

STATE BOARD OF ACCOUNTS
302 West Washington Street
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INDIANAPOLIS, INDIANA 46204-2769

FEDERAL SINGLE AUDIT REPORT

PURDUE UNIVERSITY

WEST LAFAYETTE, INDIANA

July 1, 2018 to June 30, 2019



FILED
02/20/2020

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SCHEDULE OF UNIVERSITY OFFICIALS

<u>Office</u>	<u>Official</u>	<u>Term</u>
President	Mitchell E. Daniels, Jr.	07-01-18 to 06-30-20
Treasurer and Chief Financial Officer	William E. Sullivan Christopher A. Ruhl	07-01-18 to 12-31-19 01-01-20 to 06-30-20
Senior Vice President And Assistant Treasurer	James S. Almond	07-01-18 to 06-30-20
Executive Vice President for Research and Partnerships	Suresh V. Garimella (Vacant) Dr. Theresa Mayer	07-01-18 to 06-30-19 07-01-19 to 07-31-19 08-01-19 to 06-30-20
Chairman of the Board of Trustees	Michael R. Berghoff	07-01-18 to 06-30-20



INDEPENDENT AUDITOR'S REPORT ON SCHEDULE OF EXPENDITURES
OF FEDERAL AWARDS REQUIRED BY THE UNIFORM GUIDANCE

TO: THE OFFICIALS OF PURDUE UNIVERSITY, WEST LAFAYETTE, INDIANA

We have audited the financial statements of the business-type activities and the aggregate discretely presented component units of Purdue University (University), a component unit of the State of Indiana, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the University's basic financial statements. We issued our report thereon dated October 10, 2019, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. We have not performed any procedures with respect to the audited financial statements subsequent to October 10, 2019. Our report includes a reference to other auditors who audited the financial statements of the Purdue Research Foundation (Foundation) and Purdue University Global, Inc. (Purdue Global), as described in our report on the University's financial statements.

The University's basic financial statements include the operations of Purdue Global, a blended component unit. Purdue Global expended \$424,726,284 in federal awards that are reported separately and are not included in the University's Schedule of Expenditures of Federal Awards for the year ended June 30, 2019. Other auditors were engaged to perform audit procedures on Purdue Global's Schedule of Expenditures of Federal Awards and, accordingly, this report does not include those results of those audit procedures.

The accompanying Schedule of Expenditures of Federal Awards is presented for purposes of additional analysis as required by the Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. 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 basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditures of Federal Awards is fairly stated, in all material respects, in relation to the basic financial statements, as a whole.

Paul D. Joyce
Paul D. Joyce, CPA
State Examiner

October 10, 2019



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 OFFICIALS OF PURDUE UNIVERSITY, WEST LAFAYETTE, INDIANA

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities and the aggregate discretely presented component units of Purdue University (University), a component unit of the State of Indiana, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the University's basic financial statements and have issued our report thereon dated October 10, 2019. Our report includes a reference to other auditors who audited the financial statements of the Purdue Research Foundation (Foundation) and Purdue University Global, Inc. as described in our report on the University's financial statements. The financial statements of the Foundation were not audited in accordance with *Government Auditing Standards*. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors.

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) to determine the 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. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.


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*
(Continued)

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 determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the 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.


Paul D. Joyce, CPA
State Examiner

October 10, 2019



INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR
FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE

TO: THE OFFICIALS OF PURDUE UNIVERSITY, WEST LAFAYETTE, INDIANA

Report on Compliance for Each Major Federal Program

We have audited Purdue University's (University) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2019. 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.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the University's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the University's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the University's compliance.

Opinion on Each Major Federal Program

In our opinion, the University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2019.

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR
FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE
(Continued)

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 2019-001 and 2019-002. Our opinion on each major federal program is not modified with respect to these matters.

The University's response to the noncompliance findings identified in our audit is described in the accompanying Corrective Action Plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

Report on Internal Control over Compliance

Management of the University is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the University's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program 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 internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over compliance.

Our consideration of internal control over compliance was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and, therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we identified certain deficiencies in internal control over compliance that we consider to be material weaknesses and significant deficiencies.

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 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. We consider the deficiencies in internal control over compliance described in the accompanying Schedule of Findings and Questioned Costs as item 2019-002 to be a material weakness.

A significant deficiency in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance. We consider the deficiencies in internal control over compliance described in the accompanying Schedule of Findings and Questioned Costs as item 2019-001 to be significant deficiencies.

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR
FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE
(Continued)

The University's response to the internal control over compliance findings identified in our audit is described in the accompanying Corrective Action Plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

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.

Paul D. Joyce
Paul D. Joyce, CPA
State Examiner

February 5, 2020

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND ACCOMPANYING NOTES

The Schedule of Expenditures of Federal Awards and accompanying notes presented were prepared by management of the University. The schedule and notes are presented as intended by the University.

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.007	Federal Supplemental Educational Opportunity Grants	2,244,431	0
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.033	Federal Work-Study Program	1,681,009	0
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.063	Federal Pell Grant Program	51,744,269	0
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.379	Teacher Education Asst for College & Higher Education Grants (TEACH Grants)	15,868	0
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.268	LOAN/LOAN GUARANTEE - Federal Direct Student Loans	176,149,556	0
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.038	LOAN/LOAN GUARANTEE - Federal Perkins Loan Program_Federal Capital Contributions	19,287,972	0
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.408	Iraq and Afghanistan Service Grant (IASG)	5,717	0
Student Financial Assistance Cluster*	Total - U.S. Department of Education						251,128,822	0
Student Financial Assistance Cluster*	U.S. Department of Health & Human Services	Direct			93.342	LOAN/LOAN GUARANTEE - Health Professions Student Loans, Including Primary Care Loan	3,082,993	0
Student Financial Assistance Cluster*	Total - U.S. Department of Health & Human Services						3,082,993	0
Total - Student Financial Assistance Cluster*							254,211,815	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.001	Agricultural Research_Basic and Applied Research	2,777,297	347,928
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AGRICULTURAL RESEARCH SERVICE	59-5020-7-001	10.001	Agricultural Research_Basic and Applied Research	71,215	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AGRICULTURAL RESEARCH SERVICE	59-5020-8-002	10.001	Agricultural Research_Basic and Applied Research	2,731	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AGRICULTURAL RESEARCH SERVICE	59-5020-8-004	10.001	Agricultural Research_Basic and Applied Research	100,063	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AGRICULTURAL RESEARCH SERVICE	59-5020-9-003	10.001	Agricultural Research_Basic and Applied Research	7,952	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AGRICULTURAL RESEARCH SERVICE	59-5090-7-003	10.001	Agricultural Research_Basic and Applied Research	19,168	0
					Total - 10.001		2,978,426	347,928
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.025	Plant and Animal Disease, Pest Control, and Animal Care	515,681	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	CORNELL UNIVERSITY	81230-10953	10.025	Plant and Animal Disease, Pest Control, and Animal Care	3,184	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT# 29323	10.025	Plant and Animal Disease, Pest Control, and Animal Care	54,219	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT# 29891	10.025	Plant and Animal Disease, Pest Control, and Animal Care	27,451	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT# 32519	10.025	Plant and Animal Disease, Pest Control, and Animal Care	6,572	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	XAVIER UNIVERSITY	USDA1718-1	10.025	Plant and Animal Disease, Pest Control, and Animal Care	5,940	0
					Total - 10.025		613,047	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.028	Wildlife Services	49,334	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.069	Conservation Reserve Program	52,945	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.156	Federal-State Marketing Improvement Program	26,642	18,027
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.170	Specialty Crop Block Grant Program - Farm Bill	42,947	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-17-SCBG-101	10.170	Specialty Crop Block Grant Program - Farm Bill	40,902	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-17-SCBG-105	10.170	Specialty Crop Block Grant Program - Farm Bill	9,068	0

* denotes major programs
 The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-17-SCBG-106	10.170	Specialty Crop Block Grant Program - Farm Bill	39,954	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-19-SCBG-18-004	10.170	Specialty Crop Block Grant Program - Farm Bill	22,719	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-19-SCBG-18-006	10.170	Specialty Crop Block Grant Program - Farm Bill	10,576	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT ID 24214	10.170	Specialty Crop Block Grant Program - Farm Bill	18,663	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT ID 24216	10.170	Specialty Crop Block Grant Program - Farm Bill	5,016	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT ID 24217	10.170	Specialty Crop Block Grant Program - Farm Bill	9,582	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT ID 24218	10.170	Specialty Crop Block Grant Program - Farm Bill	7,971	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	EDS# A337-16-SCBG-15-004	10.170	Specialty Crop Block Grant Program - Farm Bill	-838	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	INDIANA UNIVERSITY	SUBAWARD #BL-4746614-PU	10.170	Specialty Crop Block Grant Program - Farm Bill	1,020	0
					Total - 10.170		207,580	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.200	Grants for Agricultural Research, Special Research Grants	112,085	9,878
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	388639	10.200	Grants for Agricultural Research, Special Research Grants	2,092	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	416-41-71F	10.200	Grants for Agricultural Research, Special Research Grants	6,278	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	446957	10.200	Grants for Agricultural Research, Special Research Grants	1,024	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	COLORADO STATE UNIVERSITY	UV MONITORING 2008	10.200	Grants for Agricultural Research, Special Research Grants	374	0
					Total - 10.200		121,853	9,878
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.202	Cooperative Forestry Research	726,990	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.203	Payments to Agricultural Experiment Stations Under the Hatch Act	6,053,174	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.207	Animal Health and Disease Research	48,757	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NOVATEUR RESEARCH SOLUTIONS LLC	2017-33610-26707	10.212	Small Business Innovation Research	12,681	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NUTRAMAIZE	80542	10.212	Small Business Innovation Research	32,386	0
					Total - 10.212		45,067	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H004403704 LNC14-359	10.215	Sustainable Agriculture Research and Education	22,932	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H004991210	10.215	Sustainable Agriculture Research and Education	20,952	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H005722932	10.215	Sustainable Agriculture Research and Education	3,437	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H005722955	10.215	Sustainable Agriculture Research and Education	10,288	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H005722957	10.215	Sustainable Agriculture Research and Education	686	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607402	10.215	Sustainable Agriculture Research and Education	29,923	1,812
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607403	10.215	Sustainable Agriculture Research and Education	54,519	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607404	10.215	Sustainable Agriculture Research and Education	91,747	49,709
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607432	10.215	Sustainable Agriculture Research and Education	587	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H007179315	10.215	Sustainable Agriculture Research and Education	16,459	0

* denotes major programs
 The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
					Total - 10.215		251,530	51,521
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	LANGSTON UNIVERSITY	2017-38821-26445	10.216	1890 Institution Capacity Building Grants	52,654	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.217	Higher Education Challenge Grants	37,651	7,811
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.219	Biotechnology Risk Assessment Research	92,353	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	RICE UNIVERSITY	R19322	10.219	Biotechnology Risk Assessment Research	5,649	0
					Total - 10.219		98,002	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.226	Secondary and Two-Year Postsecondary Agriculture Education Challenge Grants	11,197	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.250	Agricultural and Rural Economic Research	75,376	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF RHODE ISLAND	0005238/01232019	10.250	Agricultural and Rural Economic Research	7,156	0
					Total - 10.250		82,532	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.253	Consumer Data and Nutrition Research	16,055	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.290	Agricultural Market and Economic Research	21,662	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	VIRGINIA TECH	422615-19084	10.303	Integrated Programs	36,221	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF CONNECTICUT	76427	10.303	Integrated Programs	133,599	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC108938PU	10.303	Integrated Programs	6,499	0
					Total - 10.303		176,319	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.304	Homeland Security_Agricultural	117,250	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC106556E	10.304	Homeland Security_Agricultural	19,529	0
					Total - 10.304		136,779	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.307	Organic Agriculture Research and Extension Initiative	561,198	225,395
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC106531A	10.307	Organic Agriculture Research and Extension Initiative	27,885	0
					Total - 10.307		589,083	225,395
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.309	Specialty Crop Research Initiative	990,056	233,255
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	06-M1703517	10.309	Specialty Crop Research Initiative	8,018	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006335003	10.309	Specialty Crop Research Initiative	79,927	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	M1900056	10.309	Specialty Crop Research Initiative	29,614	0
					Total - 10.309		1,107,615	233,255
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.310	Agriculture and Food Research Initiative	5,025,875	944,916
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	KENTUCKY STATE UNIVERSITY	210174 202092 3100	10.310	Agriculture and Food Research Initiative	41,074	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA	26-6221-0338-002	10.310	Agriculture and Food Research Initiative	9,773	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ARIZONA	277590	10.310	Agriculture and Food Research Initiative	79,111	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	TUSKEGEE UNIVERSITY	36 22091 424 76190	10.310	Agriculture and Food Research Initiative	2,318	0

