
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	69,603
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	119,688
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	795
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	17,802
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	45,983
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	150,204
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	270,926
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	15,757
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	(908)
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	387
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	189,267
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	283,827
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	92,073
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	10,399
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	17,884
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	69,532
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	102,405
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	28,241
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	62,434
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	73,829
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	106,771
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	11,672
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	(38)
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	71,814
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	145,973
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	20,000
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	46,759
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	82,190
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	19,797
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	15,279
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	9,078
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	2
U.S. Department of Energy	Y	81.RD	U.S. Department of Energy Research and Development			-	413,300
U.S. Department of Energy	N	81.041	State Energy Program	COP: Department of Environmental Protection	4300748299	-	18,265

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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	81.049	Office of Science Financial Assistance Program	Altex Technologies Corporation	DE-SC0022939-PSU-001	-	36,417
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Arizona State University	17-108	-	149,221
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Arizona State University	ASUB00001287	-	42,685
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Carnegie Mellon University	1070142-450640	-	89,865
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Cornell University	85989-22285	-	55,493
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Dartmouth College	R1703	-	42,333
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Duray Technologies	235922	-	8,838
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Energy Driven Technologies, LLC.	272121	-	465
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Energy Driven Technologies, LLC.	ARL982410	-	25,009
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Georgia Institute of Technology	AWD-100498-G6 AMENDMENT 4	-	79,767
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	H Quest Vanguard Inc.	249786	-	20,038
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Ionomer Solutions LLC	250741	-	29,407
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Johns Hopkins University	2004000674	-	3,097
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Louisiana State University	PO-0000184816	-	226,021
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Luna Innovations, Inc.	357901PSU	-	28,844
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Lung Innovations, Inc.	367802IPSU	-	98,647
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	NanoSonic, Inc.	EN1-2597	-	40,000
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	NanoSonic, Inc.	EN2-9844	-	187,883
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	North Carolina Agricultural & Technical State University	270197D	-	32,750
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Ohio State University	60057542 PO RF01459797	-	(634)
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Pennsylvania, University of	578218	-	43,435
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Quantum Ventura Inc.	260986	-	249,268
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Rensselaer Polytechnic Institute	A08-0003-S001	-	114,421
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Rutgers-The State University of New Jersey	SUB00002555 AMENDMENT 1	-	3,679
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	152,837	1,379,709
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	62690786-228486	-	135,778
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	THE RESEARCH FOUNDATION FOR STATE UNIVERSITY OF NEW YORK	88828/2/162931	-	35,217
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)	-	33,267
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Ultramet	983147 (PO 19835)	-	5,688
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of California at Davis	A17-0309-S002 (201603457-02)	-	22,938
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of California at Davis	A23-1053-S004	-	131,741
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of California at San Diego	KR 704574	-	20,931
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of Colorado at Boulder	1563093 PO 1001731752	-	45,100
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of Delaware	51542	-	3,339
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of Illinois	088955-16609	-	239,913
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of Illinois	090834-17760	-	53,256
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	University of Texas at Dallas	1301151	-	66,217
U.S. Department of Energy	N	81.049	Office of Science Financial Assistance Program	Utah, University of	10049491-PENN PO U000154267	-	84,522
U.S. Department of Energy	N	81.086	Conservation Research and Development	Louisiana State University	PO-0000192171	-	125,596
U.S. Department of Energy	N	81.086	Conservation Research and Development	Metropolitan Energy Center, Inc.	S-EVST07	-	104,711
U.S. Department of Energy	N	81.086	Conservation Research and Development	Metropolitan Energy Center, Inc.	S-OEV05	-	44,765
U.S. Department of Energy	N	81.086	Conservation Research and Development	The Regents of the University of Michiga	SUBK00013989	-	88,408
U.S. Department of Energy	N	81.086	Conservation Research and Development	University of Colorado at Boulder	1562473	-	303,159
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	Arizona State University	ASUB00001127	-	122,794
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	Forest Concepts, LLC	210246	-	38,383
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	General Motors Company	255177 PO 4301458996	-	76,792
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	Oklahoma, University of	2619-64	-	12,316
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	Rensselaer Polytechnic Institute	A22-0034-S001	-	(1)
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	The REMADE Institute	SA-20-08	-	76,137
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	UHV Technologies, Inc.	252827	-	77,705
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	University of California at Davis	A22-1852-S006	-	55,235
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	University of California at Los Angeles	4550 G YA100	168,571	259,660
U.S. Department of Energy	N	81.087	Renewable Energy Research and Development	Utah, University of	10039612-PSU-S-2419-AF1	-	272,008
U.S. Department of Energy	N	81.089	Fossil Energy Research and Development	H Quest Vanguard Inc.	231217	-	59,781
U.S. Department of Energy	N	81.089	Fossil Energy Research and Development	Illinois Institute of Technology Research Institute	SA21-0045-S002	-	101,893
U.S. Department of Energy	N	81.089	Fossil Energy Research and Development	Rice University	X03017142	-	131,044
U.S. Department of Energy	N	81.089	Fossil Energy Research and Development	Susteon Inc.	PO SUST000052	-	8,889
U.S. Department of Energy	N	81.089	Fossil Energy Research and Development	University of Texas at Austin	UTA19-000910	-	126,610
U.S. Department of Energy	N	81.089	Fossil Energy Research and Development	Wyoming, University of	1005037-PSU	-	57,829
U.S. Department of Energy	N	81.113	Defense Nuclear Nonproliferation Research	The Regents of the University of Michiga	SUBK00009799 PO 3005799149	-	197,439
U.S. Department of Energy	N	81.113	Defense Nuclear Nonproliferation Research	The Regents of the University of Michiga n	SUBK00016733	-	80,868
U.S. Department of Energy	N	81.121	Nuclear Energy Research, Development and Demonstration	Massachusetts Institute of Technology	S5885 PO #831321	-	71,649
U.S. Department of Energy	N	81.121	Nuclear Energy Research, Development and Demonstration	Texas A&M University	M2100511	-	64,890
U.S. Department of Energy	N	81.135	Advanced Research Projects Agency - Energy	Board of Regents of The University of Wi sconsin System	0000002446	-	117,147
U.S. Department of Energy	N	81.135	Advanced Research Projects Agency - Energy	Energy Trading Analytics, LLC	238198	-	276,685
U.S. Department of Energy	N	81.135	Advanced Research Projects Agency - Energy	Virginia Polytechnic Institute and State University	429424-19079	-	16,115
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Allure for Sustainable Energy, LLC	ALB-2021-10566	-	4,629
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Battelle	B626737	-	(2,601)
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Bettis Atomic Power Laboratory	137358	-	184,895
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Chattanooga Area Regional Transportation Authority (CARTA)	266475	-	122,733
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Corporation	132121	-	149,333
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	138219	-	437,951
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	140424	-	189,254
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	141967	-	92,055
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	142087	-	53,011
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	1427111	-	170,296
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 1	-	58,695
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 2	-	7,697
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 2	-	77,131
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 3	-	221,133
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	144548 RELEASE ORDER 7	-	62,841
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	145306	-	141,451
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	149104	-	2,467
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	149434	-	75,719
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	149732	-	74,580
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Fluor Marine Propulsion, LLC	RELEASE 13	-	581
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC	N000441593	-	38,201
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC	N000441594	-	35,902
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC	N000480909	-	11,054
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Honeywell Federal Manufacturing & Technologies, LLC	N000481598	-	25,086

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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	U.S. Department of Energy Research and Development	InnoSys, Inc.	265711	-	73,984
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK 13	-	63,000
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 1	-	14,975
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 10	-	40,000
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 10	-	22,998
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 11	-	42,000
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 11	-	34,988
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 12	-	42,000
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 12	-	19,516
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 14	-	35,231
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 15	-	1,523
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 4	-	7,450
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 4	-	23,315
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 5	-	(551)
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Leidos, Inc.	P010221754 TASK ORDER 9	-	1,622
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Littoral Power Systems, Inc.	LPS-22831-001	-	139,349
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Luna Innovations, Inc.	7064-DOE-1S	-	64,020
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Materia USA, LLC	239439	-	(12,089)
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 02	-	2,407
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	-	154,886
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Mission Support and Test Services, LLC	215257/01	-	(39,908)
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Ohio State University	231898 60076652/GR119343	-	36,126
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	-	125,277
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Texas Mineral Resources Corp.	239441	-	25,910
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Thar Energy, LLC	246540	-	(440)
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	The Regents of the University of Michiga	SUBK00006626 PO 3004992137	-	6,981
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	The REMADE Institute	20-01-RR-4034	18,375	630,543
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	20487 CW20487	-	106,676
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	293402 WO 424285	-	(14,709)
U.S. Department of Energy	N	81.RD	COVID-19 - U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	293402_585371 CW15988	-	16,576
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	587178 13088	-	293,393
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	Triad National Security, LLC (was LANL)	587178 C2032	-	343,676
U.S. Department of Energy	N	81.RD	U.S. Department of Energy Research and Development	ULC Technologies, LLC	980550	-	94,958
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	-	15,045
U.S. Department of Energy Total						8,404,271	43,923,369
U.S. Department of Education	Y	84.002	Adult Education - Basic Grants to States			-	12,406
U.S. Department of Education	Y	84.015	National Resource Centers Program for Foreign Language and Area Studies or Forei			-	205,026
U.S. Department of Education	Y	84.015A	National Resource Centers Program for Foreign Language and Area Studies or Forei			-	193,529
U.S. Department of Education	Y	84.015B	National Resource Centers Program for Foreign Language and Area Studies or Forei			-	15,400
U.S. Department of Education	Y	84.016A	Undergraduate International Studies and Foreign Language Programs			-	34,980
U.S. Department of Education	Y	84.017	International Research and Studies			-	84,566
U.S. Department of Education	Y	84.021	Overseas Programs - Group Projects Abroad			-	46,000
U.S. Department of Education	Y	84.200	Graduate Assistance in Areas of National Need			-	15,027
U.S. Department of Education	Y	84.229	Language Resource Centers			9,463	36,654
U.S. Department of Education	Y	84.229A	Language Resource Centers			16,826	98,023
U.S. Department of Education	Y	84.305	Education Research, Development and Dissemination			72,043	959,410
U.S. Department of Education	Y	84.305A	Education Research, Development and Dissemination			-	868,126
U.S. Department of Education	Y	84.324	Research in Special Education			176,754	593,183
U.S. Department of Education	Y	84.324A	Research in Special Education			118,094	306,669
U.S. Department of Education	Y	84.327	Special Education Educational Technology Media, and Materials for Individuals wi			-	371,127
U.S. Department of Education	N	84.305A	Education Research, Development and Dissemination	Portland State University	100018	-	64,439
U.S. Department of Education	N	84.305A	Education Research, Development and Dissemination	WestEd	S-00019391	-	64,973
U.S. Department of Education	N	84.324	Research in Special Education	The University of Texas Health Science Center at San Antonio	SA0000787	-	4,582
U.S. Department of Education Total						393,280	3,974,120
U.S. Agency for Global Media, BBG	N	90.500	International Broadcasting Independent Grantee Organizations	Radio Free Asia	1002-2019-026	-	40
U.S. Agency for Global Media, BBG Total						-	40
U.S. Department of Health and Human Services	Y	93.077	Family Smoking Prevention and Tobacco Control Act Regulatory Research			-	1,108,226
U.S. Department of Health and Human Services	Y	93.085	Research on Research Integrity			19,133	113,347
U.S. Department of Health and Human Services	Y	93.103	Food and Drug Administration Research			-	254,664
U.S. Department of Health and Human Services	Y	93.110	Maternal and Child Health Federal Consolidated Programs			-	171,045
U.S. Department of Health and Human Services	Y	93.113	Environmental Health			243,454	2,237,410
U.S. Department of Health and Human Services	Y	93.121	Oral Diseases and Disorders Research			259,929	1,809,803
U.S. Department of Health and Human Services	Y	93.172	Human Genome Research			1,718,013	3,414,954
U.S. Department of Health and Human Services	Y	93.173	Research Related to Deafness and Communication Disorders			1,767	642,876
U.S. Department of Health and Human Services	Y	93.186	National Research Service Award in Primary Care Medicine			-	395,562
U.S. Department of Health and Human Services	Y	93.213	Research and Training in Complementary and Integrative Health			350,136	1,148,753
U.S. Department of Health and Human Services	Y	93.226	Research on Healthcare Costs, Quality and Outcomes			23,767	764,844
U.S. Department of Health and Human Services	Y	93.233	National Center on Sleep Disorders Research			-	388,450
U.S. Department of Health and Human Services	Y	93.242	Mental Health Research Grants			1,044,377	5,704,563
U.S. Department of Health and Human Services	Y	93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig			108,651	936,816
U.S. Department of Health and Human Services	Y	93.262	Occupational Safety and Health Program			-	52,842
U.S. Department of Health and Human Services	Y	93.273	Alcohol Research Programs			657,930	3,736,727
U.S. Department of Health and Human Services	Y	93.279	Drug Abuse and Addiction Research Programs			696,468	5,397,177
U.S. Department of Health and Human Services	Y	93.286	Discovery and Applied Research for Technological Innovations to Improve Human He			276,094	2,234,759
U.S. Department of Health and Human Services	Y	93.301	Small Rural Hospital Improvement Grant Program			-	312,234
U.S. Department of Health and Human Services	Y	93.307	Minority Health and Health Disparities Research			350,500	1,253,781
U.S. Department of Health and Human Services	Y	93.310	Trans-NIH Research Support			85,413	361,519
U.S. Department of Health and Human Services	Y	93.315	Rare Disorders: Research, Surveillance, Health Promotion, and Education			-	67,791
U.S. Department of Health and Human Services	Y	93.350	National Center for Advancing Translational Sciences			32,651	4,371,325
U.S. Department of Health and Human Services	Y	93.351	Research Infrastructure Programs			126,653	1,304,012
U.S. Department of Health and Human Services	Y	93.361	Nursing Research			-	165,155
U.S. Department of Health and Human Services	Y	93.393	Cancer Cause and Prevention Research			449,319	4,834,034
U.S. Department of Health and Human Services	Y	93.394	Cancer Detection and Diagnosis Research			234,501	710,845
U.S. Department of Health and Human Services	Y	93.395	Cancer Treatment Research			90,262	659,951
U.S. Department of Health and Human Services	Y	93.396	Cancer Biology Research			545,324	3,208,149
U.S. Department of Health and Human Services	Y	93.398	Cancer Research Manpower			-	316,170
U.S. Department of Health and Human Services	Y	93.433	ACL National Institute on Disability, Independent Living, and Rehabilitation Res			290,441	1,039,753

