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

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**The Pennsylvania State University  
Fiscal Year Ended June 30, 2022**

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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, 2022**

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March 29, 2023

Federal Audit Clearinghouse  
1201 E. 10<sup>th</sup> Street  
Jeffersonville, IN 47132

To Whom It May Concern:

The Pennsylvania State University's financial, internal control and compliance reports for the fiscal year ended June 30, 2022 are presented on the accompanying pages. The reports have been issued in accordance with the Office of Management and Budget (OMB) Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. Also enclosed is The Pennsylvania State University's schedule of findings and questioned costs.

Sincerely,

Virginia A. Teachey  
Associate Vice President for Budget and Finance

Enclosures

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# **Audited Financial Statements**

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The Pennsylvania State University  
Fiscal Year Ended June 30, 2022

## **INDEPENDENT AUDITOR'S REPORT**

To the Board of Trustees of The Pennsylvania State University  
University Park, Pennsylvania

### **Report on the Audit of the Financial Statements**

#### ***Opinion***

We have audited the consolidated financial statements of The Pennsylvania State University and subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2022, and 2021, and the related consolidated statements of activities and cash flows for the years then ended, and the related notes to the consolidated financial statements (collectively referred to as the "financial statements").

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

#### ***Basis for Opinion***

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

The financial statements of the University include various subsidiaries as outlined in Note 1 to the financial statements. The financial statements of The Pennsylvania State University Philanthropic Fund and Nittany Insurance Company were not audited in accordance with *Government Auditing Standards*.

#### ***Emphasis of Matter***

As discussed in Note 2 to the financial statements, in 2021, the University changed its method of accounting for leases effective July 1, 2020, due to the adoption of Accounting Standard Codification Topic 842, *Leases*. Our opinion is not modified with respect to this matter.

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

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or

events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for one year after the date that the financial statements are issued.

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

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

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

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of 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 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 Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated November 21, 2022, on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance

*Deloitte & Touche LLP*

November 21, 2022

**THE PENNSYLVANIA STATE UNIVERSITY**  
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION**  
**ASSETS**  
**JUNE 30, 2022 AND 2021**  
**(in thousands)**

	June 30, 2022	June 30, 2021
<b>Current assets:</b>		
Cash and cash equivalents	\$ 1,058,303	\$ 1,839,705
Short-term investments	1,549,884	1,211,525
Deposits held by bond trustees	91,521	48,520
Deposits held for others	34,460	45,690
Accounts receivable, net of allowances	846,172	663,850
Contributions receivable, net	40,306	44,112
Loans to students, net of allowances	3,952	5,501
Inventories	85,662	72,604
Prepaid expenses and other assets	127,277	196,046
<b>Total current assets</b>	3,837,537	4,127,553
<b>Noncurrent assets:</b>		
Deposits held by bond trustees	100,097	-
Contributions receivable, net	152,443	162,534
Loans to students, net of allowances	28,052	37,411
Total investment in plant, net	6,885,672	6,619,801
Beneficial interest in perpetual trusts	26,240	29,931
Investments	8,045,673	8,553,375
Operating lease right-of-use assets	172,590	146,215
Other assets	191,385	201,914
<b>Total noncurrent assets</b>	15,602,152	15,751,181
<b>Total assets</b>	\$ 19,439,689	\$19,878,734

See notes to consolidated financial statements.



**THE PENNSYLVANIA STATE UNIVERSITY**  
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION**  
**LIABILITIES AND NET ASSETS**  
**JUNE 30, 2022 AND 2021**  
**(in thousands)**

	<u>June 30, 2022</u>	<u>June 30, 2021</u>
<b>Current liabilities:</b>		
Accounts payable and other accrued expenses	\$ 984,226	\$ 1,032,727
Deferred revenue	180,066	170,078
Long-term debt	110,633	208,659
Present value of annuities payable	7,720	7,238
Accrued postretirement benefits	54,119	53,755
Refundable United States Government student loans	3,898	5,613
Operating lease liabilities	<u>21,442</u>	<u>24,373</u>
<b>Total current liabilities</b>	<u>1,362,104</u>	<u>1,502,443</u>
<b>Noncurrent liabilities:</b>		
Deposits held in custody for others	22,269	25,667
Deferred revenue	563	581
Long-term debt	3,658,417	3,300,119
Present value of annuities payable	56,275	57,679
Accrued postretirement benefits	1,417,337	2,006,929
Refundable United States Government student loans	17,233	28,261
Operating lease liabilities	150,800	123,681
Other liabilities	<u>362,071</u>	<u>426,703</u>
<b>Total noncurrent liabilities</b>	<u>5,684,965</u>	<u>5,969,620</u>
<b>Total liabilities</b>	<u>7,047,069</u>	<u>7,472,063</u>
<b>Net assets:</b>		
Without donor restrictions -		
Designated for specific purposes	4,912,904	4,678,123
Net investment in plant	<u>3,606,865</u>	<u>3,615,323</u>
Total without donor restrictions - The Pennsylvania State University	8,519,769	8,293,446
Noncontrolling interest	<u>337,141</u>	<u>322,165</u>
Total without donor restrictions	8,856,910	8,615,611
With donor restrictions	<u>3,535,710</u>	<u>3,791,060</u>
<b>Total net assets</b>	<u>12,392,620</u>	<u>12,406,671</u>
<b>Total liabilities and net assets</b>	<u>\$19,439,689</u>	<u>\$19,878,734</u>

See notes to consolidated financial statements.

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

	Without Donor Restrictions	With Donor Restrictions	Total
<b>Operating revenues and other support:</b>			
Tuition and fees, net of discounts of \$258,744 Commonwealth of Pennsylvania -	\$ 1,837,714	\$ -	\$ 1,837,714
Appropriations	323,792	-	323,792
Special contracts	77,146	-	77,146
Department of General Services projects	50,023	-	50,023
United States Government grants and contracts	638,438	-	638,438
Private grants and contracts	106,289	-	106,289
Gifts and pledges	95,753	24,333	120,086
Endowment spending	140,047	-	140,047
Other investment income	192,756	1,574	194,330
Sales and services of educational activities	101,041	-	101,041
Recovery of indirect costs	229,932	-	229,932
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	50,545	(50,545)	-
<b>Total operating revenues and other support</b>	<b>7,892,015</b>	<b>(24,638)</b>	<b>7,867,377</b>
<b>Operating expenses:</b>			
Educational and general -			
Academic and student services	1,991,230	-	1,991,230
Research	1,019,530	-	1,019,530
Public service	200,359	-	200,359
Institutional support	463,959	-	463,959
Total educational and general	3,675,078	-	3,675,078
Auxiliary enterprises	479,608	-	479,608
Health System expense	3,614,830	-	3,614,830
<b>Total operating expenses</b>	<b>7,769,516</b>	<b>-</b>	<b>7,769,516</b>
<b>Increase (decrease) in net assets from operating activities</b>	<b>122,499</b>	<b>(24,638)</b>	<b>97,861</b>
<b>Nonoperating activities:</b>			
Gifts and pledges	-	137,819	137,819
Current year investment returns	(361,526)	(358,038)	(719,564)
Endowment appreciation utilized	(96,629)	-	(96,629)
Changes in funds held by others in perpetuity	-	(3,691)	(3,691)
Write-offs and disposals 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)
<b>Increase (decrease) in net assets from nonoperating activities</b>	<b>103,824</b>	<b>(230,712)</b>	<b>(126,888)</b>
<b>Increase (decrease) in net assets - The Pennsylvania State University</b>	<b>226,323</b>	<b>(255,350)</b>	<b>(29,027)</b>
<b>Noncontrolling interest:</b>			
Excess of revenues over expenses	14,976	-	14,976
<b>Increase in net assets - noncontrolling interest</b>	<b>14,976</b>	<b>-</b>	<b>14,976</b>
<b>Increase (decrease) in total net assets</b>	<b>241,299</b>	<b>(255,350)</b>	<b>(14,051)</b>
<b>Net assets at the beginning of the year</b>	<b>8,615,611</b>	<b>3,791,060</b>	<b>12,406,671</b>
<b>Net assets at the end of the year</b>	<b>\$ 8,856,910</b>	<b>\$ 3,535,710</b>	<b>\$ 12,392,620</b>

See notes to consolidated financial statements.

**THE PENNSYLVANIA STATE UNIVERSITY**  
**CONSOLIDATED STATEMENT OF ACTIVITIES**  
**FOR THE YEAR ENDED JUNE 30, 2021**  
**(in thousands)**

	Without Donor Restrictions	With Donor Restrictions	Total
<b>Operating revenues and other support:</b>			
Tuition and fees, net of discounts of \$227,627 Commonwealth of Pennsylvania -	\$ 1,796,041	\$ -	\$ 1,796,041
Appropriations	323,792	-	323,792
Special contracts	83,211	-	83,211
Department of General Services projects	12,665	-	12,665
United States Government grants and contracts	532,652	-	532,652
Private grants and contracts	115,194	-	115,194
Gifts and pledges	76,720	30,863	107,583
Endowment spending	132,693	-	132,693
Other investment income	177,534	556	178,090
Sales and services of educational activities	99,721	-	99,721
Recovery of indirect costs	204,204	-	204,204
Auxiliary enterprises	237,303	-	237,303
Health System revenue	3,423,994	-	3,423,994
Other sources	28,485	-	28,485
Net assets released from restrictions	24,924	(24,924)	-
<b>Total operating revenues and other support</b>	<b>7,269,133</b>	<b>6,495</b>	<b>7,275,628</b>
<b>Operating expenses:</b>			
Educational and general -			
Academic and student services	1,966,267	-	1,966,267
Research	913,234	-	913,234
Public service	163,354	-	163,354
Institutional support	196,680	-	196,680
Total educational and general	3,239,535	-	3,239,535
Auxiliary enterprises	428,460	-	428,460
Health System expense	3,131,273	-	3,131,273
<b>Total operating expenses</b>	<b>6,799,268</b>	<b>-</b>	<b>6,799,268</b>
<b>Increase in net assets from operating activities</b>	<b>469,865</b>	<b>6,495</b>	<b>476,360</b>
<b>Nonoperating activities:</b>			
Gifts and pledges	-	117,146	117,146
Current year investment returns	794,185	853,842	1,648,027
Endowment appreciation utilized	(113,608)	-	(113,608)
Changes in funds held by others in perpetuity	-	5,421	5,421
Write-offs and disposals of assets	(11,261)	-	(11,261)
Nonperiodic change in postretirement benefit plan	337,961	-	337,961
Other components of net periodic postretirement benefit cost	(62,033)	-	(62,033)
Actuarial adjustment on annuities payable	-	(16,155)	(16,155)
<b>Increase in net assets from nonoperating activities</b>	<b>945,244</b>	<b>960,254</b>	<b>1,905,498</b>
<b>Increase in net assets - The Pennsylvania State University</b>	<b>1,415,109</b>	<b>966,749</b>	<b>2,381,858</b>
<b>Noncontrolling interest:</b>			
Excess of revenues over expenses	63,039	-	63,039
<b>Increase in net assets - noncontrolling interest</b>	<b>63,039</b>	<b>-</b>	<b>63,039</b>
<b>Increase in total net assets</b>	<b>1,478,148</b>	<b>966,749</b>	<b>2,444,897</b>
<b>Net assets at the beginning of the year</b>	<b>7,137,463</b>	<b>2,824,311</b>	<b>9,961,774</b>
<b>Net assets at the end of the year</b>	<b>\$ 8,615,611</b>	<b>\$ 3,791,060</b>	<b>\$ 12,406,671</b>

See notes to consolidated financial statements.

**THE PENNSYLVANIA STATE UNIVERSITY**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**FOR THE YEARS ENDED JUNE 30, 2022 AND 2021**  
**(in thousands)**

	June 30, 2022	June 30, 2021
<b>Cash flows from operating activities:</b>		
(Decrease) increase in net assets	\$ (14,051)	\$ 2,444,897
Adjustments to reconcile change in net assets to net cash provided by operating activities -		
Actuarial adjustment on annuities payable	6,805	16,155
Contributions restricted for long-term investment	(166,153)	(125,498)
Interest and dividends restricted for long-term investment	(43,692)	(39,852)
Net realized and unrealized losses (gains) on long-term investments	650,546	(1,918,202)
Depreciation and amortization expense	481,589	438,950
Noncash lease expense	(2,187)	774
Inherent contributions from acquisition - Health System	-	(123,591)
Write-offs and disposals of assets	5,174	11,261
Contributions of land, buildings and equipment	(1,419)	(7,286)
Provision for bad debts	4,451	9,048
(Increase) decrease in deposits held for others	(2,917)	29,865
Increase in receivables	(171,305)	(115,025)
Increase in inventories	(13,059)	(13,675)
Decrease (increase) in prepaid expenses and other assets	82,991	(26,797)
(Decrease) increase in accounts payable and other accrued expenses	(113,135)	263,569
Increase in deferred revenue	9,971	9,678
Decrease in accrued postretirement benefits	(589,228)	(284,130)
<b>Net cash provided by operating activities</b>	<b>124,381</b>	<b>570,141</b>
<b>Cash flows from investing activities:</b>		
Purchase of land, buildings and equipment	(742,661)	(951,545)
(Increase) decrease in deposits held by bond trustees	(106,334)	103,995
Repayments and advances on student loans	(1,235)	(8,094)
Collections on student loans	5,145	7,102
Purchase of investments	(4,076,999)	(4,244,476)
Proceeds from sale of investments	3,595,795	3,927,664
<b>Net cash used in investing activities</b>	<b>(1,326,289)</b>	<b>(1,165,354)</b>
<b>Cash flows from financing activities:</b>		
Contributions restricted for long-term investment	166,153	125,498
Interest and dividends restricted for long-term investment	43,692	39,852
Payments of annuity obligations	(7,727)	(7,803)
Proceeds from long-term debt	514,300	177,666
Principal payments on long-term debt	(262,580)	(195,346)
Refundable federal student loans	(7,317)	781
<b>Net cash provided by financing activities</b>	<b>446,521</b>	<b>140,648</b>
<b>Net decrease in unrestricted and restricted cash and cash equivalents</b>	<b>(755,387)</b>	<b>(454,565)</b>
<b>Unrestricted and restricted cash and cash equivalents at the beginning of the year</b>	<b>1,904,988</b>	<b>2,359,553</b>
<b>Unrestricted and restricted cash and cash equivalents at the end of the year</b>	<b>\$ 1,149,601</b>	<b>\$ 1,904,988</b>

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

See notes to consolidated financial statements.

**THE PENNSYLVANIA STATE UNIVERSITY**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2022 AND 2021**

**1. THE UNIVERSITY AND RELATED ENTITIES**

The Pennsylvania State University (“University”), which was created 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.

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 revenues whose restrictions are met within the same fiscal year are reported as revenue without donor restrictions. All expenses from operations are reported as a reduction of net assets without donor restrictions since the use of restricted contributions in accordance with donors’ stipulations results in the release of the restriction.

### Use of Estimates

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

### Revenue Recognition

#### *Tuition*

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

Tuition receipts of \$72.0 million, included in deferred revenue at June 30, 2021, were recognized during the year ended June 30, 2022. Tuition receipts of \$64.5 million, included in deferred revenue at June 30, 2020, were recognized during the year ended June 30, 2021. 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 \$32.9 million, included in deferred revenue at June 30, 2021, were recognized during the year ended June 30, 2022. Grants and contracts receipts of \$36.0 million, included in deferred revenue at June 30, 2020, were recognized during the year ended June 30, 2021. The University has entered into numerous grants and contracts, with periods of performance ending at various dates from July 1, 2022 through December 31, 2050. The estimated performance obligations remaining under these grants and contracts as of June 30, 2022 total \$927.9 million. 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, 2021 and 2020 were recognized during the years ended June 30, 2022 and 2021. 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*

The Health System reports net patient service revenue at the amounts that reflect 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 managed care and government programs) and others, and they include explicit and implicit price concessions, as well as variable consideration for retroactive revenue adjustments due to settlement of audits, reviews, and investigations. Generally, the Health System bills patients and third-party payors several days after the services are performed or shortly after discharge. Revenues are 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 receiving inpatient acute care services. The Health System measures the performance obligation from admission into the Health System to the point when it is no longer required to provide services to that patient, which is generally at the time of discharge. Revenue for performance obligations satisfied at a point in time is recognized when goods or services are provided, and the Health System does not believe it is required to provide additional goods or services to the patient.

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 has elected the practical expedient provided by ASC 340-40-25-4 and all incremental customer contract acquisition costs are expensed as they are incurred, as the amortization period of the asset that the Health System otherwise would have recognized is one year or less in duration.

The Health System utilizes the portfolio approach practical expedient in ASC 606 for contracts related to net patient service revenue. The Health System accounts for contracts within each portfolio as a collective group, rather than individual contracts, based on the payment pattern expected in each portfolio category and the similar nature and characteristics of the patients within each portfolio. As a result, the Health System has concluded that revenue for a given portfolio would not be materially different than if accounting for revenue on a contract by contract basis.

Generally, patients who are covered by third party payors are responsible for patient responsibility balances, including deductibles and coinsurance, which vary in amount. The Health System estimates the transaction price for patients with deductibles and coinsurance based on historical experience and current market conditions. The initial estimate of the transactions price is determined by reducing the standard charge by any contractual amounts, discounts, and implicit price concessions (routine uncollectible amounts). Subsequent changes to the estimate of the transaction price are generally recorded as adjustments to patient service revenue in the period of the change. Adjustments arising from a change in transaction price were not material in 2022 and 2021.

The Health System has agreements with third party payors that provide for payments at amounts different from its established charges. Inpatient acute care services rendered are paid at prospectively determined rates per

discharge in accordance with the Federal Prospective Payment System (PPS) for Medicare and generally at negotiated or otherwise predetermined amounts. Inpatient, nonacute, and outpatient services are paid at various rates under different arrangements with third party payors, commercial insurance carriers, and health maintenance organizations. The basis for payment under these agreements includes prospectively determined discounts from the Health System's established charges, fee schedules, and per diem rates for certain services.

Law and regulations governing the Medicare and Medicaid programs are extremely complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates will change by a material amount in the near term. During 2022 and 2021, a decrease of \$2.8 million and \$6.0 million, respectively, was recognized reflecting the difference in actual versus estimated reimbursement and the change in certain estimates related to prior years' patient service revenue.

Additionally, during 2022 and 2021, the Health System recognized \$6.3 million 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 subsidiaries of the Health System provide care to patients who meet certain criteria under its charity care policy without charge or at amounts less than established rates. The Health System does not pursue collection of amounts determined to qualify as charity care; these amounts are not reported as net patient service revenue. The amounts of direct and indirect costs for services and supplies furnished under the Health System's charity care policy totaled approximately \$38.6 million and \$36.5 million for the years ended June 30, 2022 and 2021, respectively, and was based on a ratio of the Health System's operational costs to its gross charges. The amount of charges foregone for services and supplies furnished under the Health System's charity policy totaled approximately \$81.9 million and \$73.4 million during 2022 and 2021, 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, 2022 and 2021. 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, 2022 and 2021 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>	<u>2022</u>	<u>2021</u>
Supplemental reconciliation data:		
Cash and cash equivalents as shown in the statements of financial position	\$ 1,058,303	\$ 1,839,705
Restricted cash and cash equivalents included in deposits held by bond trustees	67,362	30,598
Restricted cash and cash equivalents included in deposits held for others	<u>23,936</u>	<u>34,685</u>
Total unrestricted and restricted cash and cash equivalents as shown in the statements of cash flows	<u>\$ 1,149,601</u>	<u>\$ 1,904,988</u>
Other supplemental data:	<u>2022</u>	<u>2021</u>
Interest paid	\$ 115,323	\$ 108,656
Penn College:		
Deposit with bond escrow agent	-	(58,851)
Proceeds from 2021 bond issuance	-	52,665
Net original issue premium/underwriter's discount – 2021 bonds	-	6,186
Costs of 2021 bond issuance	-	(777)

Capitalized costs accrued related to construction are \$78.8 million and \$87.7 million as of June 30, 2022 and 2021, respectively. Taxes paid for 2022 and 2021 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>	<u>2022</u>	<u>2021</u>
Grants and contracts, net of allowance of \$2,330 and \$2,132	\$ 212,050	\$ 160,777
Patient accounts receivable	531,271	395,887
Student receivables, net of allowance of \$14,845 and \$15,701	49,780	51,571
Other, net of allowance of \$8,263 and \$7,761	<u>53,071</u>	<u>55,615</u>
Total accounts receivable, net	<u>\$ 846,172</u>	<u>\$ 663,850</u>

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.

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 \$21.1 million and \$33.9 million at June 30, 2022 and 2021, 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>	<u>2022</u>	<u>2021</u>
Loans to students:		
Federal government loan programs:		
Perkins loan program	\$ 20,641	\$ 26,252
Health Professions Student Loans and Loans for Disadvantaged Students	<u>1</u>	<u>1</u>
Federal government loan programs	20,642	26,253
Institutional loan programs	<u>18,806</u>	<u>19,709</u>
	39,448	45,962
Less allowance for doubtful accounts:		
Balance, beginning of year	(3,050)	(3,064)
Provision for doubtful accounts	<u>(4,394)</u>	<u>14</u>
Balance, end of year	<u>(7,444)</u>	<u>(3,050)</u>
Loans to students, net	<u>\$ 32,004</u>	<u>\$ 42,912</u>

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>	<u>2022</u>		<u>2021</u>		<u>Total</u>
	45 days or less	46-75 days	76-105 days	Over 105 days	
Loans to students:					
Federal government loan programs	\$ 17,468	\$ 33	\$ 30	\$ 3,111	\$ 20,642
Institutional loan programs	<u>16,485</u>	<u>26</u>	<u>25</u>	<u>2,270</u>	<u>18,806</u>
Total loans to students	<u>\$ 33,953</u>	<u>\$ 59</u>	<u>\$ 55</u>	<u>\$ 5,381</u>	<u>39,448</u>
Allowance for doubtful accounts:					
Federal government loan programs					(4,889)
Institutional loan programs					<u>(2,555)</u>
Total allowance for doubtful accounts					<u>(7,444)</u>
Total loans to students, net					<u>\$ 32,004</u>

(in thousands of dollars)

<u>2021</u>	<u>45 days or less</u>	<u>46-75 days</u>	<u>76-105 days</u>	<u>Over 105 days</u>	<u>Total</u>
Loans to students:					
Federal government loan programs	\$ 20,833	\$ 26	\$ 27	\$ 5,367	\$ 26,253
Institutional loan programs	<u>17,080</u>	<u>21</u>	<u>20</u>	<u>2,588</u>	<u>19,709</u>
Total loans to students	<u>\$ 37,913</u>	<u>\$ 47</u>	<u>\$ 47</u>	<u>\$ 7,955</u>	<u>45,962</u>
Allowance for doubtful accounts:					
Federal government loan programs					(543)
Institutional loan programs					<u>(2,507)</u>
Total allowance for doubtful accounts					<u>(3,050)</u>
Total loans to students, net					<u>\$ 42,912</u>

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 represent 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, 2022 and 2021. 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 on 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>	<u>2022</u>	<u>2021</u>
Land	\$ 181,833	\$ 169,965
Buildings	8,892,700	8,275,067
Improvements other than buildings	807,507	725,067
Equipment	2,071,893	1,950,794
Assets under construction	<u>850,068</u>	<u>1,008,180</u>
Total plant	12,804,001	12,129,073
Less accumulated depreciation	<u>(5,918,329)</u>	<u>(5,509,272)</u>
Total investment in plant, net	<u>\$ 6,885,672</u>	<u>\$ 6,619,801</u>

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 \$484.5 million and \$435.7 million for the fiscal years ended June 30, 2022 and 2021, 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 \$50.4 million and \$46.7 million at June 30, 2022 and 2021, 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 comparisons to Indicative Composite Observable Reported Execution (CORE) Yields for various maturities. The CORE is a yield curve that represents an aggregation of daily trade data reported to the Municipal Securities Rulemaking Board. It is a simple average yield of fixed-rate, non-Alternative Minimum Tax, tax-exempt, coupon-bearing municipal bond trades. 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>	<u>2022</u>	<u>2021</u>
Accounts payable (non-Health System)	\$ 249,140	\$ 213,235
Health System accounts payable and other accrued expenses	535,351	507,550
Health System Medicare APP	37,631	117,054
Accrued payroll and other related liabilities	127,464	161,111
Accrued interest	30,835	30,459
Student deposits	<u>3,805</u>	<u>3,318</u>
Total accounts payable and other accrued expenses	<u>\$ 984,226</u>	<u>\$ 1,032,727</u>

### 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, 2020	\$ 95,430
Adjustment to liability	7,321
Accretion expense	3,876
Liabilities settled	<u>(3,702)</u>
Balance as of June 30, 2021	102,925
Adjustment to liability	4,972
Accretion expense	5,697
Liabilities settled	<u>(7,198)</u>
Balance as of June 30, 2022	<u>\$ 106,396</u>

### 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>	<u>2022</u>	<u>2021</u>
Net assets without donor restrictions:		
Designated for specific purposes:		
Health System	\$ 1,542,270	\$ 1,627,785
Designated for plant activities	1,422,756	1,524,081
Funds functioning as endowments	1,177,727	1,263,825
Operating general funds carryforward	962,139	1,018,758
Unit managed non-general funds	268,831	256,689
Designated for postretirement benefits	189,087	(370,630)
Designated for scholarships and program support	135,655	131,195
Designated for pension prefunding	(990,267)	(1,025,633)
Other designated net assets	<u>204,706</u>	<u>252,053</u>
Total designated for specific purposes	<u>4,912,904</u>	<u>4,678,123</u>
Net investment in plant	<u>3,606,865</u>	<u>3,615,323</u>
Non-controlling interest	<u>337,141</u>	<u>322,165</u>
Total net assets without donor restrictions	<u>\$ 8,856,910</u>	<u>\$ 8,615,611</u>
Net assets with donor restrictions:		
Endowment funds	\$ 3,181,657	\$ 3,373,624
Future contributions	214,669	228,797
Split-interest agreements	103,775	125,432
Student loan funds	19,602	19,314
Contributions for property, plant and equipment	<u>16,007</u>	<u>43,893</u>
Total net assets with donor restrictions	<u>\$ 3,535,710</u>	<u>\$ 3,791,060</u>
Total net assets	<u>\$ 12,392,620</u>	<u>\$ 12,406,671</u>

Net assets without donor restrictions that are designated for specific purposes have been designated at the discretion of management.

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 August 2018, the FASB issued Accounting Standards Update (ASU) 2018-14, "*Compensation – Retirement Benefits – Defined Benefit Plans – General (Subtopic 715-20); Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans.*" This update modified the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans and was effective for the University beginning July 1, 2021. The adoption of this guidance did not have a material impact on the consolidated financial statements.

In January 2020, the FASB issued ASU 2020-01, "*Investments – Equity Securities (Topic 321), Investments – Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815); Clarifying the Interactions between Topic 321, Topic 323, and Topic 815.*" This update clarifies the interaction of the accounting for equity securities under Topic 321 and investments accounted for under the equity method of accounting in Topic 323 and the accounting for certain forward contracts and purchased options accounted for under Topic 815. This update is effective for the University beginning July 1, 2022 with early adoption

permitted. The University is currently evaluating the impact this guidance may have on its consolidated financial statements.

In September 2020, the FASB issued ASU 2020-07, *“Not-for-Profit Entities; Presentation and Disclosure by Not-for-Profit Entities for Contributed Nonfinancial Assets.”* This update requires a not-for-profit entity to present contributed nonfinancial assets as a separate line item in the statement of activities, apart from contributions of cash and other financial assets. In addition, not-for-profit entities are required to disclose additional qualitative and quantitative information related to nonfinancial assets. This update was effective for the University beginning July 1, 2021. The adoption of this guidance did not have a material impact on the 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 and \$30.8 million during 2022 and 2021, respectively, 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 and \$85.0 million were also recognized as United States Government grants and contracts in the consolidated statement of activities in 2022 and 2021, respectively, 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 has deferred payment of \$34.0 million and \$68.0 million for the employer portion of Social Security payroll tax at June 30, 2022 and 2021, respectively, which is included in accounts payable and other accrued expenses and other liabilities in the consolidated statement of financial position. In December 2021, \$34.0 million of the deferral was paid with the remaining \$34.0 million due by December 31, 2022.

The CARES Act revised the Medicare accelerated payment program (“Medicare APP”). During 2020, the Health System received approximately \$160.3 million of Medicare APP funding under this program, which is recorded as a contract liability within accounts payable and other accrued expenses in the consolidated statements of financial position. Through the acquisition of Holy Spirit Medical Center and Spirit Physician Services, Inc., an additional \$27.9 million was recorded as a contract liability in 2021. The Health System has not received additional Medicare APP funding during the year ended June 30, 2022. On October 1, 2020, the Continuing Appropriations Act, 2021 and Other Extensions Act (the “Act”) was passed, which revised the Medicare APP repayment terms and interest rate for amounts received between the passage of the CARES Act and the end of the COVID-19 public health emergency. The Act delays the beginning of the recoupment of the advance payments to twelve months after the receipt of Medicare APP funds and extends the full repayment term to twenty-nine months. In addition, the Act caps recoupments at 25% for the first eleven months of repayment and 50% for the following six months. The interest rate is capped at 4% for amounts that remain outstanding at the end of the revised recoupment period.

During 2022 and 2021, the Health System recorded recoupment of Medicare APP funds of \$127.6 million and \$23.0 million, respectively. As of June 30, 2022 and 2021, Medicare APP funds of \$37.6 million and

\$117.1 million, respectively are recorded in accounts payable and other accrued expenses within the consolidated statements of financial position. As of June 30, 2021, Medicare APP funds of \$48.2 million are recorded in other liabilities within the consolidated statements of financial position.

During the years ended June 30, 2022 and 2021, the Health System received approximately \$8.5 million and \$77.9 million, respectively, from the Public Health and Social Services Emergency Fund (“Provider Relief Fund” or “CARES Act Grant”) of which the Health System recognized approximately \$8.5 million and \$87.1 million (including \$9.1 million received and deferred at June 30, 2020) as other operating revenue in the accompanying consolidated statement of operations and changes in net assets for the years ended June 30, 2022 and 2021, respectively. Providers who have been allocated a Provider Relief Fund payment must sign an attestation confirming receipt of the funds and agreeing to certain terms and conditions of payment. Amounts recognized as other operating revenue are subject to uncertainty as new or revised guidance is released regarding the treatment of the funds. In September 2021, the Health System completed the submission to the Department of Health and Human Services through the on-line portal for Provider Relief Funds received between April 10, 2020 through June 30, 2020. Final approval was received by the Health System on February 3, 2022. Subsequent to year-end, the Health System completed an additional submission for Provider Relief Funds received between July 1, 2021 through June 30, 2022 as of September 30, 2022, and final approval of this submission has not been received.

### **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 operates with a balanced budget and 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, 2022 and 2021.

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, 2022 and 2021, 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>	<u>2022</u>	<u>2021</u>
Total assets	\$ 19,439,689	\$ 19,878,734
Less:		
Inventories	(85,662)	(72,604)
Prepaid expenses and other assets	(127,277)	(196,046)
Total investment in plant, net	(6,885,672)	(6,619,801)
Beneficial interest in perpetual trusts	(26,240)	(29,931)
Operating lease right-of-use assets	(172,590)	(146,215)
Other assets	<u>(191,385)</u>	<u>(201,914)</u>
Total financial assets	11,950,863	12,612,223
Less:		
Noncurrent investments	(8,045,673)	(8,553,375)
Contractual or donor-imposed restrictions:		
Deposits held by bond trustees	(191,618)	(48,520)
Deposits held for others	(34,460)	(45,690)
Receivables subject to time restrictions	(42,793)	(40,714)
Receivables subject to donor-imposed restrictions	(127,333)	(143,715)
Loans to students, net	<u>(32,004)</u>	<u>(42,912)</u>
Financial assets available to meet cash needs for general expenditures within one year	<u>\$ 3,476,982</u>	<u>\$ 3,737,297</u>

#### 4. INVESTMENTS

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

<i>(in thousands of dollars)</i>	<u>2022</u>	<u>2021</u>
Fixed income	\$ 3,912,368	\$ 3,782,575
Equity investments	4,217,348	4,823,628
Real assets	642,506	469,251
Opportunistic	<u>823,335</u>	<u>689,446</u>
Total	<u>\$ 9,595,557</u>	<u>\$ 9,764,900</u>

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 and treasury note futures contracts comprise the University's beneficially held derivative instruments as of June 30, 2022 and 2021 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, 2022 and 2021.

The following schedules summarize the investment return and its classification in the consolidated statements of activities for the year ended June 30:

<i>(in thousands of dollars)</i> <u>2022</u>	Without donor <u>restrictions</u>	With donor <u>restrictions</u>	<u>Total</u>
Investment income	\$ 39,817	\$ 58,233	\$ 98,050
Net realized gains	339,757	123,024	462,781
Net unrealized losses	<u>(504,926)</u>	<u>(537,721)</u>	<u>(1,042,647)</u>
Total returns	<u>\$ (125,352)</u>	<u>\$ (356,464)</u>	<u>\$ (481,816)</u>

<i>(in thousands of dollars)</i> <u>2021</u>	Without donor <u>restrictions</u>	With donor <u>restrictions</u>	<u>Total</u>
Investment income	\$ 196,619	\$ 14,492	\$ 211,111
Net realized gains, including endowment spending	144,522	100,527	245,049
Net unrealized gains	<u>649,663</u>	<u>739,379</u>	<u>1,389,042</u>
Total returns	<u>\$ 990,804</u>	<u>\$ 854,398</u>	<u>\$ 1,845,202</u>

## 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 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 and are classified as net assets without donor restrictions due to the lack of external donor restrictions. Also included in net assets without donor restrictions are gains and losses attributable to funds functioning as endowments.