* denotes major programs
 The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	SOUTH DAKOTA STATE UNIVERSITY	3TE462	10.310	Agriculture and Food Research Initiative	28,689	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	VIRGINIA POLYTECHNIC INST & STATE UNIV	422475-19084	10.310	Agriculture and Food Research Initiative	28,919	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5237-PU-USDA-3509	10.310	Agriculture and Food Research Initiative	-2,185	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	OHIO STATE UNIVERSITY	60064615	10.310	Agriculture and Food Research Initiative	49,624	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H004383003	10.310	Agriculture and Food Research Initiative	24,429	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF HAWAII	MA1251	10.310	Agriculture and Food Research Initiative	2,062	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC107153PU	10.310	Agriculture and Food Research Initiative	14,442	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	KANSAS STATE UNIVERSITY	S15170	10.310	Agriculture and Food Research Initiative	684	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	KANSAS STATE UNIVERSITY	S16156	10.310	Agriculture and Food Research Initiative	28,976	0
					Total - 10.310		5,333,791	944,916
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.318	Women and Minorities in Science, Technology, Engineering, and Mathematics Fields	27,640	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.329	Crop Protection and Pest Management Competitive Grants Program	10,620	9,934
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	076332-16669	10.329	Crop Protection and Pest Management Competitive Grants Program	15,310	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MISSOURI	C00059074-2	10.329	Crop Protection and Pest Management Competitive Grants Program	3,655	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC108174 PURDUE	10.329	Crop Protection and Pest Management Competitive Grants Program	1,940	0
					Total - 10.329		31,525	9,934
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.351	Rural Business Development Grant	47,104	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MISSISSIPPI STATE UNIVERSITY	018000.340677.01	10.352	Value-Added Producer Grants	6,111	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.500	Cooperative Extension Service	421,423	54,963
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	ILLINOIS COOPERATIVE EXTENSION SERVICE	14098242; IL 008250	10.500	Cooperative Extension Service	18,158	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	25-6324-0187-015	10.500	Cooperative Extension Service	1,126	0
					Total - 10.500		440,707	54,963
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.652	Forestry Research	293,024	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	US ENDOWMENT FORESTRY COMMUNITIES	E16-50	10.652	Forestry Research	-87	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	OREGON STATE UNIVERSITY	J2285A-B	10.652	Forestry Research	26,739	0
					Total - 10.652		319,676	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	9500075412	10.675	Urban and Community Forestry Program	5,546	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.680	Forest Health Protection	83,135	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.777	Norman E. Borlaug International Agricultural Science and Technology Fellowship	129,208	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.890	Rural Development Cooperative Agreement Program	13,601	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MISSISSIPPI STATE UNIVERSITY	018000.340677.04	10.890	Rural Development Cooperative Agreement Program	5	0
					Total - 10.890		13,606	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.902	Soil and Water Conservation	109,122	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN ASSOC OF SOIL & WATER CONSERV DIST	15087816	10.902	Soil and Water Conservation	25,461	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	CONSERVATION TECHNOLOGY INFORMATION CTR	68-3A75-14-304	10.902	Soil and Water Conservation	86,856	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF WISCONSIN	PURDUE_16100055	10.902	Soil and Water Conservation	55,984	0
					Total - 10.902		277,423	0
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.903	Soil Survey	35,989	15,345
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.960	Technical Agricultural Assistance	105,005	20
Research and Development Cluster	U.S. Department of Agriculture	Direct		E17-19	10.RD	U.S. Department of Agriculture	74,401	0
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	P3 NANO	P3-1	10.RD	U.S. Department of Agriculture	16,496	16,490
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	P3 NANO	P3-3	10.RD	U.S. Department of Agriculture	7,482	0
					Total - 10.RD		98,379	16,490
Research and Development Cluster	Total - U.S. Department of Agriculture						20,459,739	1,935,483
Research and Development Cluster	U.S. Department of Commerce	Direct			11.001	Census Bureau Data Products	168,034	28,698
Research and Development Cluster	U.S. Department of Commerce	Direct			11.303	Economic Development_Technical Assistance	93,778	0
Research and Development Cluster	U.S. Department of Commerce	Direct			11.417	Sea Grant Support	72,936	63,888
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	074483-15948	11.417	Sea Grant Support	92,265	0
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	074483-15949	11.417	Sea Grant Support	42,467	8,818
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF ILLINOIS	14-02342-04 074483-15049	11.417	Sea Grant Support	682	0
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF ILLINOIS	2014-02342-01 15036	11.417	Sea Grant Support	5,983	0
					Total - 11.417		214,333	72,706
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	EDS# E16-6-KMA0522	11.419	Coastal Zone Management Administration Awards	4,207	0
Research and Development Cluster	U.S. Department of Commerce	Direct			11.459	Weather and Air Quality Research	30,709	0
Research and Development Cluster	U.S. Department of Commerce	Direct			11.609	Measurement and Engineering Research and Standards	1,940,201	969,962
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	STATE UNIVERSITY OF NEW YORK	13-10	11.609	Measurement and Engineering Research and Standards	-246	0
					Total - 11.609		1,939,955	969,962
Research and Development Cluster	U.S. Department of Commerce	Direct			11.611	Manufacturing Extension Partnership	83,435	0
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	ILLINOIS MF EXCELLENCE CENTER	17012343	11.611	Manufacturing Extension Partnership	54,135	0
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	EDS# A229-6-EDF-2080	11.611	Manufacturing Extension Partnership	34,523	0
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	NATNL INST FOR INNOVATION IN MF BIO	SP1.0-3	11.611	Manufacturing Extension Partnership	27,312	0
					Total - 11.611		199,405	0
Research and Development Cluster	U.S. Department of Commerce	Direct			11.620	Science, Technology, Business and/or Education Outreach	15,801	0
Research and Development Cluster	Total - U.S. Department of Commerce						2,666,222	1,071,366

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Defense	Direct			12.300	Basic and Applied Scientific Research	12,420,344	2,023,066
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF CONNECTICUT	163164	12.300	Basic and Applied Scientific Research	134,323	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	2012 02341 01 (A0442)	12.300	Basic and Applied Scientific Research	55,584	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF PENNSYLVANIA	572339	12.300	Basic and Applied Scientific Research	108,320	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CORNELL UNIVERSITY	81424-10839	12.300	Basic and Applied Scientific Research	121,182	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	M1901497	12.300	Basic and Applied Scientific Research	25,739	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	FLORIDA STATE UNIVERSITY	R01850	12.300	Basic and Applied Scientific Research	182,800	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	EXO-ATMOSPHERIC TECHNOLOGIES LLC	S1000	12.300	Basic and Applied Scientific Research	74,146	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GRIFFISS INSTITUTE INC	SA2018-UP-027	12.300	Basic and Applied Scientific Research	8,190	0
					Total - 12.300		13,130,628	2,023,066
Research and Development Cluster	U.S. Department of Defense	Direct			12.351	Basic Scientific Research - Combating Weapons of Mass Destruction	946,604	192,845
Research and Development Cluster	U.S. Department of Defense	Direct			12.420	Military Medical Research and Development	2,060,888	437,033
Research and Development Cluster	U.S. Department of Defense	Pass-Through	REHABILITATION INST OF CHICAGO	5098	12.420	Military Medical Research and Development	14,874	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CALIFORNIA INSTITUTE OF TECHNOLOGY	S374892	12.420	Military Medical Research and Development	138,370	0
					Total - 12.420		2,214,132	437,033
Research and Development Cluster	U.S. Department of Defense	Direct			12.431	Basic Scientific Research	1,808,428	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF TEXAS AT DALLAS	1604768	12.431	Basic Scientific Research	60,059	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF NEW SOUTH WALES	171011	12.431	Basic Scientific Research	110,673	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	3002778250	12.431	Basic Scientific Research	198,504	16,356
Research and Development Cluster	U.S. Department of Defense	Pass-Through	VIRGINIA TECH	451474-19084	12.431	Basic Scientific Research	61,959	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INDIANA UNIVERSITY	BL-4329734-PU	12.431	Basic Scientific Research	80,261	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NORFOLK STATE UNIVERSITY	F1040059	12.431	Basic Scientific Research	8,576	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GEORGIA TECH	RH541-G4	12.431	Basic Scientific Research	27,064	0
					Total - 12.431		2,355,524	16,356
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	3004036942	12.611	Community Economic Adjustment Planning Assistance for Reductions in Defense Indu	115,042	0
Research and Development Cluster	U.S. Department of Defense	Direct			12.630	Basic, Applied, and Advanced Research in Science and Engineering	1,087	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DELAWARE	42145	12.630	Basic, Applied, and Advanced Research in Science and Engineering	1	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DELAWARE	45574	12.630	Basic, Applied, and Advanced Research in Science and Engineering	-9,723	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DELAWARE	49188	12.630	Basic, Applied, and Advanced Research in Science and Engineering	49,664	0
					Total - 12.630		41,029	0
Research and Development Cluster	U.S. Department of Defense	Direct			12.800	Air Force Defense Research Sciences Program	4,459,363	190,993
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CARNEGIE-MELLON UNIVERSITY	1150119-294739	12.800	Air Force Defense Research Sciences Program	19,521	0

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Research and Development Cluster	U.S. Department of Defense	Pass-Through	HARVARD UNIVERSITY	123885-5079396	12.800	Air Force Defense Research Sciences Program	225,447	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NEXTFLEX	16088525	12.800	Air Force Defense Research Sciences Program	17,846	17,846
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NEXTFLEX	17013120	12.800	Air Force Defense Research Sciences Program	104,428	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	J.T. MCGRAW AND ASSOCIATES, LLC	17090041	12.800	Air Force Defense Research Sciences Program	85,329	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LEVEL 6 ENGINEERING LLC	18078958	12.800	Air Force Defense Research Sciences Program	19,986	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	HIGH PERFORMANCE IMAGING	18101381	12.800	Air Force Defense Research Sciences Program	58,126	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SYSTEMS & TECHNOLOGY RESEARCH	2018-0043	12.800	Air Force Defense Research Sciences Program	127,551	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	3004428167	12.800	Air Force Defense Research Sciences Program	190,892	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	VANDERBILT UNIVERSITY	3091-01093	12.800	Air Force Defense Research Sciences Program	623	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	4792-PU-AFOSR-0004	12.800	Air Force Defense Research Sciences Program	79,718	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	VON KARMAN INST FOR FLUID DYNAMICS	FA9550-16-1-0120	12.800	Air Force Defense Research Sciences Program	10,576	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF CHICAGO	FP057123-D	12.800	Air Force Defense Research Sciences Program	257,413	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NORTHROP GRUMMAN CORPORATION	PO 2941972	12.800	Air Force Defense Research Sciences Program	128,679	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CASE WESTERN RESERVE UNIVERSITY	RES506635	12.800	Air Force Defense Research Sciences Program	-400	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF CALIFORNIA-RIVERSIDE	S-000701	12.800	Air Force Defense Research Sciences Program	143,675	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1713-001-1	12.800	Air Force Defense Research Sciences Program	172,304	0
					Total - 12.800		6,101,077	208,839
Research and Development Cluster	U.S. Department of Defense	Direct			12.901	Mathematical Sciences Grants Program	26,785	0
Research and Development Cluster	U.S. Department of Defense	Direct			12.902	Information Security Grants	626,696	182,474
Research and Development Cluster	U.S. Department of Defense	Direct			12.903	GenCyber Grants Program	177,447	0
Research and Development Cluster	U.S. Department of Defense	Direct			12.905	CyberSecurity Core Curriculum	267,558	108,289
Research and Development Cluster	U.S. Department of Defense	Direct			12.910	Research and Technology Development	2,178,434	199,491
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ROCHESTER INSTITUTE OF TECHNOLOGY	417385/URFAO GRS10841	12.910	Research and Technology Development	68,331	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5621-PU-DARPA-0032	12.910	Research and Technology Development	301,661	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5852-PU-DARPA-0109	12.910	Research and Technology Development	235,366	0
					Total - 12.910		2,783,792	199,491
Research and Development Cluster	U.S. Department of Defense	Direct		17066836	12.RD	U.S. Department of Defense	301,709	0
Research and Development Cluster	U.S. Department of Defense	Direct		17122444	12.RD	U.S. Department of Defense	-9	0
Research and Development Cluster	U.S. Department of Defense	Direct		18090157	12.RD	U.S. Department of Defense	125,401	0
Research and Development Cluster	U.S. Department of Defense	Direct		19089079	12.RD	U.S. Department of Defense	42,732	0
Research and Development Cluster	U.S. Department of Defense	Direct		2019-016	12.RD	U.S. Department of Defense	17,679	0
Research and Development Cluster	U.S. Department of Defense	Direct		2019-19-020700004	12.RD	U.S. Department of Defense	1,941	0

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Research and Development Cluster	U.S. Department of Defense	Direct		2102765-02	12.RD	U.S. Department of Defense	2,055	0
Research and Development Cluster	U.S. Department of Defense	Direct		FA8750-17-C-0069	12.RD	U.S. Department of Defense	446,871	119,942
Research and Development Cluster	U.S. Department of Defense	Direct		HQ0147-15-C-6003	12.RD	U.S. Department of Defense	30,958	0
Research and Development Cluster	U.S. Department of Defense	Direct		HQ0147-16-C-6001	12.RD	U.S. Department of Defense	99,067	0
Research and Development Cluster	U.S. Department of Defense	Direct		HQ0147-16-C-6005	12.RD	U.S. Department of Defense	178,236	0
Research and Development Cluster	U.S. Department of Defense	Direct		HR001119C0038	12.RD	U.S. Department of Defense	84,172	0
Research and Development Cluster	U.S. Department of Defense	Direct		IPA MELISSA DARK	12.RD	U.S. Department of Defense	2,922	0
Research and Development Cluster	U.S. Department of Defense	Direct		N00164-19-P-0106	12.RD	U.S. Department of Defense	15,278	0
Research and Development Cluster	U.S. Department of Defense	Direct		N00174-16-C-0007	12.RD	U.S. Department of Defense	102,327	0
Research and Development Cluster	U.S. Department of Defense	Direct		N6893618P0078	12.RD	U.S. Department of Defense	98,937	0
Research and Development Cluster	U.S. Department of Defense	Direct		NTP-19100525	12.RD	U.S. Department of Defense	4,772	0
Research and Development Cluster	U.S. Department of Defense	Direct		OAI-CAPST-19088	12.RD	U.S. Department of Defense	8,997	0
Research and Development Cluster	U.S. Department of Defense	Direct		SP8000-18-P-0007	12.RD	U.S. Department of Defense	83,643	0
Research and Development Cluster	U.S. Department of Defense	Direct		SPAFFORDIPA	12.RD	U.S. Department of Defense	81,522	0
Research and Development Cluster	U.S. Department of Defense	Direct		W81XWH-14-1-0588	12.RD	U.S. Department of Defense	2,241	0
Research and Development Cluster	U.S. Department of Defense	Direct		W911NF-16-2-0020	12.RD	U.S. Department of Defense	1,441,618	0
Research and Development Cluster	U.S. Department of Defense	Direct		W911NF-18-1-0074	12.RD	U.S. Department of Defense	138,401	0
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-14-C-0047	12.RD	U.S. Department of Defense	25,229	0
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-16-C-0048	12.RD	U.S. Department of Defense	384,728	0
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-18-C-0021	12.RD	U.S. Department of Defense	138,654	0
Research and Development Cluster	U.S. Department of Defense	Direct		W91CRB-14-C-0025	12.RD	U.S. Department of Defense	407,202	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF CALIFORNIA-LOS ANGELES	0205GTA682	12.RD	U.S. Department of Defense	88,838	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CUBRC INC	07983.12S2	12.RD	U.S. Department of Defense	23,347	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BAE SYSTEMS ADVANCED TECHNOLOGIES, INC.	1017479	12.RD	U.S. Department of Defense	87,500	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INDIANA MICROELECTRONICS LLC	12097721	12.RD	U.S. Department of Defense	37	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	HRL LABORATORIES, LLC	12105-301701-DS	12.RD	U.S. Department of Defense	64,386	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS	130148	12.RD	U.S. Department of Defense	16,077	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	HELICON CHEMICAL COMPANY	15109773	12.RD	U.S. Department of Defense	12,601	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS	151437	12.RD	U.S. Department of Defense	141,081	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS	155220	12.RD	U.S. Department of Defense	30,171	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSAL TECHNOLOGY CORPORATION	16-S7415-06-C2	12.RD	U.S. Department of Defense	-500	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	S RAM DYNAMICS	16044615	12.RD	U.S. Department of Defense	-34	0