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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	93.516	COVID-19 - Public Health Training Centers Program			48,653	150,506
U.S. Department of Health and Human Services	Y	93.732	Mental and Behavioral Health Education and Training Grants			-	442,440
U.S. Department of Health and Human Services	Y	93.738	COVID-19 - PPHF: Racial and Ethnic Approaches to Community Health Program financed solely b			-	412,527
U.S. Department of Health and Human Services	Y	93.738	PPHF: Racial and Ethnic Approaches to Community Health Program financed solely b			168,205	726,899
U.S. Department of Health and Human Services	Y	93.789	Opioid STR			-	277,819
U.S. Department of Health and Human Services	Y	93.837	Cardiovascular Diseases Research			1,096,781	11,821,338
U.S. Department of Health and Human Services	Y	93.838	Lung Diseases Research			-	867,793
U.S. Department of Health and Human Services	Y	93.839	Blood Diseases and Resources Research			94,916	1,365,446
U.S. Department of Health and Human Services	Y	93.846	Arthritis, Musculoskeletal and Skin Diseases Research			852,757	4,290,080
U.S. Department of Health and Human Services	Y	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research			2,330,036	13,631,579
U.S. Department of Health and Human Services	Y	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders			987,642	9,857,635
U.S. Department of Health and Human Services	Y	93.855	COVID-19 - Allergy and Infectious Diseases Research			-	22,987
U.S. Department of Health and Human Services	Y	93.855	Allergy and Infectious Diseases Research			1,572,816	13,091,366
U.S. Department of Health and Human Services	Y	93.859	Biomedical Research and Research Training			417,743	22,195,869
U.S. Department of Health and Human Services	Y	93.860	Emerging Infections Sentinel Networks			39,399	691,636
U.S. Department of Health and Human Services	Y	93.865	Child Health and Human Development Extramural Research			906,871	8,513,149
U.S. Department of Health and Human Services	Y	93.866	Aging Research			2,342,027	13,700,990
U.S. Department of Health and Human Services	Y	93.867	Vision Research			272,523	2,136,572
U.S. Department of Health and Human Services	Y	93.879	Medical Library Assistance			-	182,511
U.S. Department of Health and Human Services	Y	93.884	Grants for Primary Care Training and Enhancement			-	17,280
U.S. Department of Health and Human Services	Y	93.918	Grants to Provide Outpatient Early Intervention Services with Respect to HIV Dis			-	400,500
U.S. Department of Health and Human Services	Y	93.976	Primary Care Medicine and Dentistry Clinician Educator Career Development Awards			45,481	105,717
U.S. Department of Health and Human Services	Y	93.989	International Research and Research Training			-	60,689
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	93,556
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	5,577
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			62,249	63,863
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	372,815
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	78,989
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	91,272
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	309,925
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	43,560
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	(6,252)
U.S. Department of Health and Human Services	Y	93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development			-	369,387
U.S. Department of Health and Human Services	Y	93.RD	U.S. Department of Health and Human Services Research and Development			-	29,214
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	-	22,838
U.S. Department of Health and Human Services	N	93.110	Maternal and Child Health Federal Consolidated Programs	Lehigh Valley Hospital, Inc.	HRSA 22_23_008	-	38,407
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	-	3,462
U.S. Department of Health and Human Services	N	93.110	Maternal and Child Health Federal Consolidated Programs	The Regents of the University of Califor nia, Los Angeles	1638 G WA051	-	38,711
U.S. Department of Health and Human Services	N	93.113	Environmental Health	Brigham & Women's Hospital	121157	-	23,539
U.S. Department of Health and Human Services	N	93.113	Environmental Health	Children's Hospital of Philadelphia	GRT-00002160/PO#20383118	-	14,451
U.S. Department of Health and Human Services	N	93.113	Environmental Health	Michigan State University	RC109570PSU	-	47,254
U.S. Department of Health and Human Services	N	93.113	Environmental Health	Pennsylvania, University of	577005	-	(20,516)
U.S. Department of Health and Human Services	N	93.113	Environmental Health	PRESIDENT AND FELLOWS OF HARVARD COLLEGE HARVARD UNIVERSITY	112560-5104916 AMEND 2	-	20,195
U.S. Department of Health and Human Services	N	93.121	Oral Diseases and Disorders Research	Icahn School of Medicine at Mount Sinai	0255-F431-4609	-	237,991
U.S. Department of Health and Human Services	N	93.121	Oral Diseases and Disorders Research	Phoenix Children's Hospital	24,953	-	24,953
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	-	(51)
U.S. Department of Health and Human Services	N	93.121	Oral Diseases and Disorders Research	University of Pittsburgh	CNVAA0055576 (134310-1)	-	90,948
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	-	233,217
U.S. Department of Health and Human Services	N	93.172	Human Genome Research	Johns Hopkins University	2003978433 AMENDMENT 1	-	(120,709)
U.S. Department of Health and Human Services	N	93.172	Human Genome Research	Johns Hopkins University	2003978433 AMENDMENT 6	-	226,259
U.S. Department of Health and Human Services	N	93.172	Human Genome Research	Northwestern University	60059128 PSU A01.A02	-	52,404
U.S. Department of Health and Human Services	N	93.173	Research Related to Deafness and Communication Disorders	Veterans Health Foundation	NIH 2019-1001	-	32,212
U.S. Department of Health and Human Services	N	93.213	Research and Training in Complementary and Integrative Health	Georgetown University	425188_GR411710_PSU	-	24,355
U.S. Department of Health and Human Services	N	93.213	Research and Training in Complementary and Integrative Health	Mount Sinai Medical Center	TACT2	-	162
U.S. Department of Health and Human Services	N	93.213	Research and Training in Complementary and Integrative Health	The Regents of the University of Michiga n	SUBK00014654	-	191,764
U.S. Department of Health and Human Services	N	93.226	Research on Healthcare Costs, Quality and Outcomes	Vanderbilt University Medical Center	VUNCR7503	-	1,174
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	Actuated Medical, Inc.	5882-S01	-	17,153
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	Boston Medical Center	04_PSU_04141 PROJ #4300335001	-	(1)
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	Colorado, University of	1562735	-	25,921
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	DePaul University	501455SG173-55	-	33,276
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	McLean Hospital	401643	-	31,713
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	North Carolina, University of	5121314	-	43,343
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	Quadrant Biosciences Inc.	1293481860000	-	17,531
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	University of Illinois at Chicago	19125	-	61,751
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	University of Massachusetts	SUB00000252 (POWA01353608)	-	1,571
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	University of Texas	2109586	-	32,648
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	University of Texas at Arlington	2020GC0825	-	36,077
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	University of Texas at Dallas	2109521	-	237
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	-	95,995
U.S. Department of Health and Human Services	N	93.242	Mental Health Research Grants	Weill Cornell Medicine	192499	-	91,482
U.S. Department of Health and Human Services	N	93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Cen-Clear Child Services, Inc.	233453	-	62,495
U.S. Department of Health and Human Services	N	93.243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Child Health and Development Institute o f Connecticut, Inc.	221-580	-	76,310
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 Pro ram	4300655082	-	(575)
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	270055 178623	-	7,999
U.S. Department of Health and Human Services	N	93.262	Occupational Safety and Health Program	Icahn School of Medicine at Mount Sinai	0255-F921-4609	-	18,889
U.S. Department of Health and Human Services	N	93.262	Occupational Safety and Health Program	Mary Imogene Bassett Hospital	6 USAOH007542-20-01-PSU	-	11,743
U.S. Department of Health and Human Services	N	93.262	Occupational Safety and Health Program	Mary Imogene Bassett Hospital	6USAOH007542-21GB	9,696	19,159
U.S. Department of Health and Human Services	N	93.262	Occupational Safety and Health Program	PolK Technologies, LLC	PK-S22B	-	12,103
U.S. Department of Health and Human Services	N	93.262	Occupational Safety and Health Program	University of Iowa	S02874-01	-	3,645
U.S. Department of Health and Human Services	N	93.273	Alcohol Research Programs	State University of New York - Binghamto n	92036-169863-PSU	-	27,706
U.S. Department of Health and Human Services	N	93.273	Alcohol Research Programs	State University of New York - Binghamto n	95308-1177353-PSU	-	46,668
U.S. Department of Health and Human Services	N	93.273	Alcohol Research Programs	The Regents of the University of Michiga	SUBK00014961 PO 3006465570	-	8,612
U.S. Department of Health and Human Services	N	93.273	Alcohol Research Programs	University of California at San Francisco o	127735C	-	187,526
U.S. Department of Health and Human Services	N	93.273	Alcohol Research Programs	Utah State University	201356-491	-	3,669
U.S. Department of Health and Human Services	N	93.273	Alcohol Research Programs	Utah State University	204328-818	-	64,428
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	Emory University	AT56929	-	8,785
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	Indiana University (State of Indiana)	200567	-	270,629
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	Massachusetts General Hospital	240567	-	20,629
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	New York University School of Medicine	22-A0-R2-003671	-	136,162
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	North Carolina, University of	5114624	-	66,328