From time to time, due to unfavorable market fluctuations, the fair value of some assets associated with individual donor-restricted endowment funds may fall below the level that donors require to be retained as a perpetual fund, while other assets are unaffected to the same extent and maintain or exceed the level required. Such deficiencies are reported as net assets with donor restrictions. As of June 30, 2022 and 2021, funds with an original gift value of \$121.4 million and \$6.2 million were "underwater" by \$20.8 million and \$2.2 million, respectively. Subsequent investment gains will be used to restore the balance up to the fair market value of the original gift.

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

<i>(in thousands of dollars)</i> <u>2022</u>	<u>Without donor restrictions</u>	<u>With donor restrictions</u>	<u>Total</u>
Donor-restricted endowment funds	\$ -	\$ 3,148,363	\$ 3,148,363
Funds functioning as Endowments	<u>1,174,108</u>	<u>-</u>	<u>1,174,108</u>
Total net assets	<u>\$ 1,174,108</u>	<u>\$ 3,148,363</u>	<u>\$ 4,322,471</u>
<i>(in thousands of dollars)</i> <u>2021</u>	<u>Without donor restrictions</u>	<u>With donor restrictions</u>	<u>Total</u>
Donor-restricted endowment funds	\$ -	\$ 3,335,969	\$ 3,335,969
Funds functioning as Endowments	<u>1,259,586</u>	<u>-</u>	<u>1,259,586</u>
Total net assets	<u>\$ 1,259,586</u>	<u>\$ 3,335,969</u>	<u>\$ 4,595,555</u>

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

<i>(in thousands of dollars)</i> <u>2022</u>	<u>Without donor restrictions</u>	<u>With donor restrictions</u>	<u>Total</u>
Endowment net assets, beginning of the year	\$ 1,259,586	\$ 3,335,969	\$ 4,595,555
Endowment return, net	15,864	(340,015)	(324,151)
Contributions	-	152,409	152,409
Endowment spending	(140,047)	-	(140,047)
Transfers to create funds functioning as endowments	<u>38,705</u>	<u>-</u>	<u>38,705</u>
Endowment net assets, end of the year	<u>\$ 1,174,108</u>	<u>\$ 3,148,363</u>	<u>\$ 4,322,471</u>
<i>(in thousands of dollars)</i> <u>2021</u>	<u>Without donor restrictions</u>	<u>With donor restrictions</u>	<u>Total</u>
Endowment net assets, beginning of the year	\$ 922,801	\$ 2,424,281	\$ 3,347,082
Endowment return, net	436,605	812,502	1,249,107
Contributions	-	99,186	99,186
Endowment spending	(132,693)	-	(132,693)
Transfers to create funds functioning as endowments	<u>32,873</u>	<u>-</u>	<u>32,873</u>
Endowment net assets, end of the year	<u>\$ 1,259,586</u>	<u>\$ 3,335,969</u>	<u>\$ 4,595,555</u>

Not included above are the endowment net assets of subsidiaries of \$36.9 million and \$42.1 million as of June 30, 2022 and 2021, respectively.

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 2022 and 2021 was based on 4.5% 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, 2022 and 2021:

(in thousands of dollars)

<u>2022</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>NAV</u>	<u>Total</u>
<u>Assets:</u>					
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	<u>\$ 951,043</u>	<u>\$ 493,275</u>	<u>\$ 1,525</u>	<u>\$ 4,642,153</u>	<u>\$ 6,087,996</u>
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	<u>\$ 547,632</u>	<u>\$ 2,519,102</u>	<u>\$ 4,595</u>	<u>\$ 436,052</u>	<u>\$ 3,507,381</u>
Deposits held by bond trustees:					
Fixed income					
Public funds	<u>\$ 124,256</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 124,256</u>
Deposits held for others	<u>\$ -</u>	<u>\$ 10,524</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 10,524</u>
Beneficial interest in perpetual trusts	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 26,240</u>	<u>\$ -</u>	<u>\$ 26,240</u>
<u>Liabilities:</u>					
Present value of annuities payable					
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 63,995</u>	<u>\$ -</u>	<u>\$ 63,995</u>

(in thousands of dollars)

2021	Level 1	Level 2	Level 3	NAV	Total
<b>Assets:</b>					
<b>Long-term Investment Pool:</b>					
Fixed income					
Public separate accounts	\$ 174	\$ 577,871	\$ -	\$ -	\$ 578,045
Public funds	127,368	-	-	-	127,368
Private funds	-	-	-	398,281	398,281
Equity investments					
Public separate accounts	669,086	-	-	-	669,086
Private separate accounts	-	-	1,308	-	1,308
Public funds	109,826	-	-	-	109,826
Private funds	-	-	-	3,650,925	3,650,925
Real assets					
Public funds	86,762	-	-	-	86,762
Private funds	-	-	-	380,894	380,894
Opportunistic					
Private funds	-	-	-	481,889	481,889
<b>Total</b>	<b><u>\$ 993,216</u></b>	<b><u>\$ 577,871</u></b>	<b><u>\$ 1,308</u></b>	<b><u>\$ 4,911,989</u></b>	<b><u>\$ 6,484,384</u></b>
<b>Operating Investments:</b>					
Fixed income					
Public separate accounts	\$ 4,962	\$ 2,221,167	\$ -	\$ -	\$ 2,226,129
Public funds	310,045	-	-	-	310,045
Private funds	-	-	-	142,707	142,707
Equity investments					
Public separate accounts	25,437	5	-	-	25,442
Private separate accounts	-	-	1	420	421
Public funds	292,129	-	-	-	292,129
Private funds	-	-	4,783	69,708	74,491
Real assets					
Private separate accounts	-	-	7	-	7
Public funds	1,473	-	-	-	1,473
Private funds	-	-	-	115	115
Opportunistic					
Private funds	-	-	-	207,557	207,557
<b>Total</b>	<b><u>\$ 634,046</u></b>	<b><u>\$ 2,221,172</u></b>	<b><u>\$ 4,791</u></b>	<b><u>\$ 420,507</u></b>	<b><u>\$ 3,280,516</u></b>
<b>Deposits held by bond trustees:</b>					
Fixed income					
Public funds	\$ 17,922	\$ -	\$ -	\$ -	\$ 17,922
U.S. dollar cash	-	-	-	-	30,598
<b>Total</b>	<b><u>\$ 17,922</u></b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 48,520</u></b>
<b>Beneficial interest in perpetual trusts</b>					
	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 29,931</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 29,931</u></b>
<b>Liabilities:</b>					
Present value of annuities payable					
	<b><u>\$ -</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 64,917</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 64,917</u></b>

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. As of June 30, 2022 and 2021, the fair value of endowment funds and funds functioning as endowments within the LTIP totaled \$4,391.6 million and \$4,630.9 million, respectively. As of June 30, 2022 and 2021, the fair value of operating funds included in the LTIP totaled \$1,696.4 million and \$1,853.5 million, respectively.

The following tables present information related to changes in Level 3 for each category of financial assets and liabilities for years ended June 30, 2022 and 2021:

<i>(in thousands of dollars)</i>	Long-Term Investment <u>Pool</u>	Operating <u>Investments</u>	Beneficial Interest in Perpetual <u>Trusts</u>
<u>Assets:</u>			
Balance as of June 30, 2020	\$ -	\$ 5,132	\$ 24,509
Total realized and unrealized (losses) gains	-	(331)	5,422
Net transfers in (out)	<u>1,308</u>	<u>(10)</u>	<u>-</u>
Balance as of June 30, 2021	1,308	4,791	29,931
Purchases	-	136	-
Total realized and unrealized (losses) gains	217	(332)	(3,691)
Net transfers in (out)	<u>-</u>	<u>-</u>	<u>-</u>
Balance as of June 30, 2022	<u>\$ 1,525</u>	<u>\$ 4,595</u>	<u>\$ 26,240</u>
		Present Value of Annuities <u>Payable</u>	
<u>Liabilities:</u>			
Balance as of June 30, 2020	\$ 56,564		
Actuarial adjustment of liability	8,435		
Gifts	1,160		
Sales	<u>(1,242)</u>		
Balance as of June 30, 2021	64,917		
Actuarial adjustment of liability	1,726		
Gifts	772		
Sales	<u>(3,420)</u>		
Balance as of June 30, 2022	<u>\$ 63,995</u>		

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:

<i>(in thousands of dollars)</i>	Fair Value		Unfunded Commitments	Redemption Frequency	Redemption Notice Period
	<u>2022</u>	<u>2021</u>	At June 30, 2022		
<b>Private Funds With Redemption Ability:</b>					
Fixed income investments	\$ 247,426	\$ 421,442		Monthly	10 days
Equity investments	1,661,652	2,043,168		Daily/Quarterly	2-90 days
Real asset investments	237,814	136,802		Daily/Monthly	0-60 Days
Opportunistic investments	<u>730,960</u>	<u>610,372</u>		Daily/Quarterly	90-365 Days
Subtotal	<u>\$ 2,877,852</u>	<u>\$ 3,211,784</u>			
<b>Private Funds Without Redemption Ability:</b>					
Fixed income investments	\$ 177,477	\$ 119,546	\$ 94,494		
Equity investments	1,615,782	1,677,885	519,333		
Real asset investments	314,793	244,207	217,986		
Opportunistic investments	<u>92,301</u>	<u>79,074</u>	<u>100,577</u>		
Subtotal	<u>\$ 2,200,353</u>	<u>\$ 2,120,712</u>	<u>\$ 932,390</u>		
Total	<u>\$ 5,078,205</u>	<u>\$ 5,332,496</u>	<u>\$ 932,390</u>		

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 drawdown funds as of June 30, 2022.

## 7. CONTRIBUTIONS RECEIVABLE

Contributions receivable are summarized as follows as of June 30:

<i>(in thousands of dollars)</i>	<u>2022</u>	<u>2021</u>
In one year or less	\$ 42,361	\$ 45,821
Between one year and five years	68,283	85,599
More than five years	<u>133,463</u>	<u>122,100</u>
Contributions receivable, gross	244,107	253,520
Less allowance	(1,656)	(1,415)
Less discount	<u>(49,702)</u>	<u>(45,459)</u>
Contributions receivable, net	<u>\$ 192,749</u>	<u>\$ 206,646</u>

Contributions received during the years ended June 30, 2022 and 2021 are discounted at rates ranging from 2.80% to 3.18% and 0.07% to 1.75%, respectively. The discount rates for prior periods ranged from 0.11% to 6.28%.

At June 30, 2022 and 2021 the University has received bequest intentions of \$797.5 million and \$714.0 million, respectively, and certain other conditional promises to give of \$65.5 million and \$57.5 million, respectively. These intentions and conditional promises to give are not included in the consolidated financial statements.



The following table summarizes the change in contributions receivable, net during the years ended June 30, 2022 and 2021:

<i>(in thousands of dollars)</i>	
Balance as of June 30, 2020	\$ 208,587
New pledges	59,821
Collections on pledges	(65,194)
Decrease in allowance	2,410
Decrease in unamortized discounts	<u>1,022</u>
Balance as of June 30, 2021	206,646
New pledges	64,172
Collections on pledges	(73,585)
Increase in allowance	(241)
Increase in unamortized discounts	<u>(4,243)</u>
Balance as of June 30, 2022	<u>\$ 192,749</u>

## 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>	<u>2022</u>	<u>2021</u>
<u>The Pennsylvania State University Bonds</u>		
Series 2022A	\$ 125,450	\$ -
Series 2022B	26,500	-
Series 2020A	79,300	80,495
Series 2020B	314,675	325,390
Series 2020D	1,039,685	1,065,165
Series 2020E	52,330	56,850
Series 2019A	103,770	105,425
Series 2019B	113,835	116,445
Series 2018	61,140	62,215
Series 2017A	146,780	149,540
Series 2017B	114,115	116,905
Series 2016A	107,995	111,105
Series 2016B	180,645	191,375
Series 2015A	55,820	57,560
Series 2015B	87,965	92,360
Series 2007B	31,455	35,800
 <u>Pennsylvania Higher Educational Facilities Authority</u>		
<u>University Revenue Bonds (issued for The Pennsylvania State University)</u>		
Series 2006	1,320	1,610
Series 2004	1,200	1,560
Series 2002	-	535
 <u>Penn State Health Bonds</u>		
Series 2019	222,000	222,000
 <u>Cumberland County Municipal Authority Revenue Bonds (issued for Penn State Health)</u>		
Series 2019	200,000	200,000
 <u>Lancaster County Hospital Authority Revenue Bonds (issued for Penn State Health)</u>		
Series 2021	288,840	-

Lycoming County Authority College Revenue Bonds  
(issued for Penn College)

Series 2021A	28,025	29,885
Series 2021B	21,980	22,780
Series 2016	44,865	46,890
Series 2015	<u>1,700</u>	<u>2,295</u>
Total bonds payable	3,451,390	3,094,185
Unamortized bond premiums	247,135	186,794
Unamortized deferred bond costs	(16,526)	(14,073)
<u>Notes payable, lines of credit and finance leases</u>		
Notes payable	41,968	46,843
Lines of credit	-	150,000
Finance lease obligations	<u>45,083</u>	<u>45,029</u>
Total notes payable, lines of credit and finance leases	<u>87,051</u>	<u>241,872</u>
Total long-term debt	<u>\$ 3,769,050</u>	<u>\$ 3,508,778</u>

<u>Debt issuance</u>	<u>Interest rate mode</u>	<u>Interest rates</u>	<u>Payment ranges and maturity</u> <i>(in thousands of dollars)</i>
<b>The Pennsylvania State University Bonds</b>			
Series 2022A	Fixed	2.08% - 3.69%	\$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%	\$1,255 to \$3,090 through September 2040 with \$17,980 and \$22,490 due September 2045 and 2050, respectively
Series 2020B	Fixed	1.549% - 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	1.14% - 2.84%	\$25,765 to \$33,545 through September 2035 with \$304,225 and \$328,000 due September 2043 and 2050, respectively
Series 2020E	Fixed	5.00%	\$4,520 to \$7,010 through March 2031
Series 2019A	Fixed	5.00%	\$1,740 to \$6,720 through September 2049
Series 2019B	Fixed	2.10% - 3.50%	\$2,670 to \$3,720 through September 2034 with \$20,455 and \$52,515 due September 2039 and September 2049, respectively
Series 2018	Fixed	2.00% - 5.00%	\$1,115 to \$2,320 through September 2037 with \$16,650 and \$18,255 due September 2043 and September 2048, respectively
Series 2017A	Fixed	2.00% - 5.00%	\$2,860 to \$5,965 through September 2037 with \$34,750 and \$44,620 due September 2042 and September 2047, respectively
Series 2017B	Fixed	2.283% - 3.793%	\$2,855 to \$3,830 through September 2032 with \$21,305 and \$56,595 due September 2037 and September 2047, respectively
Series 2016A	Fixed	5.00%	\$3,625 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%	\$1,830 to \$3,445 through September 2035 with \$20,000 due September 2040

<u>Debt issuance</u>	<u>Interest rate mode</u>	<u>Interest rates</u>	<u>Payment ranges and maturity</u>
Series 2015B	Fixed	5.00%	\$4,620 to \$8,435 through September 2035
Series 2007B	Fixed	5.25%	\$4,580 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.

**Penn State Health Bonds**

Series 2019	Fixed	3.806%	\$200,000 due November 2049
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**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
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**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
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**Lycoming County Authority College Revenue Bonds**

Series 2021A	Fixed	5.00%	\$1,720 to \$4,565 through July 2030
Series 2021B	Fixed	0.50% - 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	2.65% - 5.00%	\$465 to \$625 through January 2025

The Series 2022A Bonds are general obligation bonds issued in May 2022 for the purpose of financing various construction and renovation projects. The Series 2022A Bonds are subject to early redemption provisions, at the option of the University, beginning September 2032. The bonds maturing September 2047 and September 2052 are subject to mandatory sinking fund redemption.

The Series 2022B Bonds are taxable general obligation bonds issued in May 2022 for the purposes of financing a renovation project. The Series 2022B Bonds are subject to optional redemption provisions prior to maturity, in such order of their maturity as directed by the University, at the greater of (1) the sum of present values of the remaining scheduled payments of principal and interest thereon discounted at the redemption rate on a semi-annual basis or (2) 100% of the principal amount of the Series 2022B Bonds to be redeemed. The bonds maturing September 2042 are subject to mandatory sinking fund redemption.

The Lancaster County Hospital Authority Revenue Bonds, Series 2021 were issued by the Health System in November 2021 for the purpose of financing the construction of the Penn State Health Lancaster Medical Center.

The University believes it has complied with all financial debt covenants for the years ended June 30, 2022 and 2021.

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

<u>Year</u>	<u>Annual Installments</u> <i>(in thousands of dollars)</i>
2023	\$ 85,720
2024	91,085
2025	93,900
2026	102,555
2027	105,975
Thereafter	<u>2,972,155</u>
Total	<u>\$ 3,451,390</u>

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, 2022, the carrying value and estimated fair value of the University's bonds payable, including issuance premiums and deferred bond costs, are \$3,682.0 million and \$3,288.8 million, respectively. At June 30, 2021, the carrying value and estimated fair value of the University's bonds payable, including issuance premiums and deferred bond costs, are \$3,266.9 million and \$3,430.7 million, respectively. Certain bond issues have associated issuance premiums; these issuance premiums total \$247.1 million and \$186.8 million at June 30, 2022 and 2021, 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 \$16.5 million and \$14.1 million at June 30, 2022 and 2021, 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 and lines of credit

The University has five notes payable included within the consolidated statements of financial position at June 30, 2022 with balances of \$2.4 million, \$3.6 million, \$5.0 million, \$6.1 million, and \$24.8 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. The current portion of payments due under these notes totals \$5.0 million at June 30, 2022.

In July 2020, the University issued two lines of credit totaling \$250 million to provide support for its liquidity position in the wake of the COVID-19 pandemic. Total drawn amounts of \$50 million on these lines of credit were repaid in full in July 2021 and the related loan documents were fully terminated.

During 2020, the Health System established several lines of credit, all of which were repaid in full in 2021 and have expired.

In April 2021, the Health System established a revolving line of credit with PNC Bank in the amount of \$230 million, expiring in April 2024. The interest rate on the line of credit is LIBOR-based plus a spread, with a commitment fee on the undrawn portion. In 2021, the Health System had drawn \$100 million on the line. During 2022, the Health System did not draw on this line of credit and repaid the outstanding balance in full. The interest rate as of June 30, 2022 and 2021 was 2.3% and 0.8%, respectively. As of June 30, 2022 the line of credit was closed.

## **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, 2022 are as follows:

(in thousands of dollars)

<u>Year</u>	<u>Finance Leases</u>	<u>Operating Leases</u>
2023	\$ 10,350	\$ 31,725
2024	9,232	26,590
2025	6,602	24,094
2026	4,510	21,215
2027	3,747	19,556
Thereafter	<u>21,268</u>	<u>86,015</u>
Total lease payments	55,709	209,195
Less amount representing interest	<u>(10,626)</u>	<u>(36,953)</u>
Total lease obligations	45,083	172,242
Current portion	<u>7,860</u>	<u>21,442</u>
Long-term portion	<u>\$ 37,223</u>	<u>\$ 150,800</u>

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

(in thousands of dollars)

<u>Components of Lease Expense</u>	<u>2022</u>	<u>2021</u>
Finance lease expense:		
Amortization of ROU assets	\$ 7,573	\$ 9,210
Interest on lease liabilities	<u>1,762</u>	<u>2,042</u>
Total finance lease expense	<u>9,335</u>	<u>11,252</u>
Operating lease expense	<u>41,959</u>	<u>44,788</u>
Total lease expense	<u>\$ 51,294</u>	<u>\$ 56,040</u>

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	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
<u>University:</u>				
Finance leases	12.17	12.37	4.10%	4.00%
Operating leases	5.62	5.79	3.62%	3.52%
<u>Health System:</u>				
Finance leases	3.90	6.57	3.30%	6.55%
Operating leases	11.70	10.12	4.30%	5.00%

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

<i>(in thousands of dollars)</i>	<u>2022</u>	<u>2021</u>
ROU assets acquired in exchange for finance lease liabilities	\$ 8,553	\$ 7,495
ROU assets acquired in exchange for operating lease liabilities	51,793	25,444
Beginning operating lease ROU asset balance	146,215	147,991
Beginning operating lease liability balance	148,054	147,991
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash outflows from finance leases	1,762	2,042
Operating cash outflows from operating leases	30,459	23,019
Financing cash outflows from finance leases	8,161	10,908

## 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>	<u>2022</u>	<u>Educational and General</u>	<u>Auxiliary Enterprises</u>	<u>Health System</u>	<u>Total</u>
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	713,270	181,767	1,352,232	2,247,269	
Total	<u>\$ 3,735,145</u>	<u>\$ 479,608</u>	<u>\$ 3,614,830</u>	<u>\$ 7,829,583</u>	
	<u>2021</u>	<u>Educational and General</u>	<u>Auxiliary Enterprises</u>	<u>Health System</u>	<u>Total</u>
Salaries and wages	\$ 1,762,358	\$ 122,132	\$ 1,431,531	\$ 3,316,021	
Benefits	636,626	61,539	376,882	1,075,047	
Depreciation	283,963	37,470	114,241	435,674	
Plant operations and maintenance	98,383	11,675	82,963	193,021	
Other components of net periodic postretirement benefit cost	62,033	-	-	62,033	
Interest	23,058	26,595	5,589	55,242	
Supplies, services, and other	435,147	169,049	1,120,067	1,724,263	
Total	<u>\$ 3,301,568</u>	<u>\$ 428,460</u>	<u>\$ 3,131,273</u>	<u>\$ 6,861,301</u>	

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 (\$38.0 million and \$34.5 million,

net of applied setoff credits of \$93.3 million for the years ended June 30, 2022 and 2021). 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 \$224.1 million and \$213.0 million for the years ended June 30, 2022 and 2021, 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 \$1,061.0 million 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, 2022 and 2021 were \$34.1 million and \$31.0 million, respectively (net of applied setoff credits of \$93.3 million) and represent approximately 5.8% of total contributions to the plan based on projections for fiscal years 2022 and 2021. The funded ratio of the plan was 69.6% as of December 31, 2021.

## 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.

Effective January 1, 2016, any non-union employee who retires on or before December 31, 2020 will receive a \$5,000 term life insurance policy benefit at no cost to the employee. If a non-union employee retires after December 31, 2020, no life insurance benefit is provided. 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:		
	<u>2022</u>	<u>2021</u>
Benefit obligation at beginning of year	\$ 2,060,684	\$ 2,344,814
Service cost	31,758	37,137
Interest cost	59,566	61,951
Actuarial gain	(185,469)	(399,022)
Benefits paid	(53,834)	(45,338)
Plan assumptions	<u>(441,249)</u>	<u>61,142</u>
Benefit obligation at end of year	<u>\$ 1,471,456</u>	<u>\$ 2,060,684</u>
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ -	\$ -
Employer contributions	53,834	45,338
Benefits paid	<u>(53,834)</u>	<u>(45,338)</u>
Fair value of plan assets at end of year	<u>\$ -</u>	<u>\$ -</u>
Funded status	\$ (1,471,456)	\$ (2,060,684)
Unrecognized prior service cost (benefit)	-	-
Unrecognized net actuarial loss	-	-
Accrued postretirement benefit expense	<u>\$ (1,471,456)</u>	<u>\$ (2,060,684)</u>

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

<i>(in thousands of dollars)</i>		
Operating expenses:		
	<u>2022</u>	<u>2021</u>
Service cost	\$ 31,758	\$ 37,137
Nonoperating activities:		
Interest cost	59,566	61,951
Amortization of prior service cost	(4)	(906)
Amortization of unrecognized net loss	<u>505</u>	<u>987</u>
Net periodic postretirement cost	<u>\$ 91,825</u>	<u>\$ 99,169</u>

The assumed healthcare cost trend rate used in measuring the accumulated postretirement benefit obligation was 7.60% and 6.70% for the years ended June 30, 2022 and 2021, respectively, reduced to an ultimate level of 4.50% and 5.00%, respectively. The postretirement benefit obligation discount rate was 4.87% and 3.23% for the years ended June 30, 2022 and 2021, respectively. During 2022, the plan had favorable claims experience compared to assumptions, and the liability decreased significantly due to the increase in discount rates. During 2021, the plan also had favorable claims experience compared to assumptions in addition to positive results related to the change in the mortality table improvement scale.

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>
2023	\$ 54,060
2024	59,307
2025	64,333
2026	68,896
2027	73,299
2028-32	417,900

### 13. PENN STATE HEALTH

Penn State Health was organized exclusively for the charitable, educational, and scientific purposes as defined and limited by Section 501(c)(3) of the Internal Revenue Code of 1986. The Health System's purpose is to promote, support and further the charitable, educational, and scientific purposes of the University. The Health System is controlled by the University with a 20% minority ownership by Highmark Health (HH). The Health System recorded non-controlling interest, excess of revenues over expenses, related to this minority interest. The total noncontrolling interest related to Highmark Health is recorded in net assets without donor restrictions within the consolidated statements of financial position with a value at June 30, 2022 and 2021 of \$334.7 million and \$319.8 million, respectively.

The wholly owned subsidiaries of the Health System include the Milton S. Hershey Medical Center (MSHMC), Saint Joseph's Regional Health Network and Medical Group (SJRHN/SJMG), Penn State Community Medical Group (PSCMG), Holy Spirit Medical Center (HSMC), Nittany Health, Inc. ("Nittany"), Central PA Health Network (CIN), Penn State Health Hampden Medical Center ("Hampden"), Penn State Health Lancaster Medical Center (LMC) and Penn State Health Life Lion, LLC (PSHLL).

The Health System has four, not-for-profit, acute care hospitals. MSHMC is a 634-licensed bed academic medical center located in Hershey, Pennsylvania. The hospital is a Level 1 Regional Trauma Center. Additionally, MSHMC operates an ambulatory surgical center, which provides endoscopy procedures to the Centre County Region. SJRHN is a 204-licensed bed hospital in the Berks County Region. SJRHN owns Saint Joseph Health Services, LLC ("SJHS, LLC") which is a for-profit subsidiary. HSMC was acquired on November 1, 2020 and is a 307-licensed bed hospital in Cumberland County. Hampden is a 120-licensed bed hospital in Cumberland County which opened October 1, 2021. All acute care hospitals provide inpatient, outpatient and emergency care services.

The Health System has one acute care hospital under construction. LMC will be a 129-licensed bed acute care hospital located in Lancaster County and is expected to open in the fall of 2022.

On June 23, 2020, the Health System established PSHLL. The purpose of PSHLL is to provide emergency medical services into a broader geographic region. On December 1, 2020 PSHLL began operations.

The Health System, through its medical groups, operates a non-acute and ambulatory network which consists of over 84 sites of patient care in nine counties. The Health System, through its affiliates, also operates two joint venture specialty hospitals, the Penn State Health Rehabilitation Hospital (PSHR) and Pennsylvania Psychiatric Institute (PPI). The Health System has additional jointly owned health care centers, home health care services and ambulatory surgical centers. These include Hershey Outpatient Surgery Center (HOSC), Hershey Endoscopy Center (HEC) and Cancer Care Partnership (CCP). Nittany owns 72% interest in HOSC and therefore the operations of HOSC are included in the consolidated financial statements of the Health System, with the 28% unowned interest reported as noncontrolling interest. This non-controlling interest is recorded in net assets without donor restrictions within the consolidated statements of financial position with a value at June 30, 2022 and 2021 of \$2.4 million.

During 2022 and 2021, the Health System received cash contributions related to the Community Health Reinvestment Act from HH. The cash contributions of \$30.0 million are recorded as Health System revenue on the consolidated statements of activities. Additionally, during 2022 and 2021, the Health System paid HH \$243.2 million and \$226.6 million, respectively related to employee benefit expenses and recorded \$659.8

million and \$658.2 million, respectively in net patient revenue related to HH third party payor contracts. As of June 30, 2022 and 2021, the Health System has a liability due to HH in the amount of \$3.1 million. This liability is related to a contractual agreement between the parties and 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 \$1,731.5 million, of which \$1,345.7 million has been paid or accrued as of June 30, 2022. 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 \$38.4 million and \$39.7 million as of June 30, 2022 and 2021, 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, 2022 and 2021, of the medical malpractice claims liability in the amount of \$186.4 million and \$162.5 million is recorded as of June 30, 2022 and 2021, 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 \$33.6 million at June 30, 2022 and 2021. 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 \$5.8 million and \$7.3 million, discounted at 3.01% and 0.87%, respectively, is recorded as of June 30, 2022 and 2021, respectively. The University has established a trust fund, in the amount of \$13.9 million and \$14.5 million at June 30, 2022 and 2021, 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 \$600,000 per employee per year. The University and the Health System provide for reported claims and claims incurred but not reported.

#### 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 21, 2022, 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.