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Research and Development Cluster	U.S. Department of Defense	Pass-Through	SONRISA RESEARCH INC	17012939	12.RD	U.S. Department of Defense	398,394	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF ILLINOIS AT CHICAGO	17043	12.RD	U.S. Department of Defense	47,945	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INDIANA MICROELECTRONICS LLC	17056255	12.RD	U.S. Department of Defense	-1,717	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	MAGEE TECHNOLOGIES, LLC	180027	12.RD	U.S. Department of Defense	40,503	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IN TECH & MANUFACTURING CO	18089187	12.RD	U.S. Department of Defense	33,000	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ENURGA, INC.	18123286	12.RD	U.S. Department of Defense	30,000	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SRI INTERNATIONAL	19-000269	12.RD	U.S. Department of Defense	228,225	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CONTINUOUS SOLUTIONS	19025033	12.RD	U.S. Department of Defense	28,303	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ENGINE RESEARCH ASSOCIATES INC	19035351	12.RD	U.S. Department of Defense	5,253	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TWINLEAF LLC	19035493	12.RD	U.S. Department of Defense	76,485	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF NOTRE DAME	2013-MA-2383	12.RD	U.S. Department of Defense	-49	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CFD RESEARCH CORPORATION	20160552	12.RD	U.S. Department of Defense	104,527	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2018-0438-01	12.RD	U.S. Department of Defense	86,226	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ADVANCED TECHNOLOGY INTERNATIONAL	2018-505 TASK 1	12.RD	U.S. Department of Defense	56,724	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ADVANCED TECHNOLOGY INTERNATIONAL	2018-505 TASK NO. 2	12.RD	U.S. Department of Defense	45,200	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CFD RESEARCH CORPORATION	2018001	12.RD	U.S. Department of Defense	1,369	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF NOTRE DAME	203488PU	12.RD	U.S. Department of Defense	67,460	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2102854-01	12.RD	U.S. Department of Defense	105,441	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NATIONAL AEROSPACE SOLUTIONS, LLC	405173	12.RD	U.S. Department of Defense	16,346	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	4700059853	12.RD	U.S. Department of Defense	524,158	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	5005129713	12.RD	U.S. Department of Defense	170,656	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	5005129717	12.RD	U.S. Department of Defense	321,270	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BATTELLE MEMORIAL INSTITUTE	504872	12.RD	U.S. Department of Defense	402,092	257,013
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DELAWARE	52967	12.RD	U.S. Department of Defense	28,860	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF PENNSYLVANIA	575191	12.RD	U.S. Department of Defense	32,048	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STANFORD UNIVERSITY	6097665-118230	12.RD	U.S. Department of Defense	59,098	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PHYSICS MATERIALS & APPLIED MATH	8057-S01	12.RD	U.S. Department of Defense	25,148	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BAE SYSTEMS ADVANCED TECHNOLOGIES, INC.	918668	12.RD	U.S. Department of Defense	8,625	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	AURORA FLIGHT SCIENCES CORPORATION	AMA-16-0018	12.RD	U.S. Department of Defense	-868	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	KORD TECHNOLOGIES INC	KSC-17-001	12.RD	U.S. Department of Defense	44,083	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SMART INFORMATION FLOW TECHNOLOGIES	NEUTRON-PURDUE-01	12.RD	U.S. Department of Defense	30,566	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SOUTHERN ILLINOIS UNIVERSITY	NTP18013194	12.RD	U.S. Department of Defense	41,392	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LEIDOS	P010189902	12.RD	U.S. Department of Defense	45,639	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LEIDOS	P010204872	12.RD	U.S. Department of Defense	48,068	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SCIENCE APPLICATIONS INTNL	P010224172	12.RD	U.S. Department of Defense	355,487	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LOCKHEED MARTIN CORP.	PO #4103672829	12.RD	U.S. Department of Defense	188,409	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GE GLOBAL RESEARCH CENTER	PO 401109013	12.RD	U.S. Department of Defense	73,766	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPACE EXPLORATION TECHNOLOGIES CORP	PO 875048	12.RD	U.S. Department of Defense	257,055	31,755
Research and Development Cluster	U.S. Department of Defense	Pass-Through	RAYTHEON	PO LBN9513127	12.RD	U.S. Department of Defense	311,445	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	HONEYWELL INC.	PO# 4207438363	12.RD	U.S. Department of Defense	46,915	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	PO5004959889	12.RD	U.S. Department of Defense	0	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DAYTON RESEARCH INSTITUTE	RSC17068	12.RD	U.S. Department of Defense	618,554	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-111-051-002	12.RD	U.S. Department of Defense	43,139	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-114-054-002	12.RD	U.S. Department of Defense	29,388	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	APPLIED RESEARCH ASSOCIATES, INC	S-273-003253-02-PU	12.RD	U.S. Department of Defense	179,848	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	APPLIED RESEARCH ASSOCIATES, INC	S-275-003253-03-PU	12.RD	U.S. Department of Defense	281,998	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-987-001-001	12.RD	U.S. Department of Defense	3,815	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	EXO-ATMOSPHERIC TECHNOLOGIES LLC	S1004	12.RD	U.S. Department of Defense	20,000	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	EXO-ATMOSPHERIC TECHNOLOGIES LLC	S1007	12.RD	U.S. Department of Defense	8,271	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BOOZ, ALLEN & HAMILTON, INC	S900880BAH	12.RD	U.S. Department of Defense	-1,160	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1506-001-1	12.RD	U.S. Department of Defense	73,404	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1612-001-1	12.RD	U.S. Department of Defense	53,619	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1708-001-1	12.RD	U.S. Department of Defense	16,094	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1808-001-1	12.RD	U.S. Department of Defense	165,519	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1814-001-1	12.RD	U.S. Department of Defense	51,624	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INNOVATIVE SCIENTIFIC SOLUTIONS, INC.	SB20210	12.RD	U.S. Department of Defense	35,150	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ROCCOR, LLC	SC-RC02-7033	12.RD	U.S. Department of Defense	16,277	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ROCCOR, LLC	SC-RC02-7036	12.RD	U.S. Department of Defense	8,500	0
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GEORGIA STATE UNIVERSITY	SP00012914-02	12.RD	U.S. Department of Defense	358,351	0
					Total - 12.RD		11,076,725	408,710
Research and Development Cluster	Total - U.S. Department of Defense						39,863,039	3,777,103
Research and Development Cluster	Housing & Urban Development	Direct			14.906	Healthy Homes Technical Studies Grants	-290	0
Research and Development Cluster	Total - Housing & Urban Development						-290	0
Research and Development Cluster	U.S. Department of Interior	Direct			15.229	Wild Horse and Burro Resource Management	10,841	0

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Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT# 18949	15.608	Fish and Wildlife Management Assistance	17,408	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT #27739	15.611	Wildlife Restoration	319,067	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT ID 25141	15.611	Wildlife Restoration	63,014	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	M1901198	15.611	Wildlife Restoration	4,301	0
					Total - 15.611		386,382	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT# 19603	15.615	Cooperative Endangered Species Conservation Fund	30,912	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPT NAT RES DIV OF FISH & WILDLIFE	CONTRACT #17236	15.634	State Wildlife Grants	65,337	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT ID 22295	15.634	State Wildlife Grants	39,618	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT ID 23557	15.634	State Wildlife Grants	52,674	0
					Total - 15.634		157,629	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	NATIONAL FISH AND WILDLIFE FOUNDATION	0101.15.050007	15.650	Research Grants (Generic)	8,971	0
Research and Development Cluster	U.S. Department of Interior	Direct			15.805	Assistance to State Water Resources Research Institutes	106,699	41,608
Research and Development Cluster	U.S. Department of Interior	Pass-Through	UNIVERSITY OF ILLINOIS	2015-06806-01	15.805	Assistance to State Water Resources Research Institutes	358,057	0
					Total - 15.805		464,756	41,608
Research and Development Cluster	U.S. Department of Interior	Direct			15.808	U.S. Geological Survey_ Research and Data Collection	158,041	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	AMERICAVIEW INC	AV18-IN-01	15.815	National Land Remote Sensing_Education Outreach and Research	20,219	0
Research and Development Cluster	U.S. Department of Interior	Direct			15.945	Cooperative Research and Training Programs ? Resources of the National Park Syst	14,463	0
Research and Development Cluster	U.S. Department of Interior	Direct		140G0318P0260	15.RD	U.S. Department of Interior	17,903	0
Research and Development Cluster	U.S. Department of Interior	Direct		G17PX00230	15.RD	U.S. Department of Interior	9,825	0
Research and Development Cluster	U.S. Department of Interior	Direct		G17PX00413	15.RD	U.S. Department of Interior	5,425	0
Research and Development Cluster	U.S. Department of Interior	Direct		G17PX01270	15.RD	U.S. Department of Interior	9,688	0
Research and Development Cluster	U.S. Department of Interior	Direct		G17PX01396	15.RD	U.S. Department of Interior	7,053	0
Research and Development Cluster	U.S. Department of Interior	Direct		G17PX01452	15.RD	U.S. Department of Interior	7,595	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	UNIVERSITY OF SOUTHERN CALIFORNIA	104480975	15.RD	U.S. Department of Interior	20,000	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	UNIVERSITY OF SOUTHERN CALIFORNIA	90702000	15.RD	U.S. Department of Interior	24,889	0
Research and Development Cluster	U.S. Department of Interior	Pass-Through	KITWARE INC	K002037-00-S02	15.RD	U.S. Department of Interior	111,269	0
					Total - 15.RD		213,647	0
Research and Development Cluster	Total - U.S. Department of Interior						1,483,269	41,608
Research and Development Cluster	U.S. Department of Justice	Direct			16.560	National Institute of Justice Research, Evaluation, and Development Project Gran	544,268	150,000
Research and Development Cluster	U.S. Department of Justice	Direct			16.562	Criminal Justice Research and Development_Graduate Research Fellowships	47,055	0
Research and Development Cluster	U.S. Department of Justice	Direct		DJO-NIJ-17-RPOR-0521	16.RD	U.S. Department of Justice	54,787	0
Research and Development Cluster	Total - U.S. Department of Justice						646,110	150,000

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Labor	Direct			17.502	Occupational Safety and Health_Susan Harwood Training Grants	71,428	0
Research and Development Cluster	U.S. Department of Labor	Pass-Through	IOWA STATE UNIVERSITY	428-40-10A	17.502	Occupational Safety and Health_Susan Harwood Training Grants	25,756	0
					Total - 17.502		97,184	0
Research and Development Cluster	Total - U.S. Department of Labor						97,184	0
Research and Development Cluster	U.S. Department of State	Direct			19.033	Global Threat Reduction	17,532	0
Research and Development Cluster	U.S. Department of State	Direct		IPA FOR SANTERRE	19.RD	U.S. Department of State	44,000	0
Research and Development Cluster	Total - U.S. Department of State						61,532	0
Research and Development Cluster	U.S. Department of Transportation	Direct			20.109	Air Transportation Centers of Excellence	1,162,753	233,448
Research and Development Cluster	U.S. Department of Transportation	Direct			20.200	Highway Research & Development Program	182,684	35,781
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	2018/19 APPROPRIATION	20.200	Highway Research & Development Program	291,729	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	2042	20.200	Highway Research & Development Program	34,907	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	2352	20.200	Highway Research & Development Program	199,213	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	2357	20.200	Highway Research & Development Program	2,450	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	EDS# A249-14-320689	20.200	Highway Research & Development Program	204,003	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	PO#15815724	20.200	Highway Research & Development Program	27,814	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	PO# 0020007894	20.200	Highway Research & Development Program	101,458	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-2351	20.200	Highway Research & Development Program	74	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3634, TPF-5(253)	20.200	Highway Research & Development Program	-5,138	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3710	20.200	Highway Research & Development Program	7,584	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3715	20.200	Highway Research & Development Program	28,390	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3727	20.200	Highway Research & Development Program	490,999	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3815	20.200	Highway Research & Development Program	-307	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3820	20.200	Highway Research & Development Program	6,043	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3821	20.200	Highway Research & Development Program	183,913	40,593
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3857	20.200	Highway Research & Development Program	117,411	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3865	20.200	Highway Research & Development Program	2,660	2,660
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3904	20.200	Highway Research & Development Program	867	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3912	20.200	Highway Research & Development Program	85,046	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3914	20.200	Highway Research & Development Program	55,966	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3915	20.200	Highway Research & Development Program	17,403	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3916	20.200	Highway Research & Development Program	16,405	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3945	20.200	Highway Research & Development Program	16,023	0