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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	93.279	Drug Abuse and Addiction Research Programs	Northwestern University	60058507 PSU	-	98,222
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	Purdue University	11001159-010	-	70,576
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	RTI International	9-312-0216924-66743L	-	14,205
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	The Regents of the University of Michiga	SUBK00013923	-	8,132
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	University of Texas Health Science Center at San Antonio	SA0000341	-	440,110
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	University of California at San Diego	7050948	4,476	47,518
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	University of Rochester	417871-G /JR FAO GR511145	-	24,015
U.S. Department of Health and Human Services	N	93.279	Drug Abuse and Addiction Research Programs	University of Texas at Dallas	2109182	-	15,958
U.S. Department of Health and Human Services	N	93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	Aleo BME, Inc.	ALEOB030462	-	540
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	-	(5,638)
U.S. Department of Health and Human Services	N	93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	University of Illinois at Urbana-Champai gn	107837-18883	-	68,203
U.S. Department of Health and Human Services	N	93.307	Minority Health and Health Disparities Research	South Carolina, University of	21-4269	-	68,548
U.S. Department of Health and Human Services	N	93.307	Minority Health and Health Disparities Research	UNIVERSITY OF ARIZONA	458879	-	24,232
U.S. Department of Health and Human Services	N	93.307	Minority Health and Health Disparities Research	University of Central Florida	26036A01-03	-	4,951
U.S. Department of Health and Human Services	N	93.307	Minority Health and Health Disparities Research	University of Chicago	AWD101843 (SUB000000451)	-	76,446
U.S. Department of Health and Human Services	N	93.307	Minority Health and Health Disparities Research	Virginia Polytechnic Institute and State University	432089-19079	-	43,275
U.S. Department of Health and Human Services	N	93.310	COVID-19 - Trans-NIH Research Support	Central Michigan University	F64627	-	293
U.S. Department of Health and Human Services	N	93.310	COVID-19 - Trans-NIH Research Support	Central Michigan University	F65066	-	114,772
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Central Michigan University	F65066	-	38,808
U.S. Department of Health and Human Services	N	93.310	COVID-19 - Trans-NIH Research Support	Central Michigan University	F65409	-	25,089
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Columbia University	1(GG016281-02)	-	3,221
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Drexel University	900245	-	7,020
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Duke University	303-001157	-	54,453
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Duke University	A03-5233	-	4,272
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Duke University	A03-5288	-	432
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	New York University	19-A0-00-1003237 PROJ #114579	-	(89)
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	New York University School of Medicine	19-A0-00-1003237 PROJ#114579	-	208,890
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Oregon, University of	281210C AMENDMENT NO. 8	-	205,292
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Oregon, University of	281210C AMENDMENT NO. 9	-	813,008
U.S. Department of Health and Human Services	N	93.310	COVID-19 - Trans-NIH Research Support	University of Florida	SUB00003082	-	95,568
U.S. Department of Health and Human Services	N	93.310	Trans-NIH Research Support	Yale University	CON-80003956 (GR118087)	-	145,701
U.S. Department of Health and Human Services	N	93.323	Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	COP Department of Agriculture	4300739474	-	51,979
U.S. Department of Health and Human Services	N	93.323	Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	COP: Department of Health	4300735795	-	259,225
U.S. Department of Health and Human Services	N	93.350	National Center for Advancing Translational Sciences	Clinical and Translational Science Insti tute	2 UL1TR002014-05A1	-	214,772
U.S. Department of Health and Human Services	N	93.350	National Center for Advancing Translational Sciences	Columbia University	1(GG019007-01)	-	2,976
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	-	482,332
U.S. Department of Health and Human Services	N	93.350	National Center for Advancing Translational Sciences	Research Foundation for Mental Hygiene Inc.	PO 152541	-	728
U.S. Department of Health and Human Services	N	93.350	National Center for Advancing Translational Sciences	Research Foundation for Mental Hygiene I nc.	PO 152541 2925D	-	68,021
U.S. Department of Health and Human Services	N	93.360	Biomedical Advanced Research and Development Authority (BARDA), Biodefense Medic	Microbiotix, Inc.	PENNSCARBXT2019	-	(26)
U.S. Department of Health and Human Services	N	93.361	Nursing Research	Duke University	A03-5516	-	187,316
U.S. Department of Health and Human Services	N	93.361	Nursing Research	Emory University	A679203	-	21,930
U.S. Department of Health and Human Services	N	93.391	Activities to Support State, Tribal, Local and Territorial (STLT) Health Departm	COP: Department of Health	4300745903	14,944	121,814
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	Geisinger Clinic	646031PSU02	-	16,308
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	H. Lee Moffitt Cancer Center and Researc h Institute	10-21752-99-01-G1	-	20,711
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	Thomas Jefferson University	080-27000-S47401	-	129,081
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	UNIVERSITY OF ARIZONA	627125	-	41,918
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	University of Hawaii	KA1764	-	8,609
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	University of North Carolina Chapel Hill	5123629	-	62,677
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	University of Pittsburgh	AWD00003953 (135993-1)	-	5,602
U.S. Department of Health and Human Services	N	93.393	Cancer Cause and Prevention Research	University of Pittsburgh	AWD00006749 (138927-1)	-	112,313
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	Carnegie Mellon University	1090613-434032	-	47,323
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	Carnegie Mellon University	1090614-435042	-	13,597
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	Johns Hopkins University	2005175844	-	45,823
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	The Regents of the University of Michiga	SUBK00011540	-	32,123
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	The Regents of the University of Michiga	SUBK00012128	-	4,297
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	University of Pittsburgh	AWD00006737 (138883-1)	-	128,742
U.S. Department of Health and Human Services	N	93.394	Cancer Detection and Diagnosis Research	University of Pittsburgh	AWD00008914 (138979-3)	-	17,295
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	Children's Hospital of Philadelphia	BIO5FP-COG AALL1131 11XS1	-	4,445
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	ECOG-ACRIN Medical Research Foundation, Inc.	177860 U10CA180820	-	40,546
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	ECOG-ACRIN Medical Research Foundation, Inc.	U10CA180820-06-PSCI1A	-	16,028
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	Icahn School of Medicine at Mount Sinai	0255-C921-4609	-	23,692
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	NRG Oncology	NRG-MACHTAY-GY7	-	73,554
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	Rector and Visitors of the University of Virginia	GB10832 / PO2323865	-	324,247
U.S. Department of Health and Human Services	N	93.395	Cancer Treatment Research	Texas A&M University	M2102794	-	199,292
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	Case Western Reserve University	RES517178	-	8,378
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	Cleveland Clinic Lerner College of Medic ine	CCF21143188	-	(89,439)
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	Cleveland Clinic Lerner College of Medic ine	CCF22762337	-	26,679
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	Loma Linda University	2150287-PSU-4	-	(304)
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	Oregon Health & Sciences University	1013137_PENNSTATE	-	56,777
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	University of Pittsburgh	AWD00003405 (135524-2)	-	5,783
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	University of Pittsburgh	AWD00004233 (136288-2)	-	14,097
U.S. Department of Health and Human Services	N	93.396	Cancer Biology Research	Virginia, University of	GB10274 150997	-	18,443
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	-	50,341
U.S. Department of Health and Human Services	N	93.680	Medical Student Education	Oklahoma Health Sciences Center, Univers ity of	RS20192426-03	-	10,346
U.S. Department of Health and Human Services	N	93.788	Opioid STR	COP: Commission on Crime and Delinquency	28768	-	20,085
U.S. Department of Health and Human Services	N	93.788	Opioid STR	COP: Department of Drug and Alcohol Prog ram	4300703501	1,472,386	2,251,067
U.S. Department of Health and Human Services	N	93.788	Opioid STR	COP: Department of Health	4100085796	-	2,760
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Des Moines University	02-20-02 SUB2	-	5,039
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Duke University	2037894	-	1,539
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Kansas State University	A22-0645-S001	-	159,846
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Kentucky, University of	3200004236-22-019	-	45,488
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Minnesota, University of	N007979201	-	194,233
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	The Regents of the University of Michiga	SUBK00016700	-	1,096
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of California at Davis	A21-1682-S002	-	6,391
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of Massachusetts	SUB00000209	-	51,126
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004314 (137168-3)	-	1,405
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004314 (138609-3)	-	49,278
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004314 (139454-30A)	-	3,634
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of Pittsburgh	AWD00004406 (136498-1)	-	64,543
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	University of Texas at Arlington	2021GC1903	-	142,885