**THE PENNSYLVANIA STATE UNIVERSITY**  
**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
**FOR THE YEAR ENDED JUNE 30, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
10 555	COVID-19	COVID-19 - National School Lunch Program	Child Nutrition	\$ 3,274	\$ 3,274	N	COP: Department of Education	N/A		\$ 3,274
66 468		Capitalization Grants for Drinking Water State Revolving Funds	Drinking Water State Revolving Fund (DWSRF)	\$ 47,476	\$ 47,476	N	COP: Department of Environmental Protection	N/A		\$ 47,476
11 307	COVID-19	COVID-19 - Economic Adjustment Assistance	Economic Development	\$ 166,521	\$ 166,521	Y				\$ 166,521
15 611		Wildlife Restoration and Basic Hunter Education	Fish and Wildlife	\$ 89,331	\$ 89,331	N	COP: Game Commission	N/A		\$ 89,331
10 025		Plant and Animal Disease, Pest Control, and Animal Care	N/A	\$ 1,203,430	\$ -	Y				\$ 470,787
10 164		Wholesale Farmers and Alternative Market Development	N/A	\$ 4,575	\$ -	N	Kentucky, University of	N/A		\$ 4,575
10 170		Specialty Crop Block Grant Program - Farm Bill	N/A	\$ 1,088,766	\$ -	N	COP Department of Agriculture	N/A		\$ 74,028
10 170		Specialty Crop Block Grant Program - Farm Bill	N/A	\$ 1,088,766	\$ -	N	COP Department of Agriculture	USDA AGRICULTURAL MARKET		\$ 14,123
10 174		Acer Access Development Program	N/A	\$ 2,655	\$ -	N	Ohio State University	AM190100XXXXG074		\$ 2,655
10 175		Farmers Market and Local Food Promotion Program	N/A	\$ 65,954	\$ -	Y				\$ 65,954
10 176		Dairy Business Innovation Initiatives	N/A	\$ 22,472	\$ -	N	University of Tennessee	N/A		\$ 22,472
10 215		Sustainable Agriculture Research and Education	N/A	\$ 447,632	\$ -	N	Connecticut, University of	2020-38640-31520		\$ 31,036
10 215		Sustainable Agriculture Research and Education	N/A	\$ 447,632	\$ -	N	University of Scranton	USDA NIFA		\$ 10,125
10 215		Sustainable Agriculture Research and Education	N/A	\$ 447,632	\$ -	N	Vermont, University of	N/A		\$ 10,976
10 215		Sustainable Agriculture Research and Education	N/A	\$ 447,632	\$ -	N	Vermont, University of	2018-38640-28415		\$ 4,079
10 226		Secondary and Two-Year Postsecondary Agriculture Education Challenge Grants	N/A	\$ 32,391	\$ -	N	Idaho, University of	2021-38414-34960		\$ 32,391
10 229		Extension Collaborative on Immunization Teaching & Engagement (EXCITE)	N/A	\$ 155,441	\$ -	N	eXtension Foundation	N/A		\$ 155,441
10 303		Integrated Programs	N/A	\$ 1,382,230	\$ -	Y				\$ 161,169
10 304		Homeland Security Agricultural	N/A	\$ 34,661	\$ -	N	Michigan State University	N/A		\$ 17,553
10 304		Homeland Security Agricultural	N/A	\$ 34,661	\$ -	N	Michigan State University	2021-37621-35788		\$ 16,240
10 310		Agriculture and Food Research Initiative (AFRI)	N/A	\$ 11,465,789	\$ -	Y				\$ 69,308
10 310		Agriculture and Food Research Initiative (AFRI)	N/A	\$ 11,465,789	\$ -	Y			\$ 26,062	\$ 54,185
10 311		Beginning Farmer and Rancher Development Program	N/A	\$ 58,842	\$ -	Y				\$ (4,227)
10 311		Beginning Farmer and Rancher Development Program	N/A	\$ 58,842	\$ -	Y			\$ 34,095	\$ 64,425
10 319		Farm Business Management and Benchmarking Competitive Grants Program	N/A	\$ 18,844	\$ -	N	Minnesota, University of	2021-38504-35827		\$ 18,844
10 326		Capacity Building for Non-Land Grant Colleges of Agriculture (NLGCA)	N/A	\$ 5,501	\$ -	N	University of Tennessee Martin	N/A		\$ 5,501
10 328		National Food Safety Training, Education, Extension, Outreach, and Technical Ass	N/A	\$ 12,294	\$ -	N	Vermont, University of	2021-70020-35497		\$ 12,294
10 329		Crop Protection and Pest Management Competitive Grants Program	N/A	\$ 395,101	\$ -	Y				\$ 171,473
10 329		Crop Protection and Pest Management Competitive Grants Program	N/A	\$ 395,101	\$ -	N	Ohio State University	20217000635319		\$ 3,908
10 336		Veterinary Services Grant Program	N/A	\$ 45,092	\$ -	Y				\$ 45,092
10 351		Rural Business Development Grant	N/A	\$ 38,028	\$ -	Y				\$ 38,028
10 500		Cooperative Extension Service	N/A	\$ 4,856,278	\$ -	Y				\$ 37,439
10 500		Cooperative Extension Service	N/A	\$ 4,856,278	\$ -	Y			\$ 36,919	\$ 152,492
10 500		Cooperative Extension Service	N/A	\$ 4,856,278	\$ -	N	Delaware, University of	N/A		\$ 20,044
10 500		Cooperative Extension Service	N/A	\$ 4,856,278	\$ -	N	eXtension Foundation	2019-41595-30123		\$ 60,237
10 500		Cooperative Extension Service	N/A	\$ 4,856,278	\$ -	N	Nebraska, University of	2021-41521-35104		\$ 2,751
10 500		Cooperative Extension Service	N/A	\$ 4,856,278	\$ -	N	University of Delaware	USDA NATIONAL INSTITUTE		\$ 4,776
10 511		Smith-Lever Funding (Various Programs)	N/A	\$ 10,149,394	\$ -	Y				\$ 178,239
10 511		Smith-Lever Funding (Various Programs)	N/A	\$ 10,149,394	\$ -	Y				\$ 9,971,155
10 514		Expanded Food and Nutrition Education Program	N/A	\$ 2,072,455	\$ -	Y				\$ 563,019
10 514		Expanded Food and Nutrition Education Program	N/A	\$ 2,072,455	\$ -	Y				\$ 1,509,436
10 515		Renewable Resources Extension Act and National Focus Fund Projects	N/A	\$ 109,488	\$ -	Y				\$ 109,488
10 558	COVID-19	COVID-19 - Child and Adult Care Food Program	N/A	\$ 62,737	\$ -	N	COP: Department of Education	N/A		\$ 13,646
10 558		Child and Adult Care Food Program	N/A	\$ 62,737	\$ -	N	COP: Department of Education	N/A		\$ 49,091
10 560		State Administrative Expenses for Child Nutrition	N/A	\$ 4,301	\$ -	N	COP: Department of Education	N/A		\$ 4,301
10 575		Farm to School Grant Program	N/A	\$ 129,710	\$ -	N	COP: Department of Education	N/A		\$ 129,710
10 674		Wood Utilization Assistance	N/A	\$ 28,372	\$ -	Y				\$ 28,372
10 675		Urban and Community Forestry Program	N/A	\$ 352,860	\$ -	Y				\$ 352,860
10 678		Forest Stewardship Program	N/A	\$ 153,391	\$ -	Y				\$ 153,391
10 902		Soil and Water Conservation	N/A	\$ 21,881	\$ -	N	National Fish and Wildlife Foundation	USDA NATURAL RESOURCES C		\$ 12,928
10 912		Environmental Quality Incentives Program	N/A	\$ 124,787	\$ -	Y				\$ 43,859
10 912		Environmental Quality Incentives Program	N/A	\$ 124,787	\$ -	N	North Jersey RC&D	N/A		\$ 2,296

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
10	U01	2021LOC100-1035-100-00013	U.S. Department of Agriculture Other	\$ 474,091	\$ -	Y				\$ 50,000
10	U01	44-027-0246000376	U.S. Department of Agriculture Other	\$ 474,091	\$ -	Y				\$ 34,766
10	U01	4300644404	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	COP: Department of Education	USDA FOOD AND NUTRITION		\$ 130,971
10	U01	4300669828	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	COP: Department of Education	4300669828		\$ 2,142
10	U01	4300682959	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	COP: Department of Education	4300682959		\$ 28,854
10	U01	4300702374	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	COP: Department of Education	4300702374		\$ 74,240
10	U01	4300702607	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	COP: Department of Education	4300702607		\$ 90,848
10	U01	4300703585	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	COP: Department of Education	4300703585		\$ 18,015
10	U01	99698-Z5188202	U.S. Department of Agriculture Other	\$ 474,091	\$ -	N	University of Maryland	99698-Z5188202		\$ 44,255
11	020		Cluster Grants	\$ 175,579	\$ -	Y				\$ 175,579
11	303		Economic Development Technical Assistance	\$ 83,054	\$ -	Y				\$ 83,054
11	U01	YA132318CN0007	U.S. Department of Commerce Other	\$ (12,021)	\$ -	Y				\$ (12,021)
12	351		Scientific Research - Combating Weapons of Mass Destruction	\$ 5,674,725	\$ -	N	Minnesota, University of	HDTRA11710045		\$ 28,857
12	630		Basic, Applied, and Advanced Research in Science and Engineering	\$ 4,313,379	\$ -	N	Army Educational Outreach Program	N/A		\$ 16,610
12	910		Research and Technology Development	\$ 3,477,418	\$ -	Y			\$ 365,458	\$ 1,057,873
12	U01	SP4704-21-F-0028	U.S. Department of Defense Other	\$ 300,904	\$ -	Y				\$ 107,300
12	U01	RDA DATED 1/31/22	U.S. Department of Defense Other	\$ 300,904	\$ -	N	DEFENSEWERX	RDA DATED 1/31/22		\$ 144,109
12	U01	2521-2	U.S. Department of Defense Other	\$ 300,904	\$ -	N	Intelligent Automation, Inc.	W911NF-20-C-0010		\$ 49,495
15	945		Cooperative Research and Training Programs – Resources of the National Park Syst	\$ 446,409	\$ -	Y				\$ 44,401
16	560		National Institute of Justice Research, Evaluation, and Development Project Gran	\$ 1,576,372	\$ -	Y				\$ 311,961
16	575		Crime Victim Assistance	\$ 518,855	\$ -	N	COP: Commission on Crime and Delinquency	N/A		\$ 499,096
16	582		Crime Victim Assistance/Discretionary Grants	\$ 214,661	\$ -	Y				\$ 214,661
16	726		Juvenile Mentoring Program	\$ 94,411	\$ -	N	National 4-H Council	N/A		\$ 87,019
16	726		Juvenile Mentoring Program	\$ 94,411	\$ -	N	National 4-H Council	2019-MU-FX-0002		\$ 7,392
16	738		Edward Byrne Memorial Justice Assistance Grant Program	\$ 96,767	\$ -	N	COP: Commission on Crime and Delinquency	N/A		\$ 46,818
17	245		Trade Adjustment Assistance	\$ 893,983	\$ -	N	COP: Department of Labor and Industry	N/A		\$ 893,983
17	280		WIOA Dislocated Worker National Reserve Demonstration Grants	\$ 92,367	\$ -	Y				\$ 92,367
17	600		Mine Health and Safety Grants	\$ 136,016	\$ -	N	COP: Department of Environmental Protection	N/A		\$ 103,464
17	600		Mine Health and Safety Grants	\$ 136,016	\$ -	N	COP: Department of Environmental Protection	U.S. DEPARTMENT OF LABOR		\$ 32,552
19	010		Academic Exchange Programs - Hubert H. Humphrey Fellowship Program	\$ 286,792	\$ -	N	Institute of International Education	SECAGD21CA3001		\$ 286,792
19	040		Public Diplomacy Programs	\$ 58,990	\$ -	N	American Councils	N/A		\$ 3,670
19	900		AEECA/ESF PD Programs	\$ 64,292	\$ -	N	University of Alaska Fairbanks	N/A		\$ 58,001
20	106	COVID-19	COVID-19 - Airport Improvement Program	\$ 12,757,839	\$ -	Y				\$ 1,597,371
20	106		Airport Improvement Program	\$ 12,757,839	\$ -	Y				\$ 11,160,468
20	U01	2009035Z2	U.S. Department of Transportation Other	\$ 149	\$ -	N	Michigan Technological University	693JJ621C000014		\$ 149
21	019	COVID-19	COVID-19 Coronavirus Relief Fund	\$ 265	\$ -	N	COP: Dep. Community & Economic Develop.	N/A		\$ 265
23	002		Appalachian Area Development	\$ 407,437	\$ -	Y			\$ 304,249	\$ 407,437
23	U01	10/1/2021-9/30/2024	Appalachian Regional Commission (ARC) Other	\$ 708,194	\$ -	Y			\$ 150,314	\$ 450,260
23	U01	226272	Appalachian Regional Commission (ARC) Other	\$ 708,194	\$ -	N	Clearfield County Commissioners	226272		\$ 257,934
39	U01	GS-21F-025CA	General Services Administration Other	\$ 262,947	\$ -	Y				\$ 262,947
45	024		Promotion of the Arts Grants to Organizations and Individuals	\$ 34,499	\$ -	Y				\$ 24,929
45	025		Promotion of the Arts Partnership Agreements	\$ 8,100	\$ -	N	Mid-Atlantic Arts Foundation	N/A		\$ 8,100
45	162		Promotion of the Humanities Teaching and Learning Resources and Curriculum Devel	\$ 24,671	\$ -	N	The Teagle Foundation	N/A		\$ 24,671
45	301		Museums for America	\$ 53,750	\$ -	Y				\$ 44,229
45	312		National Leadership Grants	\$ 49,377	\$ -	Y				\$ 16,989
45	313		Laura Bush 21st Century Librarian Program	\$ 41,421	\$ -	Y				\$ 41,421
59	037	COVID-19	COVID-19 - Small Business Development Centers	\$ 403,558	\$ -	N	Kutztown University of Pennsylvania	SBAHQ20C0042		\$ 209,353

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
59 037		Small Business Development Centers	N/A	\$ 403,558	\$ -	N	Kutztown University of Pennsylvania	N/A		\$ 194,205
59 075	COVID-19	COVID-19 - Shuttered Venue Operators Grants (SVOG), U.S. Small Business Administration	N/A	\$ 3,366,178	\$ -	Y				\$ 3,366,178
64 U01	7/1/16-12/31/22	Department of Veterans Affairs Other	N/A	\$ 696,426	\$ -	Y				\$ 3,120
64 U01	VAAASCMS-41-PSU-20-0001	Department of Veterans Affairs Other	N/A	\$ 696,426	\$ -	N	Cathexis Corporation	36C10X20N0085		\$ 693,306
66 436		Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	N/A	\$ 214,086	\$ -	N	Rural Community Assistance Partnership	N/A		\$ 8,675
66 441		Healthy Watersheds Consortium Grant Program	N/A	\$ (849)	\$ -	N	COP: Department of Conservation and Natural Resources	ENVIRONMENTAL PROTECTION		\$ (849)
66 466		Chesapeake Bay Program	N/A	\$ 373,481	\$ -	N	Conservation Foundation of Lancaster County	N/A		\$ 7,149
66 466		Chesapeake Bay Program	N/A	\$ 373,481	\$ -	N	National Fish and Wildlife Foundation	N/A	\$ 61,309	\$ 164,453
66 466		Chesapeake Bay Program	N/A	\$ 373,481	\$ -	N	Pennsylvania Association for Sustainable Agriculture	N/A		\$ 6,307
66 708		Pollution Prevention Grants Program	N/A	\$ 213,970	\$ -	Y				\$ 213,970
66 716		Research, Development, Monitoring, Public Education, Outreach, Training, Demonst	N/A	\$ 9,493	\$ -	N	eXtension Foundation	N/A		\$ 9,493
66 U01	SA-2022-38	Environmental Protection Agency Other	N/A	\$ 8,865	\$ -	N	eXtension Foundation	SA-2022-38		\$ 8,865
81 041		State Energy Program	N/A	\$ 281,330	\$ -	N	COP: Department of Environmental Protection	N/A		\$ 281,330
81 049		Office of Science Financial Assistance Program	N/A	\$ 17,790,111	\$ -	Y				\$ 289,237
81 049		Office of Science Financial Assistance Program	N/A	\$ 17,790,111	\$ -	N	Altex Technologies Corporation	U.S. DEPARTMENT OF ENERG		\$ 26,461
81 U01	89243319CFE000032	U.S. Department of Energy Other	N/A	\$ 249,092	\$ -	Y				\$ 130,260
81 U01	DE-FE0026825 0007	U.S. Department of Energy Other	N/A	\$ 249,092	\$ -	Y				\$ 24,296
81 U01	4300678653	U.S. Department of Energy Other	N/A	\$ 249,092	\$ -	N	COP: Department of Environmental Protection	4300678653		\$ (4,613)
81 U01	7575911	U.S. Department of Energy Other	N/A	\$ 249,092	\$ -	N	Lawrence Berkeley National Laboratory	7575911		\$ 32,459
81 U01	P010221754 TASK ORDER 6	U.S. Department of Energy Other	N/A	\$ 249,092	\$ -	N	Leidos, Inc.	NATIONAL ENERGY TECHNOLO		\$ 66,690
84 002		Adult Education - Basic Grants to States	N/A	\$ 702,841	\$ -	N	COP: Department of Education	N/A		\$ 591,368
84 002		Adult Education - Basic Grants to States	N/A	\$ 702,841	\$ -	N	COP: Department of Education	N/A	\$ 31,100	\$ 86,661
84 031		Higher Education Institutional Aid	N/A	\$ 9,231	\$ -	N	UNIVERSITY OF ARIZONA	P031S200086		\$ 9,231
84 048		Career and Technical Education -- Basic Grants to States	N/A	\$ (4,236)	\$ -	N	COP: Department of Education	N/A		\$ (4,236)
84 126		Rehabilitation Services Vocational Rehabilitation Grants to States	N/A	\$ 742,444	\$ -	N	COP: Office of Vocational Rehabilitation	N/A		\$ 742,444
84 129		Rehabilitation Long-Term Training	N/A	\$ 135,894	\$ -	Y				\$ 135,894
84 325		Special Education - Personnel Development to Improve Services and Results for Ch	N/A	\$ 578,587	\$ -	Y				\$ 578,587
84 335		Child Care Access Means Parents in School	N/A	\$ 243,719	\$ -	Y				\$ 195,652
84 365		English Language Acquisition State Grants	N/A	\$ 261,822	\$ -	Y			\$ 47,430	\$ 261,822
84 425	COVID-19, 84.425E	COVID-19 - Education Stabilization Fund	N/A	\$ 150,014,367	\$ -	Y				\$ 76,199,300
84 425	COVID-19, 84.425F	COVID-19 - Education Stabilization Fund	N/A	\$ 150,014,367	\$ -	Y				\$ 73,814,576
84 425	COVID-19, 84.425C	COVID-19 - Governors Emergency Education Relief Fund	N/A	\$ 150,014,367	\$ -	N	COP: Department of Education	DEPT OF ED		\$ 491
93 070		Environmental Public Health and Emergency Response	N/A	\$ 87,336	\$ -	N	COP: Department of Health	N/A		\$ 87,336
93 107		Area Health Education Centers	N/A	\$ 1,145,921	\$ -	Y			\$ 930,980	\$ 1,145,921
93 155	COVID-19	COVID-19 - Rural Health Research Centers	N/A	\$ 6,202,085	\$ -	Y			\$ 5,376,547	\$ 6,202,085
93 236		Grants to States to Support Oral Health Workforce Activities	N/A	\$ 10,667	\$ -	N	PA Coalition for Oral Health	T12HP27539		\$ 10,667
93 241		State Rural Hospital Flexibility Program	N/A	\$ 660,207	\$ -	Y				\$ 660,207
93 243		Substance Abuse and Mental Health Services Projects of Regional and National Sig	N/A	\$ 949,650	\$ -	N	Cen-Clear Child Services, Inc.	N/A		\$ 74,946
93 247		Advanced Nursing Education Workforce Grant Program	N/A	\$ 398,647	\$ -	Y				\$ 398,647
93 262		Occupational Safety and Health Program	N/A	\$ 291,215	\$ -	N	Mary Imogene Bassett Hospital	6 U540H007542-20-01		\$ 25,116
93 262		Occupational Safety and Health Program	N/A	\$ 291,215	\$ -	N	Mary Imogene Bassett Hospital	6U540H007542-20-01	\$ 21,821	\$ 185,627
93 318	COVID-19	COVID-19 - Protecting and Improving Health Globally: Building and Strengthening Public Heal	N/A	\$ 257,643	\$ -	N	National Association of County & City Health Officials	5N50CK000587-02-00		\$ 254,268
93 318		Protecting and Improving Health Globally: Building and Strengthening Public Heal	N/A	\$ 257,643	\$ -	N	National Association of County & City Health Officials	5N50CK000587-02-00		\$ 3,375

See notes to schedule of expenditures of federal awards.

**THE PENNSYLVANIA STATE UNIVERSITY**  
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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93 391		Activities to Support State, Tribal, Local and Territorial (STLT) Health Departm	N/A	\$ 2,143,608	\$ -	N	COP: Department of Health	N/A		\$ 1,227,224
93 563		Child Support Enforcement	N/A	\$ 2,939,120	\$ -	N	COP: Department of Human Services Room 832 Health and Welfare Building	N/A		\$ 2,939,120
93 618		Voting Access for Individuals with Disabilities-Grants for Protection and Advoca	N/A	\$ 38,110	\$ -	N	Disability Rights PA	2101PAPAVA-01		\$ 38,110
93 788		Opioid STR	N/A	\$ 2,364,089	\$ -	N	COP: Commission on Crime and Delinquency	N/A		\$ 302,407
93 788		Opioid STR	N/A	\$ 2,364,089	\$ -	N	COP: Department of Health	N/A	\$ 22,982	\$ 183,426
93 913		Grants to States for Operation of State Offices of Rural Health	N/A	\$ 236,087	\$ -	Y				\$ 236,087
93 959	COVID-19	COVID-19 - Block Grants for Prevention and Treatment of Substance Abuse	N/A	\$ 322,451	\$ -	N	COP: Commission on Crime and Delinquency	N/A		\$ 29,459
93 959		Block Grants for Prevention and Treatment of Substance Abuse	N/A	\$ 322,451	\$ -	N	COP: Commission on Crime and Delinquency	N/A		\$ 243,321
93 959		Block Grants for Prevention and Treatment of Substance Abuse	N/A	\$ 322,451	\$ -	N	COP: Department of Drug and Alcohol Prog ram	N/A		\$ 77,494
93 969	COVID-19	COVID-19 - PPHF Geriatric Education Centers	N/A	\$ 882,762	\$ -	Y			\$ 274,242	\$ 1,921
93 969		PPHF Geriatric Education Centers	N/A	\$ 882,762	\$ -	Y				\$ 841,723
93 969		PPHF Geriatric Education Centers	N/A	\$ 882,762	\$ -	N	Virginia Commonwealth University	3U1QHP28744-06-02		\$ 39,118
93 991		Preventive Health and Health Services Block Grant	N/A	\$ 146	\$ -	N	Borough of Susquehanna Depot	N/A		\$ 146
93 U01	75D30119C05128	U.S. Department of Health and Human Services Other	N/A	\$ 265,033	\$ -	Y				\$ 156,758
93 U01	P0019419	U.S. Department of Health and Human Services Other	N/A	\$ 265,033	\$ -	N	New Mexico Institute of Mining and Techn ology	75D30119C06390		\$ 104,416
93 U01	233513	U.S. Department of Health and Human Services Other	N/A	\$ 265,033	\$ -	N	University of Chicago	NATIONAL INSTITUTES OF H		\$ 3,859
97 036	COVID-19	COVID-19 - Disaster Grants - Public Assistance (Presidentially Declared Disasters)	N/A	\$ 315,294	\$ -	N	COP: Emergency Management Agency	N/A		\$ 315,294
98 001		USAID Foreign Assistance for Programs Overseas	N/A	\$ 1,283,971	\$ -	Y			\$ 428,591	\$ 1,188,424
10 001		Agricultural Research Basic and Applied Research	Research and Development	\$ 1,328,672	\$ 675,184,680	Y				\$ 1,146,882
10 001		Agricultural Research Basic and Applied Research	Research and Development	\$ 1,328,672	\$ 675,184,680	Y			\$ 10,343	\$ 10,343
10 001		Agricultural Research Basic and Applied Research	Research and Development	\$ 1,328,672	\$ 675,184,680	N	Geisinger Clinic	59-8050-9-001		\$ 53,643
10 001		Agricultural Research Basic and Applied Research	Research and Development	\$ 1,328,672	\$ 675,184,680	N	Research Corporation for Science Advance ment	58-3022-0-005		\$ 13,865
10 001		Agricultural Research Basic and Applied Research	Research and Development	\$ 1,328,672	\$ 675,184,680	N	University of Arkansas	58-8250-4-002		\$ 103,939
10 025	COVID-19	COVID-19 - Plant and Animal Disease, Pest Control, and Animal Care	Research and Development	\$ 1,203,430	\$ 675,184,680	Y				\$ 36,091
10 025		Plant and Animal Disease, Pest Control, and Animal Care	Research and Development	\$ 1,203,430	\$ 675,184,680	Y				\$ 463,224
10 025		Plant and Animal Disease, Pest Control, and Animal Care	Research and Development	\$ 1,203,430	\$ 675,184,680	N	Bioprodex, Inc.	N/A		\$ 29,111
10 025		Plant and Animal Disease, Pest Control, and Animal Care	Research and Development	\$ 1,203,430	\$ 675,184,680	N	COP Department of Agriculture	N/A		\$ 133,766
10 025		Plant and Animal Disease, Pest Control, and Animal Care	Research and Development	\$ 1,203,430	\$ 675,184,680	N	Georgia, University of	USDA ANIMAL AND PLANT HE		\$ 25,866
10 025		Plant and Animal Disease, Pest Control, and Animal Care	Research and Development	\$ 1,203,430	\$ 675,184,680	N	State of Minnesota	N/A		\$ 44,585
10 028		Wildlife Services	Research and Development	\$ 64,573	\$ 675,184,680	Y				\$ 64,573
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	COP Department of Agriculture	N/A		\$ 217,177
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	COP Department of Agriculture	U.S. DEPARTMENT OF AGRIC		\$ 33,073
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	COP Department of Agriculture	U.S. DEPARTMENT OF AGRIC	\$ 51,147	\$ 198,028
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	COP Department of Agriculture	USDA AGRICULTURAL MARKET		\$ 116,226
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	COP Department of Agriculture	USDA AGRICULTURAL MARKET	\$ 215,509	\$ 254,398
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	Nebraska Department of Agriculture	N/A		\$ 52,320
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	Pennsylvania Co-Operative Potato Growers , Inc.	N/A		\$ 33,368
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	University of Florida	N/A		\$ 29,750
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	University of New Hampshire	AM190100XXXXG012		\$ 27
10 170		Specialty Crop Block Grant Program - Farm Bill	Research and Development	\$ 1,088,766	\$ 675,184,680	N	Washington State University	N/A		\$ 66,248
10 200		Grants for Agricultural Research, Special Research Grants	Research and Development	\$ 237,714	\$ 675,184,680	Y				\$ 192,327

See notes to schedule of expenditures of federal awards.

**THE PENNSYLVANIA STATE UNIVERSITY**  
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**FOR THE YEAR ENDED JUNE 30, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
10 200		Grants for Agricultural Research, Special Research Grants	Research and Development	\$ 237,714	\$ 675,184,680	N	Rutgers-The State University of New Jersey	2019-34383-29903		\$ (259)
10 200		Grants for Agricultural Research, Special Research Grants	Research and Development	\$ 237,714	\$ 675,184,680	N	University of Maine	2019-34141-30285		\$ 21,343
10 200		Grants for Agricultural Research, Special Research Grants	Research and Development	\$ 237,714	\$ 675,184,680	N	University of Maine	2021-34141-35448		\$ 23,827
10 200		Grants for Agricultural Research, Special Research Grants	Research and Development	\$ 237,714	\$ 675,184,680	N	University of Maryland Eastern Shore	2021-34383-34848		\$ 476
10 202		Cooperative Forestry Research	Research and Development	\$ 533,704	\$ 675,184,680	Y			\$ 13,109	\$ (125,210)
10 202		Cooperative Forestry Research	Research and Development	\$ 533,704	\$ 675,184,680	Y			\$ 9,064	\$ 163,370
10 202		Cooperative Forestry Research	Research and Development	\$ 533,704	\$ 675,184,680	Y			\$ 13,109	\$ 495,544
10 203		Payments to Agricultural Experiment Stations Under the Hatch Act	Research and Development	\$ 8,378,636	\$ 675,184,680	Y				\$ 1,462,050
10 203		Payments to Agricultural Experiment Stations Under the Hatch Act	Research and Development	\$ 8,378,636	\$ 675,184,680	Y				\$ 6,916,586
10 207		Animal Health and Disease Research	Research and Development	\$ 66,836	\$ 675,184,680	Y				\$ 66,836
10 210		Higher Education – Graduate Fellowships Grant Program	Research and Development	\$ 166,103	\$ 675,184,680	Y				\$ 166,103
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Cornell University	USDA		\$ 27,135
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	N/A		\$ 15,188
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2016-38640-25380		\$ (2)
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2017-38640-26915		\$ 656
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2017-38640-26915	\$ 6,491	\$ 22,240
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2018-38640-28415		\$ 119,760
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2018-38640-28415	\$ 50,895	\$ 122,676
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2019-38640-29877	\$ 2,679	\$ 36,205
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2020-38640-31520		\$ 19,663
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	2021-38640-34668		\$ 4,196
10 215		Sustainable Agriculture Research and Education	Research and Development	\$ 447,632	\$ 675,184,680	N	Vermont, University of	USDA NIFA		\$ 23,699
10 216		1890 Institution Capacity Building Grants	Research and Development	\$ 18,751	\$ 675,184,680	N	Delaware State University	2018-38821-27743		\$ 18,751
10 217		Higher Education - Institution Challenge Grants Program	Research and Development	\$ 48,674	\$ 675,184,680	Y				\$ 14,807
10 217		Higher Education - Institution Challenge Grants Program	Research and Development	\$ 48,674	\$ 675,184,680	N	Purdue University	N/A		\$ 33,867
10 250		Agricultural and Rural Economic Research, Cooperative Agreements and Collaborati	Research and Development	\$ 95,371	\$ 675,184,680	Y				\$ 95,371
10 253		Consumer Data and Nutrition Research	Research and Development	\$ 62,055	\$ 675,184,680	Y				\$ 32,459
10 253		Consumer Data and Nutrition Research	Research and Development	\$ 62,055	\$ 675,184,680	N	RTI International	N/A	\$ 8,968	\$ 29,596
10 303		Integrated Programs	Research and Development	\$ 1,382,230	\$ 675,184,680	Y				\$ 808,032
10 303		Integrated Programs	Research and Development	\$ 1,382,230	\$ 675,184,680	Y			\$ 37,206	\$ 413,029
10 304		Homeland Security Agricultural	Research and Development	\$ 34,661	\$ 675,184,680	N	Cornell University	2016-37620-25852		\$ 868
10 307		Organic Agriculture Research and Extension Initiative	Research and Development	\$ 805,989	\$ 675,184,680	Y				\$ 58,900
10 307		Organic Agriculture Research and Extension Initiative	Research and Development	\$ 805,989	\$ 675,184,680	Y			\$ 172,275	\$ 686,452
10 307		Organic Agriculture Research and Extension Initiative	Research and Development	\$ 805,989	\$ 675,184,680	N	Cornell University	N/A		\$ 60,637
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	Y			\$ 1,400,653	\$ 2,784,366
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	Cornell University	2020-51181-32197		\$ 55,605
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	North Carolina State University	2016-51181-25404		\$ 31,935
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	North Carolina State University	2016-51181-25409		\$ 105,844
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	Rutgers-The State University of New Jersey	2016-51181-25399		\$ 9,046
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	Texas A&M University	N/A		\$ 36,104
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	Texas A&M University	2018-51181-28436		\$ 44,551
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	University of California at Riverside	2021-51181-35866		\$ 451
10 309		Specialty Crop Research Initiative	Research and Development	\$ 3,121,728	\$ 675,184,680	N	Washington State University	2019-51181-30013		\$ 53,826
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	Y				\$ 4,570,398
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	Y			\$ 1,874,000	\$ 4,990,882
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Alabama A&M University	2018-67017-27558		\$ 39,516
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Colorado School of Mines	N/A		\$ 89,595
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Connecticut, University of	2020-69012-31823		\$ 100,247
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Cornell University	USDA NATIONAL INSTITUTE		\$ 86,596
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Iowa State University	N/A		\$ 741,845
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Minnesota, University of	USDA NIFA		\$ 14,319
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	North Carolina State University	2019-68012-29818		\$ 104,932
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Ohio State University	20156800423131		\$ 13,186
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Ohio State University	2015-68004-23131		\$ 371
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Pennsylvania, University of	N/A		\$ 27,261
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Piedmont Conservation Council, Inc.	2019-68010-29128		\$ (11,060)
10 310		Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Purdue University	2019-67017-29258		\$ 21,473

See notes to schedule of expenditures of federal awards.



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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Purdue University	USDA NATIONAL INSTITUTE		\$ 107,476
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Rutgers-The State University of New Jersey	2017-67023-26906		\$ 13,749
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Sam Houston State University	2017-68006-26235		\$ (4,176)
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Tufts University	2021-67023-34479		\$ 24,704
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	University of Arkansas	2020-67017-33256		\$ 42,097
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	University of California at Davis	2018-67015-27500		\$ 11,453
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	University of California at Davis	2020-68013-30977		\$ 22,588
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	University of Florida	N/A		\$ 9,407
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	2017-67019-26401		\$ (1,769)
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	2018-67007-28452		\$ 8,593
10	310	Agriculture and Food Research Initiative (AFRI)	Research and Development	\$ 11,465,789	\$ 675,184,680	N	West Virginia University	N/A		\$ 318,613
10	311	Beginning Farmer and Rancher Development Program	Research and Development	\$ 58,842	\$ 675,184,680	Y				\$ (1,356)
10	320	Sun Grant Program	Research and Development	\$ 66,588	\$ 675,184,680	N	South Dakota State University	2019-38502-30120		\$ 19,307
10	320	Sun Grant Program	Research and Development	\$ 66,588	\$ 675,184,680	N	University of Tennessee	31F372		\$ 47,281
10	329	Crop Protection and Pest Management Competitive Grants Program	Research and Development	\$ 395,101	\$ 675,184,680	Y				\$ 117,647
10	329	Crop Protection and Pest Management Competitive Grants Program	Research and Development	\$ 395,101	\$ 675,184,680	Y			\$ 49,119	\$ 93,163
10	329	Crop Protection and Pest Management Competitive Grants Program	Research and Development	\$ 395,101	\$ 675,184,680	N	Michigan State University	2018-70006-28883		\$ 8,910
10	500	Cooperative Extension Service	Research and Development	\$ 4,856,278	\$ 675,184,680	Y				\$ 3,113,473
10	500	Cooperative Extension Service	Research and Development	\$ 4,856,278	\$ 675,184,680	Y			\$ 774,865	\$ 968,919
10	500	Cooperative Extension Service	Research and Development	\$ 4,856,278	\$ 675,184,680	N	Minnesota, University of	2018-41520-28908	\$ 189,729	\$ 469,795
10	500	Cooperative Extension Service	Research and Development	\$ 4,856,278	\$ 675,184,680	N	Nebraska, University of	2017-41521-27121		\$ 26,352
10	600	Foreign Market Development Cooperator Program	Research and Development	\$ 1,802	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	N/A		\$ 1,802
10	680	Forest Health Protection	Research and Development	\$ 56,010	\$ 675,184,680	Y				\$ 56,010
10	707	Research Joint Venture and Cost Reimbursable Agreements	Research and Development	\$ 116,610	\$ 675,184,680	Y				\$ 116,610
10	902	Soil and Water Conservation	Research and Development	\$ 21,881	\$ 675,184,680	N	Capital Resource Conservation and Development (RC&D) Area Council	NATIONAL FISH AND WILDLIFE		\$ 3,748
10	902	Soil and Water Conservation	Research and Development	\$ 21,881	\$ 675,184,680	N	Indiana University of Pennsylvania	NR193A750010C0001		\$ 4,116
10	902	Soil and Water Conservation	Research and Development	\$ 21,881	\$ 675,184,680	N	Rhode Island, University of	68-3A75-17-480		\$ 1,089
10	912	Environmental Quality Incentives Program	Research and Development	\$ 124,787	\$ 675,184,680	Y				\$ 78,632
10	932	Regional Conservation Partnership Program	Research and Development	\$ 19,804	\$ 675,184,680	N	Environmental Defense Fund	USDA		\$ 19,804
10	960	Technical Agricultural Assistance	Research and Development	\$ 3,555	\$ 675,184,680	Y				\$ 3,555
10	RD 12639521F0244	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	Y				\$ 4,000
10	RD 12639521F0245	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	Y				\$ 4,125
10	RD 12905B21P0194	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	Y				\$ 11,027
10	RD 19-JV-11272167-035	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	Y				\$ 4,554
10	RD AG-6395-C-17-0152	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	Y				\$ 2,842
10	RD 3201480822	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	Children's Hospital of Philadelphia	U.S. FOOD AND DRUG ADMIN		\$ 3,277
10	RD C940000777	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	COP Department of Agriculture	C940000777		\$ 70,969
10	RD 247599	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	Michigan State University	247599		\$ 11,861
10	RD 254709	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	Mississippi State University	254709		\$ 920
10	RD 094525-17306	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	University of Illinois	094525-17306		\$ 203,493
10	RD 248286	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	University of Maryland Eastern Shore	248286		\$ 15,000
10	RD 0000000154	U.S. Department of Agriculture Research and Development	Research and Development	\$ 486,921	\$ 675,184,680	N	University of Wisconsin-Madison	0000000154		\$ 154,853
11	417	Sea Grant Support	Research and Development	\$ 1,153,872	\$ 675,184,680	Y				\$ 129,181
11	417	Sea Grant Support	Research and Development	\$ 1,153,872	\$ 675,184,680	Y			\$ 222,562	\$ 951,642
11	417	Sea Grant Support	Research and Development	\$ 1,153,872	\$ 675,184,680	N	Minnesota, University of	NA190AR170388		\$ 11,518
11	417	Sea Grant Support	Research and Development	\$ 1,153,872	\$ 675,184,680	N	Purdue University	NA180AR4170082		\$ 27,924
11	417	Sea Grant Support	Research and Development	\$ 1,153,872	\$ 675,184,680	N	Purdue University	NA200AR4170343		\$ 23,844
11	417	Sea Grant Support	Research and Development	\$ 1,153,872	\$ 675,184,680	N	University of Illinois	NA190AR4170391		\$ 9,763
11	431	Climate and Atmospheric Research	Research and Development	\$ 307,449	\$ 675,184,680	Y				\$ 174,266
11	431	Climate and Atmospheric Research	Research and Development	\$ 307,449	\$ 675,184,680	Y			\$ 47,719	\$ 128,258
11	431	Climate and Atmospheric Research	Research and Development	\$ 307,449	\$ 675,184,680	N	RAND Corporation	N/A		\$ (1)
11	431	Climate and Atmospheric Research	Research and Development	\$ 307,449	\$ 675,184,680	N	The Regents of the University of Michigan	NA150AR4310148		\$ 4,926