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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4002	20.200	Highway Research & Development Program	74,540	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4003	20.200	Highway Research & Development Program	84,121	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4004	20.200	Highway Research & Development Program	107,436	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4009	20.200	Highway Research & Development Program	105,646	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4040-II	20.200	Highway Research & Development Program	44,977	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4042	20.200	Highway Research & Development Program	164,032	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4100	20.200	Highway Research & Development Program	-135	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4101	20.200	Highway Research & Development Program	22,559	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4102	20.200	Highway Research & Development Program	113,341	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4103	20.200	Highway Research & Development Program	6,209	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4104	20.200	Highway Research & Development Program	57,558	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4105	20.200	Highway Research & Development Program	28,558	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4107	20.200	Highway Research & Development Program	116,087	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4108	20.200	Highway Research & Development Program	163,079	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4109	20.200	Highway Research & Development Program	94,556	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4113	20.200	Highway Research & Development Program	13,801	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4114	20.200	Highway Research & Development Program	68,527	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4115	20.200	Highway Research & Development Program	60,182	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4116	20.200	Highway Research & Development Program	88,946	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4119	20.200	Highway Research & Development Program	71,360	71,360
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4120	20.200	Highway Research & Development Program	96,085	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4121	20.200	Highway Research & Development Program	10,214	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4122	20.200	Highway Research & Development Program	101,922	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4123	20.200	Highway Research & Development Program	43,033	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4126	20.200	Highway Research & Development Program	179,956	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4153	20.200	Highway Research & Development Program	29,547	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4155	20.200	Highway Research & Development Program	33,899	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4160	20.200	Highway Research & Development Program	61,623	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4162	20.200	Highway Research & Development Program	115,456	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4165	20.200	Highway Research & Development Program	55,504	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4200	20.200	Highway Research & Development Program	38,733	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4203	20.200	Highway Research & Development Program	37,072	0

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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4204	20.200	Highway Research & Development Program	952	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4205	20.200	Highway Research & Development Program	221,963	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4209	20.200	Highway Research & Development Program	34,328	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4210	20.200	Highway Research & Development Program	64,008	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4211	20.200	Highway Research & Development Program	59,164	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4212	20.200	Highway Research & Development Program	49,495	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4213	20.200	Highway Research & Development Program	128,756	69,049
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4215	20.200	Highway Research & Development Program	52,506	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4216	20.200	Highway Research & Development Program	20,607	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4217	20.200	Highway Research & Development Program	68,832	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4218	20.200	Highway Research & Development Program	78,038	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4219	20.200	Highway Research & Development Program	80,410	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4221	20.200	Highway Research & Development Program	98,250	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4222	20.200	Highway Research & Development Program	147,112	20,000
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4223	20.200	Highway Research & Development Program	43,299	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4225	20.200	Highway Research & Development Program	22,175	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4226	20.200	Highway Research & Development Program	111,455	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4229	20.200	Highway Research & Development Program	36,910	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4231	20.200	Highway Research & Development Program	59,266	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4233	20.200	Highway Research & Development Program	48,288	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4234	20.200	Highway Research & Development Program	32,468	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4236	20.200	Highway Research & Development Program	23,820	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4251	20.200	Highway Research & Development Program	561,843	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4252	20.200	Highway Research & Development Program	146	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4300	20.200	Highway Research & Development Program	47,859	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4301	20.200	Highway Research & Development Program	1,283	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4302	20.200	Highway Research & Development Program	34,616	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4305	20.200	Highway Research & Development Program	78,963	78,963
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4306	20.200	Highway Research & Development Program	39,519	39,519
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4308	20.200	Highway Research & Development Program	51,045	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4309	20.200	Highway Research & Development Program	21,925	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4310	20.200	Highway Research & Development Program	48,252	0

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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4311	20.200	Highway Research & Development Program	6,098	6,098
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4314	20.200	Highway Research & Development Program	101,770	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4315	20.200	Highway Research & Development Program	62,179	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4319	20.200	Highway Research & Development Program	10,370	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4321	20.200	Highway Research & Development Program	83,113	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4322	20.200	Highway Research & Development Program	62,787	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4323	20.200	Highway Research & Development Program	50,538	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4325	20.200	Highway Research & Development Program	10,350	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4326	20.200	Highway Research & Development Program	53,752	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4327	20.200	Highway Research & Development Program	41,948	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4332	20.200	Highway Research & Development Program	23,530	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4333	20.200	Highway Research & Development Program	65,147	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4334	20.200	Highway Research & Development Program	28,934	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4335	20.200	Highway Research & Development Program	33,830	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4336	20.200	Highway Research & Development Program	8,979	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4350	20.200	Highway Research & Development Program	45,955	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4353	20.200	Highway Research & Development Program	28,584	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(281)	20.200	Highway Research & Development Program	131,078	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(377)	20.200	Highway Research & Development Program	44,164	8,808
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(387)	20.200	Highway Research & Development Program	45,237	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION		20.200	Highway Research & Development Program	90,999	0
					Total - 20.200		7,752,916	372,831
Research and Development Cluster	U.S. Department of Transportation	Direct			20.205	Highway Planning and Construction	3,684	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN CRIMINAL JUSTICE INSTITUTE	EDS# D3-18-12098	20.601	Alcohol Traffic Safety and Drunk Driving Prevention Incentive Grants	42,413	0
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	UNIVERSITY OF MICHIGAN	3004631368	20.701	University Transportation Centers Program	689,925	0
Research and Development Cluster	U.S. Department of Transportation	Direct		18101261	20.RD	U.S. Department of Transportation	10,385	0
Research and Development Cluster	U.S. Department of Transportation	Direct		ACRP A03-48	20.RD	U.S. Department of Transportation	122,582	0
Research and Development Cluster	U.S. Department of Transportation	Direct		DFACT-13-D-00010	20.RD	U.S. Department of Transportation	9,670	0
Research and Development Cluster	U.S. Department of Transportation	Direct		DFACT-13-D-00010 0005	20.RD	U.S. Department of Transportation	3,285	0
Research and Development Cluster	U.S. Department of Transportation	Direct		DFACT-13-D-00010-0004	20.RD	U.S. Department of Transportation	1,241	0
					Total - 20.RD		147,163	0
Research and Development Cluster	Total - U.S. Department of Transportation						9,798,854	606,279

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.001	Science	2,990,187	816,433
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF COLORADO AT BOULDER	1555205	43.001	Science	121,887	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1578703	43.001	Science	18,328	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ARIZONA STATE UNIVERSITY	16-999	43.001	Science	48,528	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1609311	43.001	Science	23,510	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	PLANETARY SCIENCE INSTITUTE	1612-PU	43.001	Science	4,192	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	EAGLE HARBOR TECHNOLOGIES, INC.	17066953	43.001	Science	55,216	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	LOWELL OBSERVATORY	2016-81490	43.001	Science	422	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	INTELLIGENT AUTOMATION INC	2384-1	43.001	Science	24,012	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	GO8-19060X	43.001	Science	18,230	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	TEXAS A&M UNIVERSITY	M1900178	43.001	Science	15,358	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY CORP FOR ATMOSPHERIC RESEARCH	Z15-13657	43.001	Science	34,528	0
					Total - 43.001		3,354,398	816,433
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.002	Aeronautics	1,771	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5710003954	43.002	Aeronautics	31,151	0
					Total - 43.002		32,922	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.003	Exploration	86,584	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.007	Space Operations	172,565	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.008	Education	15,321	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.009	Cross Agency Support	2,775	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.012	Space Technology	940,890	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		1547388	43.RD	National Aeronautics & Space Administration	77,257	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		1557111	43.RD	National Aeronautics & Space Administration	49,332	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		1615649	43.RD	National Aeronautics & Space Administration	40,352	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		1615740	43.RD	National Aeronautics & Space Administration	197,421	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		1622909	43.RD	National Aeronautics & Space Administration	5,711	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		18078780	43.RD	National Aeronautics & Space Administration	12,507	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		5100003111	43.RD	National Aeronautics & Space Administration	43,177	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		80GRC018C0055	43.RD	National Aeronautics & Space Administration	61,741	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		80NSSC18P2609	43.RD	National Aeronautics & Space Administration	12,000	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		80NSSC19K0582	43.RD	National Aeronautics & Space Administration	8,802	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		B630972	43.RD	National Aeronautics & Space Administration	7,500	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	National Aeronautics & Space Administration	Direct		HST-GO-13378.012-A	43.RD	National Aeronautics & Space Administration	18,343	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		HST-GO-13782.012-A	43.RD	National Aeronautics & Space Administration	13,229	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		NNX17ED14P	43.RD	National Aeronautics & Space Administration	3,321	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		PUR18-001	43.RD	National Aeronautics & Space Administration	17,000	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JAMES MADISON UNIVERSITY	#IS15-178-06	43.RD	National Aeronautics & Space Administration	2,626	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1558776	43.RD	National Aeronautics & Space Administration	-15,470	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1592873	43.RD	National Aeronautics & Space Administration	63,282	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1606696	43.RD	National Aeronautics & Space Administration	35,130	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ATA ENGINEERING INC	17077663	43.RD	National Aeronautics & Space Administration	8,024	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	AIR SQUARED	18067611	43.RD	National Aeronautics & Space Administration	111,126	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	P. C. KRAUSE AND ASSOCIATES, INC.	18122509	43.RD	National Aeronautics & Space Administration	48,997	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ARIZONA STATE UNIVERSITY	2015-704	43.RD	National Aeronautics & Space Administration	68,053	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	INTELLIGENT AUTOMATION INC	2282-1	43.RD	National Aeronautics & Space Administration	70,969	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF MICHIGAN	3002485426	43.RD	National Aeronautics & Space Administration	91,538	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	NATIONAL INSTITUTE OF AEROSPACE	601010	43.RD	National Aeronautics & Space Administration	40,178	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	NATIONAL INSTITUTE OF AEROSPACE	601044	43.RD	National Aeronautics & Space Administration	40,000	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	FRONTIER AEROSPACE CORPORATION	FAD000173	43.RD	National Aeronautics & Space Administration	64,330	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	SPACE TELESCOPE SCIENCE INSTITUTE	HST-GO-14202.014-A	43.RD	National Aeronautics & Space Administration	35,109	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	IN SPACE, LLC	INS-41703-1	43.RD	National Aeronautics & Space Administration	157,642	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	VON BRAUN CTR FOR SCIENCE & INNOV	PUR18-002	43.RD	National Aeronautics & Space Administration	4,995	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	PHYSICAL SCIENCES, INC	SC 6982-46-1	43.RD	National Aeronautics & Space Administration	81,550	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	PHYSICAL SCIENCES, INC	SC-7378-059-4171-001	43.RD	National Aeronautics & Space Administration	10,697	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	PHYSICAL SCIENCES, INC	SC6911-46-1	43.RD	National Aeronautics & Space Administration	27	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	T3-0224-FY19	43.RD	National Aeronautics & Space Administration	2,500	0
					Total - 43.RD		1,488,996	0
Research and Development Cluster	Total - National Aeronautics & Space Administration						6,094,451	816,433
Research and Development Cluster	National Endowment for the Arts & Humanities	Direct			45.161	Promotion of the Humanities_Research	123,077	17,491
Research and Development Cluster	Total - National Endowment for the Arts & Humanities						123,077	17,491
Research and Development Cluster	National Science Foundation	Direct			47.041	Engineering Grants	21,496,268	3,097,223
Research and Development Cluster	National Science Foundation	Pass-Through	WEPAN	1445076-EEC	47.041	Engineering Grants	9,770	0
Research and Development Cluster	National Science Foundation	Pass-Through	AUBURN UNIVERSITY	17-ENG-200641-PU	47.041	Engineering Grants	20,232	0
Research and Development Cluster	National Science Foundation	Pass-Through	CROSSLIFE TECHNOLOGIES INC	17066873	47.041	Engineering Grants	11,173	0