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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	93.837	Cardiovascular Diseases Research	University of Texas at Austin	UTA16-000756	-	43
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Vermont, University of	AWD00000123SUB00000060	-	166,825
U.S. Department of Health and Human Services	N	93.837	Cardiovascular Diseases Research	Wayne State University	WSU21073 GRANT INDEX:340655	-	53,730
U.S. Department of Health and Human Services	N	93.838	Lung Diseases Research	Brigham & Women's Hospital	122869	-	534,689
U.S. Department of Health and Human Services	N	93.838	Lung Diseases Research	Sage Biometworks	239077 2022.02, 2022.01	-	92,710
U.S. Department of Health and Human Services	N	93.838	Lung Diseases Research	The Regents of the University of Michiga	SUBK00015550	-	778
U.S. Department of Health and Human Services	N	93.838	Lung Diseases Research	University of Colorado Denver	FY20.988.002	-	11,603
U.S. Department of Health and Human Services	N	93.838	Lung Diseases Research	University of Pittsburgh	AWD00005589 (418897-1)	-	31,333
U.S. Department of Health and Human Services	N	93.838	COVID-19 - Lung Diseases Research	University of Pittsburgh	CNVAA0038682(134369-1)	-	(34,653)
U.S. Department of Health and Human Services	N	93.839	Blood Diseases and Resources Research	Actuated Medical, Inc.	5075-S01	-	74,500
U.S. Department of Health and Human Services	N	93.839	Blood Diseases and Resources Research	Actuated Medical, Inc.	5075-S02	-	33,304
U.S. Department of Health and Human Services	N	93.839	Blood Diseases and Resources Research	Children's Hospital of Philadelphia	GRT-00002850	-	22,892
U.S. Department of Health and Human Services	N	93.839	Blood Diseases and Resources Research	HMH Hospitals Corporation	2203-G10159	-	181,246
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	-	148,445
U.S. Department of Health and Human Services	N	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	Columbia University	2(GG012259)	-	139
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	-	22,979
U.S. Department of Health and Human Services	N	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	University of Alabama at Birmingham	000517922-SC002	-	18,439
U.S. Department of Health and Human Services	N	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	University of Massachusetts	OSP2018039 PO W A00617531	-	(235)
U.S. Department of Health and Human Services	N	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	University of Nebraska Medical Center	34-5360-2202-101	-	12,393
U.S. Department of Health and Human Services	N	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	Yale University	CON-80003783 (GR117196)	-	109,788
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Aleo BME, Inc.	PSU-DK130756	-	41,263
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Arizona State University	ASUB00000567	-	36,089
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Board of Regents of the University System of Georgia	SUB00002371	-	15,021
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Carnegie Mellon University	1090670-449374	-	5,993
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Children's Hospital of Philadelphia	204010521 PO 20193097	-	(14,687)
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	-	183,414
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Columbia University	1(GG016477-07) PO G16475	-	23,304
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Duke University	A03-4702	-	71,823
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Georgia State University	SP00014262-01	-	13,544
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Icahn School of Medicine at Mount Sinai	0255-7170-4609	-	1,128
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Kaiser Foundation Research Institute	OOS030544-PSU	-	(10,740)
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	McLean Hospital	401536	-	43,170
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Princeton University Office of Research & Project Administration	SUB00000507	-	12,034
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Temple University	265300-PSU	-	37,754
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 / 1171153	-	58,702
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	-	101,121
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	University of California at San Francisco	122715C	-	23,304
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	University of South Florida	1204	-	388
U.S. Department of Health and Human Services	N	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	Yale University	GR108900 (CON-80002282)	-	85,143
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Actuated Medical, Inc.	5070-S02	-	10,644
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	-	36,914
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	-	10,314
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Columbia University	2(GG010847-01)	-	(6,379)
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Drexel University	900009-3	-	8,381
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	-	110,277
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Johns Hopkins University	2005543037	-	25,991
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Massachusetts General Hospital	232380	-	(40,663)
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic	BER-224063-03/PO 6663812	-	27,218
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic	HMC-224063	-	523
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic	HMC-224063-04	-	95
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic	HMC-224063-05	-	(606)
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Mayo Clinic Jacksonville	BER-290195-01	-	300
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Pennsylvania, University of	585719	-	33,542
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Quadrant Biosciences Inc.	2020-NS119119	-	(4,353)
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	1803	-	(1,981)
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	-	72,929
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	-	12,350
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Florida	SUB00003122	-	34,958
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	-	68,467
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	-	31,766
U.S. Department of Health and Human Services	N	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	University of Texas at Dallas	22010311	-	12,552
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Abigail Wexner Research Institute at Nationwide Childrens	700246-0322-00	-	79,025
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Abigail Wexner Research Institute at Nationwide Childrens	700246-0323-00	-	39,511
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Benaroya Research Institute at Virginia Mason	FY22ITN448	-	19,137
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Boston Children's Hospital	GENFD0002201917	-	41,424
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Boston Children's Hospital	GENFD0002340605	-	123,003
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Boston Children's Hospital	PO # GENFD0002024872	-	1,260
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Carnegie Mellon University	1090598-425264	-	51,382
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Colorado State University	G-45094-01	-	50,995
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Cornell University	81060-10895	-	(2,071)
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	FHI 360	PO21001645	-	12,439
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Hennepin Healthcare Research Institute	14384-15 18X107CF9 STRIVE	-	6,390
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Johns Hopkins University	2002753700	-	(17)
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Johns Hopkins University	2005681817	-	13,803
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	North Carolina, University of	5124364	-	19,310
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Purdue University	11901048-006	-	67,5418
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Respana Therapeutics, Inc.	PSU-RESA162590	-	130,826
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Rutgers-The State University of New Jersey	1949	-	105,171
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Sanaria	242188	-	29,997
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Sanaria	266022	-	60,000
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Stanford Medicine	62402848-165639	-	304,510
U.S. Department of Health and Human Services	N	93.855	COVID-19 - Allergy and Infectious Diseases Research	The Jackson Laboratory	210310-0223-10	-	129,500
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	The Jackson Laboratory	210310-0223-10	-	1,465
U.S. Department of Health and Human Services	N	93.855	COVID-19 - Allergy and Infectious Diseases Research	The Jackson Laboratory	210310-0224-10	-	100,692
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	-	10,550
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	University of Illinois at Chicago	18076	-	27
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	University of North Carolina Chapel Hill	5117468	-	2,068
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	University of North Carolina Chapel Hill	5120489	-	46,023
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	University of Pittsburgh Medical Center	AWD000005335 (137255-1)	-	20,762
U.S. Department of Health and Human Services	N	93.855	Allergy and Infectious Diseases Research	Utah, University of	10054720-02 PENN	-	13,488

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
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FOR THE YEAR ENDED JUNE 30, 2023

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	93.855	Allergy and Infectious Diseases Research	Worcester Polytechnic Institute	10853-GR	-	20,590
U.S. Department of Health and Human Services	N	93.859	Biomedical Research and Research Training	Florida State University	R000002901	-	20,656
U.S. Department of Health and Human Services	N	93.859	Biomedical Research and Research Training	Georgetown University	AWD7772899-GR205577	-	6,514
U.S. Department of Health and Human Services	N	93.859	Biomedical Research and Research Training	Minnesota, University of	N007645301	-	82,874
U.S. Department of Health and Human Services	N	93.859	Biomedical Research and Research Training	University of Florida	UFDSP00012167	-	46,701
U.S. Department of Health and Human Services	N	93.859	Biomedical Research and Research Training	Virginia, University of	AWD-004861.GR101363	-	124,689
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Actuated Medical, Inc.	5073-S02	-	90,267
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Arizona State University	ASUB000001025	-	73,429
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Baylor University	7000001045	-	54,728
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Boston Children's Hospital	GENFD0001754391	-	8,516
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Children's Hospital of Philadelphia	GRT-00001459	-	30,525
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Colorado State University	G-63798-02	-	7,255
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Colorado, University of	FY20.812.002	-	9,194
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Georgetown University	412457_GR412396-PSU	-	50,704
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Georgia, University of	SUB00003091	-	4,832
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Lundquist Institute for Biomedical Innovation	MR-32035 PO# 23005000	-	62,585
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Lundquist Institute for Biomedical Innovation	PO 22003494	-	(5,139)
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	New York University	F0998-01	-	57,074
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	New York University School of Medicine	22-A1-00-1006710 PRJ ID 260679	-	36,094
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	-	17,429
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Northwestern University	60056369 PSU	-	87,509
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Syracuse University Office of Sponsored Programs	31095-05456-S01	-	2,149
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	The Regents of the University of California, Los Angeles	1644 GVA369	-	1,421
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	-	105,187
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	University of Massachusetts Amherst	20-015667	-	6,020
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	University of North Carolina Chapel Hill	5124162	-	25,884
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	University of Pittsburgh	AWD00001006 (133613-14)	-	4,348
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	University of Texas Medical Branch at Galveston	23-86262-06	-	12,002
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	University of Wisconsin-Madison	0000001938	-	10,538
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Utah, University of	10058860-23-PENN	-	(924)
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Yale University	CON-80003642 (GR116282)	-	29,880
U.S. Department of Health and Human Services	N	93.865	Child Health and Human Development Extramural Research	Yale University	CON-80004163 (GR119247)	-	39,832
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	311216	-	7,288
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	311437	-	306,441
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	312121	-	30,511
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	31229A	-	47,586
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	31229C	-	45,433
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	31229D	-	99,039
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	31229G	-	596,494
U.S. Department of Health and Human Services	N	93.866	Aging Research	Albert Einstein College of Medicine	31229H	-	214,590
U.S. Department of Health and Human Services	N	93.866	Aging Research	Ann & Robert H. Lurie Children's Hospital of Chicago	AWD001614 - PENN STATE	-	185,394
U.S. Department of Health and Human Services	N	93.866	Aging Research	Beth Israel Deaconess Medical Center	01028856	-	120,523
U.S. Department of Health and Human Services	N	93.866	Aging Research	Beth Israel Deaconess Medical Center	GRT65005	-	30,115
U.S. Department of Health and Human Services	N	93.866	Aging Research	Board of Regents of The University of Wisconsin System	0000000785	9,092	45,769
U.S. Department of Health and Human Services	N	93.866	COVID-19 - Aging Research	Brown University	00001381	-	44,702
U.S. Department of Health and Human Services	N	93.866	Aging Research	Clemson University	2299-209-2014440	-	89,302
U.S. Department of Health and Human Services	N	93.866	Aging Research	Clemson University	2318-209-2014348	-	13,319
U.S. Department of Health and Human Services	N	93.866	Aging Research	Clemson University	2466-209-2015467	-	129,932
U.S. Department of Health and Human Services	N	93.866	Aging Research	Elon University	OVERMAN 21-002	-	19,929
U.S. Department of Health and Human Services	N	93.866	Aging Research	Kent State University	403029-PSU	-	124,597
U.S. Department of Health and Human Services	N	93.866	Aging Research	Klein Buendel, Inc.	0327-0177-000	-	195,396
U.S. Department of Health and Human Services	N	93.866	Aging Research	Klein Buendel, Inc.	0336-0183-000	-	111,726
U.S. Department of Health and Human Services	N	93.866	Aging Research	Miami University (of Ohio)	G03767	-	10,010
U.S. Department of Health and Human Services	N	93.866	Aging Research	Michigan State University	RC113018D	-	114,588
U.S. Department of Health and Human Services	N	93.866	Aging Research	Proactive Life, Inc.	234190	-	448,546
U.S. Department of Health and Human Services	N	93.866	Aging Research	Syracuse University Office of Sponsored Programs	30917-05467-S23	-	7,394
U.S. Department of Health and Human Services	N	93.866	Aging Research	The Regents of the University of Michigan	SUBK00017880	-	35,300
U.S. Department of Health and Human Services	N	93.866	Aging Research	The Trustees of the University of Pennsylvania	583553	-	2,378
U.S. Department of Health and Human Services	N	93.866	Aging Research	Tulane University	TUL-SCC-560062-22/23	-	14,165
U.S. Department of Health and Human Services	N	93.866	Aging Research	Tulane University	TUL-SCC-560973-22/23	-	5,042
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of California at Riverside	S-000961	-	16,824
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Illinois	17783-00	-	61,274
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Kentucky Research Foundation	3200001467-21-046	-	24,295
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Maryland	98717-20406201	-	83,589
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Maryland	F301912-1	-	155,367
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Southern California	115487434 PO 10782313	-	177,494
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Southern California	SCON-00003492	-	5,867
U.S. Department of Health and Human Services	N	93.866	Aging Research	University of Wisconsin-Madison	0000002492	20,201	297,748
U.S. Department of Health and Human Services	N	93.866	Aging Research	Yale University	CON-80004270(GR119693)	-	34,141
U.S. Department of Health and Human Services	N	93.867	Vision Research	PolyK Technologies, LLC	259297	-	50,000
U.S. Department of Health and Human Services	N	93.867	Vision Research	Praetego, LLC	PSU-R41EY034725	-	20,642
U.S. Department of Health and Human Services	N	93.867	Vision Research	Skyran Biologicals, Inc.	2R42EY029192-02A1A	-	95,008
U.S. Department of Health and Human Services	N	93.867	Vision Research	THE RESEARCH FOUNDATION FOR STATE UNIVERSITY OF NEW YORK	87527/2/1159967	-	56,279
U.S. Department of Health and Human Services	N	93.959	Block Grants for Prevention and Treatment of Substance Abuse	COP: Commission on Crime and Delinquency	28768	-	(17,691)
U.S. Department of Health and Human Services	N	93.959	Block Grants for Prevention and Treatment of Substance Abuse	COP: Department of Drug and Alcohol Program	4300736720	-	106,393
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	American College of Radiology	1831	-	26,058
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	ASUB00001305	-	34,999
U.S. Department of Health and Human Services	N	93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Benaroya Research Institute at Virginia Mason	FY21ITN448	-	(18,181)
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	GENFD0002047665	-	678,588
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	GENFD0002153621	-	388
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	GENFD0002168556	-	347,714
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	-	3,018
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	143322 COG ANBL 1531	-	(156)
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	N	93.RD	U.S. Department of Health and Human Services Research and Development	Children's Hospital of Philadelphia	GRANTID 3201710624/PO NO.	-	988
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 Medicine	CCF21143188	-	109,090
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 Medicine	CCF2007970	-	289,042
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Columbia University	13(GG015897-01)	-	(16)
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Columbia University	264781	-	3,319
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 Room 832 Health and Welfare Building	4300707421	-	39,604