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**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
11	432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	Research and Development	\$ 25,000	\$ 675,184,680	N	The Regents of the University of Michiga	NA170AR4320152		\$ 23,707
11	432	National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes	Research and Development	\$ 25,000	\$ 675,184,680	N	The Regents of the University of Michiga	NA170AR4320152		\$ 1,293
11	457	Chesapeake Bay Studies	Research and Development	\$ 50,266	\$ 675,184,680	Y				\$ 50,266
11	459	Weather and Air Quality Research	Research and Development	\$ 223,276	\$ 675,184,680	Y				\$ 188,169
11	459	Weather and Air Quality Research	Research and Development	\$ 223,276	\$ 675,184,680	N	Mississippi, University of	NA190AR4590339		\$ 24,405
11	459	Weather and Air Quality Research	Research and Development	\$ 223,276	\$ 675,184,680	N	Texas Tech University	NA210AR4590151		\$ 10,702
11	468	Applied Meteorological Research	Research and Development	\$ 57,725	\$ 675,184,680	Y				\$ 57,725
11	478	Center for Sponsored Coastal Ocean Research Coastal Ocean Program	Research and Development	\$ 5,448	\$ 675,184,680	N	Virginia Institute of Marine Science	NA16NOS478027		\$ 5,448
11	481	Educational Partnership Program	Research and Development	\$ 154,941	\$ 675,184,680	Y	Howard University	NA16SEC4810006		\$ 154,941
11	482	Coral Reef Conservation Program	Research and Development	\$ 208,287	\$ 675,184,680	Y				\$ 208,287
11	609	Measurement and Engineering Research and Standards	Research and Development	\$ 902,337	\$ 675,184,680	Y				\$ 769,483
11	609	Measurement and Engineering Research and Standards	Research and Development	\$ 902,337	\$ 675,184,680	Y			\$ 10,758	\$ 36,356
11	609	Measurement and Engineering Research and Standards	Research and Development	\$ 902,337	\$ 675,184,680	N	American Bureau of Shipping	70NANB21H038		\$ 96,498
11	619	Arrangements for Interdisciplinary Research Infrastructure	Research and Development	\$ 139,476	\$ 675,184,680	N	Delaware, University of	70NANB17H002		\$ 14,738
11	619	Arrangements for Interdisciplinary Research Infrastructure	Research and Development	\$ 139,476	\$ 675,184,680	N	Delaware, University of	NIST		\$ 124,738
11	RD	1305M321PNRMJ0467	U.S. Department of Commerce Research and Development	\$ 152,657	\$ 675,184,680	Y				\$ 46,589
11	RD	1333MJ20PNRMA0176	U.S. Department of Commerce Research and Development	\$ 152,657	\$ 675,184,680	Y				\$ 2,020
11	RD	1333MJ21PNRMA0080	U.S. Department of Commerce Research and Development	\$ 152,657	\$ 675,184,680	Y				\$ 5,754
11	RD	MOA-2018-050-11539	U.S. Department of Commerce Research and Development	\$ 152,657	\$ 675,184,680	Y				\$ 54,389
11	RD	1060145-406189	U.S. Department of Commerce Research and Development	\$ 152,657	\$ 675,184,680	N	Carnegie Mellon University	1060145-406189		\$ (21,996)
11	RD	S2020-142	U.S. Department of Commerce Research and Development	\$ 152,657	\$ 675,184,680	N	Synoptic Data	S2020-142		\$ 65,901
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	Y				\$ 6,597,681
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	Y			\$ 1,568,225	\$ 3,286,411
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Duke University	N00014-21-1-2515		\$ 213,509
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Minnesota, University of	N00014-17-1-2438		\$ 40,407
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	New Mexico, University of University of New Mexico Health Sciences	FA9453-21-2-0024		\$ 102,470
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	North Carolina State University	N00014-15-1-2863		\$ 88,952
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Oregon, University of	N00014-20-1-2517		\$ 264,301
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Purdue University	HR0011-18-3-0004		\$ 237,756
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Purdue University	N00014-18-1-2371		\$ 126,703
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Purdue University	N00014-21-1-2673		\$ 53,250
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	University of Illinois	N00014-20-1-2325		\$ 263,477
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	University of Southern California	N00014-21-1-2163		\$ 63,886
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Vanderbilt University	N00014-18-1-2107		\$ 31,047
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Vanderbilt University	N00014-22-1-2035		\$ 7,047
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	N000141712376 00001127		\$ 19,864
12	300	Basic and Applied Scientific Research	Research and Development	\$ 11,444,419	\$ 675,184,680	N	Washington, University of	N00014-19-1-2593		\$ 47,658
12	330	Science, Technology, Engineering & Mathematics (STEM) Education, Outreach and Wo	Research and Development	\$ 47,000	\$ 675,184,680	Y				\$ 47,000
12	351	Scientific Research - Combating Weapons of Mass Destruction	Research and Development	\$ 5,674,725	\$ 675,184,680	Y				\$ 26,881
12	351	Scientific Research - Combating Weapons of Mass Destruction	Research and Development	\$ 5,674,725	\$ 675,184,680	Y			\$ 3,831,412	\$ 5,475,055
12	351	Scientific Research - Combating Weapons of Mass Destruction	Research and Development	\$ 5,674,725	\$ 675,184,680	N	University of Iowa	HDTRA1-18-1-0012		\$ 2,991
12	351	Scientific Research - Combating Weapons of Mass Destruction	Research and Development	\$ 5,674,725	\$ 675,184,680	N	University of Texas at Austin	DOD-DTRA		\$ 140,941
12	420	Military Medical Research and Development	Research and Development	\$ 2,662,459	\$ 675,184,680	Y				\$ 2,304,512
12	420	Military Medical Research and Development	Research and Development	\$ 2,662,459	\$ 675,184,680	Y			\$ 21,396	\$ 286,958
12	420	Military Medical Research and Development	Research and Development	\$ 2,662,459	\$ 675,184,680	N	Drexel University	W81XWH2010435		\$ 51,556
12	420	Military Medical Research and Development	Research and Development	\$ 2,662,459	\$ 675,184,680	N	Iowa State University	CONGRESSIONALLY DIRECTED		\$ 26,182
12	420	Military Medical Research and Development	Research and Development	\$ 2,662,459	\$ 675,184,680	N	Microbiotix, Inc.	N/A		\$ (6,749)
12	431	COVID-19 - Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	Y				\$ 239,748
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	Y				\$ 1,872,883
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	Y			\$ 650,490	\$ 2,097,595
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	George Mason University	ARMY		\$ (15,298)
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	Massachusetts Institute of Technology	N/A		\$ 21,450
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	Michigan State University	W91NFB2110319		\$ 58,196
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	North Carolina State University	W91NFB-16-1-0406		\$ 184,374
12	431	Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	Purdue University	W91NFB1910488		\$ 195,759

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended	
12 431		Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	University of California at Berkeley	N/A		\$ 153,844	
12 431		Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	University of Wisconsin-Madison	W911NF-17-1-0462		\$ 76,185	
12 431		Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	University of Wisconsin-Madison	W911NF2110317		\$ 111,642	
12 431	COVID-19	COVID-19 - Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	Worcester Polytechnic Institute	W911NF1920108		\$ 338,518	
12 431		Basic Scientific Research	Research and Development	\$ 5,323,370	\$ 675,184,680	N	Worcester Polytechnic Institute	W911NF1520024		\$ (11,526)	
12 556		Competitive Grants: Promoting K-12 Student Achievement at Military-Connected Sch	Research and Development	\$ 520,003	\$ 675,184,680	Y				\$ 520,003	
12 598		Centers for Academic Excellence	Research and Development	\$ 723,477	\$ 675,184,680	Y			\$ 15,809	\$ 723,477	
12 599		Congressionally Directed Assistance	Research and Development	\$ 114,220	\$ 675,184,680	Y				\$ 114,220	
12 630		Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	Y				\$ 50,647	
12 630		Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	Y			\$ 2,945,509	\$ 3,777,574	
12 630		Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	N	IBM Watson Research Center	N/A		\$ 204,583	
12 630		Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	N	MxD	N/A		\$ 72,514	
12 630		Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	N	Texas A&M Engineering Experiment Station	HM04761912015		\$ 89,919	
12 630	COVID-19	COVID-19 - Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	N	University of Iowa	FA9550-20-1-0346		\$ 47,500	
12 630		Basic, Applied, and Advanced Research in Science and Engineering	Research and Development	\$ 4,313,379	\$ 675,184,680	N	Utah, University of	U.S. ARMY RESEARCH LABOR		\$ 54,032	
12 800	COVID-19	COVID-19 - Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	Y				\$ 536,025	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	Y				\$ 2,203,996	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	Y			\$ 1,101,990	\$ 1,853,026	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Applied Optimization	FA86502025700		\$ 12,538	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Directed Energy Professional Society	FA9451-19-1-0012		\$ 1,630	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Florida International University	AIR FORCE OFFICE OF SCIE		\$ 132,435	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	GE Global Research Center	FA85602025700		\$ 100,471	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	General Electric Co. [MP]	FA86501625700		\$ 54,956	
12 800	COVID-19	COVID-19 - Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	National Center for Defense Manufacturin g & Machining	FA86502025700	\$ 227,709	\$ 483,618	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	National Center for Defense Manufacturin g & Machining	FA86501227230		\$ (3,949)	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	National Center for Defense Manufacturin g & Machining	FA86501625700	\$ 173,746	\$ 213,203	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	National Center for Defense Manufacturin g & Machining	FA86502025700	\$ 8,392	\$ 8,392	
12 800	COVID-19	COVID-19 - Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Northwestern University	AIR FORCE OFFICE OF SCIE		\$ 78,764	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Purdue University	FA9550-19-1-0008		\$ 439,786	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	The Board of Trustees of the Leland Stanford Junior University	FA9453-21-2-0018		\$ 9,046	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	The Research Foundation for SUNY on behalf of Univ at Buffalo	FA9550-222-1-0092		\$ 6,672	
12 800	COVID-19	COVID-19 - Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	University of California at Merced	CAMPUS CASHIERING SERVICES	FA9550-20-1-0347		\$ 50,563
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	University of California at Merced	CAMPUS CASHIERING SERVICES	FA9550-20-1-0347		\$ 5,127
12 800	COVID-19	COVID-19 - Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	University of Texas at Arlington	COVID-19		\$ 42,392	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	University of Wisconsin-Madison	FA9550-19-1-0385		\$ 136,978	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Utah, University of	N/A		\$ 120,697	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	FA9550-17-1-0341		\$ 10,183	
12 800		Air Force Defense Research Sciences Program	Research and Development	\$ 6,573,464	\$ 675,184,680	N	Washington, University of	N/A		\$ 76,915	
12 900		Language Grant Program	Research and Development	\$ 51,928	\$ 675,184,680	Y				\$ 51,928	
12 902		Information Security Grants	Research and Development	\$ 521,246	\$ 675,184,680	Y				\$ 521,246	
12 910	COVID-19	COVID-19 - Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	Y				\$ 112,123	
12 910		Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	Y				\$ 374,662	
12 910		Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	Y			\$ 464,040	\$ 1,416,775	
12 910		Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	N	Carnegie Mellon University	N66001-17-2-4064		\$ 200,504	
12 910		Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	N	Georgia Institute of Technology	N/A		\$ 21,722	
12 910		Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	N	Montana State University	D18AC00031		\$ 132,413	

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**THE PENNSYLVANIA STATE UNIVERSITY**  
**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
**FOR THE YEAR ENDED JUNE 30, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	910	Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	N	University of Southern California	W911NF-18-1-0027		\$ 88,918
12	910	Research and Technology Development	Research and Development	\$ 3,477,418	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	W911NF-16-2-0010		\$ 72,428
12	RD 03200	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (684)
12	RD 15-G-2529	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (804)
12	RD 15-G-2529/0004	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 201
12	RD 15-G-2529/19F2527	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 28,837
12	RD 15-G-2529/19F2540	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,089,740
12	RD 16-C-0089	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 5,814,726
12	RD 18-G-2165/20F1808	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 838,004
12	RD 18-G-2165/ORDER 20F2028	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 6,046,345
12	RD 18-G-2165/ORDER 20F2029	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 6,535,301
12	RD 19-C-0009	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 118,879
12	RD 19C5321	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 526,722
12	RD 19F2513	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 459,985
12	RD 19P5322	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (4,770)
12	RD 2016-16021000002/006	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 395,862
12	RD 2016-16021000002-005	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 59,883
12	RD 2016-1602100002/010	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 40,425
12	RD 2018101G001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (35,089)
12	RD 2019290G001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,406,858
12	RD 20-D-0129/0002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 3,555,306
12	RD 20-D-0129/ORDER 0001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 72,698
12	RD 20F2517	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 4,647,591
12	RD 20F4753	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 14,856
12	RD 21F2560	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 665,572
12	RD 980575	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 56,179
12	RD BROCK IPA 21	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 158,149
12	RD COVID-19, HR0011-20-C-0067	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 144,800
12	RD COVID-19, N0002419F8406	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 89,308
12	RD COVID-19, N0002419F8421	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 62,849
12	RD DO 0201	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (2,360)
12	RD DO 0296	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (40)
12	RD DO 0423	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (24,892)
12	RD DO 0458	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (2,912)
12	RD DO 0475	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (15,685)
12	RD DO 0481	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 206
12	RD DO 0506	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (3,895)
12	RD DO 0529	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (582)
12	RD DO 0532	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (3,661)
12	RD DO 0533	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1
12	RD DO 0548	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (58,830)
12	RD DO 0553	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (9,232)
12	RD FA8251-22-P-0001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 39,254
12	RD FA8750-19-C-1519	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 598,584
12	RD H98230-16-D-0022/0001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ (136)
12	RD H98230-20-D-0027/0002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 505,529
12	RD H98230-20-D-0027/0003	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 345,279
12	RD H98230-20-D-0027/0004	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 196
12	RD H98230-20-D-0027/0007	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,531
12	RD H98230-20-D-0027/0008	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 189,290

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**FOR THE YEAR ENDED JUNE 30, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD	H98230-20-D-0027/0009	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 332,376
12	RD	H98230-20-D-0027/0010	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 102,590
12	RD	H98230-20-D-0027/0011	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 65,375
12	RD	HM0476-20-C-0016	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,320,877
12	RD	HM0476-21-F-0010	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 278,555
12	RD	HM0476-21-F-0026	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 407,575
12	RD	HM0476-21-F-0047	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 181,831
12	RD	HM0476-21-F-0054	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 525,838
12	RD	HM0476-21-F-0074	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 586,339
12	RD	HM0476-21-F-0090	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 189,737
12	RD	HM0476-21-F-0143	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 194,972
12	RD	HM0476-21-F-0145	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 279,819
12	RD	HM0476-22-F-0003	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 548,505
12	RD	HM0476-22-F-0010	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 221,199
12	RD	HM0476-22-F-0033	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 103,647
12	RD	HM047622F0040	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 31,327
12	RD	HM047622F0046	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 3,432
12	RD	HR0011-15-C-0029	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (6,759)
12	RD	HR0011-20-C-0067	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,811,859
12	RD	HR0011-21-C-0208	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,996,954
12	RD	HR0011-22-C-0108	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 284,140
12	RD	IPA NEIGHBORS 21	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 276,713
12	RD	M0008816WRPC702	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 61,877
12	RD	N0001410F0005	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 9,359
12	RD	N0001410F0034	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 211,763
12	RD	N0001415D0001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (37)
12	RD	N0001415F0001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (6,202)
12	RD	N0001415F0002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 134,075
12	RD	N0001415G0001 DO 0005	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 270
12	RD	N000141712129	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (376)
12	RD	N000141812736	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 231
12	RD	N0001418F2006	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 579,244
12	RD	N0001418FM019	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,629
12	RD	N000141912221	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 100,576
12	RD	N0001419C1055	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 453,326
12	RD	N0001419C2034	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (13)
12	RD	N0001419C2064	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 247,287
12	RD	N0001419FM002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 579,720
12	RD	N0001419FM008	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 3,637,020
12	RD	N0001420C1061	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,556,631
12	RD	N0001420C2002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 758,159
12	RD	N0001420FM001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 396,567
12	RD	N0001420FM006	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 788,960
12	RD	N0001420FM009	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,397,032
12	RD	N0001421C2010	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,141,670
12	RD	N0001421FM017	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,084,192
12	RD	N0001421FM018	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 124,931
12	RD	N0001422C1035	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 443,812
12	RD	N000149920005	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (42,367)
12	RD	N0002417F8302	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (1,147)
12	RD	N0002417F8310	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (2,849)
12	RD	N0002417F8327	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,145
12	RD	N0002417F8330	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (96,438)
12	RD	N0002417F8355	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (4,767)
12	RD	N0002418F8309	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (12,146)
12	RD	N0002418F8335	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 235
12	RD	N0002418F8343	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 46
12	RD	N0002418F8344	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (371)
12	RD	N0002418F8348	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (2)

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD	N0002418F8402	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 708
12	RD	N0002418F8410	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,656,444
12	RD	N0002418F8419	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 601
12	RD	N0002418F8420	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 66,712
12	RD	N0002418F8421	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 87,322
12	RD	N0002418F8425	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (4,473)
12	RD	N0002418F8426	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,623
12	RD	N0002418F8432	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 163,073
12	RD	N0002418F8434	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 37,746
12	RD	N0002418F8436	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 31,756
12	RD	N0002418F8437	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (15,788)
12	RD	N0002418F8438	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 816
12	RD	N0002418F8440	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 562
12	RD	N0002418F8445	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 954,867
12	RD	N0002418F8448	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 202
12	RD	N0002418F8450	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,033,268
12	RD	N0002418F8451	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 5,470
12	RD	N0002419F8303	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 262,703
12	RD	N0002419F8403	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (241)
12	RD	N0002419F8406	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 12,651,600
12	RD	N0002419F8408	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 434,356
12	RD	N0002419F8409	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 7,665
12	RD	N0002419F8411	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35,194
12	RD	N0002419F8412	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 306,198
12	RD	N0002419F8414	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 9
12	RD	N0002419F8416	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 65,628
12	RD	N0002419F8417	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 135
12	RD	N0002419F8420	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (546)
12	RD	N0002419F8421	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,978,772
12	RD	N0002419F8422	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 174,629
12	RD	N0002419F8423	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (8,286)
12	RD	N0002419F8424	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 398,189
12	RD	N0002419F8425	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (1,546)
12	RD	N0002419F8426	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 262
12	RD	N0002419F8427	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (713)
12	RD	N0002419F8429	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (2,517)
12	RD	N0002419F8434	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 958
12	RD	N0002419F8435	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 3,160,989
12	RD	N0002419F8437	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (50,468)
12	RD	N0002419F8438	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 896,462
12	RD	N0002419F8439	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 890,057
12	RD	N0002419F8441	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 5
12	RD	N0002419F8443	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (6,734)
12	RD	N0002419F8444	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 5
12	RD	N0002419F8445	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 15,654
12	RD	N0002419F8449	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 27,317
12	RD	N0002419F8452	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 314,169
12	RD	N0002419F8456	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 316,520
12	RD	N0002419F8458	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 654,156
12	RD	N0002419F8462	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (20)
12	RD	N0002419F8463	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (445)
12	RD	N0002419F8464	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 838,070
12	RD	N0002419F8466	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 219,902
12	RD	N0002419F8471	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 54,139
12	RD	N0002419F8472	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 98,915
12	RD	N0002419F8473	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 218,781
12	RD	N0002419F8474	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 60,160
12	RD	N0002419F8476	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 47
12	RD	N0002419F8478	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 16,482
12	RD	N0002419F8480	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (470)
12	RD	N0002419F8482	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 151,205
12	RD	N0002419F8484	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 166,482
12	RD	N0002419F8485	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 688,672

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD	N0002419F8486	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 78,732
12	RD	N0002419F8487	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 146
12	RD	N0002419F8491	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 142
12	RD	N0002419F8492	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 354
12	RD	N0002419F8493	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 5
12	RD	N0002419F8495	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 74,398
12	RD	N0002419F8497	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 248
12	RD	N0002419F8498	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 360
12	RD	N0002419F8499	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 19,733
12	RD	N0002420F8320	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (7,521)
12	RD	N0002420F8323	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 185,513
12	RD	N0002420F8325	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 38,942
12	RD	N0002420F8326	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 60,804
12	RD	N0002420F8327	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 4,550,769
12	RD	N0002420F8328	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 152,708
12	RD	N0002420F8329	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,993,930
12	RD	N0002420F8330	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (172)
12	RD	N0002420F8333	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,209,332
12	RD	N0002420F8334	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 4,666,536
12	RD	N0002420F8335	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 308,757
12	RD	N0002420F8337	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 410,065
12	RD	N0002420F8338	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35
12	RD	N0002420F8340	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 93
12	RD	N0002420F8341	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 25
12	RD	N0002420F8342	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 4,844,253
12	RD	N0002420F8343	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 4,594,090
12	RD	N0002420F8344	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 220,997
12	RD	N0002420F8345	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 310,129
12	RD	N0002420F8346	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 156,946
12	RD	N0002420F8349	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 31
12	RD	N0002420F8350	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 8,182,105
12	RD	N0002420F8351	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 741,853
12	RD	N0002420F8352	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 203,951
12	RD	N0002420F8353	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 79,715
12	RD	N0002420F8354	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 217,398
12	RD	N0002420F8355	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 10,036,170
12	RD	N0002420F8356	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 21,116
12	RD	N0002420F8358	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 8,549
12	RD	N0002420F8359	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (481)
12	RD	N0002420F8360	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 52,365
12	RD	N0002420F8361	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (838)
12	RD	N0002420F8363	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (3,620)
12	RD	N0002420F8364	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 112
12	RD	N0002420F8366	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 14,916,957
12	RD	N0002420F8367	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,951,507
12	RD	N0002420F8368	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 826,374
12	RD	N0002420F8369	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 69,247
12	RD	N0002420F8370	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,151,145
12	RD	N0002420F8371	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 148,669
12	RD	N0002420F8373	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 78,742
12	RD	N0002420F8374	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (9,915)
12	RD	N0002420F8376	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,324,925
12	RD	N0002420F8379	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 175,047
12	RD	N0002420F8380	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 7
12	RD	N0002420F8381	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 472,526
12	RD	N0002420F8382	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 149
12	RD	N0002420F8383	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 229,107
12	RD	N0002420F8384	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 190,682
12	RD	N0002420F8385	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,035,629
12	RD	N0002420F8386	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 110,961
12	RD	N0002420F8388	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 398,730
12	RD	N0002420F8389	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 419,979
12	RD	N0002420F8391	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 14,900

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD	N0002420F8392	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 774,414
12	RD	N0002420F8393	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,122
12	RD	N0002420F8394	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 298
12	RD	N0002420F8395	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 146,948
12	RD	N0002420F8396	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (14,874)
12	RD	N0002420F8398	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 152,856
12	RD	N0002420F8399	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 5,571
12	RD	N0002420F8401	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (763)
12	RD	N0002420F8402	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 17,896
12	RD	N0002420F8403	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 104,761
12	RD	N0002420F8404	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 912,363
12	RD	N0002420F8405	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 725,797
12	RD	N0002420F8406	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 85,291
12	RD	N0002420F8407	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 750,029
12	RD	N0002420F8408	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 68
12	RD	N0002420F8409	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,678,769
12	RD	N0002420F8410	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 22,511
12	RD	N0002420F8411	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 502,688
12	RD	N0002420F8412	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 146,542
12	RD	N0002420F8413	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (7,585)
12	RD	N0002420F8414	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (1,557)
12	RD	N0002420F8415	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,421,515
12	RD	N0002420F8416	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,227,315
12	RD	N0002420F8417	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 79,463
12	RD	N0002420F8418	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 232,370
12	RD	N0002420F8419	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 31,014
12	RD	N0002420F8420	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 104,041
12	RD	N0002420F8421	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ (1,232)
12	RD	N0002420F8422	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 25,311
12	RD	N0002420F8424	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 523,343
12	RD	N0002420F8426	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 30,573
12	RD	N0002420F8427	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,307,671
12	RD	N0002420F8428	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 362,725
12	RD	N0002420F8430	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 68,873
12	RD	N0002420F8431	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35,393
12	RD	N0002420F8433	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 3,850
12	RD	N0002420F8434	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 32,122
12	RD	N0002420F8437	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 205,377
12	RD	N0002421F8300	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 217,078
12	RD	N0002421F8301	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 21,427
12	RD	N0002421F8303	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 939,209
12	RD	N0002421F8304	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 572,439
12	RD	N0002421F8305	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 213,240
12	RD	N0002421F8306	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 6,476,824
12	RD	N0002421F8307	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 8,063,594
12	RD	N0002421F8308	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 481,016
12	RD	N0002421F8310	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 99,051
12	RD	N0002421F8312	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 4,090,151
12	RD	N0002421F8314	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 102,430
12	RD	N0002421F8315	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 381,080
12	RD	N0002421F8316	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 213,353
12	RD	N0002421F8317	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 232,229
12	RD	N0002421F8318	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 47,706
12	RD	N0002421F8319	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 308
12	RD	N0002421F8320	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 451,941
12	RD	N0002421F8321	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 19,403
12	RD	N0002421F8322	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 22,062
12	RD	N0002421F8323	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 265,327
12	RD	N0002421F8324	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 470,583
12	RD	N0002421F8326	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 172,250
12	RD	N0002421F8327	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 114,466
12	RD	N0002421F8328	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 327,795
12	RD	N0002421F8329	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 189,687

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD N0002421F8330	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,006,686
12	RD N0002421F8331	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 469,606
12	RD N0002421F8332	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 19,964
12	RD N0002421F8333	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 28,509
12	RD N0002421F8334	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 136,298
12	RD N0002421F8335	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 362,005
12	RD N0002421F8336	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 365,679
12	RD N0002421F8337	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,177,277
12	RD N0002421F8338	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 518,350
12	RD N0002421F8339	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 218,660
12	RD N0002421F8340	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 546,060
12	RD N0002421F8341	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,439,098
12	RD N0002421F8342	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 256,749
12	RD N0002421F8343	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 364,245
12	RD N0002421F8344	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 307,579
12	RD N0002421F8345	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 457,286
12	RD N0002421F8347	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 36,970
12	RD N0002421F8348	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 643,746
12	RD N0002421F8349	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 169,803
12	RD N0002421F8350	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 56,298
12	RD N0002421F8351	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 45,087
12	RD N0002421F8352	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 388,886
12	RD N0002421F8353	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 534,094
12	RD N0002421F8354	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,499,933
12	RD N0002421F8355	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,015,712
12	RD N0002421F8356	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 475,659
12	RD N0002421F8357	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 494,373
12	RD N0002421F8358	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 366,616
12	RD N0002421F8359	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 277,663
12	RD N0002421F8361	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 2,032,406
12	RD N0002421F8362	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 72,161
12	RD N0002421F8363	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 748,985
12	RD N0002421F8364	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 482,778
12	RD N0002421F8365	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 359,707
12	RD N0002421F8366	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,485,727
12	RD N0002421F8367	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 331,782
12	RD N0002421F8368	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 183,215
12	RD N0002421F8369	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 2,198,073
12	RD N0002421F8370	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 268,901
12	RD N0002421F8371	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 222,237
12	RD N0002421F8372	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 509,742
12	RD N0002421F8373	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 411,138
12	RD N0002421F8374	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 615,190
12	RD N0002421F8375	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 183,362
12	RD N0002421F8376	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 776,751
12	RD N0002421F8377	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 243,884
12	RD N0002421F8378	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 637,707
12	RD N0002421F8379	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 59,800
12	RD N0002421F8380	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 451,154
12	RD N0002421F8382	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 49,650
12	RD N0002421F8383	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 324,152
12	RD N0002421F8384	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 352,416
12	RD N0002421F8385	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 89,996
12	RD N0002421F8386	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 508,416
12	RD N0002421F8387	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 2,004,326
12	RD N0002421F8388	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 199,182
12	RD N0002421F8389	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 195,122
12	RD N0002421F8390	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 72,886
12	RD N0002421F8392	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 405,166
12	RD N0002421F8393	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 138,231
12	RD N0002421F8394	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 301,369
12	RD N0002421F8396	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 1,420,915
12	RD N0002421F8397	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y				\$ 34,749

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD	N0002421F8398	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 34,885
12	RD	N0002421F8400	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 151,403
12	RD	N0002421F8401	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 153,653
12	RD	N0002421F8402	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 493,908
12	RD	N0002421F8403	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 215,749
12	RD	N0002421F8404	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,042,085
12	RD	N0002421F8406	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 267,408
12	RD	N0002421F8407	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 566,472
12	RD	N0002421F8409	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 411,852
12	RD	N0002421F8410	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 161,292
12	RD	N0002421F8411	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 146,101
12	RD	N0002421F8412	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 244,915
12	RD	N0002422F8301	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 46,319
12	RD	N0002422F8302	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 311,307
12	RD	N0002422F8303	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 2,795,573
12	RD	N0002422F8304	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 162,628
12	RD	N0002422F8305	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 415,129
12	RD	N0002422F8306	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,764,281
12	RD	N0002422F8307	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 1,679,952
12	RD	N0002422F8309	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 6,192
12	RD	N0002422F8310	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 908,155
12	RD	N0002422F8311	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 134,250
12	RD	N0002422F8312	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 190,172
12	RD	N0002422F8313	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 144,371
12	RD	N0002422F8314	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 259,294
12	RD	N0002422F8315	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 173,340
12	RD	N0002422F8316	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 221,070
12	RD	N0002422F8317	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 67,762
12	RD	N0002422F8318	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 251,088
12	RD	N0002422F8319	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35,386
12	RD	N0002422F8320	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 13,950
12	RD	N0002422F8321	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 221,476
12	RD	N0002422F8322	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 89,723
12	RD	N0002422F8323	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 373,302
12	RD	N0002422F8324	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 230,097
12	RD	N0002422F8325	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 341,827
12	RD	N0002422F8326	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 54,708
12	RD	N0002422F8327	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 72,625
12	RD	N0002422F8328	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 5,436
12	RD	N0002422F8329	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 383,764
12	RD	N0002422F8330	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 189,768
12	RD	N0002422F8331	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 12,715
12	RD	N0002422F8332	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 9,870
12	RD	N0002422F8333	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35,676
12	RD	N0002422F8334	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 202,778
12	RD	N0002422F8336	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35,052
12	RD	N0002422F8337	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 48,539
12	RD	N0002422F8338	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 163,288
12	RD	N0002422F8339	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 184,952
12	RD	N0002422F8340	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 54,074
12	RD	N0002422F8342	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 7,673
12	RD	N0002422F8344	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 198
12	RD	N0002422F8345	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 25,578
12	RD	N0002422F8347	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 118,927
12	RD	N0002422F8348	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 166,142
12	RD	N0002422F8349	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 17,007
12	RD	N0002422F8350	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 44,930
12	RD	N0002422F8352	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 35,169
12	RD	N0002422F8353	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 6,329
12	RD	N0002422F8354	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 3,849
12	RD	N0002422F8356	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 9,192
12	RD	N0002422F8361	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 643,695
12	RD	N0002422F8365	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$ 4,846

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12 RD	N0003022PAIPAAH	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	318,728
12 RD	N0017321P1565	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	186,527
12 RD	N66001-22-P-6026	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	34,000
12 RD	OF69 DATED 02/01/2022	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	110,613
12 RD	OF69 DATED 02/24/2022	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	116,360
12 RD	OF69 DATED 1/19/2022	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	32,721
12 RD	OF69 DATED 1/31/2020	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	141,623
12 RD	OF69 DATED 10/24/21	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	61,573
12 RD	OF69 DATED 12/02/2020	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	140,945
12 RD	OF69 DATED 3/14/2022	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	87,699
12 RD	OF69 DATED 5/26/2021	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	233,512
12 RD	OF69 DATED 8/20/2021	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	189,697
12 RD	OF69 DATED 8/27/2020	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	283,662
12 RD	OF69 DATED 8/28/2020	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	130,507
12 RD	OF69 SIGNED 1/25/2022	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	107,067
12 RD	OF69 SIGNED 2/9/2022	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	103,312
12 RD	ORDER 20F2514	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	712,588
12 RD	PARODE IPA 2021	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	191,024
12 RD	SCF1159038	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	4,878
12 RD	W81EWF02090327	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	200,908
12 RD	W81XWH-21-1-0915	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	86,603
12 RD	W912HQ-22-C-0011	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	127,318
12 RD	W912HZ21P0002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	83,209
12 RD	W912PX-19-F-0019	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	Y			\$	650,006
12 RD	2181	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	4D Tech Solutions	N6833521C0371	\$	2,722
12 RD	233337	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Actuated Medical, Inc.	DEFENSE HEALTH PROGRAM (	\$	37,077
12 RD	242423	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Actuated Medical, Inc.	242423	\$	16,229
12 RD	34858	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Cooling Technologies, Inc.	U.S. DEPARTMENT OF THE N	\$	45,754
12 RD	41768	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Cooling Technologies, Inc.	41768	\$	616
12 RD	2012532 TO 007	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N0001411D0504	\$	7,126
12 RD	2014-309	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	DOTC-17-01-INIT0453	\$	60,014
12 RD	2014-309	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	W15QKN-14-9-1001	\$	692,166
12 RD	2015460 TO 002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N0001414D0377	\$	75,883
12 RD	2018-457 TO 002	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N00014-17-D-4003	\$	351,221
12 RD	2018-825	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	U.S. DEPARTMENT OF THE A	\$	139,108
12 RD	2018-867 TO #CWMD1907-001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	US ARMY CONTRACTING COMM	\$	203,852
12 RD	2019467 TO 001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N0001416D4001	\$	566,851
12 RD	2019482 TO 003	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N000241832231	\$	137,950
12 RD	2019-482-01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N00024-18-3-2231	\$	(41,343)
12 RD	2019-482-02	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N00024-18-3-2231	\$	32,676
12 RD	2019685 TO 001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N0001419D7001	\$	1,730
12 RD	COVID-19, 2018-457 TO 003	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Advanced Technology International	N0001417D4003	\$	201,427
12 RD	ULT0000009	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Amentum	FA807520F0080	\$	43,281