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Research and Development Cluster	National Science Foundation	Pass-Through	NUTRAMAIZE	17066893	47.041	Engineering Grants	30,699	0
Research and Development Cluster	National Science Foundation	Pass-Through	THERMETRICS, INC	17066906	47.041	Engineering Grants	20,264	0
Research and Development Cluster	National Science Foundation	Pass-Through	ENTO BIO	17089006	47.041	Engineering Grants	82,130	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NOTRE DAME	202468PU	47.041	Engineering Grants	21,438	0
Research and Development Cluster	National Science Foundation	Pass-Through	RUTGERS, THE STATE UNIVERSITY	2297	47.041	Engineering Grants	25,703	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MASSACHUSETTS DARTHMOUTH	27542	47.041	Engineering Grants	-77	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MICHIGAN	3004362735	47.041	Engineering Grants	448,728	0
Research and Development Cluster	National Science Foundation	Pass-Through	RUTGERS, THE STATE UNIVERSITY	5792	47.041	Engineering Grants	19,616	0
Research and Development Cluster	National Science Foundation	Pass-Through	NORTHWESTERN UNIVERSITY	SPOO27655-PROJ0007253	47.041	Engineering Grants	80,087	0
					Total - 47.041		22,266,031	3,097,223
Research and Development Cluster	National Science Foundation	Direct			47.049	Mathematical and Physical Sciences	8,968,912	0
Research and Development Cluster	National Science Foundation	Pass-Through	MISSISSIPPI STATE UNIVERSITY	031900.362651.01	47.049	Mathematical and Physical Sciences	-771	0
Research and Development Cluster	National Science Foundation	Pass-Through	CARNEGIE-MELLON UNIVERSITY	1123266-388661	47.049	Mathematical and Physical Sciences	9,414	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NOTRE DAME	1219444-PHY	47.049	Mathematical and Physical Sciences	3,500	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MICHIGAN	3002095871	47.049	Mathematical and Physical Sciences	-868	0
Research and Development Cluster	National Science Foundation	Pass-Through	CORNELL UNIVERSITY	75737-11061	47.049	Mathematical and Physical Sciences	104,494	0
Research and Development Cluster	National Science Foundation	Pass-Through	CORNELL UNIVERSITY	78877-10946	47.049	Mathematical and Physical Sciences	4,409	0
Research and Development Cluster	National Science Foundation	Pass-Through	ASSOC OF UNIV FOR RES IN ASTRONOMY	N60023C-L	47.049	Mathematical and Physical Sciences	58,303	0
Research and Development Cluster	National Science Foundation	Pass-Through	PRINCETON UNIVERSITY	SUB0000181	47.049	Mathematical and Physical Sciences	749,908	0
					Total - 47.049		9,897,301	0
Research and Development Cluster	National Science Foundation	Direct			47.050	Geosciences	2,228,647	79,001
Research and Development Cluster	National Science Foundation	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	072212-14701	47.050	Geosciences	73,721	0
Research and Development Cluster	National Science Foundation	Pass-Through	COLUMBIA UNIVERSITY	1(GG006672)	47.050	Geosciences	8,416	0
Research and Development Cluster	National Science Foundation	Pass-Through	COLUMBIA UNIVERSITY	1(GG013199)	47.050	Geosciences	23,725	0
Research and Development Cluster	National Science Foundation	Pass-Through	COLUMBIA UNIVERSITY	1(GG013208)	47.050	Geosciences	22,330	0
Research and Development Cluster	National Science Foundation	Pass-Through	COLUMBIA UNIVERSITY	55(GG009393)	47.050	Geosciences	942	0
					Total - 47.050		2,357,781	79,001
Research and Development Cluster	National Science Foundation	Direct			47.070	Computer and Information Science and Engineering	17,550,007	2,367,361
Research and Development Cluster	National Science Foundation	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	083842-16071	47.070	Computer and Information Science and Engineering	277,067	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MARYLAND	17286-Z4314001	47.070	Computer and Information Science and Engineering	3,409	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NOTRE DAME	202369PU	47.070	Computer and Information Science and Engineering	-294	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	26-6331-0310-003	47.070	Computer and Information Science and Engineering	1,091	0

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Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN DIEGO	78283280	47.070	Computer and Information Science and Engineering	646,251	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MINNESOTA	A006581302	47.070	Computer and Information Science and Engineering	83,875	0
Research and Development Cluster	National Science Foundation	Pass-Through	GEORGE MASON UNIVERSITY	E2043283	47.070	Computer and Information Science and Engineering	25,896	0
Research and Development Cluster	National Science Foundation	Pass-Through	MICHIGAN STATE UNIVERSITY	RC104385PUR	47.070	Computer and Information Science and Engineering	4,160	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF DENVER	SC37237-01-00	47.070	Computer and Information Science and Engineering	6,611	0
					Total - 47.070		18,598,073	2,367,361
Research and Development Cluster	National Science Foundation	Direct			47.074	Biological Sciences	4,242,302	405,697
Research and Development Cluster	National Science Foundation	Pass-Through	WASHINGTON STATE UNIVERSITY	123672-G003456	47.074	Biological Sciences	76,498	0
Research and Development Cluster	National Science Foundation	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2014-2564-01	47.074	Biological Sciences	530,184	0
Research and Development Cluster	National Science Foundation	Pass-Through	VIRGINIA TECH	479498-19084	47.074	Biological Sciences	30,946	0
Research and Development Cluster	National Science Foundation	Pass-Through	COLD SPRING HARBOR LABORATORY	52670116	47.074	Biological Sciences	15,411	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF WISCONSIN-MADISON	758K984	47.074	Biological Sciences	1,719	0
Research and Development Cluster	National Science Foundation	Pass-Through	NEW YORK UNIVERSITY	F7304-03	47.074	Biological Sciences	15,471	0
Research and Development Cluster	National Science Foundation	Pass-Through	LOUISIANA STATE UNIVERSITY	PO-0000025955	47.074	Biological Sciences	12,533	0
Research and Development Cluster	National Science Foundation	Pass-Through	MICHIGAN STATE UNIVERSITY	RC104982PU	47.074	Biological Sciences	323,447	0
Research and Development Cluster	National Science Foundation	Pass-Through	MICHIGAN STATE UNIVERSITY	RC105234PU	47.074	Biological Sciences	43,968	0
					Total - 47.074		5,292,479	405,697
Research and Development Cluster	National Science Foundation	Direct			47.075	Social, Behavioral, and Economic Sciences	753,661	61,595
Research and Development Cluster	National Science Foundation	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5897-PU-NSF-4092	47.075	Social, Behavioral, and Economic Sciences	5,887	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF CHICAGO	FP043343-02-B	47.075	Social, Behavioral, and Economic Sciences	120,074	0
					Total - 47.075		879,622	61,595
Research and Development Cluster	National Science Foundation	Direct			47.076	Education and Human Resources	10,916,678	951,116
Research and Development Cluster	National Science Foundation	Pass-Through	SUNY AT ALBANY	16-15-75844	47.076	Education and Human Resources	-2,111	0
Research and Development Cluster	National Science Foundation	Pass-Through	THE CONCORD CONSORTIUM INC	299-01	47.076	Education and Human Resources	210,101	0
Research and Development Cluster	National Science Foundation	Pass-Through	THE CONCORD CONSORTIUM INC	314.01	47.076	Education and Human Resources	22,108	0
Research and Development Cluster	National Science Foundation	Pass-Through	VIRGINIA POLYTECHNIC INST & STATE UNIV	479710-19084	47.076	Education and Human Resources	9,671	0
Research and Development Cluster	National Science Foundation	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5430-PU-NSF-1450	47.076	Education and Human Resources	15,276	0
Research and Development Cluster	National Science Foundation	Pass-Through	OHIO STATE UNIVERSITY	60059092	47.076	Education and Human Resources	178,253	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF WISCONSIN-MADISON	665K980	47.076	Education and Human Resources	52,338	0
Research and Development Cluster	National Science Foundation	Pass-Through	COLLEGE OF WILLIAM AND MARY	714483	47.076	Education and Human Resources	68,073	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MINNESOTA	A003014102	47.076	Education and Human Resources	27,738	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MISSOURI	C00055471-1	47.076	Education and Human Resources	38,017	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	National Science Foundation	Pass-Through	KANSAS STATE UNIVERSITY	S17136	47.076	Education and Human Resources	187,542	0
Research and Development Cluster	National Science Foundation	Pass-Through	SINCLAIR COMMUNITY COLLEGE	SCC-1700531	47.076	Education and Human Resources	25,013	0
Research and Development Cluster	National Science Foundation	Pass-Through	VANDERBILT UNIVERSITY	UNIV59509	47.076	Education and Human Resources	25,655	0
					Total - 47.076		11,774,352	951,116
Research and Development Cluster	National Science Foundation	Direct			47.078	Polar Programs	3,340	0
Research and Development Cluster	National Science Foundation	Direct			47.079	International Science and Engineering (OISE)	1,100	0
Research and Development Cluster	National Science Foundation	Pass-Through	MICHIGAN TECHNOLOGICAL UNIVERSITY	1110090Z4	47.079	International Science and Engineering (OISE)	14,771	0
					Total - 47.079		15,871	0
Research and Development Cluster	National Science Foundation	Direct		18067631	47.RD	National Science Foundation	35,163	0
Research and Development Cluster	National Science Foundation	Direct		28-S172814	47.RD	National Science Foundation	91,071	0
Research and Development Cluster	National Science Foundation	Pass-Through	PHYTOPTION LLC	16012614	47.RD	National Science Foundation	29,380	0
Research and Development Cluster	National Science Foundation	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	6024-PU-NSF-0020	47.RD	National Science Foundation	4,986	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF CALIFORNIA - DAVIS	UCD382823	47.RD	National Science Foundation	2,985	0
					Total - 47.RD		163,585	0
Research and Development Cluster	Total - National Science Foundation						71,248,435	6,961,993
Research and Development Cluster	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	EDS# A229-9-SBA-1014	59.037	Small Business Development Center	23,856	0
Research and Development Cluster	Total - Small Business Administration						23,856	0
Research and Development Cluster	Department of Veterans Affairs	Direct			64.009	Veterans Medical Care Benefits	46,916	0
Research and Development Cluster	Department of Veterans Affairs	Direct		583D95061	64.RD	Department of Veterans Affairs	45,385	0
Research and Development Cluster	Department of Veterans Affairs	Direct		618-D84025	64.RD	Department of Veterans Affairs	19,889	0
Research and Development Cluster	Department of Veterans Affairs	Direct		ANDREA WELLNITZ 17100661	64.RD	Department of Veterans Affairs	20,014	0
Research and Development Cluster	Department of Veterans Affairs	Direct		IPA DR. ZILLICH	64.RD	Department of Veterans Affairs	2,453	0
Research and Development Cluster	Department of Veterans Affairs	Direct		IPA MARGIE SNYDER	64.RD	Department of Veterans Affairs	19,139	0
Research and Development Cluster	Department of Veterans Affairs	Direct		SPROC00A1	64.RD	Department of Veterans Affairs	19,910	0
Research and Development Cluster	Department of Veterans Affairs	Direct		VA240C-14-D-0007	64.RD	Department of Veterans Affairs	81,040	0
					Total - 64.RD		207,830	0
Research and Development Cluster	Total - Department of Veterans Affairs						254,746	0
Research and Development Cluster	Environmental Protection Agency	Pass-Through	IN DEPARTMENT OF ENVIRONMENTAL MGMT	CONTRACT# 19146	66.460	Nonpoint Source Implementation Grants	149,681	0
Research and Development Cluster	Environmental Protection Agency	Direct			66.509	Science To Achieve Results (STAR) Research Program	16,038	0
Research and Development Cluster	Environmental Protection Agency	Direct			66.511	Office of Research and Development Consolidated Research/Training	499,764	255,285
Research and Development Cluster	Environmental Protection Agency	Direct			66.516	P3 Award: National Student Design Competition for Sustainability	14,991	0
Research and Development Cluster	Environmental Protection Agency	Direct			66.608	Environmental Information Exchange Network Grant Program and Related Assistance	63,133	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	Environmental Protection Agency	Direct			66.700	Consolidated Pesticide Enforcement Cooperative Agreements	2,788	0
Research and Development Cluster	Environmental Protection Agency	Pass-Through	AMEC	16098772	66.RD	Environmental Protection Agency	15,170	0
Research and Development Cluster	Environmental Protection Agency	Pass-Through	PEGASUS TECHNICAL SERVICES INC	PUR-18-001	66.RD	Environmental Protection Agency	18,706	0
Research and Development Cluster	Environmental Protection Agency	Pass-Through	PEGASUS TECHNICAL SERVICES INC	PUR-19-001	66.RD	Environmental Protection Agency	47,302	0
					Total - 66.RD		81,178	0
Research and Development Cluster	Total - Environmental Protection Agency						827,573	255,285
Research and Development Cluster	Nuclear Regulatory Commission	Direct			77.008	Nuclear Regulatory Commission Scholarship & Fellowship Program	147,939	0
Research and Development Cluster	Nuclear Regulatory Commission	Direct			77.009	U.S. Nuclear Regulatory Commission Ofc of Research Financial Assistance Program	78,985	0
					Total - 77.009		78,985	0
Research and Development Cluster	Nuclear Regulatory Commission	Direct		NRC-HQ-60-14-T-0001	77.RD	Nuclear Regulatory Commission	112,686	112,686
Research and Development Cluster	Nuclear Regulatory Commission	Direct		NRC-HQ-60-15-T-0001	77.RD	Nuclear Regulatory Commission	374,115	373,281
Research and Development Cluster	Nuclear Regulatory Commission	Direct		NRC-HQ-84-14-G-0048	77.RD	Nuclear Regulatory Commission	206,479	0
Research and Development Cluster	Nuclear Regulatory Commission	Pass-Through	ENERGY RESEARCH INC.	NRC-HQ-25-14-E-005 TO 1	77.RD	Nuclear Regulatory Commission	72,915	0
					Total - 77.RD		766,195	485,967
Research and Development Cluster	Total - Nuclear Regulatory Commission						993,119	485,967
Research and Development Cluster	U.S. Department of Energy	Direct			81.049	Office of Science Financial Assistance Program	6,543,251	346,152
Research and Development Cluster	U.S. Department of Energy	Pass-Through	CHAPMAN UNIVERSITY	500307-0002	81.049	Office of Science Financial Assistance Program	198,085	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	STANFORD UNIVERSITY	61351722-124215	81.049	Office of Science Financial Assistance Program	216,466	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NEW YORK UNIVERSITY	F7600-06	81.049	Office of Science Financial Assistance Program	117,330	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIV OF CALIFORNIA-SANTA BARBARA	KK1935	81.049	Office of Science Financial Assistance Program	39,687	0
					Total - 81.049		7,114,819	346,152
Research and Development Cluster	U.S. Department of Energy	Direct			81.086	Conservation Research and Development	399,391	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	TEXAS A&M UNIVERSITY	C7401	81.086	Conservation Research and Development	40,992	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-4.2-01	81.086	Conservation Research and Development	1,807	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-7.1-01	81.086	Conservation Research and Development	2,203,807	0
					Total - 81.086		2,645,997	0
Research and Development Cluster	U.S. Department of Energy	Direct			81.087	Renewable Energy Research and Development	2,030,291	447,069
Research and Development Cluster	U.S. Department of Energy	Pass-Through	3M PHARMACEUTICALS	DE-EE0007270	81.087	Renewable Energy Research and Development	69,673	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	S4696-PO245703	81.087	Renewable Energy Research and Development	119,199	0
					Total - 81.087		2,219,163	447,069
Research and Development Cluster	U.S. Department of Energy	Direct			81.089	Fossil Energy Research and Development	34,103	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2014-0501-03	81.113	Defense Nuclear Nonproliferation Research	275,952	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Energy	Direct			81.121	Nuclear Energy Research, Development and Demonstration	1,404,856	745,916
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	195702	81.121	Nuclear Energy Research, Development and Demonstration	27,764	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2016-1536-01	81.121	Nuclear Energy Research, Development and Demonstration	98,350	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	TEXAS ENGINEERING EXPERIMENT STATION	28-S172806	81.121	Nuclear Energy Research, Development and Demonstration	68,444	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BOISE STATE UNIVERSITY	7161-PO124384	81.121	Nuclear Energy Research, Development and Demonstration	110,378	0
					Total - 81.121		1,709,792	745,916
Research and Development Cluster	U.S. Department of Energy	Direct			81.135	Advanced Research and Projects Agency ? Energy Financial Assistance Program	4,856,499	1,431,971
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UTAH STATE UNIVERSITY	201254-465	81.135	Advanced Research and Projects Agency ? Energy Financial Assistance Program	29,930	0
					Total - 81.135		4,886,429	1,431,971
Research and Development Cluster	U.S. Department of Energy	Direct		106913	81.RD	U.S. Department of Energy	11	0
Research and Development Cluster	U.S. Department of Energy	Direct		115108	81.RD	U.S. Department of Energy	104,641	0
Research and Development Cluster	U.S. Department of Energy	Direct		121165	81.RD	U.S. Department of Energy	10,191	0
Research and Development Cluster	U.S. Department of Energy	Direct		123980	81.RD	U.S. Department of Energy	126,219	0
Research and Development Cluster	U.S. Department of Energy	Direct		16044777	81.RD	U.S. Department of Energy	32,657	0
Research and Development Cluster	U.S. Department of Energy	Direct		1643429	81.RD	U.S. Department of Energy	-15,517	0
Research and Development Cluster	U.S. Department of Energy	Direct		169758	81.RD	U.S. Department of Energy	3,101	0
Research and Development Cluster	U.S. Department of Energy	Direct		1735706	81.RD	U.S. Department of Energy	24,003	0
Research and Development Cluster	U.S. Department of Energy	Direct		1746523	81.RD	U.S. Department of Energy	55,519	0
Research and Development Cluster	U.S. Department of Energy	Direct		1755561	81.RD	U.S. Department of Energy	29,949	0
Research and Development Cluster	U.S. Department of Energy	Direct		1757154	81.RD	U.S. Department of Energy	23,390	0
Research and Development Cluster	U.S. Department of Energy	Direct		1759547	81.RD	U.S. Department of Energy	12,151	0
Research and Development Cluster	U.S. Department of Energy	Direct		1760540	81.RD	U.S. Department of Energy	130,686	0
Research and Development Cluster	U.S. Department of Energy	Direct		1766360	81.RD	U.S. Department of Energy	1,181	0
Research and Development Cluster	U.S. Department of Energy	Direct		1766422	81.RD	U.S. Department of Energy	87,388	0
Research and Development Cluster	U.S. Department of Energy	Direct		1794986	81.RD	U.S. Department of Energy	18,469	0
Research and Development Cluster	U.S. Department of Energy	Direct		181109	81.RD	U.S. Department of Energy	17,177	0
Research and Development Cluster	U.S. Department of Energy	Direct		1826765	81.RD	U.S. Department of Energy	4,419	0
Research and Development Cluster	U.S. Department of Energy	Direct		1845572	81.RD	U.S. Department of Energy	33,160	0
Research and Development Cluster	U.S. Department of Energy	Direct		1847039	81.RD	U.S. Department of Energy	123,953	0
Research and Development Cluster	U.S. Department of Energy	Direct		1852765	81.RD	U.S. Department of Energy	258,948	0
Research and Development Cluster	U.S. Department of Energy	Direct		1861716	81.RD	U.S. Department of Energy	123,102	0
Research and Development Cluster	U.S. Department of Energy	Direct		1861780	81.RD	U.S. Department of Energy	125,748	0