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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 Room 832 Health and Welfare Building	4300743303	-	219,896
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	COP: Insurance Department	4300719108	-	98,081
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	-	11,961
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	-	19,642
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	-	10,400
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Emory University	289237	-	11,801
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	A372595	-	28,229
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	A496021	-	1,486
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	A697575	-	152,570
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Emory University	A874316 75N93021C00017 COA #1	-	47,014
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Emory University	IRB00101506 STUDY14730	-	13,690
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Family Health Council of Central PA	225529	-	673,075
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Geisinger Clinic	646031PSU01	-	1,138
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	-	9,811
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	-	1,008
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	-	44,123
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Iaaho Department of Health and Welfare	RC085400	-	333,915
U.S. Department of Health and Human Services	N	93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Johns Hopkins University	HHSN272201400007C	5,639	390
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Kaiser Foundation Research Institute	OOS030544-PSU	-	69,905
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Lundquist Institute for Biomedical Innov ation	PSU-32131	-	45,321
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	-	17,214
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	-	195,135
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	-	76,051
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	S5889	-	60,680
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	McKIng Consulting Corporation	#PSU-02-4577	-	33,486
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	McKIng Consulting Corporation	#PSU-02-4577 MOD #01	-	48,234
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	McKIng Consulting Corporation	20066-02D	-	1,967
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	N006269302	-	860
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	-	98,190
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	-	83,779
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	-	118,201
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	P0023541	-	15,728
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	New York University School of Medicine	NYU ACTIV4	-	411
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Pennsylvania, University of	572292 PO 4989941	-	15,716
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Pennsylvania, University of	578130 AMENDMENT 3	-	21,783
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Pennsylvania, University of	585496 PO 4963997	-	4,853
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Pennsylvania, University of	ADVANCE	-	1,967
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-00000119	-	20,362
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Reading Area Community College	268253	-	6,208
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	-	51,832
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	The Regents of the University of Califor nia	119545C	-	4,488
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	The Regents of the University of Michiga	SUBK00005527	-	54,599
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	The Regents of the University of Michiga	SUBK00008131-EXT 3	-	170
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 lvania	577005	-	188,712
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 lvania	584874 PO 4918118	-	5,547
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 lvania	RSIS45476 AMENDMENT 5	-	4,496
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Triad National Security, LLC (was LANL)	587178 SUB 614004	-	13,938
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of California at Los Angeles	1685 G LB959	-	67,531
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Chicago	233513	-	14,410
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Maryland	5 R01 HD092489-003	-	7,440
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Maryland Baltimore	20929 (PO 1000015390)	-	27,268
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	AWD00002374 (137893-1)	-	17,440
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Southern California	98880674 PO 50674601	-	1,520
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Tennessee Health Science C enter	21-4803-PSU	-	(24)
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Tennessee Health Science C enter	23-0049-PSU	-	1,814
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Texas at San Antonio	160577/160571 AMEND 3	-	3
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	University of Texas Health Science Center at Houston	SA0001044	-	6,906
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	-	209,585
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	-	54,488
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	-	31,765
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Vanderbilt University Medical Center	VUMC87503	-	9,316
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Vermont, University of	AWD00000483SUB000000228	-	22,067
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Wake Forest University Attn: Grants Accounting	21-032	-	82,259
U.S. Department of Health and Human Services	N	93.RD	COVID-19 - U.S. Department of Health and Human Services Research and Development	Wayne State University	WSU22014	-	107,536
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Wayne State University	WSU22014-A1	-	12,898
U.S. Department of Health and Human Services	N	93.RD	U.S. Department of Health and Human Services Research and Development	Wayne State University	WSU22014-A2	-	164,741
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	-	51,196
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)	-	4,636
U.S. Department of Health and Human Services Total						20,379,516	182,381,845
U.S. Department of Homeland Security	Y	97.077	Homeland Security Research, Development, Testing, Evaluation, and Demonstration			47,217	130,552
U.S. Department of Homeland Security	Y	97.RD	U.S. Department of Homeland Security Research and Development			-	64,947
U.S. Department of Homeland Security	N	97.047	Pre-Disaster Mitigation	COP: Emergency Management Agency	4300767554	-	8,092
U.S. Department of Homeland Security	N	97.061	Centers for Homeland Security	University of Nebraska Omaha	44-0108-1001-417	-	72,612
U.S. Department of Homeland Security	N	97.061	Centers for Homeland Security	University of North Carolina Chapel Hill	5122044 AMENDMENT #1,#2	-	70,171
U.S. Department of Homeland Security	N	97.RD	U.S. Department of Homeland Security Research and Development	COP: Emergency Management Agency	4300703457	-	67,582
U.S. Department of Homeland Security	N	97.RD	U.S. Department of Homeland Security Research and Development	Dartm on, University of	RSC22031 SUB-22-000033	-	86,576
U.S. Department of Homeland Security	N	97.RD	U.S. Department of Homeland Security Research and Development	George Mason University	E206378B	-	169,873
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	-	229,602
U.S. Department of Homeland Security Total						47,217	900,007
Agency for International Development	Y	98.001	USAID Foreign Assistance for Programs Overseas			727,314	1,507,011
Agency for International Development	N	98.001	USAID Foreign Assistance for Programs Overseas	Kansas State University	A21-0346-S004	-	11,268
Agency for International Development	N	98.001	USAID Foreign Assistance for Programs Overseas	National Academy of Sciences	2000010563	-	1,528
Agency for International Development	N	98.001	USAID Foreign Assistance for Programs Overseas	The University of Tennessee Institute of Agriculture	9500096186	-	33,679
Agency for International Development	N	98.007	Food for Peace Development Assistance Program (DAP)	Catholic Relief Services	NE23 SUBAGR 20611.65348.010.00	-	23,157
Agency for International Development	N	98.RD	U.S. Agency for International Development Research and Development	Georgia, University of	SUB00002026	60,001	203,522
Agency for International Development Total						787,315	1,780,165
U.S. Government	Y	99.RD	USG Awards Research and Development			-	227,777

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Government	Y	99.RD	USG Awards Research and Development			-	(1,402)
U.S. Government	Y	99.RD	USG Awards Research and Development			-	(435)
U.S. Government	Y	99.RD	USG Awards Research and Development			-	(13)
U.S. Government	Y	99.RD	USG Awards Research and Development			114,634	130,759
U.S. Government	Y	99.RD	USG Awards Research and Development			-	196,139
U.S. Government	Y	99.RD	USG Awards Research and Development			-	136,370
U.S. Government	Y	99.RD	USG Awards Research and Development			-	58,397
U.S. Government	Y	99.RD	USG Awards Research and Development			-	2,628,341
U.S. Government	Y	99.RD	USG Awards Research and Development			-	38,310
U.S. Government	Y	99.RD	USG Awards Research and Development			473,895	534,741
U.S. Government	Y	99.RD	USG Awards Research and Development			-	25,843
U.S. Government	Y	99.RD	USG Awards Research and Development			-	12,881
U.S. Government	Y	99.RD	USG Awards Research and Development			37,307	42,072
U.S. Government	Y	99.RD	USG Awards Research and Development			-	145,428
U.S. Government	Y	99.RD	USG Awards Research and Development			-	12,987
U.S. Government	Y	99.RD	USG Awards Research and Development			-	53,688
U.S. Government	Y	99.RD	USG Awards Research and Development			-	962,756
U.S. Government	Y	99.RD	USG Awards Research and Development			31,297	81,154
U.S. Government	Y	99.RD	USG Awards Research and Development			-	417,567
U.S. Government	N	99.RD	USG Awards Research and Development	L3Harris Technologies, Inc.	060201492	-	269
U.S. Government	N	99.RD	USG Awards Research and Development	ZETA Associates Inc.	090051SC-PSU-ARL-01	-	758,873
U.S. Government Total						657,133	6,462,502
Research and Development Cluster Total						82,156,388	786,316,451
Student Financial Assistance Cluster							
U.S. Department of Education	Y	84.007	Federal Supplemental Educational Opportunity Grants			-	5,966,462
U.S. Department of Education	Y	84.033	Federal Work-Study Program			-	2,479,723
U.S. Department of Education	Y	84.038	Federal Perkins Loan Program			-	14,249,790
U.S. Department of Education	Y	84.063	Federal Pell Grant Program			-	81,041,925
U.S. Department of Education	Y	84.268	Federal Direct Student Loans			-	455,180,826
Student Financial Assistance Cluster Total						-	558,918,726
SNAP Cluster							
U.S. Department of Agriculture	N	10.561	State Administrative Matching Grants for the Supplemental Nutrition Assistance P	COP: Department of Human Services Room 832 Health and Welfare Building	4100088743	17,802,485	20,986,983
SNAP Cluster Total						17,802,485	20,986,983
Economic Development Cluster							
U.S. Department of Commerce	N	11.307	Economic Adjustment Assistance	Advanced Robotics for Manufacturing	268057 ARM-RMH-22-F-04	-	21,150
U.S. Department of Commerce	N	11.307	COVID-19 - Economic Adjustment Assistance	Catalyst Connection	267417	-	22,010
U.S. Department of Commerce	N	11.307	COVID-19 - Economic Adjustment Assistance	Southwestern Pennsylvania Commission	22-15316-11	-	39,225
U.S. Department of Commerce	N	11.307	COVID-19 - Economic Adjustment Assistance	Southwestern Pennsylvania Commission	22-15316-19	-	36,696
Economic Development Cluster Total						-	119,081
CDBG - Entitlement Grants Cluster							
U.S. Department of Housing and Urban Development	N	14.218	Community Development Block Grants/Entitlement Grants	COP: Emergency Management Agency	PEMA-2022-006	-	99,999
CDBG - Entitlement Grants Cluster Total						-	99,999
Fish and Wildlife Cluster							
U.S. Department of the Interior	N	15.611	Wildlife Restoration and Basic Hunter Education	COP: Game Commission	4300716716	-	91,151
Fish and Wildlife Cluster Total						-	91,151
WIOA Cluster							
U.S. Department of Labor	N	17.259	WIOA Youth Activities	Corry Higher Education Council	261205	-	4,341
U.S. Department of Labor	N	17.259	WIOA Youth Activities	Delaware County Workforce Development Board	PSU-BRANDYWINE 265429	-	43,649
WIOA Cluster Total						-	47,990
Special Education (IDEA) Cluster							
U.S. Department of Education	N	84.027	Special Education Grants to States	COP: Bureau of Special Education	062-22-0042	-	247,360
U.S. Department of Education	N	84.027	Special Education Grants to States	COP: Bureau of Special Education	062-23-0042	-	396,417
U.S. Department of Education	N	84.027	Special Education Grants to States	COP: Bureau of Special Education	260923	-	11,236
Special Education (IDEA) Cluster Total						-	655,013
TRIO Cluster							
U.S. Department of Education	Y	84.042A	Office of Postsecondary Education (OPE): Student Support Services Program			-	721,903
U.S. Department of Education	Y	84.044	TRIO Talent Search			-	1,082,087
U.S. Department of Education	Y	84.047	TRIO Upward Bound			-	1,372,204
U.S. Department of Education	Y	84.217	TRIO McNair Post-Baccalaureate Achievement			-	310,009
U.S. Department of Education	N	84.047	TRIO Upward Bound	Northwest Tri-County Intermediate Unit	70465	-	(4,844)
TRIO Cluster Total						-	3,481,359
Other Federal Programs							
Peace Corps	Y	08.U01	Peace Corps Other			-	10,402
U.S. Department of Agriculture	Y	10.025	Plant and Animal Disease, Pest Control, and Animal Care			-	373,247
U.S. Department of Agriculture 10.025 Total	N	10.025	Plant and Animal Disease, Pest Control, and Animal Care	COP Department of Agriculture	44209067	-	31,065
						-	404,312
U.S. Department of Agriculture	Y	10.163	Market Protection and Promotion			-	41,126
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C940000024	-	(3)
U.S. Department of Agriculture	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000531	-	5,247
U.S. Department of Agriculture 10.170 Total	N	10.170	Specialty Crop Block Grant Program - Farm Bill	COP Department of Agriculture	C9400000818	-	19,961
						-	25,205
U.S. Department of Agriculture	N	10.174	Acer Access Development Program	Ohio State University	SPC-1000004087 GR117635	-	4,233
U.S. Department of Agriculture	Y	10.175	Farmers Market and Local Food Promotion Program			-	77,826
U.S. Department of Agriculture	N	10.176	Dairy Business Innovation Initiatives	University of Tennessee	9500096725	-	24,036

See notes to schedule of expenditures of federal awards.