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD K004-01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	American Lightweight Materials Manufacturing Innovation Institute	N00014-21-9-0010		\$ 4,210
12	RD N68335-17-C-0037/1	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Analysis, Design & Diagnostics, Inc.	N68335-17-C-0037		\$ 29,152
12	RD 1902084PSU01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Optimization	N6833519C0299		\$ 191
12	RD 1910086PSU01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Optimization	N6833519C0366		\$ 75,040
12	RD 2106022PSU01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Optimization	N6833521C0862		\$ 45,864
12	RD 2201074PSU01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Optimization	N6833522C0353		\$ 792
12	RD 26320PSU01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Optimization	N6833517C0149		\$ 26,842
12	RD 980976	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Physical Sciences Corporation	HR001120C0100		\$ (11,355)
12	RD APS2020	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Applied Physical Sciences Corporation	HR001120C0100		\$ 11,364
12	RD PO 19006 & PO 28318	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Arrow Tech Associates, Inc.	FA8651-19-P-0111		\$ 103,179
12	RD 911175	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Assurance Technology Corporation	N0017317F6702		\$ 42,952
12	RD PO 911014 JOB 5795-049 & 050	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Assurance Technology Corporation	G500Q140ADS402/N00173-15		\$ (24,157)
12	RD 413	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	AVX Aircraft Company	W911W61320004		\$ 352,507
12	RD 1017191	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	BAE Systems	N68335-18-C-0106		\$ (4,759)
12	RD 1022225	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	BAE Systems	N6600116C4001		\$ (7,359)
12	RD 1099670	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	BAE Systems	1099670		\$ 14,747
12	RD 1124569	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	BAE Systems	HQ0727-16-D-0002		\$ 107,842
12	RD BT12021001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Ballydel Technologies, Inc	W15QKN20C0028		\$ 19,380
12	RD PO US001-0000812865	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Battelle (Ohio)	PO US001-0000812865		\$ 272,207
12	RD 137808	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Bettis Atomic Power Laboratory	N0002818C2130		\$ (779)
12	RD 227838	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	BlueHalo	227838		\$ 5,168
12	RD 2166311	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Boeing Company [MP]	2166311		\$ 43,938
12	RD 255466	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Bolder Flight Systems, Inc.	255466		\$ 39,987
12	RD 22941	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Brimrose Technology Corporation	HQ014715C7401		\$ 687
12	RD 1990792-455728	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Carnegie Mellon University	W52P1J22F0103		\$ 1,469
12	RD COVID-19, 1990682-437338	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Carnegie Mellon University	1990682-437338		\$ 73,718
12	RD COVID-19, 1990683-437338	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Carnegie Mellon University	1990683-437338		\$ 9,543
12	RD 237696	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Cascade Technologies	N6833520C0839		\$ 91,296
12	RD 2021-0001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Catalyzeh2O, LLC	2021-0001		\$ 66,898
12	RD 982466	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	CEPEDA Associates, Inc.	N0002417C2117		\$ 16,741
12	RD 20200658	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	CFD Research Corporation	N6833520C0402		\$ 67,579
12	RD SC1519801	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Charles River Analytics, Inc.	W81XWH-17-C-0002		\$ 61,428
12	RD SC1720001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Charles River Analytics, Inc.	OFFICE OF NAVAL RESEARCH		\$ 20,939
12	RD PSU 21-1-0460	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Clarkson Aerospace Corporation	FA9550-22-1-0460		\$ 87,401
12	RD 7043-SC-PSU-P1	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	ColdQuanta, Inc.	7043-SC-PSU-P1		\$ 107,001
12	RD 237314	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Colorado School of Mines	237314		\$ 16,509
12	RD 401733-5801	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Colorado School of Mines	DEFENSE ADVANCED RESEAR		\$ 169,864
12	RD 22-014	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Continuum Dynamics, Inc.	22-014		\$ 6,672
12	RD PURCHASE ORDER 21-006	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Continuum Dynamics, Inc.	PURCHASE ORDER 21-006		\$ 18,580
12	RD 247806	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Corvid Technologies	W15QKN-21-P-0066		\$ 65,921
12	RD 19-C-0189/C802	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Craft Tech	NAVAL AIR		\$ 86,682
12	RD 982543	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	D#Angelo Technologies, LLC	FA8649-22-P-0700		\$ 9,418
12	RD HR0011-22-C-0038	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	DARPA STO	HR0011-22-C-0038		\$ 9,150
12	RD 183737	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	DCS Corporation	W56HZV17C0062		\$ (198)
12	RD MSRC-FY19-04	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Denver Research Institute	U.S. ARMY MEDICAL RESEAR		\$ 641,449
12	RD 239972	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	EC Power	239972		\$ 25,550
12	RD 26140	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Engineering and Software System Solution s, Inc.	N6833518C0201		\$ 396
12	RD 9379	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Execet, Inc.	N0017316D2014		\$ (988)
12	RD 241488	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Farad Power, Inc	241488		\$ 15,498
12	RD 141967	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Fluor Marine Propulsion, LLC	RFP CIM-141967		\$ 1,437
12	RD 145306	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Fluor Marine Propulsion, LLC	RFP CIM-145306		\$ 1,657

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12 RD	2019-021	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Galois, Inc.	DEFENSE ADVANCED RESEARC		\$ 294,763
12 RD	27355	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Gear Research Institute	N0001917C0020		\$ (201)
12 RD	980734	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Gear Research Institute	N0001917C0020		\$ 47,257
12 RD	982256	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Gear Research Institute	W911W620C0042		\$ 790
12 RD	SGG227017	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	General Dynamics Electric Boat	SN227017		\$ 189,282
12 RD	401105828	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	General Electric Co. [MP]	N0001418C2010		\$ 85,936
12 RD	AWD-000706-S1	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Georgia Institute of Technology	AWD-000706-S1		\$ 83,897
12 RD	26625	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	HAMR, Industries LLC	W15QKN19C0009		\$ 7,221
12 RD	982357	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	HAMR, Industries LLC	W15QKN2110055		\$ 88,685
12 RD	982509	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	HAMR, Industries LLC	FA8651-22-P-0087		\$ 24,592
12 RD	240400	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Harmony Aeronautics LLC	240400		\$ (45)
12 RD	201826	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	H-Nu Systems LLC	FA9453-17-C00421		\$ 4,449
12 RD	COVID-19, CW3033969	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	IBM Watson Research Center	W912CG19C0003		\$ 108,906
12 RD	CW3033969	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	IBM Watson Research Center	W912CG19C0003		\$ 47,310
12 RD	110637	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	II-VI Aerospace & Defense	FA9451-21-C-0006		\$ 79,921
12 RD	25484	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	In-Depth Engineering Corporation	N68335-18-C-0066		\$ (766)
12 RD	SB20265	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Innovative Scientific Solutions, Inc.	FA8650-21-D-2401		\$ 25,692
12 RD	5230-01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Innovering, LLC	N6833522C0183		\$ 2,856
12 RD	2532-1	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Intelligent Automation, Inc.	N68335-20-C-0146		\$ 178,434
12 RD	124818 TO 161121	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Johns Hopkins University	HR0011-17-D-0001		\$ (157)
12 RD	W81XWH-17-2-0032	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Johns Hopkins University	U.S. ARMY RESEARCH, DEVE		\$ 27,557
12 RD	241436	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	JuggerBot 3D, LLC	241436		\$ 20,322
12 RD	PSU 200474.000	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Karagozian & Case, Inc.	HQ0860 - 2 1 - C - 7139		\$ 131,494
12 RD	25294 174037	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	KCF Technologies, Inc.	N0002417C4037		\$ 97,537
12 RD	K002528-00-S01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Kitware, Inc.	FA8650-19-C-1011		\$ 19,576
12 RD	P010237053	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Leidos, Inc.	HDTRA1-17-C-0019		\$ 108,117
12 RD	P010256846	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Leidos, Inc.	P010256846		\$ 179,752
12 RD	PO10203201	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Leidos, Inc.	FA9451-17-D-0070		\$ 18,217
12 RD	4104658663	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Lockheed Martin Rotary and Mission Systems	4104658663		\$ 1,453,643
12 RD	U16-002 PROJECT NUMBER 033	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Lockheed Martin Space Systems Company	U16-002 PROJECT NUMBER 033		\$ 6,171
12 RD	981476	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	LP Resilient Services JV LLC	FA864922P0043		\$ 25,000
12 RD	4667-NVY-1S/ARLPSU	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Luna Innovations, Inc.	N68335-21-C-0531		\$ 19,196
12 RD	26973	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Mainstream Engineering Corporation	HQ104719C7132		\$ 128,734
12 RD	980098	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Mainstream Engineering Corporation	HQ086020C7150		\$ 198,850
12 RD	982417	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Mainstream Engineering Corporation	HQ014718C0037		\$ 85,321
12 RD	236236	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	M-Mech Defense, Inc.	236236		\$ 237,554
12 RD	222205 PROJECT 211003	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	MxD	W15QKN1930003		\$ 4,094
12 RD	238127	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Nanohmics, Inc.	238127		\$ 156,285
12 RD	238901	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	NanoSonic, Inc.	238901		\$ 11,664
12 RD	250014 PO 452951	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	NanoSonic, Inc.	250014 PO 452951		\$ 9,629
12 RD	982679	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	NanoSonic, Inc.	HQ014719C7142		\$ 19,985
12 RD	NV1-0354	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	NanoSonic, Inc.	U.S. DEPARTMENT OF THE NA		\$ 1
12 RD	NV2-0570	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	NanoSonic, Inc.	NV2-0570		\$ 258,111
12 RD	28196	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	National Center for Defense Manufacturing & Machining	W9124P1990001		\$ 90,950
12 RD	PO 21-01	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	NextGen Aeronautics, Inc.	W58RGZ-21-C-0019		\$ 94,600
12 RD	MP00302615	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Northrop Grumman Defense Systems	N00024-17-C-2100		\$ 7,542
12 RD	241367	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	OneSky	241367		\$ 41,844
12 RD	1024 PO 27139094	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Oshkosh Corporation	W56HZV21C0113		\$ 143,620
12 RD	ARL PENN STATE 4 PTEROFIN	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Pacific Ocean Energy Trust	ARL PENN STATE 4 PTEROFIN		\$ 4,470
12 RD	PO 0029370 TO 8	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta Engineering Inc.	PO 0029370 TO 8		\$ 153,234

See notes to schedule of expenditures of federal awards.

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD PO0024766	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta Engineering Inc.	W91CRB18D0006		\$ 86,911
12	RD PO-0028863	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta Engineering Inc.	W91CRB-18-D-0006		\$ 388,546
12	RD COVID-19, PO0022024	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta, Inc.	W91CRB18D0006		\$ 172
12	RD PO-0018619	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta, Inc.	DEFENSE ADVANCED RESEARC		\$ (10,716)
12	RD PO-0018619 PHASE 2	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta, Inc.	DEFENSE ADVANCED RESEARC		\$ 256,890
12	RD PO0018668	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Perspecta, Inc.	W91CRB18D0006		\$ (1,762)
12	RD SC 10-10226-8006-46	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Physical Sciences Inc.	FA9453-19-C-0006		\$ 31,271
12	RD 230600	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Piasecki Aircraft Corporation	230600		\$ 223,719
12	RD PO 86929	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Piasecki Aircraft Corporation	SUBK/PO 86929		\$ 1,736
12	RD 28704 EPO-00010990 (F2D110130)	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	PPG Industries [MP]	HQ0034-15-2-0007		\$ 22,459
12	RD 2701	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	QuesTek Innovations LLC	N68335-21-C-0430		\$ 35,693
12	RD 982844	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	QuesTek Innovations LLC	N6833522C0384		\$ 358
12	RD 1257406	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Raytheon Company	W911NF2090005		\$ 400,475
12	RD 4202474469	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Raytheon Missiles & Defense	HR001121C0050		\$ 127,599
12	RD 1265063	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Raytheon Technologies Research Center	HR0011-22-C-0053		\$ 42,170
12	RD C21-27	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	RMD, Inc.	HQ0860-21-C-7062		\$ 30,055
12	RD 24296	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Sabre Systems, Inc.	FA8750-16-C-0216		\$ 6,790
12	RD 982717	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Saint-Gobain Crystals	FA8650-16-D-5524		\$ 10,441
12	RD C32788	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Saint-Gobain Crystals	FA865016D5524		\$ 4,478
12	RD SCITECH 21-21-F-0027-04	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	SciTech Services, Inc.	W911SR-19-D-0006		\$ 27,353
12	RD S21401	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Siemens Corporation, Corporate Technology	N0001421C1001		\$ 124,805
12	RD R02953	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Southwest Range Services, LLC	W91151-19-C-0008		\$ 21,298
12	RD 222595	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	spotLESS Materials LLC	OFFICE OF NAVAL RESEARCH		\$ 16,778
12	RD COVID-19, 51620	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	SRI International	FA8750-20-C-0002		\$ 6,523
12	RD STC-19-02	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Strategic Technology Consulting	W15QKN-18-9-1008		\$ 1
12	RD S21033001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	SURVICE Engineering Company	FA864921P0043		\$ 23,435
12	RD 982623	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Systems Innovation Engineering	W52P1J-20-9-3036		\$ 33,926
12	RD 236587	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Systems Technology, Inc.	236587		\$ 148,160
12	RD 208699	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Systema Technologies, Inc.	N6833518C0092		\$ 11,181
12	RD 2108-001-02	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Technical Data Analysis, Inc.	OFFICE OF NAVAL RESEARCH		\$ (1)
12	RD 168340	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	The Johns Hopkins University Applied Physics Laboratory LLC	20G6300		\$ 55,884
12	RD 174551	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	The Johns Hopkins University Applied Physics Laboratory LLC	HR001122D0001		\$ 11,884
12	RD SC20-F201-1	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Toyon Research Corporation	N68335-20-C-0449		\$ 20,734
12	RD SC22C288-1-P4061	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Toyon Research Corporation	N68335-22-C-0118		\$ 42,773
12	RD ICS2103 DO 001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Trident Systems, Inc.	47QFLA21C0015		\$ 111,371
12	RD ICS-21-04 DI 001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Trident Systems, Inc.	W50RAJ2190032		\$ 49,846
12	RD ISEG1802 DO 001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Trident Systems, Inc.	M6785418C6703		\$ 6,580
12	RD ISEG1901 DO 001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Trident Systems, Inc.	N6833519C0500		\$ (2,039)
12	RD TSI-2666-20-20201708	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Triton Systems, Inc.	N68335-20-C-0539		\$ 58,650
12	RD COVID-19, S-111-068-001	COVID-19 - U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	UES, Inc.	S-111-068-001		\$ 33,898
12	RD S160000001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	UES, Inc.	FA865019C2051		\$ (1,713)
12	RD S163001001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	UES, Inc.	FA865019C5080		\$ 11,266
12	RD S174000001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	UES, Inc.	N6833519C0854		\$ (933)
12	RD S192000001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	UES, Inc.	N6833521C0219		\$ 86,037
12	RD 1254302	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	United Technologies Research Center	FA865020C7001		\$ 70,545
12	RD 16308A23	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	University of Central Florida	HQ00342190007		\$ 3,201
12	RD RSC20079	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	University of Dayton Research Institute	FA8650-20-D-5211		\$ 88,314
12	RD 2008504 PO S281013	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	University of Texas at Dallas	AIR FORCE		\$ (28,506)
12	RD PSU2021-0184-001	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	UtopiaCompression Corporation	FA8649-21-P-0184		\$ 42,000

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
12	RD 27918 (N68335-19-C-0558-S)	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	VRC Metal Systems, LLC	N6833519C0558		\$ 43,287
12	RD 982429 W912HZ21C0017-19.08	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	VRC Metal Systems, LLC	W912HZ-21-C-0017		\$ 79,286
12	RD 232191	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Wasatch Molecular Incorporated	AIR FORCE RESEARCH LABOR		\$ 117,066
12	RD 238053	U.S. Department of Defense Research and Development	Research and Development	\$ 262,508,010	\$ 675,184,680	N	Yanhai Power Technology, LLC	238053		\$ 1,571
14	906	Healthy Homes Technical Studies Grants	Research and Development	\$ 51,847	\$ 675,184,680	N	George Washington University	U.S. DEPARTMENT OF HOUSI		\$ 51,847
15	232	Wildland Fire Research and Studies	Research and Development	\$ 11,794	\$ 675,184,680	N	Joint Fire Sciences Program	INTERIOR		\$ 11,794
15	608	Fish and Wildlife Management Assistance	Research and Development	\$ 73,150	\$ 675,184,680	N	COP: Fish & Boat Commission	N/A		\$ 73,150
15	634	State Wildlife Grants	Research and Development	\$ 138,360	\$ 675,184,680	N	COP: Fish & Boat Commission	U.S. FISH AND WILDLIFE S		\$ 138,360
15	657	Endangered Species Conservation – Recovery Implementation Funds	Research and Development	\$ 18,434	\$ 675,184,680	N	National Fish and Wildlife Foundation	N/A		\$ 18,434
15	662	Great Lakes Restoration	Research and Development	\$ 794,432	\$ 675,184,680	Y			\$ 214,108	\$ 794,432
15	678	Cooperative Ecosystem Studies Units	Research and Development	\$ (65)	\$ 675,184,680	Y				\$ (65)
15	805	Assistance to State Water Resources Research Institutes	Research and Development	\$ 150,113	\$ 675,184,680	Y				\$ 89,512
15	805	Assistance to State Water Resources Research Institutes	Research and Development	\$ 150,113	\$ 675,184,680	Y			\$ 11,051	\$ 60,601
15	808	U.S. Geological Survey Research and Data Collection	Research and Development	\$ 12,200	\$ 675,184,680	Y				\$ 4,684
15	808	U.S. Geological Survey Research and Data Collection	Research and Development	\$ 12,200	\$ 675,184,680	N	Michigan Technological University	G21AC10745-02		\$ 7,516
15	812	Cooperative Research Units	Research and Development	\$ 494,457	\$ 675,184,680	Y				\$ 494,497
15	812	Cooperative Research Units	Research and Development	\$ 494,457	\$ 675,184,680	N	North Carolina State University	U.S. GEOLOGICAL SURVEY		\$ (40)
15	815	National Land Remote Sensing Education Outreach and Research	Research and Development	\$ 4,013	\$ 675,184,680	N	California University of Pennsylvania	N/A		\$ 4,013
15	923	National Center for Preservation Technology and Training	Research and Development	\$ 28,667	\$ 675,184,680	N	National Center for Preservation Technology and Training	N/A		\$ 28,667
15	945	Cooperative Research and Training Programs – Resources of the National Park Syst	Research and Development	\$ 446,409	\$ 675,184,680	Y				\$ 402,008
15	RD 10/1/21-12/31/22	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	Y				\$ 5,422
15	RD 236575	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	Y				\$ 23,957
15	RD 9906-PO139230	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	Boise State University	PC1AC11073-00		\$ 281
15	RD 4100082356	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	COP: Fish & Boat Commission	1434-03HQURU1548		\$ (880,784)
15	RD 1434-03HQURU1548	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	COP: Game Commission	U.S. FISH AND WILDLIFE S		\$ (1,706)
15	RD RES PROJ 30	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	COP: Game Commission	U.S. FISH AND WILDLIFE S		\$ 174,919
15	RD RES PROJ 34	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	COP: Game Commission	U.S. FISH AND WILDLIFE S		\$ 41,233
15	RD 248635	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	Resource Systems Group, Inc.	248635		\$ 3,014
15	RD 1003410G-PSU	U.S. Department of Interior Research and Development	Research and Development	\$ (629,281)	\$ 675,184,680	N	Wyoming, University of	P14AC00749		\$ 4,383
16	560	National Institute of Justice Research, Evaluation, and Development Project Gran	Research and Development	\$ 1,576,372	\$ 675,184,680	Y				\$ 469,269
16	560	National Institute of Justice Research, Evaluation, and Development Project Gran	Research and Development	\$ 1,576,372	\$ 675,184,680	Y			\$ 228,351	\$ 560,245
16	560	National Institute of Justice Research, Evaluation, and Development Project Gran	Research and Development	\$ 1,576,372	\$ 675,184,680	N	Indiana University-Purdue University at Indianapolis	NATIONAL INSTITUTE OF JU		\$ 23,543
16	560	National Institute of Justice Research, Evaluation, and Development Project Gran	Research and Development	\$ 1,576,372	\$ 675,184,680	N	Iowa State University	2018ARBX0004		\$ 155,991
16	560	National Institute of Justice Research, Evaluation, and Development Project Gran	Research and Development	\$ 1,576,372	\$ 675,184,680	N	University of Texas at San Antonio	N/A		\$ 55,363
16	575	Crime Victim Assistance	Research and Development	\$ 518,855	\$ 675,184,680	N	Safe Journey	N/A		\$ 19,759
16	738	Edward Byrne Memorial Justice Assistance Grant Program	Research and Development	\$ 96,767	\$ 675,184,680	N	COP: Commission on Crime and Delinquency	U.S. DEPARTMENT OF JUSTI		\$ (544)
16	738	Edward Byrne Memorial Justice Assistance Grant Program	Research and Development	\$ 96,767	\$ 675,184,680	N	COP: State Police	N/A		\$ 50,493
16	754	Harold Rogers Prescription Drug Monitoring Program	Research and Development	\$ 144,552	\$ 675,184,680	N	PA Prescription Drug Monitoring Programs	N/A	\$ 60,400	\$ 144,552
16	812	Second Chance Act Reentry Initiative	Research and Development	\$ 16,827	\$ 675,184,680	N	COP: Board of Probation and Parole	N/A		\$ 16,827
16	RD 4300727362	U.S. Department of Justice Research and Development	Research and Development	\$ 48,359	\$ 675,184,680	N	COP: Board of Probation and Parole	4300727362		\$ 1,814

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
16	RD 4300595261	U.S. Department of Justice Research and Development	Research and Development	\$ 48,359	\$ 675,184,680	N	COP: Department of Corrections	U.S. DEPARTMENT OF JUSTI		\$ 4,676
16	RD 4300727370	U.S. Department of Justice Research and Development	Research and Development	\$ 48,359	\$ 675,184,680	N	COP: Department of Corrections	4300727370		\$ 32,260
16	RD 2019-VT-BX-0109	U.S. Department of Justice Research and Development	Research and Development	\$ 48,359	\$ 675,184,680	N	YWCA of Greater Pittsburgh	2019-VT-BX-0109		\$ 9,609
19	040	Public Diplomacy Programs	Research and Development	\$ 58,990	\$ 675,184,680	Y				\$ 9,261
19	040	Public Diplomacy Programs	Research and Development	\$ 58,990	\$ 675,184,680	Y			\$ 18,913	\$ 42,265
19	040	Public Diplomacy Programs	Research and Development	\$ 58,990	\$ 675,184,680	Y	American Councils	SRS50021GR3010		\$ 3,794
19	522	Overseas Refugee Assistance Programs for Strategic Global Priorities	Research and Development	\$ 83,796	\$ 675,184,680	Y			\$ 66,497	\$ 83,796
19	900	AECA/ESF PD Programs	Research and Development	\$ 64,292	\$ 675,184,680	N	American Councils	SUZ80021CA3148		\$ 6,291
20	108	Aviation Research Grants	Research and Development	\$ 238,876	\$ 675,184,680	Y				\$ 238,876
20	109	Air Transportation Centers of Excellence	Research and Development	\$ 2,096,874	\$ 675,184,680	Y				\$ 1,064,989
20	109	Air Transportation Centers of Excellence	Research and Development	\$ 2,096,874	\$ 675,184,680	Y			\$ 258,610	\$ 1,031,885
20	200	Highway Research and Development Program	Research and Development	\$ 182,995	\$ 675,184,680	N	National Cooperative Highway Research Program	HIGHWAY RESEARCH	\$ 50,366	\$ 182,995
20	205	Highway Planning and Construction	Research and Development	\$ 47,861	\$ 675,184,680	N	Montana Department of Transportation	N/A		\$ 25,973
20	205	Highway Planning and Construction	Research and Development	\$ 47,861	\$ 675,184,680	N	PennDOT	N/A		\$ 21,888
20	215	Highway Training and Education	Research and Development	\$ 2,331	\$ 675,184,680	Y				\$ 2,331
20	219	Recreational Trails Program	Research and Development	\$ 30,205	\$ 675,184,680	N	COP: Department of Conservation and Natural Resources	N/A		\$ 30,205
20	325	Consolidated Rail Infrastructure and Safety Improvements	Research and Development	\$ 148,760	\$ 675,184,680	N	Kansas State University	N/A		\$ 148,760
20	529	Bus Testing Facility	Research and Development	\$ 2,731,912	\$ 675,184,680	Y				\$ 2,632,995
20	529	Bus Testing Facility	Research and Development	\$ 2,731,912	\$ 675,184,680	Y			\$ 69,186	\$ 98,917
20	701	University Transportation Centers Program	Research and Development	\$ 2,189,761	\$ 675,184,680	Y			\$ 1,643,434	\$ 2,127,845
20	701	University Transportation Centers Program	Research and Development	\$ 2,189,761	\$ 675,184,680	N	Missouri University of Science and Technology	135461 SPC002095		\$ 42,052
20	701	University Transportation Centers Program	Research and Development	\$ 2,189,761	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	69A3551747115		\$ 19,864
20	RD 13-C-AJFE-PSU AMEND 31	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	Y				\$ (1,173)
20	RD 693JJ618C000009	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	Y				\$ 2,093
20	RD 693JJ621C000001	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	Y				\$ 104,634
20	RD PA-2021-052-00	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	Y				\$ 1,151,457
20	RD 245582	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	Callentis Consulting Group, LLC	245582		\$ 46,991
20	RD 228213	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	FBS, Inc. (Feature Based Systems)	U.S. DEPARTMENT OF TRANS		\$ 77,132
20	RD PENNSTATEADS2021	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	PennDOT	PENNSTATEADS2021		\$ 251,574
20	RD 22205 TASK ORDER 94 AMEND 4A	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	Pratt and Whitney	DTFAWA-15-A-80010		\$ 46,816
20	RD 19200267-030	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	Purdue University	693JJ31950019		\$ 40,421
20	RD 1142 826418 PO 1194230	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	Rutgers-The State University of New Jersey	693JJ619C000013		\$ 1,400
20	RD 39541-12	U.S. Department of Transportation Research and Development	Research and Development	\$ 1,746,613	\$ 675,184,680	N	Vanasse Hangen Brustlin, Inc.	39541-12		\$ 25,268
39	RD 2016-OCC7209	General Services Administration Research and Development	Research and Development	\$ 2,452,322	\$ 675,184,680	N	COP: Department of General Services	2016-OCC7209		\$ 37,082
39	RD 4300556762	General Services Administration Research and Development	Research and Development	\$ 2,452,322	\$ 675,184,680	N	COP: Department of General Services	4300556762		\$ 762,393
39	RD 4300685025	General Services Administration Research and Development	Research and Development	\$ 2,452,322	\$ 675,184,680	N	COP: Department of General Services	4300685025		\$ 3,887
39	RD 4400016637	General Services Administration Research and Development	Research and Development	\$ 2,452,322	\$ 675,184,680	N	COP: Department of General Services	4400016637		\$ 1,648,960
42	RD 235563	Library of Congress Research and Development	Research and Development	\$ 679	\$ 675,184,680	N	Waynesburg University	235563		\$ 679
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	Y				\$ 4,279,712
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	Y			\$ 2,466,427	\$ 4,627,683
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	CARLETON COLLEGE Attn: Business Office	80NSSC21K2006		\$ 23,539
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Cornell University	80NSSC20K1533		\$ 9,587
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Georgetown University	NATIONAL AERONAUTICS AND		\$ 95,167
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Jet Propulsion Laboratory	80NM0018D0004		\$ 23,304
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Jet Propulsion Laboratory	NASA		\$ 191,688

See notes to schedule of expenditures of federal awards.



**THE PENNSYLVANIA STATE UNIVERSITY**  
**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Jet Propulsion Laboratory	NATIONAL AERONAUTICS AND		\$ 17,348
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Montana State University	NNX16AJ62G		\$ 18,967
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	PRESIDENT AND FELLOWS OF HARVARD COLLEGE HARVARD UNIVERSITY	80NSSC22K0233		\$ 41,743
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	N/A		\$ 187,636
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	80NSSC19K0234		\$ 17,993
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	80NSSC19K0371		\$ 31,690
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	NAS8-03060		\$ 113,167
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Southwest Research Institute	N/A		\$ 36,619
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Space Telescope Science Institute	NASA		\$ 137,745
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	Texas A&M University	80NSSC21K0685		\$ 92,991
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	University of Chicago	N/A		\$ 214,238
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	University of Chicago	80NSSC21M0116		\$ 100,385
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	University of Iowa	80NSSC22K0159 & P01		\$ 25,211
43	001	Science	Research and Development	\$ 10,296,162	\$ 675,184,680	N	University of Rochester	N/A		\$ 9,749
43	002	Aeronautics	Research and Development	\$ 1,355,868	\$ 675,184,680	Y				\$ 57,335
43	002	Aeronautics	Research and Development	\$ 1,355,868	\$ 675,184,680	Y			\$ 353,765	\$ 958,768
43	002	Aeronautics	Research and Development	\$ 1,355,868	\$ 675,184,680	N	Brown University	80NSSC21M0107		\$ 58,197
43	002	Aeronautics	Research and Development	\$ 1,355,868	\$ 675,184,680	N	University of Tennessee - Knoxville	NNX17AJ95A		\$ 281,568
43	007	Space Operations	Research and Development	\$ 44,449	\$ 675,184,680	Y				\$ 44,449
43	008	Education	Research and Development	\$ 1,369,657	\$ 675,184,680	Y				\$ 150,671
43	008	Education	Research and Development	\$ 1,369,657	\$ 675,184,680	Y			\$ 215,888	\$ 1,089,670
43	008	Education	Research and Development	\$ 1,369,657	\$ 675,184,680	N	Florida International University	80NSSC19M0201		\$ 129,316
43	012	Space Technology	Research and Development	\$ 626,971	\$ 675,184,680	Y				\$ 583,192
43	012	Space Technology	Research and Development	\$ 626,971	\$ 675,184,680	Y			\$ 340	\$ 40,254
43	012	Space Technology	Research and Development	\$ 626,971	\$ 675,184,680	N	Michigan Technological University	NNX17AJ32G		\$ 3,525
43	RD	242767	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	Y				\$ (20)
43	RD	249253	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	Y				\$ 2,542
43	RD	256511	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	Y				\$ 1,817
43	RD	80NSSC20P2130	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	Y				\$ 46,198
43	RD	80NSSC21PO175	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	Y				\$ 4,346
43	RD	NAS5-00136	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	Y				\$ 1,981,997
43	RD	PSU083120	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	American GNC Corporation	NASA		\$ 11,525
43	RD	2102404PSU01	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Applied Optimization	80NSSC21C0103		\$ 33,617
43	RD	981089	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Ballydel Technologies, Inc	80NSSC21C0129		\$ 30,860
43	RD	1557824	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Colorado, University of	80NSSC19K0450		\$ 45,518
43	RD	1559104	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Colorado, University of	1559104		\$ 81,515
43	RD	21-042	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Continuum Dynamics, Inc.	21-042		\$ 37,003
43	RD	21-067	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Continuum Dynamics, Inc.	21-067		\$ 55,768
43	RD	PO 21-013A	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Continuum Dynamics, Inc.	PO 21-013A		\$ 100,877

See notes to schedule of expenditures of federal awards.