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Research and Development Cluster	U.S. Department of Energy	Direct		1889365	81.RD	U.S. Department of Energy	14,955	0
Research and Development Cluster	U.S. Department of Energy	Direct		1895765	81.RD	U.S. Department of Energy	26,250	0
Research and Development Cluster	U.S. Department of Energy	Direct		189820	81.RD	U.S. Department of Energy	8,070	0
Research and Development Cluster	U.S. Department of Energy	Direct		1921334	81.RD	U.S. Department of Energy	129,150	0
Research and Development Cluster	U.S. Department of Energy	Direct		1955839	81.RD	U.S. Department of Energy	45,047	0
Research and Development Cluster	U.S. Department of Energy	Direct		1975861	81.RD	U.S. Department of Energy	53,654	0
Research and Development Cluster	U.S. Department of Energy	Direct		1976906	81.RD	U.S. Department of Energy	57,752	0
Research and Development Cluster	U.S. Department of Energy	Direct		1998484	81.RD	U.S. Department of Energy	89,941	0
Research and Development Cluster	U.S. Department of Energy	Direct		20.079	81.RD	U.S. Department of Energy	63,021	0
Research and Development Cluster	U.S. Department of Energy	Direct		216331	81.RD	U.S. Department of Energy	37,161	0
Research and Development Cluster	U.S. Department of Energy	Direct		3010504729	81.RD	U.S. Department of Energy	50,672	0
Research and Development Cluster	U.S. Department of Energy	Direct		365253	81.RD	U.S. Department of Energy	190,455	0
Research and Development Cluster	U.S. Department of Energy	Direct		383274	81.RD	U.S. Department of Energy	101,894	0
Research and Development Cluster	U.S. Department of Energy	Direct		389810	81.RD	U.S. Department of Energy	12,922	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000136253	81.RD	U.S. Department of Energy	66,943	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000151703	81.RD	U.S. Department of Energy	58,684	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000152822	81.RD	U.S. Department of Energy	148,180	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000153378	81.RD	U.S. Department of Energy	41,132	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000157714	81.RD	U.S. Department of Energy	51,222	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000165967	81.RD	U.S. Department of Energy	36,198	0
Research and Development Cluster	U.S. Department of Energy	Direct		4000167323	81.RD	U.S. Department of Energy	34,637	0
Research and Development Cluster	U.S. Department of Energy	Direct		400161104	81.RD	U.S. Department of Energy	25,601	0
Research and Development Cluster	U.S. Department of Energy	Direct		425170	81.RD	U.S. Department of Energy	31,662	0
Research and Development Cluster	U.S. Department of Energy	Direct		483674	81.RD	U.S. Department of Energy	21,654	0
Research and Development Cluster	U.S. Department of Energy	Direct		4F-32042	81.RD	U.S. Department of Energy	23,313	0
Research and Development Cluster	U.S. Department of Energy	Direct		517731	81.RD	U.S. Department of Energy	25,930	0
Research and Development Cluster	U.S. Department of Energy	Direct		5F-30781	81.RD	U.S. Department of Energy	460	0
Research and Development Cluster	U.S. Department of Energy	Direct		631495	81.RD	U.S. Department of Energy	51,114	0
Research and Development Cluster	U.S. Department of Energy	Direct		652326	81.RD	U.S. Department of Energy	3,206	0
Research and Development Cluster	U.S. Department of Energy	Direct		7118206	81.RD	U.S. Department of Energy	72,790	0
Research and Development Cluster	U.S. Department of Energy	Direct		8F-30010	81.RD	U.S. Department of Energy	63,376	0
Research and Development Cluster	U.S. Department of Energy	Direct		9F-60060	81.RD	U.S. Department of Energy	61,175	0

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Research and Development Cluster	U.S. Department of Energy	Direct		B618024	81.RD	U.S. Department of Energy	35,289	0
Research and Development Cluster	U.S. Department of Energy	Direct		B628390	81.RD	U.S. Department of Energy	85,257	0
Research and Development Cluster	U.S. Department of Energy	Direct		DE-SC0007884	81.RD	U.S. Department of Energy	745,256	0
Research and Development Cluster	U.S. Department of Energy	Direct		DE-SC0014281	81.RD	U.S. Department of Energy	57,291	0
Research and Development Cluster	U.S. Department of Energy	Direct		DE-SC0018238	81.RD	U.S. Department of Energy	197,155	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO #1853829	81.RD	U.S. Department of Energy	152,898	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO #1938978	81.RD	U.S. Department of Energy	44,914	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO #1971341	81.RD	U.S. Department of Energy	44,802	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO #636192	81.RD	U.S. Department of Energy	6,377	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO 1760475	81.RD	U.S. Department of Energy	138,853	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO#1920970	81.RD	U.S. Department of Energy	151,121	0
Research and Development Cluster	U.S. Department of Energy	Direct		PO104741	81.RD	U.S. Department of Energy	55,554	0
Research and Development Cluster	U.S. Department of Energy	Direct		PURCHASE ORDER 104741	81.RD	U.S. Department of Energy	9,115	0
Research and Development Cluster	U.S. Department of Energy	Direct		SC-10-334	81.RD	U.S. Department of Energy	296,498	0
Research and Development Cluster	U.S. Department of Energy	Direct		SC-13-393	81.RD	U.S. Department of Energy	-51,958	27,738
Research and Development Cluster	U.S. Department of Energy	Direct		SC-18-476	81.RD	U.S. Department of Energy	821,388	15,868
Research and Development Cluster	U.S. Department of Energy	Direct		XDJ-8-82050-01	81.RD	U.S. Department of Energy	48,104	0
Research and Development Cluster	U.S. Department of Energy	Direct		XGX-8-82045-01	81.RD	U.S. Department of Energy	158,299	0
Research and Development Cluster	U.S. Department of Energy	Direct		ZEJ-6-62142-01	81.RD	U.S. Department of Energy	6,041	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SAVANNAH RIVER NUCLEAR SOLUTIONS LLC	0000386328	81.RD	U.S. Department of Energy	92,754	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN DIEGO	111119283	81.RD	U.S. Department of Energy	88,876	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ADVANCED RESEARCH CORPORATION	17336	81.RD	U.S. Department of Energy	72,632	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OPTIMIZED THERMAL SYSTEMS, INC	19067994	81.RD	U.S. Department of Energy	8,000	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	194026	81.RD	U.S. Department of Energy	22,295	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	AEROJET ROCKETDYNE INC	200064738	81.RD	U.S. Department of Energy	228,152	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF NOTRE DAME	202199PU	81.RD	U.S. Department of Energy	201,136	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	208358	81.RD	U.S. Department of Energy	121,451	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	212848	81.RD	U.S. Department of Energy	46,916	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	25-1123-0061-002	81.RD	U.S. Department of Energy	45,492	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UT-BATTELLE LLC	4000169270	81.RD	U.S. Department of Energy	6,697	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FERMI NATIONAL ACCELERATOR LABORATORY	649276	81.RD	U.S. Department of Energy	8,200	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FERMI NATIONAL ACCELERATOR LABORATORY	652325	81.RD	U.S. Department of Energy	5,775	0