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Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Connecticut, University of	438741	-	7,878
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	University of Scranton	121806	-	1,173
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	ONE19-339-33243	-	2,278
U.S. Department of Agriculture	N	10.215	Sustainable Agriculture Research and Education	Vermont, University of	SNE20-011-PA-35383	-	55,135
10.215 Total						-	66,464
U.S. Department of Agriculture	Y	10.217	Higher Education - Institution Challenge Grants Program			-	4,135
U.S. Department of Agriculture	N	10.226	Secondary and Two-Year Postsecondary Agriculture Education Challenge Grants	Idaho, University of	AE5629-850937	-	79,756
U.S. Department of Agriculture	N	10.229	Extension Collaborative on Immunization Teaching & Engagement (EXCITE)	eXtension Foundation Grafton & Associates PC	EXC2-2021-2110	-	(13,431)
U.S. Department of Agriculture	N	10.229	Extension Collaborative on Immunization Teaching & Engagement (EXCITE)	eXtension Foundation Grafton & Associates PC	EXC3-2022-2240	-	10,000
10.229 Total						-	(3,431)
U.S. Department of Agriculture	Y	10.303	Integrated Programs			-	189,920
U.S. Department of Agriculture	N	10.304	Homeland Security Agricultural	Michigan State University	RC112910E	-	8,502
U.S. Department of Agriculture	N	10.304	Homeland Security Agricultural	University of Maine	UMS1424	-	13,504
10.304 Total						-	22,006
U.S. Department of Agriculture	Y	10.310	Agriculture and Food Research Initiative (AFRI)			92,231	280,499
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	Connecticut, University of	149538888 PO# 457404	-	2,048
U.S. Department of Agriculture	N	10.310	Agriculture and Food Research Initiative (AFRI)	West Virginia University	21-921-PSU	-	19,091
10.310 Total						92,231	301,638
U.S. Department of Agriculture	Y	10.311	Beginning Farmer and Rancher Development Program			2,420	3,280
U.S. Department of Agriculture	N	10.319	Farm Business Management and Benchmarking Competitive Grants Program	Minnesota, University of	P009577105	-	15,704
U.S. Department of Agriculture	N	10.319	Farm Business Management and Benchmarking Competitive Grants Program	Minnesota, University of	P010062905	-	25,956
10.319 Total						-	41,660
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	-	7,534
U.S. Department of Agriculture	N	10.328	National Food Safety Training, Education, Extension, Outreach, and Technical Ass	Vermont, University of	AWD00000639SUB00000273	-	12,725
U.S. Department of Agriculture	Y	10.329	Crop Protection and Pest Management Competitive Grants Program			-	103,505
U.S. Department of Agriculture	N	10.329	Crop Protection and Pest Management Competitive Grants Program	Ohio State University	GR124290 / SPC-1000005247	-	21,392
10.329 Total						-	124,897
U.S. Department of Agriculture	Y	10.336	Veterinary Services Grant Program			-	26,958
U.S. Department of Agriculture	Y	10.351	Rural Business Development Grant			-	47,518
U.S. Department of Agriculture	Y	10.500	Cooperative Extension Service			90,855	203,180
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Delaware, University of	58999	-	15,674
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Delaware, University of	UDR00000164	-	46,080
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	eXtension Foundation Grafton & Associates PC	NTAE-2021-2136	-	12,520
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	eXtension Foundation Grafton & Associates PC	NTAE-2021-2137	9,452	52,167
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	eXtension Foundation Grafton & Associates PC	NTAE-2022-2239	-	6,735
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Nebraska, University of	35-5420-2009-001	-	5,115
U.S. Department of Agriculture	N	10.500	Cooperative Extension Service	Nebraska, University of	35-5420-2009-002	-	14,295
10.500 Total						100,307	355,766
U.S. Department of Agriculture	Y	10.511	Smith-Lever Special Needs			-	9,368,346
U.S. Department of Agriculture	Y	10.514	Expanded Food and Nutrition Education Program			-	1,943,541
U.S. Department of Agriculture	Y	10.515	Renewable Resources Extension Act			-	89,565
U.S. Department of Agriculture	N	10.520	Agriculture Risk Management Education Partnerships Competitive Grants Program	Delaware, University of	UDR00000356	-	6,460
U.S. Department of Agriculture	N	10.558	COVID-19 - Child and Adult Care Food Program	Commonwealth of Pennsylvania Pennsylvania Department of Education	COP - Food and Nutrition	-	1,754
U.S. Department of Agriculture	N	10.558	Child and Adult Care Food Program	Commonwealth of Pennsylvania Pennsylvania Department of Education	COP - Food and Nutrition	-	96,137
10.558 Total						-	97,891
U.S. Department of Agriculture	N	10.560	State Administrative Expenses for Child Nutrition	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300702619	-	182,309
U.S. Department of Agriculture	N	10.560	State Administrative Expenses for Child Nutrition	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300727899	-	38,435
U.S. Department of Agriculture	N	10.560	State Administrative Expenses for Child Nutrition	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300727920	-	6,178
10.560 Total						-	226,922
U.S. Department of Agriculture	N	10.574	Team Nutrition Grants	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300739633	82,060	286,488
U.S. Department of Agriculture	N	10.575	Farm to School Grant Program	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300702622	-	91,879
U.S. Department of Agriculture	N	10.575	Farm to School Grant Program	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300745854	-	21,297
10.575 Total						-	113,176
U.S. Department of Agriculture	N	10.645	Farm to School State Formula Grant	Commonwealth of Pennsylvania Pennsylvania Department of Education	4300763531	-	7,381
U.S. Department of Agriculture	Y	10.674	Wood Utilization Assistance			-	14,909
U.S. Department of Agriculture	Y	10.675	Urban and Community Forestry Program			-	509,820
U.S. Department of Agriculture	Y	10.678	Forest Stewardship Program			-	127,785
U.S. Department of Agriculture	N	10.902	Soil and Water Conservation	National Fish and Wildlife Foundation	0407.19.066280	-	34,636
U.S. Department of Agriculture	Y	10.912	Environmental Quality Incentives Program			-	10,942
U.S. Department of Agriculture	N	10.912	Environmental Quality Incentives Program	North Jersey RC&D	238145	-	1,154
10.912 Total						-	12,096

See notes to schedule of expenditures of federal awards.

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Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
U.S. Department of Agriculture	Y	10.U01	U.S. Department of Agriculture Other	Commonwealth of Pennsylvania Pennsylvania Department of Education Delaware, University of National 4-H Council University of Maryland	4300702374 UDR0000157 2023-224 99698-Z5188202	-	57,507
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other			-	6,542
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other			-	26,032
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other			-	794
U.S. Department of Agriculture	N	10.U01	U.S. Department of Agriculture Other			-	69,337
10.U01 Total						-	160,212
U.S. Department of Commerce	Y	11.024	Build to Scale			-	190,294
U.S. Department of Commerce	Y	11.303	Economic Development Technical Assistance			-	145,853
U.S. Department of Commerce	N	11.457	Chesapeake Bay Studies	Stroud Water Research Center	380254-55900	-	11,604
U.S. Department of the Interior	Y	15.232	Wildland Fire Research and Studies			-	13,790
U.S. Department of the Interior	N	15.608	Fish and Wildlife Management Assistance	COP: Fish & Boat Commission	4100094320	-	10,816
U.S. Department of the Interior	Y	15.662	Great Lakes Restoration			-	17,257
U.S. Department of the Interior	Y	15.945	Cooperative Research and Training Programs – Resources of the National Park Syst			-	25,079
U.S. Department of Justice	N	16.575	Crime Victim Assistance	COP: Commission on Crime and Delinquency	2020-VF-05-37702	-	101,071
U.S. Department of Justice	N	16.575	Crime Victim Assistance	COP: Commission on Crime and Delinquency	28932	-	12,932
U.S. Department of Justice	N	16.575	Crime Victim Assistance	COP: Commission on Crime and Delinquency	33287	-	99,152
16.575 Total						-	213,155
U.S. Department of Justice	Y	16.582	Crime Victim Assistance/Discretionary Grants			-	214,785
U.S. Department of Justice	N	16.726	Juvenile Mentoring Program	National 4-H Council	2020-JU-FX-0031	-	4,686
U.S. Department of Justice	N	16.726	Juvenile Mentoring Program	National 4-H Council	247546	-	(2,683)
U.S. Department of Justice	N	16.726	Juvenile Mentoring Program	National 4-H Council	258895	-	37,978
16.726 Total						-	39,981
U.S. Department of Labor	N	17.245	Trade Adjustment Assistance	COP: Department of Labor and Industry	COP - TAA	-	231,993
U.S. Department of Labor	Y	17.280	WIOA Dislocated Worker National Reserve Demonstration Grants			-	551,148
U.S. Department of Labor	N	17.U01	U.S. Department of Labor Other	COP: Department of Environmental Protect ion	4300736950	-	204,647
U.S. Department of State	N	19.010	Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	Institute of International Education	3000224518	-	(2,440)
U.S. Department of State	N	19.010	Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	Institute of International Education	3000259164	-	259,478
19.010 Total						-	257,038
U.S. Department of Transportation	Y	20.106	COVID-19 - Airport Improvement Program			-	137,953
U.S. Department of Transportation	Y	20.106	Airport Improvement Program			-	6,238,893
20.106 Total						-	6,376,846
U.S. Department of Transportation	N	20.U01	U.S. Department of Transportation Other	Michigan Technological University	2009035Z2	-	33,921
U.S. Department of the Treasury	N	21.027	COVID-19 - Coronavirus State and Local Fiscal Recovery Funds	Commonwealth of Pennsylvania Pennsylvania Department of Education	COP - SLFRF	-	12,105,200
U.S. Department of the Treasury	N	21.027	COVID-19 - Coronavirus State and Local Fiscal Recovery Funds	COP: Emergency Management Agency	COP - PEMA	-	37,237
21.027 Total						-	12,142,437
U.S. Department of the Treasury	N	21.029	COVID-19 - Coronavirus Capital Projects Fund	COP: Dep. Community & Economic Develop.	4300758349	-	221,175
Appalachian Regional Commission	Y	23.002	Appalachian Area Development			444,591	972,352
Appalachian Regional Commission	Y	23.U01	Appalachian Regional Commission Other			-	622,862
Appalachian Regional Commission	N	23.U01	Appalachian Regional Commission Other	Clearfield County Commissioners	226272	-	158,226
23.U01 Total						-	781,088
General Services Administration	Y	39.U01	General Services Administration Other			-	245,909
National Endowment for the Arts	Y	45.024	Promotion of the Arts Grants to Organizations and Individuals			-	25,000
National Endowment for the Arts	N	45.025	Promotion of the Arts Partnership Agreements	Mid-Atlantic Arts Foundation	2023-2754	-	12,000
National Endowment for the Humanities	N	45.162	Promotion of the Humanities Teaching and Learning Resources and Curriculum Devel	The Teagle Foundation	2005501	-	124,309
The Institute of Museum and Library Services	Y	45.301	Museums for America			-	2,584
The Institute of Museum and Library Services	N	45.310	Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	4100092327	-	48,471
The Institute of Museum and Library Services	Y	45.313	Laura Bush 21st Century Librarian Program			-	9,449
Small Business Administration	N	59.037	Small Business Development Centers	Kutztown University of Pennsylvania	SBA20220507	-	92,602
Small Business Administration	N	59.037	Small Business Development Centers	Kutztown University of Pennsylvania	SBA20230106	-	87,915
Small Business Administration	N	59.037	COVID-19 - Small Business Development Centers	Kutztown University of Pennsylvania	SBACARES20200507	-	36,766
59.037 Total						-	217,283
U.S. Department of Veterans Affairs	Y	64.U01	U.S. Department of Veterans Affairs Other			-	12,317
U.S. Department of Veterans Affairs	N	64.U01	U.S. Department of Veterans Affairs Other	Cathexis Corporation	VAAASCMS-41-PSU-20-0001	-	370,838
64.U01 Total						-	383,155
Environmental Protection Agency	N	66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	Rural Community Assistance Partnership	237971	-	26
Environmental Protection Agency	N	66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	Rural Community Assistance Partnership	250245	-	10,224
66.436 Total						-	10,250
Environmental Protection Agency	N	66.466	Chesapeake Bay Program	Conservation Foundation of Lancaster Cou nty	260063	-	17,707
Environmental Protection Agency	N	66.466	Chesapeake Bay Program	National Fish and Wildlife Foundation	0602.19.065295	69,666	238,678