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
43	RD	252606	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Innovative Dynamics Inc.	80NSSC21C0531	\$ 40,493
43	RD	1547612	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Jet Propulsion Laboratory	NNN12AA01C	\$ 125,849
43	RD	1549273	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Jet Propulsion Laboratory	NNN12AA01C	\$ 110,473
43	RD	1646897	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Jet Propulsion Laboratory	NATIONAL AERONAUTICS AND	\$ 3,611
43	RD	1666453	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Jet Propulsion Laboratory	1666453	\$ 23,363
43	RD	1666515	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Jet Propulsion Laboratory	1666515	\$ 52,180
43	RD	1666517	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Jet Propulsion Laboratory	1666517	\$ 29,639
43	RD	1651833	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	JPL Productions	NASA	\$ 84,427
43	RD	235820	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Masten Space Systems	NSAS	\$ 52,391
43	RD	MSS-AGM-1716-005	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Masten Space Systems	MSS-AGM-1716-005	\$ 174,935
43	RD	2021-0507	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Nanohmics, Inc.	2021-0507	\$ 30,000
43	RD	250566	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Phoenix Analysis & Design Technologies	250566	\$ 7,108
43	RD	245732	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	PhotonFolds	245732	\$ 29,998
43	RD	22205 TASK 146	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Pratt and Whitney	80GRC021CA008	\$ 327,317
43	RD	26422	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	SET Group, LLC	80NSSC18C0125	\$ 86
43	RD	GO0-21078D	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	NAS8-03060	\$ 4,626
43	RD	GO0-21079A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	NAS8-03060	\$ 8,560
43	RD	GO0-21080X	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	GO0-21080X	\$ 25,440
43	RD	GO9-20044X	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	NAS8-03060	\$ 42,247
43	RD	GO9-20066A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	NAS8-03060	\$ 14,470
43	RD	SV4-74018	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Smithsonian Astrophysical Observatory (The)	NAS8-03060	\$ 317,788
43	RD	HST-AR-15005.001-A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Space Telescope Science Institute	NASA	\$ 20,504
43	RD	HST-AR-16607.001-A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Space Telescope Science Institute	HST-AR-16607.001-A	\$ 32,877
43	RD	HST-GO-15318.003-A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Space Telescope Science Institute	HST-GO-15318.003-A	\$ 12,045
43	RD	HST-GO-15705.003-A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Space Telescope Science Institute	NASA	\$ 9,980
43	RD	HST-GO-15875.008-A	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Space Telescope Science Institute	NASA	\$ 66,526
43	RD	220677 80NSSC19C0007	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	Terves, LLC.	80NSSC19C0007	\$ 17,882
43	RD	145170	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	The Johns Hopkins University Applied Physics Laboratory LLC	80NSSC17K0591	\$ 93,642
43	RD	147577	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	The Johns Hopkins University Applied Physics Laboratory LLC	NNN06AA01C	\$ 484,375
43	RD	245468	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	The Johns Hopkins University Applied Physics Laboratory LLC	245468	\$ 54,320
43	RD	S-196-000-001	National Aeronautics and Space Administration Research and Development	Research and Development	\$ 4,853,014	\$ 675,184,680	N	UES, Inc.	80NSSC21C0586	\$ 109,827

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
43	RD	XC19007	National Aeronautics and Space Administration Research and Development	\$ 4,853,014	\$ 675,184,680	N	Ultra Safe Nuclear Corporation	80NSSC19C0202		\$ 12,472
45	024		Promotion of the Arts Grants to Organizations and Individuals	\$ 34,499	\$ 675,184,680	Y				\$ 9,570
45	161		Promotion of the Humanities Research	\$ 173,756	\$ 675,184,680	Y				\$ 135,256
45	161		Promotion of the Humanities Research	\$ 173,756	\$ 675,184,680	Y			\$ 18,144	\$ 38,500
45	169		Promotion of the Humanities Office of Digital Humanities	\$ 40,834	\$ 675,184,680	Y				\$ 40,834
45	301		Museums for America	\$ 53,750	\$ 675,184,680	Y				\$ 9,521
45	312		National Leadership Grants	\$ 49,377	\$ 675,184,680	Y				\$ 32,388
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	Y				\$ 86,595
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	Y				\$ 11,191,186
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	Y			\$ 422,919	\$ 1,336,424
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Case Western Reserve University	NATIONAL SCIENCE FOUNDAT		\$ (1,159)
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	H Quest Vanguard Inc.	1914147		\$ (117)
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Michigan Technological University	CBET-1639342		\$ 11,138
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Minnesota, University of	N/A		\$ 32,592
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	North Carolina State University	EEC-1160483		\$ 192,686
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Ohio State University	1822144		\$ 1,261
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Ohio State University	NSF		\$ 135,227
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	spotLESS Materials LLC	NSF		\$ 13,781
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	The Trustees of the University of Pennsy Ivania	CMMI-1548571		\$ 5,094
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Trinity University	1803769		\$ 105,993
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	University of Maryland	IIP2044502		\$ 53,842
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	N/A		\$ 13,078
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	IIP-1738689		\$ 76,904
47	041		Engineering	\$ 13,284,806	\$ 675,184,680	N	Virginia, University of	2132918		\$ 30,281
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	Y				\$ 26,470
47	049	COVID-19	COVID-19 - Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	Y				\$ 12,141
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	Y				\$ 15,102,879
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	Y			\$ 621,191	\$ 2,988,624
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	Board of Regents of The University of Wisconsin System	1700765		\$ 24,362
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	Florida International University	2122078		\$ 27,534
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	Missouri University of Science and Technology	1953117		\$ 11,592
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	National Radio Astronomy Observatory	N/A		\$ 16,586
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	National Radio Astronomy Observatory	NSF		\$ 85,552
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	Norfolk State University	1832031		\$ 46,048
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	PRESIDENT AND FELLOWS OF HARVARD COLLEGE HARVARD UNIVERSITY	AST-2007811		\$ 10,974
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University Auxiliary Services, Inc. (California State University)	DMR-1523588		\$ 15,199
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Arkansas	N/A		\$ 148,554
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Illinois at Urbana-Champaign	2019897		\$ 76,917
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Pittsburgh	N/A		\$ 28,573
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Pittsburgh	1740630		\$ (11,582)
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Wisconsin-Madison	1913607-PHY		\$ 171,807
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Wisconsin-Madison	DMS-2122074		\$ 87,467
47	049		Mathematical and Physical Sciences	\$ 19,017,741	\$ 675,184,680	N	University of Wisconsin-Milwaukee	2110594		\$ 148,044
47	050		Geosciences	\$ 8,905,307	\$ 675,184,680	Y				\$ 104,122
47	050	COVID-19	COVID-19 - Geosciences	\$ 8,905,307	\$ 675,184,680	Y				\$ 342,371
47	050		Geosciences	\$ 8,905,307	\$ 675,184,680	Y				\$ 6,387,626
47	050		Geosciences	\$ 8,905,307	\$ 675,184,680	Y			\$ 514,476	\$ 1,487,657
47	050		Geosciences	\$ 8,905,307	\$ 675,184,680	N	Colorado School of Mines	NATIONAL SCIENCE FOUNDAT		\$ (7,638)

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**THE PENNSYLVANIA STATE UNIVERSITY**  
**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Consortium of Univ for the Advancement of Hydrologic Science, Inc.	N/A		\$ 61,978
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Cornell University	N/A		\$ 40,119
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Michigan Technological University	2133229		\$ 33,520
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	New York University	OPP-1739003		\$ 96,797
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Oregon State University OREGON STATE UNIVERSITY OFFICE OF	N/A		\$ (5,016)
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Rutgers-The State University of New Jersey	2108984		\$ 67,508
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	University of California at Davis	1748052		\$ 4,061
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	University of Colorado at Boulder	EAR 1826850		\$ 35,570
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	University of Colorado at Boulder	EAR 2012669		\$ 104,037
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Vermont, University of	2012123		\$ 152,479
47 050		Geosciences	Research and Development	\$ 8,905,307	\$ 675,184,680	N	Woods Hole Oceanographic Institution	OCE1638805		\$ 116
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	Y				\$ 17,172
47 070	COVID-19	COVID-19 - Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	Y				\$ 73,832
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	Y				\$ 8,772,027
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	Y			\$ 156,566	\$ 1,131,185
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	N	Board of Regents of The University of Wisconsin System	1934752		\$ 187,898
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	N	Northern Arizona University	1639529		\$ 17,450
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	N	Rutgers-The State University of New Jersey	1640834		\$ (37)
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	N	University of Cincinnati	NA		\$ 9,500
47 070		Computer and Information Science and Engineering	Research and Development	\$ 10,239,077	\$ 675,184,680	N	Yale University	2018873		\$ 30,050
47 074	COVID-19	COVID-19 - Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	Y				\$ 12,748
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	Y				\$ 6,713,451
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	Y			\$ 579,479	\$ 1,397,011
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Michigan State University	1740874		\$ 106,793
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Minnesota, University of	IOS1856744		\$ 113,622
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Montana State University	1716698		\$ 50,144
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Oklahoma State University	2120085		\$ 94
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Purdue University	1831493-DEB		\$ 37,172
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Saint Louis University	NSF		\$ 89,669
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	University of California at Los Angeles	2033263:001		\$ 43,519
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	University of Colorado at Boulder	NSF DBI 2014217		\$ 302,859
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Virginia Institute of Marine Science	1754692		\$ 29,764
47 074		Biological Sciences	Research and Development	\$ 8,961,032	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	IOS-1856450		\$ 64,186
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	Y			\$ 191,569	\$ 2,215,016
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	Y				\$ 455,713
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	N	City University of New York	2127329		\$ 4,082
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	N	Indiana University (State of Indiana)	1759694		\$ 1,251
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	N	Michigan State University	1946678		\$ 10,274
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	N	Minnesota, University of	1825768		\$ 14,940
47 075		Social, Behavioral, and Economic Sciences	Research and Development	\$ 2,784,735	\$ 675,184,680	N	Ohio State University	1617185		\$ 83,459
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	Y				\$ 97,711
47 076	COVID-19	COVID-19 - Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	Y				\$ 8,224
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	Y				\$ 6,431,071
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	Y			\$ 239,660	\$ 1,511,093
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Concord Consortium (The)	293.01		\$ 48,414
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Concord Consortium (The)	DRL-1812362		\$ 221,994
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Concord Consortium (The)	DRL-2006144		\$ 179,148
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Concord Consortium (The)	DRL-2101382		\$ 70,600
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Norfolk State University	1547771		\$ 23,489
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	North Carolina State University	1761110		\$ 12,875
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Northern Arizona University	1856384		\$ 4,184
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	Pasadena City College	NSF 2000281		\$ 143,657
47 076		Education and Human Resources	Research and Development	\$ 8,769,149	\$ 675,184,680	N	University of Illinois	1639340		\$ 16,689
47 078	COVID-19	COVID-19 - Polar Programs	Research and Development	\$ 856,753	\$ 675,184,680	Y				\$ 631

See notes to schedule of expenditures of federal awards.

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
47 078		Polar Programs	Research and Development	\$ 856,753	\$ 675,184,680	Y			\$	\$ 354,016
47 078		Polar Programs	Research and Development	\$ 856,753	\$ 675,184,680	Y			\$ 217,757	\$ 496,697
47 078		Polar Programs	Research and Development	\$ 856,753	\$ 675,184,680	N	Ohio State University	NSF		\$ 5,409
47 079		Office of International Science and Engineering	Research and Development	\$ 151,136	\$ 675,184,680	Y				\$ 125,466
47 079		Office of International Science and Engineering	Research and Development	\$ 151,136	\$ 675,184,680	Y			\$ 21,000	\$ 25,670
47 083	COVID-19	COVID-19 - Integrative Activities	Research and Development	\$ 1,178,533	\$ 675,184,680	Y			\$ 10,978	\$ 27,422
47 083		Integrative Activities	Research and Development	\$ 1,178,533	\$ 675,184,680	Y				\$ 548,781
47 083		Integrative Activities	Research and Development	\$ 1,178,533	\$ 675,184,680	Y			\$ 203,030	\$ 588,691
47 083		Integrative Activities	Research and Development	\$ 1,178,533	\$ 675,184,680	N	Boise State University	NATIONAL SCIENCE FOUNDAT		\$ 4,639
47 083		Integrative Activities	Research and Development	\$ 1,178,533	\$ 675,184,680	N	Iowa State University	N/A		\$ 9,000
47 RD	AGS-2214364	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 77,100
47 RD	CMMI-2034459-001	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 233,867
47 RD	49100421C0022	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 91,628
47 RD	CNS 16-50527	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ (169)
47 RD	DBI 16-61132	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 5,400
47 RD	EAR-2127522	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 218,625
47 RD	ICER 17-36333	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ (905)
47 RD	IIP 18-41453	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 37,391
47 RD	IIP 19-16707	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 99,161
47 RD	IIP-1624727	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 274,447
47 RD	PHY 20-15651	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 53,449
47 RD	PHY-2015651	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 104,015
47 RD	TI-2211273	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	Y				\$ 40,864
47 RD	257021	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	American Sociological Association	257021		\$ 270
47 RD	IIP-1841474 PO 4400334676	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Amgen	IIP-1841474 PO 4400334676		\$ 406,478
47 RD	214173	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Association of Public and Land Grant Universities	NATIONAL SCIENCE FOUNDAT		\$ 15,010
47 RD	255074	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Idaho, University of	255074		\$ 674
47 RD	702-111020-3	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	MRIGlobal	17-84		\$ 7,032
47 RD	25-6238-0918-002	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Nebraska, University of	1924322		\$ 16,097
47 RD	181223 PO101204	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	North Carolina Central University	181223 PO101204		\$ 8,928
47 RD	10001564-008	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Purdue University	1901932-DBI		\$ 9,662
47 RD	238077	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Quantitative Scientific Solutions, LLC	238077		\$ 72,917
47 RD	2229	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Rutgers-The State University of New Jersey	2103754		\$ 28,049
47 RD	010471-003	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	University of Cincinnati	1635089		\$ (1,797)
47 RD	SUB00002345	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	University of Florida	SUB00002345		\$ 59,146
47 RD	0000000032	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	University of Wisconsin-Madison	1719277-PHY		\$ 12,872
47 RD	0000000533	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	University of Wisconsin-Madison	1935550-CMMI		\$ 10,841
47 RD	10061920-01-PSU	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Utah, University of	2220826		\$ 202,106
47 RD	480167-19079	National Science Foundation Research and Development	Research and Development	\$ 2,084,296	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	MCB-1919455		\$ 1,138
58 RD	8/1/19-11/30/20	Securities and Exchange Commission Research and Development	Research and Development	\$ 287,562	\$ 675,184,680	Y				\$ 287,562
59 RD	247723	Small Business Administration Research and Development	Research and Development	\$ 5,317	\$ 675,184,680	N	Drexel University	247723		\$ 3,426
59 RD	247874	Small Business Administration Research and Development	Research and Development	\$ 5,317	\$ 675,184,680	N	InfiniFluidics	247874		\$ 1,891
64 RD	242009	Department of Veterans Affairs Research and Development	Research and Development	\$ 17,541	\$ 675,184,680	Y				\$ 17,541
66 419		Water Pollution Control State, Interstate, and Tribal Program Support	Research and Development	\$ 43,050	\$ 675,184,680	N	COP: Department of Environmental Protection	N/A		\$ 43,050
66 436		Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	Research and Development	\$ 214,086	\$ 675,184,680	Y				\$ 205,411
66 456		National Estuary Program	Research and Development	\$ 4,966	\$ 675,184,680	N	Partnership for the Delaware Estuary	N/A		\$ 4,966
66 461		Regional Wetland Program Development Grants	Research and Development	\$ 43,058	\$ 675,184,680	N	COP: Department of Environmental Protection	N/A		\$ 43,058
66 466		Chesapeake Bay Program	Research and Development	\$ 373,481	\$ 675,184,680	Y				\$ 195,572
66 511		Office of Research and Development Consolidated Research/Training/Fellowships	Research and Development	\$ 179,107	\$ 675,184,680	N	Purdue University	N/A		\$ 179,107
66 605		Performance Partnership Grants	Research and Development	\$ 60,668	\$ 675,184,680	N	Maryland Department of the Environment	N/A		\$ 60,668

See notes to schedule of expenditures of federal awards.



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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
66	RD 4300640900	Environmental Protection Agency Research and Development	Research and Development	\$ 133,506	\$ 675,184,680	N	COP: Department of Environmental Protection	ENVIRONMENTAL PROTECTION		\$ 18,683
66	RD 4989-RFA E20-2/21-12	Environmental Protection Agency Research and Development	Research and Development	\$ 133,506	\$ 675,184,680	N	Health Effects Institute	4989-RFA E20-2/21-12		\$ 89,558
66	RD 011036-005	Environmental Protection Agency Research and Development	Research and Development	\$ 133,506	\$ 675,184,680	N	University of Cincinnati	SU83694001		\$ 8,405
66	RD TTR2021-006	Environmental Protection Agency Research and Development	Research and Development	\$ 133,506	\$ 675,184,680	N	Wood Environment & Infrastructure Solutions, Inc.	68HERH21D0006		\$ 16,860
77	008	U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program	Research and Development	\$ 190,806	\$ 675,184,680	Y				\$ 118,141
77	008	U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program	Research and Development	\$ 190,806	\$ 675,184,680	N	The Regents of the University of Michigan	N/A		\$ 72,665
77	RD 31310019D0004	Nuclear Regulatory Commission Research and Development	Research and Development	\$ (98,280)	\$ 675,184,680	Y				\$ (98,280)
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	Y				\$ 6,446,143
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	Y			\$ 2,439,449	\$ 7,180,058
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Arizona State University	DE-SC0010575		\$ 148,442
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Carnegie Mellon University	DE-SC0022277		\$ 26,896
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Columbia University	DE-SC0016579		\$ (1)
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Duryea Technologies	DOE		\$ 46,071
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Energy Driven Technologies, LLC.	DE-SC0017719		\$ 10,922
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Florida State University	U.S. DEPARTMENT OF ENER		\$ (4,061)
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Georgia Institute of Technology	DE-SC0012577		\$ 88,806
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	H Quest Vanguard Inc.	DE-SC0021767		\$ 25,531
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	HAMR, Industries LLC	DESC0018777		\$ 79,930
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Ionomer Solutions LLC	DE-SC0021877		\$ 45,805
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Johns Hopkins University	DE-SC0019331		\$ 188,219
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Louisiana State University	DE-SC0018989		\$ 11,700
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Louisiana State University	DE-SC0022304		\$ 117,708
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Luna Innovations, Inc.	DE-SC0018670		\$ 56,418
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Luna Innovations, Inc.	DOE		\$ 75,327
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	NanoSonic, Inc.	DOE		\$ 89,544
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Ohio State University	DE-SC0016584		\$ 60,967
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Parthian Energy	N/A		\$ 106,690
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Pennsylvania, University of	DE-SC0020360		\$ 37,036
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Princeton University	DE-SC0019364		\$ 34,494
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	QCoefficient, Inc.	DOE		\$ 24,130
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Starfire Industries, LLC	DESC0019828		\$ 63,699
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	The Board of Trustees of the Leland Stanford Junior University	DE-SC0016162	\$ 149,799	\$ 1,390,286
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	The Board of Trustees of the Leland Stanford Junior University	DE-SC0022222		\$ 14,583
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	THE RESEARCH FOUNDATION FOR STATE UNIVERSITY OF NEW YORK	DESC0021034		\$ 53,001
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Triton Systems, Inc.	N/A		\$ 40,000
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of California at Davis	DE-SC0016605		\$ 321,130
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of California at San Diego	DE-SC0021983		\$ 17,659
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Delaware	DE-SC0019155		\$ 45,899
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Illinois	DE-SC0018260		\$ 142,325
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Illinois	DE-SC0018420		\$ 92,534
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Massachusetts	U.S. DEPARTMENT OF ENER		\$ (13)
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Massachusetts Amherst	N/A		\$ 2,999
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Texas at Austin	DE-SC0018042		\$ 19,618
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	University of Texas at Dallas	DE-SC0010697		\$ 51,325
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Utah, University of	DE-SC0019285		\$ 203,542
81	049	Office of Science Financial Assistance Program	Research and Development	\$ 17,790,111	\$ 675,184,680	N	Washington University in St. Louis	U.S. DEPARTMENT OF ENER		\$ 119,051
81	057	University Coal Research	Research and Development	\$ 18,198	\$ 675,184,680	Y				\$ 18,198
81	086	Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	Y				\$ 1,230,909
81	086	Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	Y			\$ 489,422	\$ 790,243
81	086	Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	N	Louisiana State University	DE-EE0009101		\$ 34,589

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
81 086		Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	N	Metropolitan Energy Center, Inc.	DE-EE00008474		\$ 51,743
81 086		Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	N	Michigan State University	DE-EE0007803		\$ (1)
81 086		Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	N	The Regents of the University of Michiga	DE-EE0008456		\$ 73,766
81 086		Conservation Research and Development	Research and Development	\$ 2,231,468	\$ 675,184,680	N	The Regents of the University of Michiga	DE-EE0009402		\$ 50,219
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	Y				\$ 354,422
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	Y			\$ 112,792	\$ 251,010
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	Forest Concepts, LLC	U.S. DEPARTMENT OF ENERG		\$ 91,780
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	Oklahoma, University of	DE-EE0008602		\$ 49,990
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	Rensselaer Polytechnic Institute	DE-EE0007613		\$ 25,000
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	The Regents of the University of Michiga	DE-EE0008482		\$ 271,997
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	The REMADE Institute	N/A	\$ 23,550	\$ 72,679
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	University of California at Los Angeles	N/A	\$ 55,816	\$ 203,343
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	Utah, University of	DE EE0007080		\$ 112,018
81 087		Renewable Energy Research and Development	Research and Development	\$ 1,502,447	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	DE-EE0007613		\$ 70,208
81 089		Fossil Energy Research and Development	Research and Development	\$ 6,639,076	\$ 675,184,680	Y				\$ 366,654
81 089		Fossil Energy Research and Development	Research and Development	\$ 6,639,076	\$ 675,184,680	Y			\$ 3,021,708	\$ 5,988,619
81 089		Fossil Energy Research and Development	Research and Development	\$ 6,639,076	\$ 675,184,680	N	H Quest Vanguard Inc.	U.S. DEPARTMENT OF ENERG		\$ 28,621
81 089		Fossil Energy Research and Development	Research and Development	\$ 6,639,076	\$ 675,184,680	N	Illinois Institute of Technology Research Institute	DE-FE0031931		\$ 108,911
81 089		Fossil Energy Research and Development	Research and Development	\$ 6,639,076	\$ 675,184,680	N	University of Texas at Austin	DE-FE0031760		\$ 91,406
81 089		Fossil Energy Research and Development	Research and Development	\$ 6,639,076	\$ 675,184,680	N	Wyoming, University of	DE-FE0026825		\$ 54,865
81 113		Defense Nuclear Nonproliferation Research	Research and Development	\$ 208,230	\$ 675,184,680	N	The Regents of the University of Michiga	DE-NA0003920		\$ 204,045
81 113		Defense Nuclear Nonproliferation Research	Research and Development	\$ 208,230	\$ 675,184,680	N	The Regents of the University of Michiga n	DE-NA0003920		\$ 4,185
81 117		Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Trai	Research and Development	\$ 561,837	\$ 675,184,680	Y			\$ 240,284	\$ 561,837
81 121		Nuclear Energy Research, Development and Demonstration	Research and Development	\$ 2,616,689	\$ 675,184,680	Y				\$ 1,273,050
81 121		Nuclear Energy Research, Development and Demonstration	Research and Development	\$ 2,616,689	\$ 675,184,680	Y			\$ 839,778	\$ 1,248,755
81 121		Nuclear Energy Research, Development and Demonstration	Research and Development	\$ 2,616,689	\$ 675,184,680	N	Texas A&M University	DOE		\$ 31,226
81 121		Nuclear Energy Research, Development and Demonstration	Research and Development	\$ 2,616,689	\$ 675,184,680	N	The Regents of the University of Michiga n	N/A		\$ 63,658
81 135		Advanced Research Projects Agency - Energy	Research and Development	\$ 4,700,181	\$ 675,184,680	Y				\$ 1,465,853
81 135		Advanced Research Projects Agency - Energy	Research and Development	\$ 4,700,181	\$ 675,184,680	Y			\$ 2,072,158	\$ 2,684,700
81 135		Advanced Research Projects Agency - Energy	Research and Development	\$ 4,700,181	\$ 675,184,680	N	Energy Trading Analytics, LLC	DE-AR0001281		\$ 144,588
81 135		Advanced Research Projects Agency - Energy	Research and Development	\$ 4,700,181	\$ 675,184,680	N	United Technologies Corp.	DE-AR0000994		\$ 112,087
81 135		Advanced Research Projects Agency - Energy	Research and Development	\$ 4,700,181	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	N/A		\$ 292,953
81 RD	ADVANCE	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	Y				\$ 5,989
81 RD	SUB-2020-10315	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Alliance for Sustainable Energy, LLC	SUB-2020-10315		\$ 15,862
81 RD	SUB-2021-10566	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Alliance for Sustainable Energy, LLC	DE-AC36-08GO28308		\$ 15,371
81 RD	0F-60008	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Argonne National Laboratory	DE-AC02-06CH11357		\$ 212,730
81 RD	0F-60008	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Argonne National Laboratory	U.S. DEPARTMENT OF ENERG		\$ (73,141)
81 RD	IF-60481	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Argonne National Laboratory	IF-60481		\$ 74,266
81 RD	IF-60511	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Argonne National Laboratory	DE-AC02-06CH11357		\$ 5,091
81 RD	217047	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Idaho National Laboratory	U.S. DEPARTMENT OF ENERG		\$ 20,278
81 RD	4000167168	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	U.S. DEPARTMENT OF ENERG		\$ 67,864
81 RD	4000174451	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	U.S. DEPARTMENT OF ENERG		\$ 147,722

See notes to schedule of expenditures of federal awards.

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
81	RD	4000175374	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	U.S. DEPARTMENT OF ENERG	\$ 92,025
81	RD	4000180720 PO 4000192663	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	4000180720 PO 4000192663	\$ 20,869
81	RD	4000183827	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	4000183827	\$ 92,712
81	RD	4000185383	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	4000185383	\$ 65,042
81	RD	4000196107	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	DEAC0500R22725	\$ 25,386
81	RD	PO 4000194296	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Oak Ridge National Laboratory	DOE	\$ 367,406
81	RD	419294	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DEPARTMENT OF ENERGY	\$ 131
81	RD	432185	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	U.S. DEPARTMENT OF ENERG	\$ 6,988
81	RD	443328	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	U.S. DEPARTMENT OF ENERG	\$ 110,721
81	RD	504345	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	U.S. DEPARTMENT OF ENERG	\$ 306,440
81	RD	505195	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	U.S. DEPARTMENT OF ENERG	\$ (23,233)
81	RD	539058	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DOE	\$ 241,737
81	RD	559778	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DEAC0576RL01830	\$ (34)
81	RD	559779	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DEAC0576RL01830	\$ 17,828
81	RD	568397	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DEAC0576RL01830	\$ 17,828
81	RD	571684	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DEAC0576RL01830	\$ 1,212
81	RD	607619	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DE-AC05-76RL01830	\$ 21,405
81	RD	613949	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DE-AC05-76RL01830	\$ 38,667
81	RD	621010	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle - Pacific Northwest National Laboratory	DE-AC05-76RL01830	\$ 7,920
81	RD	512983	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Battelle Memorial Institute	DEAC0576RL01830	\$ (1)
81	RD	137358	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Bettis Atomic Power Laboratory	RFP RAM137358	\$ 204,464
81	RD	399118	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Brookhaven National Laboratory	399118	\$ 36,874
81	RD	238570	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Energy Fuels Inc.	238570	\$ 270,605
81	RD	132121	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Fluor Corporation	U.S. DEPARTMENT OF ENERG	\$ 77,128
81	RD	138219	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Fluor Marine Propulsion, LLC	138219	\$ 566,480
81	RD	140424	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Fluor Marine Propulsion, LLC	140424	\$ 101,280
81	RD	142087	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Fluor Marine Propulsion, LLC	142087	\$ 128,453
81	RD	142711	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Fluor Marine Propulsion, LLC	RFP CIM-142711	\$ 7,518
81	RD	RJ407-G1	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Georgia Institute of Technology	DE-FE0031288	\$ (3,589)
81	RD	N000441593	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Honeywell Federal Manufacturing & Technologies, LLC	N000441593	\$ 15,743
81	RD	7434356	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Berkeley National Laboratory	U.S. DEPARTMENT OF ENERG	\$ 111,499
81	RD	B630324	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Livermore National Laboratory	DE-AC52-07NA27344	\$ 17,092
81	RD	B639389	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Livermore National Laboratory	U.S. DEPARTMENT OF ENERG	\$ 1,794
81	RD	B644823	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Livermore National Laboratory	B644823	\$ 27,563
81	RD	B644865	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Livermore National Laboratory	B644865	\$ 140,557

See notes to schedule of expenditures of federal awards.



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**FOR THE YEAR ENDED JUNE 30, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
81	RD B645183	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Livermore National Laboratory	B645183		\$ 9,261
81	RD B651310	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Lawrence Livermore National Laboratory	DE-ACS2-07NA27344		\$ 15,907
81	RD COVID-19, P010221754 TASK ORDER 9	COVID-19 - U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leidos, Inc.	P010221754 TASK ORDER 9		\$ 6,722
81	RD P010221754 TASK ORDER 1	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leidos, Inc.	89243318CFE000003		\$ 29,790
81	RD P010221754 TASK ORDER 4	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leidos, Inc.	89243318CFE000003		\$ 172,494
81	RD P010221754 TASK ORDER 5	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leidos, Inc.	89243318CFE000003		\$ 124,517
81	RD P010221754 TASK ORDER 7	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leidos, Inc.	NATIONAL ENERGY TECHNOLO		\$ 72,873
81	RD P010221754 TASK ORDER 8	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leidos, Inc.	NATIONAL ENERGY TECHNOLO		\$ 104,677
81	RD LTI-FE0022594-PSU	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Leonardo Technologies, Inc.	LTI-FE0022594-PSU		\$ 76,454
81	RD 239439	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Materia USA, LLC	239439		\$ 182,272
81	RD 248907	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Minus 100, LLC	U.S. DEPT OF ENERGY		\$ 494
81	RD 215257 TASK ORDER 02	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Mission Support and Test Services, LLC	DE-NA0003624		\$ 805,245
81	RD 215257/01	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Mission Support and Test Services, LLC	DE-NA0003624		\$ (4,357)
81	RD 259565 EMAIL DATED 5/23/2022	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	National Renewable Energy Laboratory	259565 EMAIL DATED 5/23/2022		\$ 4,719
81	RD ACS-7-70122-01	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	National Renewable Energy Laboratory	U.S. DEPARTMENT OF ENERG		\$ 12,493
81	RD 231898 60076652/GR119343	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Ohio State University	SANDIA NATIONAL LABORATO		\$ 51,069
81	RD 243286	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Quantum Ventura Inc.	243286		\$ 66,283
81	RD 1356879 2329685	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	1356879 2329685		\$ 4,785
81	RD 1356879 PO 2222955	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	1356879 PO 2222955		\$ 114,408
81	RD 1356879 PO 2228336	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	1356879 PO 2228336		\$ 28,662
81	RD 1356879 PO 2240552	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	1356879 PO 2240552		\$ 24,303
81	RD 1356879 PO 2330452	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	1356879 PO 2330452		\$ 35,444
81	RD 1356879 TO 2143386	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	1356879 TO 2143386		\$ 20,961
81	RD 2278862	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	801KOB		\$ 10,027
81	RD 980057 PO 2166372	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	980057 PO 2166372		\$ 130,943
81	RD PO 2268517	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	801KOB		\$ 10,644
81	RD SNL 18-233	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Sandia National Laboratories	SNL 18-233		\$ (294)
81	RD 239441	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Texas Mineral Resources Corp.	239441		\$ 162,980
81	RD 246540	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Thar Energy, LLC	246540		\$ 1,540
81	RD SUBK00008626 PO 3004992137	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	The Regents of the University of Michiga	U.S. DEPARTMENT OF ENERG		\$ 138,750
81	RD 20-01-RR-4034	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	The REMADE Institute	DE-EE0007897		\$ 245,827
81	RD 20487	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Triad National Security, LLC (was LANL)	89233218CNA000001		\$ 5,174
81	RD 293402 WO 424285	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Triad National Security, LLC (was LANL)	DE-ACS2-06NA25396		\$ 119,143
81	RD 587178	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Triad National Security, LLC (was LANL)	89233218CNA000001		\$ 29,443
81	RD COVID-19, 293402_585371	COVID-19 - U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Triad National Security, LLC (was LANL)	U.S. DEPARTMENT OF ENERG		\$ 74,893
81	RD COVID-19, 587178 SUB 628058	COVID-19 - U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	Triad National Security, LLC (was LANL)	587178 SUB 628058		\$ 10,194
81	RD 980550	U.S. Department of Energy Research and Development	Research and Development	\$ 6,683,392	\$ 675,184,680	N	ULC Technologies, LLC	DEAR0001335		\$ 178,110
84	002	Adult Education - Basic Grants to States	Research and Development	\$ 702,841	\$ 675,184,680	Y				\$ 24,812
84	015	National Resource Centers Program for Foreign Language and Area Studies or Foreign	Research and Development	\$ 294,685	\$ 675,184,680	Y				\$ 294,685
84	017	International Research and Studies	Research and Development	\$ 94,418	\$ 675,184,680	Y				\$ 94,418