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Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	8F-30072	81.RD	U.S. Department of Energy	48,791	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	9F-60152	81.RD	U.S. Department of Energy	20,104	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LAWRENCE LIVERMORE NATNL LAB	B627599	81.RD	U.S. Department of Energy	10,890	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LAWRENCE LIVERMORE NATNL LAB	B627988	81.RD	U.S. Department of Energy	49,875	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	TEXAS A&M UNIVERSITY	M1802095	81.RD	U.S. Department of Energy	80,232	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-3.11-01	81.RD	U.S. Department of Energy	77,534	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-3.2-02	81.RD	U.S. Department of Energy	317,803	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-3.7-01	81.RD	U.S. Department of Energy	2,405	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-3.9-01	81.RD	U.S. Department of Energy	10,012	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-7.2-01	81.RD	U.S. Department of Energy	60,533	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	INST FOR ADVCD COMPOSITES MF INNOVATION	PA16-0349-7.3-01	81.RD	U.S. Department of Energy	8,087	0
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	PA16-0349-7.4-01	81.RD	U.S. Department of Energy	21,383	0
					Total - 81.RD		7,687,046	43,606
Research and Development Cluster	Total - U.S. Department of Energy						26,573,301	3,014,714
Research and Development Cluster	U.S. Department of Education	Direct			84.116	Fund for the Improvement of Postsecondary Education	501,391	0
Research and Development Cluster	U.S. Department of Education	Direct			84.200	Graduate Assistance in Areas of National Need	91,235	0
Research and Development Cluster	U.S. Department of Education	Direct			84.305	Education Research, Development and Dissemination	520,708	137,713
Research and Development Cluster	U.S. Department of Education	Pass-Through	OREGON STATE UNIVERSITY	ED161A-B	84.305	Education Research, Development and Dissemination	31,098	0
					Total - 84.305		551,806	137,713
Research and Development Cluster	U.S. Department of Education	Direct			84.324	Research in Special Education	170,420	0
Research and Development Cluster	U.S. Department of Education	Direct			84.365	English Language Acquisition State Grants	760,767	0
Research and Development Cluster	U.S. Department of Education	Direct			84.367	Improving Teacher Quality State Grants	9,769	0
Research and Development Cluster	U.S. Department of Education	Direct		P217A170345	84.RD	U.S. Department of Education	64,576	0
Research and Development Cluster	Total - U.S. Department of Education						2,149,964	137,713
Research and Development Cluster	National Archives and Records Administration	Direct			89.003	National Historical Publications and Records Grants	36,776	0
Research and Development Cluster	Total - National Archives and Records Administration						36,776	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.103	Food and Drug Administration_Research	174,735	6,783
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	RUTGERS, THE STATE UNIVERSITY	#5791	93.103	Food and Drug Administration_Research	184,464	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LONG ISLAND UNIVERSITY	0001	93.103	Food and Drug Administration_Research	156,568	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	RUTGERS, THE STATE UNIVERSITY	0648	93.103	Food and Drug Administration_Research	303,255	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2016-001	93.103	Food and Drug Administration_Research	111,135	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2016-002	93.103	Food and Drug Administration_Research	6,860	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2018-001	93.103	Food and Drug Administration_Research	227,690	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2020-001	93.103	Food and Drug Administration_Research	19,777	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2018-002	93.103	Food and Drug Administration_Research	45,611	0
					Total - 93.103		1,230,095	6,783
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4683373UR	93.107	Model State-Supported Area Health Education Centers	15,561	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4683374PUR	93.107	Model State-Supported Area Health Education Centers	55,750	0
					Total - 93.107		71,311	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.113	Biological Response to Environmental Health Hazards	1,391,003	215,206
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	HARVARD SCHOOL OF PUBLIC HEALTH	112150-5077626	93.113	Biological Response to Environmental Health Hazards	18,097	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ALBERT EINSTEIN COLLEGE OF MEDICINE	19089391	93.113	Biological Response to Environmental Health Hazards	55,700	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ALBERT EINSTEIN COLLEGE OF MEDICINE	311022	93.113	Biological Response to Environmental Health Hazards	131,012	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ALBERT EINSTEIN COLLEGE OF MEDICINE	311288	93.113	Biological Response to Environmental Health Hazards	100,016	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BOSTON UNIVERSITY	4500002206	93.113	Biological Response to Environmental Health Hazards	1,128	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BOSTON UNIVERSITY	4500002874	93.113	Biological Response to Environmental Health Hazards	115,323	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF NORTH CAROLINA	5104312	93.113	Biological Response to Environmental Health Hazards	-3,260	0
					Total - 93.113		1,809,019	215,206
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.121	Oral Diseases and Disorders Research	71,599	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NOVOSTEO INC	18068152	93.121	Oral Diseases and Disorders Research	66,738	0
					Total - 93.121		138,337	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT ID 26017	93.136	Injury Prevention and Control Research and State and Community Based Programs	35,289	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MICHIGAN STATE UNIVERSITY	RC102935PU	93.143	NIEHS Superfund Hazardous Substances_Basic Research and Education	-19,318	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.173	Research Related to Deafness and Communication Disorders	3,867,372	38,170
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	SPEECHVIVE	15065570	93.173	Research Related to Deafness and Communication Disorders	4,496	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MASSACHUSETTS AMHERST	18-010389A00	93.173	Research Related to Deafness and Communication Disorders	39,634	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BOSTON UNIVERSITY, TRUSTEES OF	4500002696	93.173	Research Related to Deafness and Communication Disorders	13,113	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	60049961	93.173	Research Related to Deafness and Communication Disorders	1,020	0
					Total - 93.173		3,925,635	38,170
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.213	Research and Training in Complementary and Alternative Medicine	848,949	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.226	Research on Healthcare Costs, Quality and Outcomes	337,536	23,790
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	5P30HS024384-04	93.226	Research on Healthcare Costs, Quality and Outcomes	38,590	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4688936PU	93.226	Research on Healthcare Costs, Quality and Outcomes	14,690	0
					Total - 93.226		390,816	23,790

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.242	Mental Health Research Grants	1,250,423	8,321
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MARQUETTE UNIVERSITY	001718-01-01	93.242	Mental Health Research Grants	31,469	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BACKYARD BRAINS	18057024	93.242	Mental Health Research Grants	76,472	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4679720PU	93.242	Mental Health Research Grants	33,860	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV OF CALIFORNIA-SANTA BARBARA	KK1518	93.242	Mental Health Research Grants	67,594	0
					Total - 93.242		1,459,818	8,321
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.247	Advanced Education Nursing Grant Program	387,233	72,093
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.262	Occupational Safety and Health Program	35,185	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF ILLINOIS AT CHICAGO	16593	93.262	Occupational Safety and Health Program	4,033	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MARSHFIELD CLINIC	606860-00	93.262	Occupational Safety and Health Program	4,021	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00010465	93.262	Occupational Safety and Health Program	16,919	0
					Total - 93.262		60,158	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.273	Alcohol Research Programs	661,943	42,504
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UTAH STATE UNIVERSITY	201356-490	93.273	Alcohol Research Programs	20,746	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	BL-4631222-PU	93.273	Alcohol Research Programs	78,583	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4683235PU	93.273	Alcohol Research Programs	21,377	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4687305PU	93.273	Alcohol Research Programs	3,241	0
					Total - 93.273		785,890	42,504
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.279	Drug Abuse and Addiction Research Programs	377,352	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CINCINNATI	009942-015	93.279	Drug Abuse and Addiction Research Programs	18,504	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	THE UNIVERSITY OF BRITISH COLUMBIA	20R22505	93.279	Drug Abuse and Addiction Research Programs	46,825	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF KENTUCKY	3210000358-17-225	93.279	Drug Abuse and Addiction Research Programs	48,935	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5877-PU-DHHS-5108	93.279	Drug Abuse and Addiction Research Programs	47,707	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	60065570	93.279	Drug Abuse and Addiction Research Programs	37,343	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	60067478-PURDUE	93.279	Drug Abuse and Addiction Research Programs	37,571	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN4693854PU	93.279	Drug Abuse and Addiction Research Programs	21,701	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	EMORY UNIVERSITY	T880310	93.279	Drug Abuse and Addiction Research Programs	32,962	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	EMORY UNIVERSITY	T994736	93.279	Drug Abuse and Addiction Research Programs	7,734	0
					Total - 93.279		676,634	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	475,861	18,384
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF PITTSBURGH	0057617 (132042-1)	93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	34,610	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF PENNSYLVANIA	574115	93.286	Discovery and Applied Research for Technological Innovations to Improve Human He	73,820	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
					Total - 93.286		584,291	18,384
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.310	Trans-NIH Research Support	3,299,649	385,039
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.350	National Center for Advancing Translational Sciences	20,511	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	17012519	93.350	National Center for Advancing Translational Sciences	350	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN4680903PU	93.350	National Center for Advancing Translational Sciences	-1,798	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN4680908PU	93.350	National Center for Advancing Translational Sciences	-37,081	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN4680910PU	93.350	National Center for Advancing Translational Sciences	827,930	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4680912PU	93.350	National Center for Advancing Translational Sciences	116,976	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN4680913PU	93.350	National Center for Advancing Translational Sciences	93,857	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN4680933PU	93.350	National Center for Advancing Translational Sciences	3,477	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	NTP	93.350	National Center for Advancing Translational Sciences	96,482	0
					Total - 93.350		1,120,704	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.351	Research Infrastructure Programs	223,887	50,532
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF ALABAMA AT BIRMINGHAM	000516421-003	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	9,576	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.393	Cancer Cause and Prevention Research	1,113,930	199,658
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF PITTSBURGH MEDICAL CENTER	0057797(130855-2)	93.393	Cancer Cause and Prevention Research	27,107	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	HARVARD MEDICAL SCHOOL	1299701	93.393	Cancer Cause and Prevention Research	65,622	0
					Total - 93.393		1,206,659	199,658
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN FRANCISCO	10194SC	93.394	Cancer Detection and Diagnosis Research	55,967	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TYMORA ANALYTICAL OPERATIONS, LLC	16076937	93.394	Cancer Detection and Diagnosis Research	71,880	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF PENNSYLVANIA	568408	93.394	Cancer Detection and Diagnosis Research	43,457	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CHICAGO	FP059852	93.394	Cancer Detection and Diagnosis Research	147,428	0
					Total - 93.394		318,732	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.395	Cancer Treatment Research	3,321,387	375,900
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4687974PUR	93.395	Cancer Treatment Research	15,756	0
					Total - 93.395		3,337,143	375,900
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.396	Cancer Biology Research	1,483,088	243,960
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CINCINNATI CHILDRENS HOSPITAL MED CTR	139316	93.396	Cancer Biology Research	164,746	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TYMORA ANALYTICAL OPERATIONS, LLC	PURDUE NO. 00056597	93.396	Cancer Biology Research	113,005	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CASE WESTERN RESERVE UNIVERSITY	RES512194	93.396	Cancer Biology Research	37,027	0
					Total - 93.396		1,797,866	243,960
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.397	Cancer Centers Support Grants	2,021,159	0

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Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.398	Cancer Research Manpower	295,599	150,937
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	EDS#17317	93.758	Preventive Health & Health Services Block Grant funded solely with PPH Funds	18,285	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.774	Medicare_Supplementary Medical Insurance	204,839	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.788	Opioid STR	102,803	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.822	Health Careers Opportunity Program	345,740	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.837	Heart and Vascular Diseases Research	1,413,074	592,562
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MOUNT SINAI SCHOOL OF MEDICINE	0255-8174-4609	93.837	Heart and Vascular Diseases Research	3,933	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NEW YORK UNIVERSITY	19-A0-00-1002499	93.837	Heart and Vascular Diseases Research	4,275	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	N CALIFORNIA INST FOR RES & EDUC	SAL1839-02	93.837	Heart and Vascular Diseases Research	41	0
					Total - 93.837		1,421,323	592,562
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.839	Blood Diseases and Resources Research	161,579	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CINCINNATI CHILDRENS HOSPITAL MED CTR	304035	93.839	Blood Diseases and Resources Research	81,569	0
					Total - 93.839		243,148	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.846	Arthritis, Musculoskeletal and Skin Diseases Research	1,105,809	142,563
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA - DAVIS	201701072-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	59,624	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF WISCONSIN-MADISON	691K924	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	59,078	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	VIRGINIA COMMONWEALTH UNIVERSITY	FP00007737_SA001	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	51,525	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4687825PUR	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	16,000	0
					Total - 93.846		1,292,036	142,563
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.847	Diabetes, Endocrinology and Metabolism Research	2,237,255	129,264
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	RUTGERS, THE STATE UNIVERSITY	0202	93.847	Diabetes, Endocrinology and Metabolism Research	231,940	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHSHORE UNIV HEALTH SYSTEM	EH18-093-S1	93.847	Diabetes, Endocrinology and Metabolism Research	59,038	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF COLORADO DENVER	FY19.115.001	93.847	Diabetes, Endocrinology and Metabolism Research	23,598	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	IN-4687809-PU	93.847	Diabetes, Endocrinology and Metabolism Research	73,473	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IU SCHOOL OF MEDICINE	IN4689905PU	93.847	Diabetes, Endocrinology and Metabolism Research	10,070	0
					Total - 93.847		2,635,374	129,264
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,011,623	57,610
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MR-LINK LLC	17099944	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	35,463	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	YALE UNIVERSITY	GK000108 (CON-80000486)	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	161,878	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	YALE UNIVERSITY	GK000164 (CON-80000474)	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	115,227	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN-4685646-PU	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	83,303	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN-4693851-PU	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	40,704	0

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					Total - 93.853		1,448,198	57,610
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.855	Allergy, Immunology and Transplantation Research	6,835,936	1,425,717
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF UTAH	10051059-01	93.855	Allergy, Immunology and Transplantation Research	1,209	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ARIZONA STATE UNIVERSITY	17-172	93.855	Allergy, Immunology and Transplantation Research	85,931	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	THERAPEUTIC SYSTEMS RESEARCH LAB, INC	17023874	93.855	Allergy, Immunology and Transplantation Research	171,282	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	GEORGIA STATE UNIVERSITY	19100731	93.855	Allergy, Immunology and Transplantation Research	4,581	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LOYOLA UNIVERSITY CHICAGO	206944-1	93.855	Allergy, Immunology and Transplantation Research	392,286	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	3004658791	93.855	Allergy, Immunology and Transplantation Research	177,977	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF ROCHESTER	417319G/UR FAO GR510776	93.855	Allergy, Immunology and Transplantation Research	374,108	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BOSTON UNIVERSITY, TRUSTEES OF	4500002938	93.855	Allergy, Immunology and Transplantation Research	41,223	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	VIRGINIA COMMONWEALTH UNIVERSITY	FP00001488_SA002	93.855	Allergy, Immunology and Transplantation Research	74,483	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF COLORADO DENVER	FY16.526.001	93.855	Allergy, Immunology and Transplantation Research	134,663	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4689794PU	93.855	Allergy, Immunology and Transplantation Research	131,106	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MAYO CLINIC COLLEGE OF MEDICINE	PUR-222630-03	93.855	Allergy, Immunology and Transplantation Research	8,249	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00008738	93.855	Allergy, Immunology and Transplantation Research	40,447	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	VANDERBILT UNIVERSITY	VUMC 53180	93.855	Allergy, Immunology and Transplantation Research	181,249	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	WASHINGTON UNIVERSITY	WU-17-36	93.855	Allergy, Immunology and Transplantation Research	278,415	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	WASHINGTON UNIVERSITY	WU-18-457	93.855	Allergy, Immunology and Transplantation Research	289,186	0
					Total - 93.855		9,222,331	1,425,717
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.859	Biomedical Research and Research Training	8,717,279	623,595
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TYMORA ANALYTICAL OPERATIONS, LLC	13098408	93.859	Biomedical Research and Research Training	12,559	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PURSPEC TECHNOLOGIES	18035549	93.859	Biomedical Research and Research Training	114,594	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MATERIALS DEVELOPMENT INC.	19068068	93.859	Biomedical Research and Research Training	8,180	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF NOTRE DAME	202564PU	93.859	Biomedical Research and Research Training	141,220	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BOSTON UNIVERSITY, TRUSTEES OF	4500002413	93.859	Biomedical Research and Research Training	74,670	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	RUTGERS, THE STATE UNIVERSITY	5923	93.859	Biomedical Research and Research Training	92,486	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	60057531	93.859	Biomedical Research and Research Training	456	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	60062580	93.859	Biomedical Research and Research Training	43,575	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CORNELL UNIVERSITY	78359-10729	93.859	Biomedical Research and Research Training	23,245	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN DIEGO	82691762	93.859	Biomedical Research and Research Training	49,077	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MINNESOTA	A004265801	93.859	Biomedical Research and Research Training	35,537	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA - SANTA CRUZ	A18-0179-S001-PO646848	93.859	Biomedical Research and Research Training	161,550	0