See notes to schedule of expenditures of federal awards.

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Federal Agency	Direct Award	ALN	Federal Program Name	Pass-Through Entity	Pass-Through Entity Identifying Number	Subrecipient Expenditures	Expenditures
Environmental Protection Agency 66.466 Total	N	66.466	Chesapeake Bay Program	Pennsylvania Association for Sustainable Agriculture	235709	-	7,803
						69,666	264,188
Environmental Protection Agency	Y	66.708	Pollution Prevention Grants Program			-	278,386
Environmental Protection Agency	N	66.U01	Environmental Protection Agency Other	COP: Department of Environmental Protection	4300732903	-	47,396
Environmental Protection Agency	N	66.U01	Environmental Protection Agency Other	COP: Department of Environmental Protection	4300744867	-	32,732
Environmental Protection Agency 66.U01 Total	N	66.U01	Environmental Protection Agency Other	eXtension Foundation Grafton & Associates PC	SA-2022-38	-	10,160
						-	90,288
U.S. Department of Energy	N	81.041	State Energy Program	COP: Department of Environmental Protection	4300714902	-	34,961
U.S. Department of Energy	Y	81.U01	U.S. Department of Energy Other			-	11,974
U.S. Department of Energy	Y	81.U01	U.S. Department of Energy Other			(80,099)	(24,296)
U.S. Department of Energy 81.U01 Total	N	81.U01	U.S. Department of Energy Other	The Regents of the University of California	4550 G ZA366	-	210,883
						(80,099)	198,561
U.S. Department of Education	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	099-22-0002	15,015	15,155
U.S. Department of Education	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	099-22-0005	-	(3)
U.S. Department of Education	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	099-22-0007	5,928	5,933
U.S. Department of Education	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	FA-064-23-0025	-	489,310
U.S. Department of Education	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	FA-099-23-0002	-	150,869
U.S. Department of Education	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	FA-099-23-0005	-	263,155
U.S. Department of Education 84.002 Total	N	84.002	Adult Education - Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	FA-099-23-0007	-	56,458
						20,943	980,877
U.S. Department of Education	N	84.031	Higher Education Institutional Aid	UNIVERSITY OF ARIZONA	596336	-	10,166
U.S. Department of Education	N	84.048	Career and Technical Education -- Basic Grants to States	Commonwealth of Pennsylvania Pennsylvania Department of Education	FA-119-23-0001	-	176,190
U.S. Department of Education	Y	84.103	TRIO Staff Training Program			-	63,691
U.S. Department of Education	N	84.126	Rehabilitation Services Vocational Rehabilitation Grants to States	COP: Office of Vocational Rehabilitation	4300772740	-	34,561
U.S. Department of Education	N	84.126	Rehabilitation Services Vocational Rehabilitation Grants to States	COP: Office of Vocational Rehabilitation	4300773751	-	63,509
U.S. Department of Education 84.126 Total	N	84.126	Rehabilitation Services Vocational Rehabilitation Grants to States	COP: Office of Vocational Rehabilitation	COP - OVR	-	1,913,443
						-	2,011,513
U.S. Department of Education	Y	84.129	Rehabilitation Long-Term Training			-	48,276
U.S. Department of Education	N	84.295	Ready-To-Learn Television	Corporation for Public Broadcasting	35357-EDU	-	10,000
U.S. Department of Education	Y	84.325	Special Education - Personnel Development to Improve Services and Results for Children			-	611,942
U.S. Department of Education 84.325 Total	N	84.325	Special Education - Personnel Development to Improve Services and Results for Children	Michigan State University	RC114207 - PSU	-	46,180
						-	658,122
U.S. Department of Education	Y	84.335	Child Care Access Means Parents in School			-	204,389
U.S. Department of Education	Y	84.365	English Language Acquisition State Grants			41,022	47,921
U.S. Department of Education	N	84.367	Supporting Effective Instruction State Grants	Commonwealth of Pennsylvania Pennsylvania Department of Education	524-23-0005	-	4,284
U.S. Department of Education	N	84.425C	COVID-19 - Education Stabilization Fund	Pennsylvania Academic Library Consortium Inc.	GRANT 51	-	3,777
U.S. Department of Education 84.425 Total	N	84.425U	COVID-19 - Education Stabilization Fund	Stroud Water Research Center	380245-55900	-	4,426
						-	8,203
U.S. Department of Health and Human Services	N	93.070	Environmental Public Health and Emergency Response	COP: Department of Health	4300714241	-	2,322
U.S. Department of Health and Human Services 93.070 Total	N	93.070	Environmental Public Health and Emergency Response	COP: Department of Health	4300759299	-	42,672
						-	44,994
U.S. Department of Health and Human Services	Y	93.107	Area Health Education Centers			781,954	986,863
U.S. Department of Health and Human Services	Y	93.155	Rural Health Research Centers			-	(1,061)
U.S. Department of Health and Human Services	N	93.236	Grants to States to Support Oral Health Workforce Activities	PA Coalition for Oral Health	214728	-	1,333
U.S. Department of Health and Human Services 93.236 Total	N	93.236	Grants to States to Support Oral Health Workforce Activities	PA Coalition for Oral Health	266007 AMENDMENT 1	-	12,500
						-	13,833
U.S. Department of Health and Human Services	Y	93.241	State Rural Hospital Flexibility Program			-	405,828
U.S. Department of Health and Human Services	Y	93.247	Advanced Nursing Education Workforce Grant Program			-	608,440
U.S. Department of Health and Human Services	N	93.262	Occupational Safety and Health Program	Mary Imogene Bassett Hospital	56U54OH007542-21PS5	-	2,172
U.S. Department of Health and Human Services 93.262 Total	N	93.262	Occupational Safety and Health Program	Mary Imogene Bassett Hospital	U54OH007542-22PS1	-	20,590
						-	22,762
U.S. Department of Health and Human Services	N	93.318	Protecting and Improving Health Globally: Building and Strengthening Public Health	National Association of County & City Health Officials	(2021-051301) 2021-060302	-	53,527
U.S. Department of Health and Human Services	N	93.323	COVID-19 - Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	COP: Department of Health	4100090875	-	3,613,003
U.S. Department of Health and Human Services	N	93.391	COVID-19 - Activities to Support State, Tribal, Local and Territorial (STLT) Health Department	COP: Department of Health	4100090128	-	3,159,042
U.S. Department of Health and Human Services 93.391 Total	N	93.391	COVID-19 - Activities to Support State, Tribal, Local and Territorial (STLT) Health Department	COP: Department of Health	4100090744	972,163	1,292,520
						972,163	4,451,562
U.S. Department of Health and Human Services	N	93.563	Child Support Enforcement	COP: Department of Human Services Room 832 Health and Welfare Building	4000024443	-	3,010,070
U.S. Department of Health and Human Services	N	93.788	Opioid STR	COP: Commission on Crime and Delinquency	2022-OG-OM039136	-	191,994
U.S. Department of Health and Human Services	N	93.788	Opioid STR	COP: Commission on Crime and Delinquency	33795	-	123,774
U.S. Department of Health and Human Services 93.788 Total	N	93.788	Opioid STR	COP: Commission on Crime and Delinquency	35680	-	11,585
						-	327,353

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2023

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	93.913	Grants to States for Operation of State Offices of Rural Health			-	231,051
U.S. Department of Health and Human Services	N	93.959	Block Grants for Prevention and Treatment of Substance Abuse	COP: Commission on Crime and Delinquency		0	- 75,000
U.S. Department of Health and Human Services	N	93.959	COVID-19 - Block Grants for Prevention and Treatment of Substance Abuse	COP: Commission on Crime and Delinquency	2022-DZ-01-37645	-	146,569
U.S. Department of Health and Human Services	N	93.959	Block Grants for Prevention and Treatment of Substance Abuse	COP: Commission on Crime and Delinquency	33795	-	201,852
U.S. Department of Health and Human Services	N	93.959	Block Grants for Prevention and Treatment of Substance Abuse	COP: Commission on Crime and Delinquency	37644	-	122,549
U.S. Department of Health and Human Services	N	93.959	Block Grants for Prevention and Treatment of Substance Abuse	COP: Department of Drug and Alcohol Prog ram	4300703336	-	47,224
93.959 Total						-	593,194
U.S. Department of Health and Human Services	Y	93.969	PPHF Geriatric Education Centers			267,945	698,911
U.S. Department of Health and Human Services	N	93.969	PPHF Geriatric Education Centers	Virginia Commonwealth University	FP00009788_SA008	-	89,543
93.969 Total						267,945	788,454
U.S. Department of Health and Human Services	N	93.991	Preventive Health and Health Services Block Grant	Borough of Susquehanna Depot	223809	-	4,626
U.S. Department of Health and Human Services	N	93.991	Preventive Health and Health Services Block Grant	PA Coalition for Oral Health	261716	-	2,500
93.991 Total						-	7,126
U.S. Department of Health and Human Services	N	93.U01	U.S. Department of Health and Human Services Other	The Pennsylvania Coalition Against Domestic Violence	255484	-	85,821
U.S. Department of Homeland Security	N	97.036	Disaster Grants - Public Assistance	COP: Emergency Management Agency	COP - PEMA	-	1,289,731
Other Federal Programs Total						2,795,203	60,223,430
Total Federal Expenditures						\$ 102,754,076	\$ 1,430,940,183

See notes to schedule of expenditures of federal awards.