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
84 022		Overseas Programs - Doctoral Dissertation Research Abroad	Research and Development	\$ 53,831	\$ 675,184,680	Y				\$ 53,831
84 027		Special Education Grants to States	Research and Development	\$ 502,431	\$ 675,184,680	N	COP: Department of Education	U.S. DEPARTMENT OF EDUCA		\$ 1
84 103		TRIO Staff Training Program	Research and Development	\$ 347,364	\$ 675,184,680	Y				\$ 347,364
84 200		Graduate Assistance in Areas of National Need	Research and Development	\$ 499,566	\$ 675,184,680	Y				\$ 499,566
84 229		Language Resource Centers	Research and Development	\$ 85,808	\$ 675,184,680	Y			\$ 28,971	\$ 85,808
84 305		Education Research, Development and Dissemination	Research and Development	\$ 859,298	\$ 675,184,680	Y				\$ 617,827
84 305		Education Research, Development and Dissemination	Research and Development	\$ 859,298	\$ 675,184,680	Y			\$ 51,977	\$ 170,022
84 305		Education Research, Development and Dissemination	Research and Development	\$ 859,298	\$ 675,184,680	N	Portland State University	R305A180374		\$ 71,449
84 324		Research in Special Education	Research and Development	\$ 840,590	\$ 675,184,680	Y			\$ 223,164	\$ 665,170
84 324		Research in Special Education	Research and Development	\$ 840,590	\$ 675,184,680	N	The University of Texas Health Science Center at San Antonio	R324A200184		\$ 175,420
84 327		Special Education Educational Technology Media, and Materials for Individuals w	Research and Development	\$ 437,178	\$ 675,184,680	Y				\$ 437,178
84 335		Child Care Access Means Parents in School	Research and Development	\$ 243,719	\$ 675,184,680	Y				\$ 48,067
84 367		Supporting Effective Instruction State Grants	Research and Development	\$ 14,573	\$ 675,184,680	N	COP: Department of Education	U.S. DEPARTMENT OF EDUCA		\$ 14,573
84 RD	R305A150488	U.S. Department of Education Research and Development	Research and Development	\$ 70,813	\$ 675,184,680	Y				\$ (403)
84 RD	G0183A-B	U.S. Department of Education Research and Development	Research and Development	\$ 70,813	\$ 675,184,680	N	Oregon State University OREGON STATE UNIVERSITY OFFICE OF	DE-AR0001143		\$ 71,216
90 500		International Broadcasting Independent Grantee Organizations	Research and Development	\$ (12,515)	\$ 675,184,680	N	Radio Free Asia	N/A		\$ (12,515)
93 077		Family Smoking Prevention and Tobacco Control Act Regulatory Research	Research and Development	\$ 1,156,084	\$ 675,184,680	Y				\$ 1,156,084
93 080		Blood Disorder Program: Prevention, Surveillance, and Research	Research and Development	\$ 9,202	\$ 675,184,680	N	Children's Hospital of Philadelphia	N/A		\$ 9,202
93 086		Healthy Marriage Promotion and Responsible Fatherhood Grants	Research and Development	\$ 5,377	\$ 675,184,680	N	Texas State University	N/A		\$ 5,377
93 103	COVID-19	COVID-19 - Food and Drug Administration Research	Research and Development	\$ 308,247	\$ 675,184,680	Y				\$ 180,151
93 103		Food and Drug Administration Research	Research and Development	\$ 308,247	\$ 675,184,680	Y				\$ 106,030
93 103		Food and Drug Administration Research	Research and Development	\$ 308,247	\$ 675,184,680	N	University of Missouri	N/A		\$ 22,066
93 110		Maternal and Child Health Federal Consolidated Programs	Research and Development	\$ 249,806	\$ 675,184,680	Y			\$ 1,505	\$ 153,580
93 110		Maternal and Child Health Federal Consolidated Programs	Research and Development	\$ 249,806	\$ 675,184,680	N	Children's Hospital of Philadelphia	5 H30 MC24050-10-00		\$ 54,272
93 110		Maternal and Child Health Federal Consolidated Programs	Research and Development	\$ 249,806	\$ 675,184,680	N	Children's Hospital of Philadelphia	HEALTH RESOURCES AND SER		\$ (1)
93 110		Maternal and Child Health Federal Consolidated Programs	Research and Development	\$ 249,806	\$ 675,184,680	N	The Regents of the University of California, Los Angeles	5UA6MC32492-02-00		\$ 41,955
93 113		Environmental Health	Research and Development	\$ 2,613,474	\$ 675,184,680	Y				\$ 1,211,354
93 113		Environmental Health	Research and Development	\$ 2,613,474	\$ 675,184,680	Y			\$ 271,925	\$ 1,048,267
93 113		Environmental Health	Research and Development	\$ 2,613,474	\$ 675,184,680	N	Brigham & Women's Hospital	5R01ES029840-03		\$ 21,043
93 113		Environmental Health	Research and Development	\$ 2,613,474	\$ 675,184,680	N	Michigan State University	1R01ES029227		\$ 69,059
93 113		Environmental Health	Research and Development	\$ 2,613,474	\$ 675,184,680	N	Pennsylvania, University of	NATIONAL INSTITUTES OF H		\$ 215,511
93 113		Environmental Health	Research and Development	\$ 2,613,474	\$ 675,184,680	N	PRESIDENT AND FELLOWS OF HARVARD COLLEGE HARVARD UNIVERSITY	5R01ES028033-03		\$ 48,240
93 121		Oral Diseases and Disorders Research	Research and Development	\$ 1,695,648	\$ 675,184,680	Y				\$ 894,359
93 121		Oral Diseases and Disorders Research	Research and Development	\$ 1,695,648	\$ 675,184,680	Y			\$ 100,804	\$ 568,601
93 121		Oral Diseases and Disorders Research	Research and Development	\$ 1,695,648	\$ 675,184,680	N	Icahn School of Medicine at Mount Sinai	1R01DE029832-01A1		\$ 176,749
93 121		Oral Diseases and Disorders Research	Research and Development	\$ 1,695,648	\$ 675,184,680	N	Phoenix Children's Hospital	5U01DE029750-02		\$ 27,409
93 121		Oral Diseases and Disorders Research	Research and Development	\$ 1,695,648	\$ 675,184,680	N	University of Pittsburgh	5R01DE027023-06		\$ 28,530
93 137	COVID-19	COVID-19 - Community Programs to Improve Minority Health Grant Program	Research and Development	\$ 79,805	\$ 675,184,680	N	City of Reading	1 CPI MP211290-01-00		\$ 79,805
93 172		Human Genome Research	Research and Development	\$ 3,128,996	\$ 675,184,680	Y				\$ 383,269
93 172		Human Genome Research	Research and Development	\$ 3,128,996	\$ 675,184,680	Y			\$ 1,007,996	\$ 2,351,352
93 172		Human Genome Research	Research and Development	\$ 3,128,996	\$ 675,184,680	N	Johns Hopkins University	N/A		\$ 63,912
93 172		Human Genome Research	Research and Development	\$ 3,128,996	\$ 675,184,680	N	Johns Hopkins University	U24HG010263		\$ 289,461
93 172		Human Genome Research	Research and Development	\$ 3,128,996	\$ 675,184,680	N	Northwestern University	1R01HG011207-01A1		\$ 41,002
93 173		Research Related to Deafness and Communication Disorders	Research and Development	\$ 730,930	\$ 675,184,680	Y				\$ 204,667
93 173		Research Related to Deafness and Communication Disorders	Research and Development	\$ 730,930	\$ 675,184,680	Y			\$ 87,981	\$ 495,062
93 173		Research Related to Deafness and Communication Disorders	Research and Development	\$ 730,930	\$ 675,184,680	N	Veterans Health Foundation	1R01DC017475-01A1		\$ 31,201
93 186		National Research Service Award in Primary Care Medicine	Research and Development	\$ 212,148	\$ 675,184,680	Y				\$ 212,148
93 213		Research and Training in Complementary and Integrative Health	Research and Development	\$ 1,419,242	\$ 675,184,680	Y				\$ 677,835
93 213		Research and Training in Complementary and Integrative Health	Research and Development	\$ 1,419,242	\$ 675,184,680	Y			\$ 288,085	\$ 657,334
93 213		Research and Training in Complementary and Integrative Health	Research and Development	\$ 1,419,242	\$ 675,184,680	N	Georgetown University	4R33AT009622-03		\$ 3,551

See notes to schedule of expenditures of federal awards.

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93	213	Research and Training in Complementary and Integrative Health	Research and Development	\$ 1,419,242	\$ 675,184,680	N	Mount Sinai Medical Center	4 UH3 AT009149-01		\$ 940
93	213	Research and Training in Complementary and Integrative Health	Research and Development	\$ 1,419,242	\$ 675,184,680	N	The Regents of the University of Michigan	1R01AT011665-01		\$ 79,582
93	226	Research on Healthcare Costs, Quality and Outcomes	Research and Development	\$ 744,661	\$ 675,184,680	Y				\$ 324,683
93	226	Research on Healthcare Costs, Quality and Outcomes	Research and Development	\$ 744,661	\$ 675,184,680	Y			\$ 41,504	\$ 329,729
93	226	Research on Healthcare Costs, Quality and Outcomes	Research and Development	\$ 744,661	\$ 675,184,680	N	RAND Corporation	U19HS024067		\$ 6,318
93	226	Research on Healthcare Costs, Quality and Outcomes	Research and Development	\$ 744,661	\$ 675,184,680	N	Vanderbilt University Medical Center	5R18HS026158-04		\$ 83,931
93	233	National Center on Sleep Disorders Research	Research and Development	\$ 450,777	\$ 675,184,680	Y				\$ 450,777
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	Y				\$ 3,857,904
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	Y			\$ 936,402	\$ 2,792,324
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	Allen Institute of Artificial Intelligence (AI2)	N/A		\$ 475
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	Boston Medical Center	5R01MH117123-04		\$ 13,228
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	DePaul University	1R01MH118382		\$ 33,837
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	Kansas, University of	3R01MH079252-10S1		\$ 15,100
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	McLean Hospital	NIH		\$ 22,944
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	North Carolina, University of	5R01MH119399-04		\$ 23,217
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	Quadrant Biosciences Inc.	N/A		\$ (6,888)
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	University of Illinois at Chicago	NIH		\$ 62,551
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	University of Texas at Arlington	1R21MH123928-01A1		\$ 42,415
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	University of Texas at Dallas	R56MH126516		\$ 7,881
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	Washington University in St. Louis	1R01MH115128-01A1		\$ 92,179
93	242	Mental Health Research Grants	Research and Development	\$ 7,058,749	\$ 675,184,680	N	Weill Cornell Medicine	1RF1MH121378-01		\$ 101,582
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	Y				\$ 319,316
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	Y			\$ 77,504	\$ 432,534
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	N	Gen-Clear Child Services, Inc.	1H79SM082823-01		\$ 4,080
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	N	Child Health and Development Institute of Connecticut, Inc.	N/A		\$ 66,350
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	N	COP: Department of Drug and Alcohol Program	U.S. DEPARTMENT OF HEALTH		\$ 23,126
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	N	York/Adams MH IDD Program	N/A		\$ 21,298
93	243	Substance Abuse and Mental Health Services Projects of Regional and National Sig	Research and Development	\$ 949,650	\$ 675,184,680	N	York/Adams MH IDD Program	H79SM082107		\$ 8,000
93	262	Occupational Safety and Health Program	Research and Development	\$ 291,215	\$ 675,184,680	N	Mary Imogene Bassett Hospital	N/A		\$ 22,636
93	262	Occupational Safety and Health Program	Research and Development	\$ 291,215	\$ 675,184,680	N	Mary Imogene Bassett Hospital	N/A	\$ 17,952	\$ 33,760
93	262	Occupational Safety and Health Program	Research and Development	\$ 291,215	\$ 675,184,680	N	Mary Imogene Bassett Hospital	6 U54OH007542-20-01		\$ 11,585
93	262	Occupational Safety and Health Program	Research and Development	\$ 291,215	\$ 675,184,680	N	University of Iowa	2 U19 OH008868-16-00		\$ 12,491
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	Y				\$ 2,652,475
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	Y			\$ 678,896	\$ 931,111
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	N	REAL Prevention LLC	NATIONAL INSTITUTES OF H		\$ 7,417
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	N	State University of New York - Binghamton	P50AA017823		\$ 54,658
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	N	The Regents of the University of Michigan	5R01AA023504-08		\$ 12,876
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	N	University of California at San Francisco	R01AA02326		\$ 70,853
93	273	Alcohol Research Programs	Research and Development	\$ 4,005,065	\$ 675,184,680	N	Utah State University	1R01AA025331-01		\$ 275,675
93	279	Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	Y				\$ 3,012,573
93	279	Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	Y			\$ 1,170,092	\$ 3,286,642
93	279	Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	Colorado State University	NATIONAL INSTITUTE ON DR		\$ 19,024
93	279	Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	Houston, University of	R03DA047597		\$ 6,596
93	279	Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	North Carolina, University of	5R01DA042988-03		\$ 154,943
93	279	Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	Northwestern University	5R01DA050700-02		\$ 110,091

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	State University of New York - Buffalo	4R33DA04564003		\$ 21,549
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	The Regents of the University of Michiga	1P50DA054039-01		\$ 80,908
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	The Regents of the University of Michiga n	N/A		\$ 45,150
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	The University of Texas Health Science Center at San Antonio	1R01DA045815-01A1		\$ 417,772
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	University of Pittsburgh	NATIONAL INSTITUTE ON DR		\$ 82,261
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	University of Rochester	5R01DA050991-02		\$ 23,306
93 279		Drug Abuse and Addiction Research Programs	Research and Development	\$ 7,267,983	\$ 675,184,680	N	University of Wisconsin-Madison	1R34DA050270-01		\$ 7,168
93 286		Discovery and Applied Research for Technological Innovations to Improve Human He	Research and Development	\$ 2,390,096	\$ 675,184,680	Y				\$ 1,088,176
93 286		Discovery and Applied Research for Technological Innovations to Improve Human He	Research and Development	\$ 2,390,096	\$ 675,184,680	Y			\$ 330,987	\$ 1,040,366
93 286		Discovery and Applied Research for Technological Innovations to Improve Human He	Research and Development	\$ 2,390,096	\$ 675,184,680	N	Aleo BME, Inc.	1 R41 EB030462-01		\$ 78,271
93 286		Discovery and Applied Research for Technological Innovations to Improve Human He	Research and Development	\$ 2,390,096	\$ 675,184,680	N	Minnesota, University of	1U01EB026978-01		\$ 164,087
93 286		Discovery and Applied Research for Technological Innovations to Improve Human He	Research and Development	\$ 2,390,096	\$ 675,184,680	N	Minnesota, University of	5U01EB025144-03		\$ 4,981
93 286		Discovery and Applied Research for Technological Innovations to Improve Human He	Research and Development	\$ 2,390,096	\$ 675,184,680	N	University of Illinois at Urbana-Champai gn	R21EB032638		\$ 14,215
93 297		Teenage Pregnancy Prevention Program	Research and Development	\$ 24,750	\$ 675,184,680	N	Women's Care Center of Erie County (The)	1 TPIAH000193-01-00		\$ 24,750
93 301		Small Rural Hospital Improvement Grant Program	Research and Development	\$ 320,926	\$ 675,184,680	Y				\$ 320,926
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	Y				\$ 90,148
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	Y			\$ 43,312	\$ 405,340
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	N	South Carolina, University of	1R01MD016012-03		\$ 53,845
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	N	UNIVERSITY OF ARIZONA	1R01MD011600-01A1		\$ 6,841
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	N	University of Central Florida	NATIONAL INSTITUTES OF H		\$ 61,118
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	N	University of Chicago	5R01MD015064-02		\$ 107,817
93 307		Minority Health and Health Disparities Research	Research and Development	\$ 783,177	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	R01MD013338-01		\$ 58,068
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	Y				\$ 254,732
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	Y			\$ 677,598	\$ 2,001,382
93 310	COVID-19	COVID-19 - Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Central Michigan University	N/A		\$ 196,490
93 310	COVID-19	COVID-19 - Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Central Michigan University	4R61HD105610-02		\$ 139,734
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Columbia University	N/A		\$ 58,671
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Columbia University	5UG3CA256962-02		\$ 146,992
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Drexel University	5UH3OD023342-06		\$ 21,061
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Duke Clinical Research Institute	5U2COD023375-06		\$ 75,471
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Duke University	5U2COD023375-05		\$ 31,282
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Duke University	5U2COD023375-06		\$ 13,522
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	New York University	5UG3OD023332-02		\$ (659)
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	New York University	7UH3OD023332-04		\$ 97,494
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	New York University School of Medicine	5UH3OD023332-06		\$ 581,865
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Oregon, University of	N/A		\$ 177,111
93 310		Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	Oregon, University of	UH3OD023389		\$ 619,450
93 310	COVID-19	COVID-19 - Trans-NIH Research Support	Research and Development	\$ 4,585,791	\$ 675,184,680	N	University of Florida	U01DC019573		\$ 171,193
93 315		Rare Disorders: Research, Surveillance, Health Promotion, and Education	Research and Development	\$ 69,328	\$ 675,184,680	Y				\$ 69,328
93 323		Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	Research and Development	\$ 300,310	\$ 675,184,680	N	COP: Department of Health	N/A		\$ 14,977
93 323	COVID-19	COVID-19 - Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)	Research and Development	\$ 300,310	\$ 675,184,680	N	COP: Department of Human Services	N/A		\$ 285,333
93 350	COVID-19	COVID-19 - National Center for Advancing Translational Sciences	Research and Development	\$ 3,093,332	\$ 675,184,680	Y				\$ 100,000
93 350		National Center for Advancing Translational Sciences	Research and Development	\$ 3,093,332	\$ 675,184,680	Y				\$ 493,473
93 350		National Center for Advancing Translational Sciences	Research and Development	\$ 3,093,332	\$ 675,184,680	Y			\$ 14,695	\$ 1,969,957

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93 350		National Center for Advancing Translational Sciences	Research and Development	\$ 3,093,332	\$ 675,184,680	N	Clinical and Translational Science Institute	NIH		\$ (200,000)
93 350		National Center for Advancing Translational Sciences	Research and Development	\$ 3,093,332	\$ 675,184,680	N	Oregon State University OREGON STATE UNIVERSITY OFFICE OF	10T2TR003428		\$ 580,066
93 350		National Center for Advancing Translational Sciences	Research and Development	\$ 3,093,332	\$ 675,184,680	N	Research Foundation for Mental Hygiene Inc.	CON-80003308(GRI14686)		\$ 149,836
93 351		Research Infrastructure Programs	Research and Development	\$ 1,188,158	\$ 675,184,680	Y			\$ 272,702	
93 351		Research Infrastructure Programs	Research and Development	\$ 1,188,158	\$ 675,184,680	Y			\$ 180	\$ 915,456
93 360		Biomedical Advanced Research and Development Authority (BARDA), Biodefense Medic	Research and Development	\$ 860	\$ 675,184,680	N	Microbiotix, Inc.	N/A		\$ 860
93 361		Nursing Research	Research and Development	\$ 325,462	\$ 675,184,680	Y				\$ 235,274
93 361		Nursing Research	Research and Development	\$ 325,462	\$ 675,184,680	N	Duke University	1R01NR019610-01A1		\$ 67,711
93 361		Nursing Research	Research and Development	\$ 325,462	\$ 675,184,680	N	Emory University	1R01NR018666-01		\$ 21,133
93 361		Nursing Research	Research and Development	\$ 325,462	\$ 675,184,680	N	Northwell Health	1R21NR018500-01		\$ 1,757
93 361		Nursing Research	Research and Development	\$ 325,462	\$ 675,184,680	N	University of Tennessee Health Science Center	5R01NR017850-02		\$ (413)
93 391		Activities to Support State, Tribal, Local and Territorial (STLT) Health Department	Research and Development	\$ 2,143,608	\$ 675,184,680	Y				\$ 37,813
93 391		Activities to Support State, Tribal, Local and Territorial (STLT) Health Department	Research and Development	\$ 2,143,608	\$ 675,184,680	N	COP: Department of Health	N/A	\$ 453,356	\$ 878,571
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	Y				\$ 3,002,909
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	Y			\$ 487,508	\$ 2,584,995
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	N	Temple University	1R01CA229542-01		\$ 64,734
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	N	UNIVERSITY OF ARIZONA	1R01CA262719-01		\$ 10,573
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	N	University of Hawaii	1R37CA263064-01		\$ 34,550
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	N	University of North Carolina Chapel Hill	1P01CA250989-01A1		\$ 41,729
93 393		Cancer Cause and Prevention Research	Research and Development	\$ 5,746,331	\$ 675,184,680	N	University of Pittsburgh	1R01CA259111-01		\$ 6,841
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	Y				\$ 170,831
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	Y			\$ 41,706	\$ 390,968
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	Carnegie Mellon University	7R01CA230339		\$ 42,443
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	Carnegie Mellon University	NIH		\$ 3,261
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	Johns Hopkins University	1R01CA257557-01A1		\$ 12,719
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	Kaiser Permanente	5R01CA206196-02		\$ 7,019
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	The Regents of the University of Michigan	N/A		\$ 41,279
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	The Regents of the University of Michigan	3U01CA086400-20S1		\$ 39,523
93 394		Cancer Detection and Diagnosis Research	Research and Development	\$ 734,127	\$ 675,184,680	N	The Regents of the University of Michigan	U01CA232931		\$ 26,084
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	Y				\$ 60,589
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	Y			\$ 165,411	\$ 768,571
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	Children's Hospital of Philadelphia	U10 CA98543-08		\$ 7,131
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	ECOG-ACRIN Medical Research Foundation, Inc.	N/A		\$ 14,191
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	ECOG-ACRIN Medical Research Foundation, Inc.	NATIONAL INSTITUTES OF H		\$ 11,704
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	Icahn School of Medicine at Mount Sinai	5R01CA247290-03		\$ 43,121
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	NRG Oncology	N/A		\$ 101,776
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	Rector and Visitors of the University of Virginia	5P01CA171983-07		\$ 388,982
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	Texas A&M University	R01CA257370		\$ 183,669
93 395		Cancer Treatment Research	Research and Development	\$ 1,579,901	\$ 675,184,680	N	Virginia Polytechnic Institute and State University	1R21CA245631-01		\$ 167
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	Y				\$ 2,183,896
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	Y			\$ 259,671	\$ 1,196,204
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	N	Cleveland Clinic Lerner College of Medicine	P01CA245705		\$ 89,439
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	N	Loma Linda University	NATIONAL INSTITUTES OF H		\$ 19,881

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	N	Oregon Health & Sciences University	5U24CA231877-04		\$ 91,850
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	N	University of Pittsburgh	7R01CA242021-03		\$ 18,864
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	N	University of Pittsburgh	R37CA240625-03		\$ 8,342
93 396		Cancer Biology Research	Research and Development	\$ 3,630,560	\$ 675,184,680	N	Virginia, University of	1R01CA178393-01A1		\$ 22,084
93 398		Cancer Research Manpower	Research and Development	\$ 620,822	\$ 675,184,680	Y				\$ 620,822
93 433		ACL National Institute on Disability, Independent Living, and Rehabilitation Res	Research and Development	\$ 1,118,963	\$ 675,184,680	Y				\$ 170,558
93 433		ACL National Institute on Disability, Independent Living, and Rehabilitation Res	Research and Development	\$ 1,118,963	\$ 675,184,680	Y			\$ 273,540	\$ 948,405
93 680		Medical Student Education	Research and Development	\$ 20,831	\$ 675,184,680	N	Oklahoma Health Sciences Center, University of	5T99HP33558-03-00		\$ 20,831
93 732		Mental and Behavioral Health Education and Training Grants	Research and Development	\$ 303,954	\$ 675,184,680	Y				\$ 303,954
93 738	COVID-19	COVID-19 - PPHF: Racial and Ethnic Approaches to Community Health Program financed solely b	Research and Development	\$ 1,368,470	\$ 675,184,680	Y				\$ 294,656
93 738		PPHF: Racial and Ethnic Approaches to Community Health Program financed solely b	Research and Development	\$ 1,368,470	\$ 675,184,680	Y			\$ 353,209	\$ 1,073,814
93 788		Opioid STR	Research and Development	\$ 2,364,089	\$ 675,184,680	Y			\$ 549	\$ 224,051
93 788		Opioid STR	Research and Development	\$ 2,364,089	\$ 675,184,680	N	COP: Department of Corrections	SUBSTANCE ABUSE & MENTAL		\$ 21,875
93 788		Opioid STR	Research and Development	\$ 2,364,089	\$ 675,184,680	N	COP: Department of Drug and Alcohol Program	N/A	\$ 314,605	\$ 1,336,344
93 788		Opioid STR	Research and Development	\$ 2,364,089	\$ 675,184,680	N	Houston, University of	N/A		\$ 6,945
93 788		Opioid STR	Research and Development	\$ 2,364,089	\$ 675,184,680	N	Substance Abuse & Mental Health Services Administration	N/A		\$ 289,041
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	Y				\$ 9,466,289
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	Y			\$ 628,109	\$ 2,579,045
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Des Moines University	N/A		\$ 10,727
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Duke University	NATIONAL INSTITUTES OF H		\$ (3,081)
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Kentucky, University of	5U01HL133359-05		\$ 70,522
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Kentucky, University of	NIH		\$ 31,563
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Minnesota, University of	N/A		\$ 240,114
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	University of California at Davis	R01HL157535		\$ 9,044
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	University of Pittsburgh	1R01HL152444-01A1		\$ 8,850
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	University of Pittsburgh	1UG3HL153847-01A1		\$ 26,346
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	University of Texas at Austin	1R01HL129077-01A1		\$ 13,413
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Vermont, University of	5R01HL150953-03		\$ 131,385
93 837		Cardiovascular Diseases Research	Research and Development	\$ 12,591,565	\$ 675,184,680	N	Washington University in St. Louis	N/A		\$ 7,348
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	Y				\$ 846,605
93 838	COVID-19	COVID-19 - Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	Brigham & Women's Hospital	5U01HL146002-03		\$ 344,647
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	Pennsylvania, University of	R01-HL-142269-04		\$ 2,156
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	Sage Bionetworks	N/A		\$ 11,606
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	University of Colorado Denver	1R01HL146542-01		\$ 11,218
93 838	COVID-19	COVID-19 - Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	University of Pittsburgh	NIH		\$ 22,551
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	University of Pittsburgh	N/A		\$ (12,496)
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	University of Pittsburgh	3U01HL123009-07S1/238915		\$ 39,167
93 838		Lung Diseases Research	Research and Development	\$ 1,267,568	\$ 675,184,680	N	Wake Forest University Attn: Grants Accounting	N/A		\$ 2,114
93 839		Blood Diseases and Resources Research	Research and Development	\$ 1,869,814	\$ 675,184,680	Y				\$ 824,607
93 839		Blood Diseases and Resources Research	Research and Development	\$ 1,869,814	\$ 675,184,680	Y			\$ 136,255	\$ 643,965
93 839		Blood Diseases and Resources Research	Research and Development	\$ 1,869,814	\$ 675,184,680	N	Actuated Medical, Inc.	5R61HL154215-02		\$ 128,411
93 839		Blood Diseases and Resources Research	Research and Development	\$ 1,869,814	\$ 675,184,680	N	Temple University	N/A		\$ 14,386
93 839		Blood Diseases and Resources Research	Research and Development	\$ 1,869,814	\$ 675,184,680	N	The University of Texas Health Science Center at San Antonio	7R01HL141950-02		\$ 261,784
93 839		Blood Diseases and Resources Research	Research and Development	\$ 1,869,814	\$ 675,184,680	N	University of Maryland	R21HL135545		\$ (3,339)
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	Y				\$ 1,924,745
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	Y			\$ 1,045,390	\$ 2,599,721
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	N	Columbia University	1R01AR071316-01A1		\$ 960
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	N	New York University Medical Center	1R01AR074500-01A1		\$ 86,728

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	N	The University of Texas Health Science Center at San Antonio	7R01AR070887-03		\$ 27,967
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	N	University of Alabama at Birmingham	5R01AR072697-03		\$ 31,157
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	N	University of Massachusetts	5R01AR072036-05		\$ 33,713
93 846		Arthritis, Musculoskeletal and Skin Diseases Research	Research and Development	\$ 4,705,232	\$ 675,184,680	N	University of Massachusetts	NATIONAL INSTITUTES OF H		\$ 241
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	Y			\$ 1,335,615	\$ 4,536,053
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	Y				\$ 6,133,482
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Actuated Medical, Inc.	4R44DK117813-02		\$ 41,110
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Arizona State University	R01DK123441		\$ 36,817
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Board of Regents of the University System of Georgia	R01DK112874		\$ 67,848
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Carnegie Mellon University	R01DK128114		\$ 12,852
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Children's Hospital of Philadelphia	N/A		\$ 62,442
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Children's Hospital of Philadelphia	2 R01 DK054931-23A1		\$ 11,850
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Children's Hospital of Philadelphia	NATIONAL INSTITUTES OF H		\$ (648)
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Columbia University	2U54DK104309-08		\$ 53,943
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Duke University	5R01DK052985-25		\$ 6,672
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Dynamic Entropy Technology LLC	NATIONAL INSTITUTE OF DI		\$ 4,011
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Georgia State University	5R01DK083890-12		\$ 29,667
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Icahn School of Medicine at Mount Sinai	5U24DK062429-20		\$ 4,222
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Icahn School of Medicine at Mount Sinai	5U24DK062429-22		\$ 9,889
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Kaiser Foundation Research Institute	N/A		\$ 26,874
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Kaiser Permanente	2R56DK099882-05		\$ (1)
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	McLean Hospital	1R01DK121240-01		\$ 12,981
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Princeton University	5R01HL149869-02		\$ 438
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Temple University	1R01DK122073-02		\$ 41,475
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	The University of Texas Health Science Center at San Antonio	NATIONAL INSTITUTES OF H		\$ 23,464
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	University of California at San Francisco	NIH		\$ 7,902
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	University of South Florida	N/A		\$ 980
93 847		Diabetes, Digestive, and Kidney Diseases Extramural Research	Research and Development	\$ 11,226,484	\$ 675,184,680	N	Yale University	1R01DK124500-01		\$ 102,161
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	Y				\$ 5,300,018
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	Y			\$ 830,041	\$ 2,993,379
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Actuated Medical, Inc.	N/A		\$ 35,707
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Columbia University	NATIONAL INSTITUTES OF H		\$ 26,253
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Drexel University	1R01NS107607-01A1		\$ (1)
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Massachusetts General Hospital	1R01NS102735-01A1		\$ 67,037
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Mayo Clinic	N/A		\$ 66,924
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Mayo Clinic	NIH		\$ (357)
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Quadrant Biosciences Inc.	1 R42 NS119119-01		\$ 164,858
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Rutgers-The State University of New Jersey	1R01NS115957-01A1		\$ 44,671
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	University of California at San Diego	5U01NS087964-04		\$ 6,603
93 853		Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	University of Cincinnati	1U01NS099043-01A1		\$ 15,026

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93	853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	University of Florida	U01NS119562		\$ 10,317
93	853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	University of Pittsburgh	2R01NS076511-06		\$ (14,514)
93	853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Utah, University of	N/A		\$ 30,050
93	853	Extramural Research Programs in the Neurosciences and Neurological Disorders	Research and Development	\$ 8,749,487	\$ 675,184,680	N	Utah, University of	IU01NS107486-01A1		\$ 3,516
93	855	COVID-19 - Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	Y			\$ 422,707	\$ 720,031
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	Y				\$ 6,652,879
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	Y			\$ 710,409	\$ 2,897,207
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Children's Hospital Boston	5U01AI143514-03		\$ 388,760
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Colorado State University	NATIONAL INSTITUTES OF H		\$ 17,935
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Cornell University	2R01AI092571-06A1		\$ 177,617
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	FHI 360	N/A		\$ 6,505
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Microbiotix, Inc.	1R01AI132276		\$ (87)
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	North Carolina, University of	1R01AI169462-01		\$ 6,319
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Novan Inc.	4R44A1143022-02		\$ 3,692
93	855	COVID-19 - Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Purdue University	5R01AI158177-02		\$ 104,383
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Rutgers-The State University of New Jersey	1R01AI162023-01		\$ 12,455
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Sanaria	1R43AI155274-01		\$ 60,000
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Stanford Medicine	5R01AI153133-02		\$ 323,123
93	855	COVID-19 - Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	The Jackson Laboratory	5U19AI142733-03		\$ 102,900
93	855	COVID-19 - Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	The Jackson Laboratory	5U19AI142733-04		\$ 15,546
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	The Jackson Laboratory	1U19AI142733-01		\$ (14,949)
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	The Regents of the University of Michiga	1R01AI110780-01A1		\$ (574)
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	The Regents of the University of Michiga	1R01AI143852-01		\$ 15,500
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	The University of Texas Health Science Center at San Antonio	5U01AI131393-05		\$ 24,845
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	University of Illinois at Chicago	5R21AI151674-02		\$ 45,427
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	University of North Carolina Chapel Hill	N/A		\$ 37,507
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	University of North Carolina Chapel Hill	1R01AI1161841-01		\$ 43,622
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	University of Pittsburgh Medical Center	1R01AI168022-01		\$ 3,336
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Utah, University of	1R01AI147641-01A1		\$ 40,898
93	855	Allergy and Infectious Diseases Research	Research and Development	\$ 11,803,100	\$ 675,184,680	N	Worcester Polytechnic Institute	R21AI151481		\$ 118,223
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	Y				\$ 17,452,748
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	Y			\$ 555,979	\$ 2,709,608
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	N	Florida State University	5P41GM122698-05		\$ 58,807
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	N	Georgetown University	1R01GM123007-01		\$ 5,321
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	N	Georgia, University of	1R01GM124203-01		\$ 27,132
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	N	Minnesota, University of	1R01GM134681-01		\$ 255,860
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	N	University of Florida	R01GM059969		\$ 189,726
93	859	Biomedical Research and Research Training	Research and Development	\$ 20,699,268	\$ 675,184,680	N	University of Texas Southwestern Medical Center	NIH		\$ 66
93	860	Emerging Infections Sentinel Networks	Research and Development	\$ 91,732	\$ 675,184,680	Y				\$ 91,732
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	Y				\$ 5,297,514
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	Y			\$ 972,934	\$ 5,320,457
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Actuated Medical, Inc.	2R44HD088139-02A1		\$ 147,139
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Arizona State University	AWD00032943		\$ 64,236
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Baylor University	5R01HD097321-04		\$ 84,902
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Board of Regents of The University of Wisconsin System	R01HD080201-01A1		\$ (3,404)
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Boston University	NIH		\$ 1,523
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Children's Hospital Boston	N/A		\$ 1,000
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Children's Hospital Boston	NIH		\$ 329
93	865	Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Children's Hospital of Philadelphia	1R25HD101359-01A1		\$ 28,895

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93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Colorado, University of	5R24HD098415-03		\$ 4,840
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Dartmouth College	5R01HD092604-04		\$ 13,118
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Delaware, University of	1R01HD098525-01A1		\$ 35,517
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Georgetown University	5R01HD088428-05		\$ 21,623
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Johns Hopkins University	N/A		\$ 21,614
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Lundquist Institute for Biomedical Innovation	1R21HD104028-01		\$ 35,204
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	New York University	REVISED		\$ 35,491
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	New York University	7R01HD081252-05		\$ 38,358
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	New York University	NATIONAL INSTITUTES OF H		\$ (9,517)
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	North Carolina, University of	5R01HD080786-04		\$ 1,075
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	North Carolina, University of	NATIONAL INSTITUTES OF H		\$ 46,076
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Northwestern University	5R01HD100630-02		\$ 23,521
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	State University of New York - Buffalo	5R01HD08708204 NIH		\$ 24,399
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Syracuse University	N/A		\$ 10,382
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	The Regents of the University of California, Los Angeles	5R01HD092471-02		\$ 1,112
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	The Regents of the University of Michigan	N/A		\$ 2,885
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	University of Massachusetts Amherst	R03HD098392		\$ 7,990
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	University of North Carolina Chapel Hill	1R03HD104843-01A1		\$ 10,638
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	University of Pittsburgh	5R01HD097578-03		\$ 3,295
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	University of Wisconsin-Madison	5R01HD102125-02		\$ 25,824
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Utah, University of	1PL1HD105462-01		\$ 20,924
93 865		Child Health and Human Development Extramural Research	Research and Development	\$ 11,323,029	\$ 675,184,680	N	Yale University	5R01HD105267-02		\$ 6,069
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	Y			\$ 4,208,518	\$ 4,208,518
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	Y			\$ 6,142,624	\$ 6,142,624
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Adelphi University	1R03AG064360-01	\$ 1,829,845	\$ 9,991
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Albert Einstein College of Medicine	3P01AG003949-36S2		\$ 8,768
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Albert Einstein College of Medicine	5R01AG055527-06		\$ 23,186
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Albert Einstein College of Medicine	5R01AG062622-03		\$ 317,571
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Albert Einstein College of Medicine	5R01AG062622-04		\$ 193,467
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Albert Einstein College of Medicine	NATIONAL INSTITUTES OF H		\$ 68,253
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Beth Israel Deaconess Medical Center	R01AG030618		\$ 109,081
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Board of Regents of The University of Wisconsin System	5U19AG051426-04		\$ (24,470)
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Board of Regents of The University of Wisconsin System	5U19AG051426-05	\$ 8,763	\$ 128,434
93 866	COVID-19	COVID-19 - Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Brown University	5U54AG063546-04		\$ 43,837
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Clemson University	7U01AG062370-03		\$ 136,466
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Clemson University	NIH		\$ 236,998
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Elon University	N/A		\$ 15,231
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Florida State University	NATIONAL INSTITUTES OF H		\$ 48,446
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Kent State University	R01AG054571		\$ 21,599
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Klein Buendel, Inc.	N/A		\$ 286,607
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Michigan State University	RF1AG073189		\$ 21,784
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	Proactive Life, Inc.	2R44AG056250-03A1		\$ 173,376
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	The Trustees of the University of Pennsylvania	1R01AG071707-01A1		\$ 10,702
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of California at Riverside	5R01AG046938-07		\$ 72,174
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of Illinois	1R01AG062180-01A1		\$ 4,969
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of Kentucky Research Foundation	5R01AG026307-14		\$ 8,022

See notes to schedule of expenditures of federal awards.

**THE PENNSYLVANIA STATE UNIVERSITY**  
**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of Maryland	R01AG050516-03		\$ 222,203
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of Maryland	R01AG062315		\$ 67,570
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of Pittsburgh	N/A		\$ 3,504
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of South Florida	N/A		\$ 794
93 866		Aging Research	Research and Development	\$ 12,659,880	\$ 675,184,680	N	University of Southern California	IR37AG057685-01		\$ 100,175
93 867		Vision Research	Research and Development	\$ 2,299,737	\$ 675,184,680	Y				\$ 1,441,696
93 867		Vision Research	Research and Development	\$ 2,299,737	\$ 675,184,680	Y			\$ 498,492	\$ 828,503
93 867		Vision Research	Research and Development	\$ 2,299,737	\$ 675,184,680	N	THE RESEARCH FOUNDATION FOR STATE UNIVERSITY OF NEW YORK	1R01EY03008501A1		\$ 29,538
93 879		Medical Library Assistance	Research and Development	\$ 251,788	\$ 675,184,680	Y				\$ 234,266
93 879		Medical Library Assistance	Research and Development	\$ 251,788	\$ 675,184,680	N	University of Colorado Denver	7R01LM012734-03		\$ 17,522
93 884		Grants for Primary Care Training and Enhancement	Research and Development	\$ 126,194	\$ 675,184,680	Y				\$ 126,194
93 918	COVID-19	COVID-19 - Grants to Provide Outpatient Early Intervention Services with Respect to HIV Dis	Research and Development	\$ 729,474	\$ 675,184,680	Y				\$ 28,710
93 918		Grants to Provide Outpatient Early Intervention Services with Respect to HIV Dis	Research and Development	\$ 729,474	\$ 675,184,680	Y				\$ 700,764
93 959		Block Grants for Prevention and Treatment of Substance Abuse	Research and Development	\$ 322,451	\$ 675,184,680	N	COP: Commission on Crime and Delinquency	N/A		\$ (27,823)
93 976		Primary Care Medicine and Dentistry Clinician Educator Career Development Awards	Research and Development	\$ 234,846	\$ 675,184,680	Y				\$ 234,846
93 RD	200-2016-90385	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 60,098
93 RD	22IPA2216190	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 20,127
93 RD	256634	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 5,462
93 RD	75D30119C05743	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 228,832
93 RD	75D30120P08980	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 40,312
93 RD	75D30121C11927	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 83,881
93 RD	75F40120P00425	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 16,909
93 RD	75N94020P00268	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 6,252
93 RD	COVID-19, 75D30121C12111	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 537,309
93 RD	S11PA21162	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	Y				\$ 28,105
93 RD	1831	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	American College of Radiology	75N92020D00018/75N92020F		\$ 6,275
93 RD	250106	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	AWARE, Inc.	93.136		\$ 9,628
93 RD	COVID-19, FY21ITN448	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Benaroya Research Institute at Virginia Mason	3UM1A1109565-08S1		\$ 166,622
93 RD	8846-PSU	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Board of Trustees of Indiana University	8846-PSU		\$ 49,908
93 RD	0001758482	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital Boston	CENTERS FOR DISEASE CONT		\$ 40
93 RD	75D30120C0772	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital Boston	CDC		\$ 3,394
93 RD	GENFD0001865529	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital Boston	NATIONAL INSTITUTES OF H		\$ (54)
93 RD	GENFD0002047665	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital Boston	SU01A1126614-06		\$ 515,016
93 RD	GENFD0002153621	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital Boston	5R01HD096693-04		\$ 35,995
93 RD	GENFD0002168556	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital Boston	SU01A1143514-04		\$ 126,951

See notes to schedule of expenditures of federal awards.

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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93	RD 139164 R01 CA212190-01A1	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital of Philadelphia	NATIONAL INSTITUTES OF H		\$ 482
93	RD 143322 AALL0434	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital of Philadelphia	NATIONAL INSTITUTES OF H		\$ (1)
93	RD 143322 COG ANBL 1531	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital of Philadelphia	NATIONAL INSTITUTES OF H		\$ 156
93	RD 3258990622	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital of Philadelphia	5T71MC30798-05-00		\$ 14,009
93	RD ADVANCE	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Children's Hospital of Philadelphia	NATIONAL INSTITUTES OF H		\$ 6,576
93	RD CCF21143188	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Cleveland Clinic Lerner College of Medicine	P01CA245705		\$ 174,212
93	RD 13(GG015997-01)	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Columbia University	13(GG015997-01)		\$ 3,554
93	RD 13(GG015997-01)	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Columbia University	RTI 22-312-0217571-66178		\$ 14,474
93	RD 182225	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	COP: Department of Health	182225		\$ (1)
93	RD 4300707421	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	COP: Department of Human Services Room 832 Health and Welfare Building	4300707421		\$ 205,599
93	RD 129210 NICHD-2019-POP02	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Duke Clinical Research Institute	129210 NICHD-2019-POP02		\$ 4,700
93	RD 203-7903	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Duke Clinical Research Institute	NATIONAL INSTITUTES OF H		\$ 22,221
93	RD 215359 NICHD-2019-POP02	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Duke Clinical Research Institute	215359 NICHD-2019-POP02		\$ 5,181
93	RD A226571	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Emory University	NATIONAL INSTITUTES OF H		\$ 45,921
93	RD COVID-19, A373595	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Emory University	COVID-19, A373595		\$ 375,855
93	RD COVID-19, A496021	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Emory University	75N93021C00017		\$ 141,689
93	RD IRB00101506 STUDY14730	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Emory University	IRB00101506 STUDY14730		\$ 3,239
93	RD 225529	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Family Health Council of Central PA	DEPARTMENT OF HEALTH		\$ 184,359
93	RD 646031PSU01	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Geisinger Clinic	U01CA240747		\$ 30,006
93	RD 243824	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Genesis Laboratories, Inc.	75D30120C09834		\$ 24,936
93	RD BRE 15-016	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Hoosier Cancer Research Network	CTO #1825		\$ 3,788
93	RD R-22-0070	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Houston, University of	R-22-0070		\$ 38,377
93	RD RC085400	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Idaho Department of Health and Welfare	RC085400		\$ 382,685
93	RD 235621	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Indiana University (State of Indiana)	235621		\$ 15,020
93	RD 219461	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Johns Hopkins University	HHSN272201400007C		\$ (4,025)
93	RD COVID-19, HHSN272201400007C	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Johns Hopkins University	HHSN272201400007C		\$ 206,878
93	RD OOS030544-PSU	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Kaiser Foundation Research Institute	1R01DK125348		\$ 41,110
93	RD 209321-05	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Kaiser Permanente	5R01CA206196-02		\$ 72,274
93	RD 20CTA-DM0024	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Leidos	NATIONAL INSTITUTE OF AL		\$ (22,790)
93	RD 21CTA-DM0035	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Leidos Biomedical Research, Inc.	21CTA-DM0035		\$ 440,027

See notes to schedule of expenditures of federal awards.

**THE PENNSYLVANIA STATE UNIVERSITY  
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ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93	RD	ULRF_17-05750A-02	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Louisville, University of	ULRF_17-05750A-02	\$ 20,007
93	RD	PSU-32131	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Lundquist Institute for Biomedical Innovation	1R01NS121150-01A1	\$ 159,775
93	RD	RTB-004	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Massachusetts General Hospital	NATIONAL INSTITUTE OF AL	\$ 1,590
93	RD	S5491	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Massachusetts Institute of Technology	FDA 75F40121C00111	\$ 36,793
93	RD	N006269302	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Minnesota, University of	U01EB025144	\$ 110,111
93	RD	8622.PSU.01	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	National Opinion Research Center	8622.PSU.01	\$ 251,495
93	RD	COVID-19, 3RJK7	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	New Mexico, University of University of New Mexico Health Sciences	AHRQ	\$ 212,239
93	RD	NYU ACTIV4	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	New York University School of Medicine	NIH	\$ 19,256
93	RD	242964	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Penngood LLC	242964	\$ 8,337
93	RD	243109	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Penngood LLC	243109	\$ 97
93	RD	572292 PO 4698697	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Pennsylvania, University of	572292 PO 4698697	\$ 164,886
93	RD	ADVANCE	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Pennsylvania, University of	NATIONAL INSTITUTES OF H	\$ (32,774)
93	RD	11001159-010	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Purdue University	1R01DA54234-01	\$ 80,887
93	RD	SCON-00000119	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	RAND Corporation	R01DA045800	\$ 24,336
93	RD	239503	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Task Force for Global Health, Inc.	239503	\$ 59,992
93	RD	11954SC	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	The Regents of the University of California	11954SC	\$ (428)
93	RD	SUBK00005527	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	The Regents of the University of Michigan	SUBK00005527	\$ 2,129
93	RD	SUBK00008131-EXT 3	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	The Regents of the University of Michigan	SUBK00008131-EXT 3	\$ 18,784
93	RD	86675/2/1158241	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	THE RESEARCH FOUNDATION FOR STATE UNIVERSITY OF NEW YORK	2R01HD07835206A1	\$ 327,670
93	RD	577005	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	The Trustees of the University of Pennsylvania	5-R01-ES-029294-04	\$ 2,641
93	RD	582262	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	The Trustees of the University of Pennsylvania	2-UL1-TR-001878-06	\$ 22,188
93	RD	RIS#35476 EXT 4	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	The Trustees of the University of Pennsylvania	RIS#35476 EXT 4	\$ 2,852
93	RD	587178 SUB 614004	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Triad National Security, LLC (was LANL)	587178 SUB 614004	\$ 5,957
93	RD	UC 217661	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	University of Alabama at Birmingham	UC 217661	\$ 24,955
93	RD	FY20.291.002	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	University of Colorado Denver	1R21HD097450-01A1	\$ 2,991
93	RD	ADVANCE	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	University of Kansas Medical Center	U.S. FOOD AND DRUG ADMIN	\$ (17,630)
93	RD	ADVANCE	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	University of Pittsburgh	NATIONAL INSTITUTE ON DR	\$ (3,500)
93	RD	98880674 PO 50674601	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	University of Southern California	6R01AG047992-02	\$ 12,855
93	RD	21-4803-PSU	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	University of Tennessee Health Science Center	21-4803-PSU	\$ 2,024
93	RD	201267-607	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Utah State University	201267-607	\$ 13,570

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, 2022**

ALN	Additional Award Identification	Name of Federal Award	Cluster Name	Federal Program Total	Cluster Total	Direct Award	Name of Pass-through Entity	Identifying number assigned by the Pass-through Entity	Amount Passed Through to Subrecipients	Amount Expended
93	RD 120267-770	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Utah State University	HHSN2722017000411		\$ 208,886
93	RD 10050533-04	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Utah, University of	U01NS107486		\$ 47,816
93	RD AWD00000483SUB00000228	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Vermont, University of	5R01HL157487-02		\$ 20,211
93	RD COVID-19, WSU22014	COVID-19 - U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Wayne State University	75D30121C11813		\$ 117,688
93	RD WSU21073 GRANT INDEX:340655	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Wayne State University	1R01HL153377-01A1		\$ 33,115
93	RD 220367-6	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Weill Cornell Medicine	NYUEHR01211OT2HL16184701		\$ 46,008
93	RD GR101891 (CON-80001103)	U.S. Department of Health and Human Services Research and Development	Research and Development	\$ 6,589,028	\$ 675,184,680	N	Yale University	5U010HD055925-10		\$ 209,646
95	007	Research and Data Analysis	Research and Development	\$ 11,757	\$ 675,184,680	N	National Prevention Science Coalition	OFFICE OF NATIONAL DRUG		\$ 11,757
97	045	Cooperating Technical Partners	Research and Development	\$ 60,406	\$ 675,184,680	Y				\$ 60,406
97	061	Centers for Homeland Security	Research and Development	\$ 208,787	\$ 675,184,680	N	Arizona State University	17STQAC00001-05-00	\$ 70,757	\$ 155,967
97	061	Centers for Homeland Security	Research and Development	\$ 208,787	\$ 675,184,680	N	University of Nebraska Omaha	20STTPC00001-02-01		\$ 11,952
97	061	Centers for Homeland Security	Research and Development	\$ 208,787	\$ 675,184,680	N	University of North Carolina Chapel Hill	15STCRC00001-07-00		\$ 40,868
97	RD 4300703457	U.S. Department of Homeland Security Research and Development	Research and Development	\$ 241,203	\$ 675,184,680	N	COP: Emergency Management Agency	4300703457		\$ 94,922
97	RD 8006828-02.01 PSU	U.S. Department of Homeland Security Research and Development	Research and Development	\$ 241,203	\$ 675,184,680	N	Southern Mississippi, University of	201*450/BSTC-20-05-007		\$ 146,281
98	001	USAID Foreign Assistance for Programs Overseas	Research and Development	\$ 1,283,971	\$ 675,184,680	N	Kansas State University	7200AA19LE00003		\$ 20,125
98	001	USAID Foreign Assistance for Programs Overseas	Research and Development	\$ 1,283,971	\$ 675,184,680	N	National Academy of Sciences	AID-263-A-15-00002		\$ 62,042
98	001	USAID Foreign Assistance for Programs Overseas	Research and Development	\$ 1,283,971	\$ 675,184,680	N	Solidarity Center	N/A		\$ 236
98	001	USAID Foreign Assistance for Programs Overseas	Research and Development	\$ 1,283,971	\$ 675,184,680	N	The University of Tennessee Institute of Agriculture	AID-OAA-L-14-00006		\$ 13,144
98	RD SUB00002026	U.S. Agency for International Development Research and Development	Research and Development	\$ 76,092	\$ 675,184,680	N	Georgia, University of	7200AA18CA00003 - USAID		\$ 76,092
99	RD 14-C-0150	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (41,682)
99	RD 15F0001	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (1,112)
99	RD 17-G-2163/20F2223	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 6,617
99	RD 17G2163/ORDER 20F2223	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 323,824
99	RD 2013324F011	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (5,809)
99	RD 2013324F012	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (21,556)
99	RD 20191201	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 44,334
99	RD 2020-20092100401	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 36,548
99	RD 21-C-00088	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 290,760
99	RD 21-F-3939	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 57,382
99	RD 21P5334	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 62,180
99	RD 2223092021	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 58,262
99	RD 22F5045	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 455,626
99	RD 26539	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 25,004
99	RD DO 0002	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (9,092)
99	RD FA8750-17-C-0254	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (1,347)
99	RD IPA CLINGERMAN 2019	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 39,269
99	RD IPA DALY 2019	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 32,421
99	RD IPA LEIBNER 2020	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 180,803
99	RD N0001410F0004	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 1,798
99	RD N0001416F3013	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 26,756
99	RD N0001416FM010	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 82,066
99	RD N0001419C1067	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 32
99	RD N0001419C2031	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 74,705
99	RD N0001419C2033	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ (180)
99	RD N0001419FM004	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 1,241
99	RD N0001420FM005	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 503,530
99	RD TO 01/TOA#11	USG Awards Classified Contracts Research and Development	Research and Development	\$ 5,006,290	\$ 675,184,680	Y				\$ 19,769

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, 2022**

**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, 2022, 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.

Expenditures for federal awards are determined using the cost accounting principles and procedures set forth in OMB Circular A-21, *Cost Principles for Educational Institutions*, and the uniform administrative requirements as set forth in OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations*, or the administrative and cost principles contained in Uniform Guidance, as applicable. 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 programs:

Title	ALN	Federal Capital Contribution for the Year Ended June 30, 2022	Loan Expenditures And Disbursements	Outstanding Balance at June 30, 2022
Federal Perkins Loan Program	84.038	\$ -	\$ -	\$ 20,640,847
Health Professions Student Loan Program	93.342	-	-	718



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.

#### 4. FEDERAL DIRECT LOAN PROGRAM

The University participates in the Federal Direct Student Loan Program (ALN 84.268) including Federal Stafford Loans and Federal PLUS Loans. Loan disbursements under the program for the year ended June 30, 2022, totaled \$444,069,861.

#### 5. SUMMARY SCHEDULE

Programs:	<u>ALN</u>	<u>Subrecipient Expenditures</u>	<u>Expenditures</u>
Research and development cluster:			
Direct funding		\$ 49,326,737	\$ 594,039,501
Direct funding – COVID-19		433,685	3,559,170
Pass-through funds – Commonwealth of Pennsylvania		1,034,617	6,097,279
Pass-through funds – Commonwealth of Pennsylvania – COVID-19		-	285,333
Pass-through funds – other institutions		878,303	67,193,989
Pass-through funds – other institutions – COVID-19		<u>227,709</u>	<u>4,009,408</u>
Total research and development cluster		<u>51,901,051</u>	<u>675,184,680</u>
Student financial aid cluster (direct):			
Department of Education:			
Federal Supplemental Educational Opportunity Grant	84.007	-	5,873,706
Federal Work Study Program	84.033	-	2,003,040
Federal Perkins Loan Program	84.038	-	20,640,847
Federal Pell Grant Program	84.063	-	80,943,042
Federal Direct Loan Program	84.268	-	444,069,861
Department of Health and Human Services:			
Health Professions Student Loan Program	93.342	<u>-</u>	<u>718</u>
Total student financial aid cluster		<u>-</u>	<u>553,531,214</u>
Other programs:			
Airport Improvement Program	20.106	-	11,160,468
COVID-19 – Airport Improvement Program	20.106	-	1,597,371
COVID-19 – Shuttered Venues Operators Grants	59.075	-	3,366,178
COVID-19 – Education Stabilization Fund	84.425	-	150,014,367
COVID-19 – Rural Health Research Centers	93.155	5,376,547	6,202,085
Other direct funding		2,598,340	27,559,936
Other direct funding – COVID-19		-	168,442
Other pass-through funds – Commonwealth of Pennsylvania		23,721,764	36,276,872
Other pass-through funds – Commonwealth of Pennsylvania – COVID-19		-	361,938
Other pass-through funds – other institutions		83,130	3,269,037
Other pass-through funds – other institutions – COVID-19		<u>-</u>	<u>463,621</u>
Total other programs		<u>31,779,781</u>	<u>240,440,315</u>
Total programs		<u>\$ 83,680,832</u>	<u>\$ 1,469,156,209</u>



## **INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

To the Board of Trustees of The Pennsylvania State University  
University Park, Pennsylvania

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 and subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2022, and the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements (collectively referred to as the "financial statements"), and have issued our report thereon dated November 21, 2022, which contains an emphasis of matter paragraph regarding the University's change in method of accounting for leases, effective July 1, 2020, due to the adoption of Accounting Standard Codification Topic 842, *Leases*.

The financial statements of the University include various subsidiaries as outlined in Note 1 to the financial statements. The financial statements of The Pennsylvania State University Philanthropic Fund and Nittany Insurance Company were audited by other auditors and were not audited in accordance with *Government Auditing Standards*. The financial statements of Penn State Health and its subsidiaries; Ben Franklin Technology Center of Central & Northern PA; and The Pennsylvania College of Technology were audited by other auditors in accordance with *Government Auditing Standards*. Accordingly, this report does not include reporting on internal control over financial reporting or instances of reportable noncompliance associated with these entities.

### **Report on Internal Control Over Financial Reporting**

In planning and performing our audit of the 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 opinions on the 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 financial statements will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We identified certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs as item 2022-001 that we consider to be a significant deficiency.

## **Report on Compliance and Other Matters**

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

## **University's Response to Findings**

*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 questioned costs. The University's response was not subjected to the other auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on the response.

## **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.

*Deloitte & Touche LLP*

November 21, 2022



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**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM;  
REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF  
EXPENDITURES OF FEDERAL AWARDS REQUIRED BY THE UNIFORM GUIDANCE**

To the Board of Trustees of The Pennsylvania State University  
University Park, Pennsylvania

**Report on Compliance for Each Major Federal Program**

***Opinion on Each Major Federal Program***

We have audited The Pennsylvania State University's and subsidiaries (the "University") compliance with the types of compliance requirements identified as subject to audit in the OMB Compliance Supplement that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2022. 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 its major federal programs for the year ended June 30, 2022.

The University's consolidated financial statements include the operations of Penn State Health and its subsidiaries ("Penn Health") and The Pennsylvania College of Technology ("PCT") which expended federal awards which are not included in the University's schedule of expenditures of federal awards for the year ended June 30, 2022. Our audit, described below, did not include the operations of Penn Health and PCT because Penn Health and PCT engaged other auditors to perform an audit of compliance.

***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 (*Government Auditing Standards*); and the audit requirements of Title 2 U.S. *Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the 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.

***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 Matters***

The results of our auditing procedures disclosed instances of noncompliance which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying schedule of findings and questioned costs as items 2022-002 and 2022-003. Our opinion on each major federal program is not modified with respect to these matters.

*Government Auditing Standards* requires the auditor to perform limited procedures on University's response to the noncompliance findings identified in our compliance audit 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 the response.

### **Report on Internal Control Over Compliance**

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

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

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

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

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

We have audited the financial statements of the University as of and for the year ended June 30, 2022, and have issued our report thereon dated November 21, 2022, which contained an unmodified opinion on those financial statements which included an emphasis of matter paragraph regarding the University's change in method of accounting for leases, effective July 1, 2020, due to the adoption of Accounting Standard Codification Topic 842, *Leases*. Our audit was performed for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the 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 financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the financial statements as a whole.

*Deloitte & Touche LLP*

March 29, 2023

**THE PENNSYLVANIA STATE UNIVERSITY**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**FOR THE YEAR ENDED JUNE 30, 2022**

<b>SECTION I—SUMMARY OF AUDITOR’S RESULTS</b>		
<i>Financial Statements</i>		
Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP: <b>UNMODIFIED</b>		
<b>Internal control over financial reporting:</b>		
• Material weakness (es) identified?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
• Significant deficiency (ies) identified?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> none reported
Noncompliance material to financial statements noted?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
<b>Federal Awards</b>		
Internal control over major federal programs:		
• Material weakness (es) identified?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
• Significant deficiency (ies) identified?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> none reported
Type of auditor’s report issued on compliance for major federal programs: <b>Unmodified.</b>		
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
<b>Identification of major federal programs:</b>		
<ul style="list-style-type: none"> <li>• Research and Development Cluster - (See “Schedule of Expenditures of Federal Awards” for ALN Numbers)</li> <li>• Education Stabilization Fund Under the Coronavirus AID, Relief, and Economic Security Act – ALN # 84.425E and ALN # 84.425F and Governors Emergency Education Relief Fund - ALN # 84.425C</li> <li>• Airport Improvement Program – ALN # 20.106</li> <li>• Shuttered Venue Operators Grant Program – ALN # 59.075</li> <li>• Rural Health Research Centers – ALN # 93.155</li> </ul>		
Dollar threshold used to distinguish between Type A and Type B programs:	\$ 4,407,469	
Auditee qualified as low-risk auditee?	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no

# THE PENNSYLVANIA STATE UNIVERSITY

## SCHEDULE OF FINDINGS AND QUESTIONED COSTS (Continued)

### SECTION II — FINANCIAL STATEMENT FINDING

#### Classification of Net Assets and Gifts and Pledges

##### Finding: 2022-001 – Significant Deficiency

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**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** - 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 restrictions, and Board designated amounts.

**Cause** - The University did not appropriately design and implement a control, or a series of controls, to allow for a method of tracking net asset restrictions and when those restrictions are satisfied based on donor intent. A similar method was not established for Board designated amounts.

**Effect** - There were multiple instances identified in which net assets with donor restrictions were incorrectly classified as net assets without donor restrictions in the financial statements and the related notes to the financial statements.

**Recommendation** – The University should design and implement a control, or a series of controls, to allow for a method of tracking net asset restrictions and when those restrictions are satisfied based on donor intent. A similar method should be established for Board designated amounts. The University is responsible for maintaining documentation on an individual gift basis about the activities and other purposes for which the original gift, and earnings thereon, are to be used. This documentation shall include, but not be limited to, restrictions on periods in which the gift can be spent, restrictions on the specific assets, limitations on investing, or other donor restrictions that limit the use of the resources. For gifts that have complex restrictions, it is advisable to retain a copy of the original donor agreement as part of this documentation.

This may involve modifying University Policy FN03 “Substantiation, Disclosure, and Accountability for the Receipt of Contributions from Non-Governmental Sources” to include language from FASB ASC 958-605 with respect to net asset classification, donor-imposed restrictions, and Board designated amounts.

**Views of Responsible Officials** – Management will work to enhance master data in SIMBA to ensure the appropriate cost collectors are established to manage and track funds within the appropriate net asset classification. True donor-restricted revenue will be classified as net assets with donor restrictions, while unrestricted revenue and internally designated funds will be classified as net assets without donor restriction. By bifurcating these funding classifications, management will have visibility into expenses incurred to ascertain whether restrictions have been satisfied. All documentation associated with each gift or gift fund will be maintained until the gift has been fully spent and all restrictions have been satisfied. In order to ensure donor funding is classified appropriately upon receipt, management will work to update University Policy FN03 “Substantiation, Disclosure, and Accountability for the Receipt of Contributions from Non-Governmental Sources” to include language from FASB ASC 958-605 with respect to net asset classification, donor-imposed restrictions, and internally designated funds.

**THE PENNSYLVANIA STATE UNIVERSITY**

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS (Continued)**

**SECTION III — FEDERAL AWARD FINDINGS**

**ALN Number:** 84.425F

**Federal Agency:** U.S. Department of Education

**Compliance:** Reporting/Special Reporting- Quarterly Budget and Expenditure Reporting for HEERF I, II, and III (a)(1) Institutional Portion, (a)(2), and (a)(3)

**Finding:** 2022-002 - Deficiency

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**Criteria** – Guidance in the *Quarterly Budget and Expenditure Reporting for HEERF I, II, and III (a)(1) Institutional Portion, (a)(2), and (a)(3) Reporting* instructions state that the reporting form must be conspicuously posted on the institution’s primary website on the same page the reports of the institution of higher education’s activities as to the emergency financial aid grants to students made with funds from the University’s’ allocation under Section 18004(a)(1) of the CARES Act (Student Aid Portion) are posted. It may be posted in an HTML webpage format or as a link to a PDF. A new, separate, form must be posted covering each quarterly reporting period (September 30, December 31, March 31, June 30), concluding after either (1) posting the quarterly report ending September 30, 2022, or (2) when an institution has expended and liquidated all (a)(1) Institutional Portion, (a)(2), and (a)(3) funds and checks the “final report” box. The University must post this quarterly reporting form no later than 10 days after the end of each calendar quarter (October 10, January 10, April 10, July 10) apart from the first report, which is due October 30, 2020.

**Condition** - The University received 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, was due on July 10, 2021, and was submitted on August 16, 2021.

**Cause** - The University did not ensure that report was submitted by the required due date.

**Effect** - The funding agency could reject the report and reject the reimbursement request.

**Repeat Finding** – No

**Recommendation** – We recommend that the University submit the required report within the time frame prescribed by U.S. Department of Education.

**Questioned Costs** - None

**Views of Responsible Officials** – While the University agrees that the report for HEERF III for the quarter ended June 30, 2021 was submitted late, it should be noted that \$0 was expended for this time period. The University was still attempting to interpret the somewhat fluid reporting requirements at the time and as soon as the error was realized, the report was submitted. It is also worth noting that the University timely reported on HEERF II funding spent for this same quarter, and all future HEERF III reports have been submitted timely.



**THE PENNSYLVANIA STATE UNIVERSITY**

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS (Continued)**

**SECTION III — FEDERAL AWARD FINDINGS (Continued)**

**ALN Number:** 93.155  
**Federal Agency:** Health Resources and Services Administration (HRSA)  
**Compliance:** Reporting- Federal Funding Accountability and Transparency Act  
**Finding:** 2022-003 – Deficiency

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**Criteria** – Guidance in the *HRSA Grants and Cooperative Agreements- Federal Funding Accountability and Transparency Act (FFATA) Subaward Reporting into FFATA* instructions state that the Prime Recipient is required to submit Subaward Reporting by the end of the month following the month in which the pass-through entity awards any subaward greater than or equal to \$30,000. Subaward information must be submitted on a rolling basis by the end of the month following the month in which the obligation was made. The prime recipient’s executive compensation information must be provided in SAM by the end of the month following the month in which the obligation was made by HRSA, and annually thereafter during the period of support. As per FFATA regulation only one report is allowed to be filed per award per report month. All subaward activity for the report’s month should be included in the report, if sub-awards made multiple different subawards in multiple different months, then the University is required to file multiple reports; one for each month the subawards were issued.

**Condition** - The University provided subawards to various Hospitals during the fiscal year ended June 30, 2022. We reviewed the FFATA submitted by the University and noted that FFATA submission was not within time frame as required by the HRSA.

**Cause** - The University did not ensure that FFATA was submitted by the required due dates.

**Effect** - The funding agency could reject the reimbursement request.

**Repeat Finding** – No

**Recommendation** – We recommend that the University submit the required FFATA reports within the time frame prescribed by HRSA.

**Questioned Costs** - None

**Views of Responsible Officials** – The University has a system to identify first tier subawards of \$30,000 or more and a system to identify Purchase Orders (PO) generating vendor payments of \$30,000 or more. These established processes are managed by the Office of Sponsored Programs (OSP) and the Office of Central Procurement (OCP), respectively. The identified hospital payments were not processed as subaward payments, nor were they processed through OCP where a payment would be generated via PO. The payments were made under unit specific service contracts and paid via non-PO payment (or direct payment) to the hospital partners. While this type of payment is authorized by Penn State systems, it was unknown at the time of payment that non-PO payments were not routed to OCP for review and validation of the FFATA reporting requirements. To ensure future compliance:

- OCP will conduct a retroactive review of all non-PO payments \$30,000 or greater from July 2020 through present to ensure FFATA reporting is complete and accurate
- OSP and OCP will work with colleges to develop a unit-level process to review and identify eligible FFATA reporting prior to submission of non-PO payment requests
- OCP will conduct a bi-weekly review of all non-PO payments \$30,000 or greater to ensure any transactions meeting FFATA requirements are reported timely and appropriately.

**THE PENNSYLVANIA STATE UNIVERSITY**

**SUMMARY SCHEDULE OF PRIOR YEAR AUDIT FINDINGS  
FOR THE YEAR ENDED JUNE 30, 2022**

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The following schedule contains the finding reference number and title for the finding(s) included in the June 30, 2021 report and the status of each finding as of June 30, 2022.

<b><u>Reference Number</u></b>	<b><u>Program</u></b>	<b><u>Corrective Action</u></b>
2021-001	Recording of Grant and Gift Income	Corrected