THE PENNSYLVANIA STATE UNIVERSITY

NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2023

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, 2023, 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.

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:

Title	ALN	Federal Capital Contribution for the Year Ended June 30, 2023	Loan Expenditures And Disbursements	Outstanding Balance at June 30, 2023
Federal Perkins Loan Program	84.038	\$ -	\$ -	\$ 14,249,790

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

Schedule of Findings and Questioned Costs

Year Ended June 30, 2023

Section I - Summary of Auditor's Results

Financial Statements

Type of auditor's report issued:

Unmodified

Internal control over financial reporting:

- Material weakness(es) identified? X Yes 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 Yes No
- 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)?

 X Yes No

Identification of major programs:

Assistance
Listing Number

Name of Federal Program or Cluster

84.007, 84.033,
84.038, 84.063,
and 84.268

Student Financial Assistance Cluster

10.561

State Administrative Matching Grants for the Supplemental Nutrition Assistance Program

10.511

Smith-Lever Special Needs

21.027

COVID-19 - Coronavirus State and Local Fiscal Recovery Funds

93.391

COVID-19 - Activities to Support State, Tribal, Local and Territorial (STLT) Health
Departments Response to Public Health or Healthcare Crises

Dollar threshold used to distinguish between
type A and type B programs:

\$4,292,821

Auditee qualified as low-risk auditee?

 Yes X No

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2023

Section II - Financial Statement Audit Findings

Reference Number	Finding
2023-001	Finding Type - Material weakness Criteria - Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 958-605 provides guidance with respect to net asset classification, donor-imposed restrictions, and board-designated amounts. Condition - 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. Context - 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 restates beginning net assets by classification. Total net assets remain unchanged. Cause - The University's process for reporting donor gifts at the time of receipt did not consider all donor restrictions. Effect - Due to not considering all donor restrictions, net assets without donor restrictions were overstated and net assets with donor restrictions were understated by a material amount. Recommendation - The University should modify its gift receipt process to properly report all restrictions on use and purpose at time of receipt and, subsequently, upon further donor support and/or changes in reporting policy. Views of Responsible Officials and Planned Corrective Actions - Management agrees with this finding and proposes the following corrective actions: - Funds with donor restrictions are in the process of being reclassified - via adjusting journal entries - in the University's endowment accounting application and accounting enterprise resource program (SAP) to restricted fund types. - University policy FN15 (Endowed or Named, Annually Funded, Accounts) is currently being revised to expand upon the topic of funds functioning as endowments (i.e., quasi endowments) and explicitly address how these funds are to be defined and established via gift receipting and fund setup processes; additionally, management is currently drafting supplemental guidance in the form of a procedures document to accompany policy FN15 related to funds functioning as endowments. - Management will develop training related to the topic of funds functioning as endowments and restricted versus unrestricted funds and make such training available to university personnel (and also make such training required, where appropriate).

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2023

Section III - Federal Program Audit Findings

Reference Number	Finding
2023-002	Assistance Listing Number, Federal Agency, and Program Name - Student Financial Assistance Cluster - Federal Pell Grants ALN 84.063 and Direct Student Loan Program ALN 84.268 Federal Award Identification Number and Year - Various Pass-through Entity - None Finding Type - Significant deficiency Repeat Finding - No Criteria - Changes in a student's status are required to be reported timely and accurately to the National Student Loan Data System (NSLDS) within 30 days of the change or included in a student status confirmation report sent to NSLDS within 60 days of a status change (Pell, 34 CFR Section 690.83(b)(2); Direct Loan, 34 CFR Section 685.309(b)). Condition - The University did not report certain students' status changes timely to NSLDS. Questioned Costs - None Identification of How Questioned Costs Were Computed - N/A Context - 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. Cause and Effect - The University did not have a control in place to ensure that the reporting of status changes to a third-party service provider, National Student Clearinghouse (NSC), was effectively designed to ensure that reporting from NSC to NSLDS complied with the 60-day requirement. As a result, certain student changes were not reported to NSLDS within the required time frame. Recommendation - The University should implement controls to ensure all student status changes are reported timely to NSLDS. Views of Responsible Officials and Corrective Action Plan - Management agrees with the finding. The University has implemented a change in the reporting timeline to ensure that there is adequate time between reporting to NSC and its reporting to NSLDS. In addition, the University will monitor reporting of status changes to NSLDS.

Reference Number	Finding
2023-003	Assistance Listing Number, Federal Agency, and Program Name - Student Financial Assistance Cluster - Federal Pell Grants ALN 84.063 and Direct Student Loan Program ALN 84.268 Federal Award Identification Number and Year - Various Pass-through Entity - None Finding Type - Material weakness and material noncompliance with laws and regulations

Schedule of Findings and Questioned Costs (Continued)

Year Ended June 30, 2023

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2023-003 (Continued)	Repeat Finding - No Criteria - The University has 45 days from the date the college determines a student's withdrawal date to calculate a return of Title IV funds for the student and return the funds. Withdrawal dates are defined as the time when the student officially withdraws or expresses notification to withdrawal or, if the student does not officially withdraw, the date the University determines the student is no longer in attendance (34 CFR Section 668.22(j)(1)). Condition - The University did not return all Title IV funds in a timely manner due to a lack of communication and review. Questioned Costs - \$485,231 Identification of How Questioned Costs Were Computed - The University identified all returns that should have been calculated during the fiscal year and performed the calculation for amounts not returned. Context - Of the 60 students tested, for 6 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. Cause and Effect - The University did not have adequate controls to communicate, calculate, and review all returns in accordance with the regulations, which resulted in late returns. Recommendation - We recommend implementing a control to ensure that all Title IV funds are returned within the required time frame. Views of Responsible Officials and Planned Corrective Actions - Management has implemented the following corrective actions: - Beginning with the spring 2024 semester, an internal peer review process was implemented to verify that Title IV funds are returned within the required time frame. This involves segregation of duties between the completion of each of the following: (1) official and unofficial withdrawal review, (2) verification of this review, and (3) return of the Title IV funding. - Beginning in February 2024, the process team leader within the Office of Student Aid is monitoring system reports on a periodic basis (weekly for official withdrawals and within 45 days of date of determination for unofficial withdrawals) to ensure procedures are being followed. - Beginning in February 2024 for the fall 2024 semester, quality control reviews are being conducted by the Office of Student Aid's Compliance and Training Team in which withdrawn students are sampled to monitor compliance. These reviews will be conducted at the end of each semester going forward. - Management will update its Return to Title IV (R2T4) procedures to reflect these additional controls. Additionally, job aids related to R2T4 have been reviewed and updated where appropriate, and ongoing training has been occurring with the R2T4 specialists.



**The Pennsylvania State University
Summary Schedule of Prior Audit Findings
June 30, 2023**

Prior Year Finding Number:
2022-001

Fiscal Year in Which the Finding Initially Occurred:
2022

Finding Type:
Financial statement finding

Original Finding Description:
The University does not have effectively designed and implemented internal controls over financial reporting relating to accounting and reporting for contributions with and without donor-imposed restricted, and Board designated amounts.

Status/Partial Corrective Action (as applicable):
In the process of completing the corrective action plan associated with this finding, additional reclassifications were identified, ultimately leading to the issuance of finding 2023-001. The correction action plan associated with finding 2023-001 has replaced the original corrective action plan for this finding, and will be completed by 6/30/24.

Planned Corrective Action:
See corrective action plan associated with finding 2023-001

Prior Year Finding Number:
2022-002

Fiscal Year in Which the Finding Initially Occurred:
2022

Federal Program, Assistance Listing Number and Name:
84.425F; Education Stabilization Fund

Original Finding Description:
The University received Higher Education Emergency Relief Fund (HEERF) III (a)(1) funding from the U.S. Department of Education. The University submitted Quarterly Budget and Expenditure Reporting for HEERF III(a)(1) Institutional Portion, (a)(2) and (a)(3) on a quarterly basis. However, it was noted that one (1) report for the Quarter ending June 30, 2021, due on July 10, 2021, was submitted on August 16, 2021.

Status/Partial Corrective Action (as applicable):
Fully corrected

Planned Corrective Action:
N/A

Prior Year Finding Number:

2022-003

Fiscal Year in Which the Finding Initially Occurred:

2022

Federal Program, Assistance Listing Number and Name:

93.155; Rural Health Research Centers

Original Finding Description:

The University provided subawards to various Hospitals during the fiscal year ended June 30, 2022. The Federal Funding Accountability and Transparency Act reporting submission by the University was not within the time frame as required by Health Resources and Services Administration.

Status/Partial Corrective Action (as applicable):

Fully corrected

Planned Corrective Action:

N/A



**The Pennsylvania State University
Corrective Action Plan
June 30, 2023**

Finding Number: 2023-001

Condition: 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 statement of activities.

Planned Corrective Action: Management proposes the following corrective actions:

- Funds with donor restrictions are in the process of being reclassified - via adjusting journal entries - in the University's endowment accounting application and accounting enterprise resource program (SAP) to restricted fund types.
- University policy FN15 (Endowed or Named, Annually Funded, Accounts) is currently being revised to expand upon the topic of funds functioning as endowments (i.e., quasi endowments) and explicitly address how these funds are to be defined and established via gift receipting and fund setup processes; additionally, management is currently drafting supplemental guidance in the form of a procedures document to accompany policy FN15 related to funds functioning as endowments.
- Management will develop training related to the topic of funds functioning as endowments and restricted versus unrestricted funds and make such training available to university personnel (and also make such training required, where appropriate).

Contact person responsible for corrective action: Virginia A. Teachey, Associate Vice President for Budget and Finance

Anticipated Completion Date: 06/30/2024



PennState

(814) 865-1355
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Virginia A. Teachey
Associate Vice President for Budget
& Finance

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

**The Pennsylvania State University
Corrective Action Plan
June 30, 2023**

Finding Number: 2023-002

Condition: The University did not report certain students' status changes timely to the National Student Loan Data System (NSLDS).

Planned Corrective Action: Management has implemented a change in the reporting timeline to ensure that there is adequate time between reporting to National Student Clearinghouse and their reporting to NSLDS. In addition, University management will monitor reporting of status changes to NSLDS.

Contact person responsible for corrective action: Robert Kubat, Assistant Vice President of Enrollment Management and University Registrar

Anticipated Completion Date: 06/30/2024



**The Pennsylvania State University
Corrective Action Plan
June 30, 2023**

Finding Number: 2023-003

Condition: The University did not return all Title IV funds in a timely manner due to a lack of communication and review.

Planned Corrective Action: Management has implemented the following corrective actions:

- Beginning with the spring 2024 semester, an internal peer review process was implemented to verify that Title IV funds are returned within the required timeframe. This involves segregation of duties between the completion of each of the following: 1) official and unofficial withdrawal review, 2) verification of this review, and 3) return of the Title IV funding.
- Beginning in February 2024, the process team leader within the Office of Student Aid is monitoring system reports on a periodic basis (weekly for official withdrawals, within 45 days of date of determination for unofficial withdrawals) to ensure procedures are being followed.
- Beginning in February 2024 for the fall 2023 semester, quality control reviews are being conducted by the Office of Student Aid's Compliance and Training Team in which withdrawn students are sampled to monitor compliance. These reviews will be conducted at the end of each semester going forward.
- Management will update its Return to Title IV ("R2T4") procedures to reflect these additional controls. Additionally, job aids related to R2T4 have been reviewed and updated where appropriate and ongoing training has been occurring with the R2T4 specialists.

Contact person responsible for corrective action: Melissa J. Kunes, Assistant Vice President for Enrollment Management and Executive Director for Student Aid

Anticipated Completion Date: 03/31/2024