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Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA	KK1509	93.859	Biomedical Research and Research Training	-1,297	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	SP0029058-PROJ0007627	93.859	Biomedical Research and Research Training	-5	0
					Total - 93.859		9,473,126	623,595
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.865	Child Health and Human Development Extramural Research	780,906	19,217
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BRADLEY HOSPITAL	7127549	93.865	Child Health and Human Development Extramural Research	21,737	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4381950PU	93.865	Child Health and Human Development Extramural Research	-32,425	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	FLORIDA STATE UNIVERSITY	R01987	93.865	Child Health and Human Development Extramural Research	16,326	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	FLORIDA STATE UNIVERSITY	R02045	93.865	Child Health and Human Development Extramural Research	30,997	0
					Total - 93.865		817,541	19,217
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.866	Aging Research	318,831	79,917
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.867	Vision Research	484,923	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CORNELL UNIVERSITY	182101	93.867	Vision Research	60,209	0
					Total - 93.867		545,132	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.879	Medical Library Assistance	134	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT ID 22984	93.945	Assistance Programs for Chronic Disease Prevention and Control	-350	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	CONTRACT# 32039	93.958	Block Grants for Community Mental Health Services	29,649	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	GRANT ID 21962	93.959	Block Grants for Prevention and Treatment of Substance Abuse	97,368	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4688961PU	93.969	Geriatric Education Centers	19,928	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.989	International Research and Research Training	151,664	98,294
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	VANDERBILT UNIVERSITY	VUMC 58838	93.989	International Research and Research Training	31,383	11,553
					Total - 93.989		183,047	109,847
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		140D0418P0070	93.RD	U.S. Department of Health & Human Services	199,162	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		19024324 - PIOTROWSKI	93.RD	U.S. Department of Health & Human Services	3,591	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		19122519 - DAVIS	93.RD	U.S. Department of Health & Human Services	599	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		BECK	93.RD	U.S. Department of Health & Human Services	2,394	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		D13PX00154	93.RD	U.S. Department of Health & Human Services	2	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		HHSF223201710137C	93.RD	U.S. Department of Health & Human Services	105,170	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		IP15120879	93.RD	U.S. Department of Health & Human Services	2,394	0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		IPA - SANDRA BAI	93.RD	U.S. Department of Health & Human Services	9,976	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LEIDOS	15X193	93.RD	U.S. Department of Health & Human Services	52,579	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	VINCE AND ASSOCIATES	17012644	93.RD	U.S. Department of Health & Human Services	85,683	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ADIPO THERAPEUTICS LLC	18024192	93.RD	U.S. Department of Health & Human Services	74,782	0

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Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LEIDOS BIOMEDICAL RESEARCH INC	18X091	93.RD	U.S. Department of Health & Human Services	217,392	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PURSPEC TECHNOLOGIES	19025141	93.RD	U.S. Department of Health & Human Services	790	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MOI UNIVERSITY	19035225	93.RD	U.S. Department of Health & Human Services	50,666	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NOVILYTIC LLC	19057160	93.RD	U.S. Department of Health & Human Services	13,854	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MONON BIOVENTURES LLC	19068051	93.RD	U.S. Department of Health & Human Services	2,520	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PACIFIC NORTHWEST NATIONAL LABORATORY	389233	93.RD	U.S. Department of Health & Human Services	39,903	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PACIFIC NORTHWEST NATIONAL LABORATORY	390988	93.RD	U.S. Department of Health & Human Services	84,374	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PACIFIC NORTHWEST NATIONAL LABORATORY	394086	93.RD	U.S. Department of Health & Human Services	10,989	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF KANSAS	FY2018-030	93.RD	U.S. Department of Health & Human Services	36,824	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN-4887586-PU	93.RD	U.S. Department of Health & Human Services	56,724	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	J CRAIG VENTER INSTITUTE	JCVI-14-005	93.RD	U.S. Department of Health & Human Services	19,140	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MINNESOTA	P007405902	93.RD	U.S. Department of Health & Human Services	6,425	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF IOWA	S00841-01	93.RD	U.S. Department of Health & Human Services	1,033	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ALTARUM INSTITUTE	SC-17-010	93.RD	U.S. Department of Health & Human Services	246,899	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	SP0040139 60047653 PU	93.RD	U.S. Department of Health & Human Services	124,804	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	SP0040139 60047653 PU-02	93.RD	U.S. Department of Health & Human Services	51,284	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	SP0040139 60051933PU OQ6	93.RD	U.S. Department of Health & Human Services	18,051	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	SP004013960051930PUOQ2	93.RD	U.S. Department of Health & Human Services	7,821	0
					Total - 93.RD		1,525,825	0
Research and Development Cluster	Total - U.S. Department of Health & Human Services						55,959,439	5,011,569
Research and Development Cluster	U.S. Department of Homeland Security	Direct			97.061	Centers for Homeland Security	2,646	0
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2102832-01	97.061	Centers for Homeland Security	154,073	0
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	NORTHEASTERN UNIVERSITY	505035-78054	97.061	Centers for Homeland Security	280,676	0
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	NORTHEASTERN UNIVERSITY	505126-78052	97.061	Centers for Homeland Security	7,991	0
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	GEORGE MASON UNIVERSITY	E2042938	97.061	Centers for Homeland Security	246,848	84,458
					Total - 97.061		692,234	84,458
Research and Development Cluster	U.S. Department of Homeland Security	Direct			97.077	Homeland Security Testing, Evaluation, and Demonstration of Technologies	93,248	0
Research and Development Cluster	U.S. Department of Homeland Security	Direct		70RSAT18CB0000004	97.RD	U.S. Department of Homeland Security	286,756	202,153
Research and Development Cluster	U.S. Department of Homeland Security	Direct		70RSAT18FR0000161	97.RD	U.S. Department of Homeland Security	103,393	40,448
Research and Development Cluster	U.S. Department of Homeland Security	Direct		HS HQDC-17-A-B0006	97.RD	U.S. Department of Homeland Security	117,766	0
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	NORTHEASTERN UNIVERSITY	505118-78050	97.RD	U.S. Department of Homeland Security	0	0
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	LAWRENCE LIVERMORE NATNL LAB	B629434	97.RD	U.S. Department of Homeland Security	223,453	0

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					Total - 97.RD		731,368	242,601
Research and Development Cluster	Total - U.S. Department of Homeland Security						1,516,850	327,059
Research and Development Cluster	Agency for International Development	Direct			98.001	USAID Foreign Assistance for Programs Overseas	381,897	206,645
Research and Development Cluster	Agency for International Development	Pass-Through	CIMMYT, INT.	17121882	98.001	USAID Foreign Assistance for Programs Overseas	48,151	0
Research and Development Cluster	Agency for International Development	Pass-Through	MICHIGAN STATE UNIVERSITY	RC102095	98.001	USAID Foreign Assistance for Programs Overseas	23,355	0
Research and Development Cluster	Agency for International Development	Pass-Through	VANDERBILT UNIVERSITY MEDICAL CENTER	VUMC68125	98.001	USAID Foreign Assistance for Programs Overseas	3,813	0
					Total - 98.001		457,216	206,645
Research and Development Cluster	Agency for International Development	Pass-Through	NATIONAL ACADEMY OF SCIENCES	2000006100	98.RD	Agency for International Development	30,348	0
Research and Development Cluster	Agency for International Development	Pass-Through	NATIONAL ACADEMY OF SCIENCES	2000007146	98.RD	Agency for International Development	44,242	0
					Total - 98.RD		74,590	0
Research and Development Cluster	Total - Agency for International Development						531,806	206,645
Total - Research and Development Cluster							241,409,052	24,816,708
SNAP Cluster	U.S. Department of Agriculture	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	CONTRACT# 18261	10.561	State Admin Matching Grants for the Supplemental Nutrition Assistance Program	934,925	0
SNAP Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT# 29605	10.561	State Admin Matching Grants for the Supplemental Nutrition Assistance Program	4,367,104	0
					Total - 10.561		5,302,029	0
Total - SNAP Cluster							5,302,029	0
	U.S. Department of Agriculture	Direct			10.001	Agricultural Research_Basic and Applied Research	1,173	0
	U.S. Department of Agriculture	Direct			10.025	Plant and Animal Disease, Pest Control, and Animal Care	186,105	0
	U.S. Department of Agriculture	Direct			10.163	Market Protection and Promotion	47,206	0
	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-19-SCBG-18-005	10.170	Specialty Crop Block Grant Program - Farm Bill	6,189	0
	U.S. Department of Agriculture	Direct			10.172	Local Food Promotion Program	1,195	1,195
	U.S. Department of Agriculture	Direct			10.202	Cooperative Forestry Research	34,003	0
	U.S. Department of Agriculture	Direct			10.207	Animal Health and Disease Research	1,409,229	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H004403713	10.215	Sustainable Agriculture Research and Education	113	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H005722903	10.215	Sustainable Agriculture Research and Education	24,708	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H007179311	10.215	Sustainable Agriculture Research and Education	31,799	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H007179330	10.215	Sustainable Agriculture Research and Education	3,519	0
					Total - 10.215		60,139	0
	U.S. Department of Agriculture	Direct			10.217	Higher Education Challenge Grants	12,843	13,077
	U.S. Department of Agriculture	Pass-Through	TEXAS A&M UNIVERSITY	06-S150646	10.217	Higher Education Challenge Grants	27,925	0
					Total - 10.217		40,768	13,077
	U.S. Department of Agriculture	Direct			10.220	Higher Education Multicultural Scholars Program	34,963	0

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	U.S. Department of Agriculture	Direct			10.226	Secondary and Two-Year Postsecondary Agriculture Education Challenge Grants	18,557	0
	U.S. Department of Agriculture	Direct			10.304	Homeland Security_Agricultural	419,558	133,331
	U.S. Department of Agriculture	Direct			10.310	Agriculture and Food Research Initiative	185,632	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF WISCONSIN-EXTENSION	0000001882	10.310	Agriculture and Food Research Initiative	44,292	0
					Total - 10.310		229,924	0
	U.S. Department of Agriculture	Pass-Through	FARMER VETERAN COALITION	16122170	10.311	Beginning Farmer and Rancher Development Program	1,585	0
	U.S. Department of Agriculture	Direct			10.328	Natnl Food Safety Training, Educ, Extn, Outreach & Tech Asst Compet Grant Prog	9,335	0
	U.S. Department of Agriculture	Direct			10.329	Crop Protection and Pest Management Competitive Grants Program	221,461	0
	U.S. Department of Agriculture	Direct			10.475	Cooperative Agreements with States for Intrastate Meat and Poultry Inspection	10,697	0
	U.S. Department of Agriculture	Direct			10.500*	Cooperative Extension Service	11,390,449	997,187
	U.S. Department of Agriculture	Pass-Through	NATIONAL INST OF FOOD & AGRICULTURE	13-48762-21537	10.500*	Cooperative Extension Service	265,922	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	25-6324-0187-011	10.500*	Cooperative Extension Service	890	0
	U.S. Department of Agriculture	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5030-PU-UM-9802	10.500*	Cooperative Extension Service	14,382	0
	U.S. Department of Agriculture	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5967-PU-UM-3501	10.500*	Cooperative Extension Service	22,672	0
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H005722929	10.500*	Cooperative Extension Service	59,173	0
	U.S. Department of Agriculture	Pass-Through	ILLINOIS COOPERATIVE EXTENSION SERVICE	PO:P1870028	10.500*	Cooperative Extension Service	29,510	0
					Total - 10.500*		11,782,998	997,187
	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #28585	10.575	Farm to School Grant Program	10,899	0
	U.S. Department of Agriculture	Direct			10.680	Forest Health Protection	61,124	31,256
	U.S. Department of Agriculture	Direct			10.777	Norman E. Borlaug International Agricultural Science and Technology Fellowship	11,748	0
	U.S. Department of Agriculture	Pass-Through	FARM FOUNDATION	693A7516007	10.912	Environmental Quality Incentives Program	81,460	0
	U.S. Department of Agriculture	Direct			10.960	Technical Agricultural Assistance	126,992	28,667
	Total - U.S. Department of Agriculture						20,109,337	1,204,713
	U.S. Department of Commerce	Direct			11.417	Sea Grant Support	1,001,212	401,543
	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF ILLINOIS	074483-15947	11.417	Sea Grant Support	44,733	0
	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF ILLINOIS	2014-02342-01 15036	11.417	Sea Grant Support	230,400	0
	U.S. Department of Commerce	Pass-Through	OHIO STATE UNIVERSITY	60069224	11.417	Sea Grant Support	11,052	0
					Total - 11.417		1,287,397	401,543
	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF ILLINOIS	090946-16963	11.419	Coastal Zone Management Administration Awards	12,467	0
	U.S. Department of Commerce	Pass-Through	REGENTS OF THE UNIV OF MICHIGAN, THE	PO 3004178130	11.432	Office of Oceanic and Atmospheric Research (OAR) Joint and Cooperative Institute	67,627	0
	U.S. Department of Commerce	Direct			11.611*	Manufacturing Extension Partnership	2,992,523	0
	U.S. Department of Commerce	Direct			11.620	Science, Technology, Business and/or Education Outreach	2,930	0

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	U.S. Department of Commerce	Direct		1331L518P13500110	11.U00	U.S. Department of Commerce	96,660	0
	U.S. Department of Commerce	Direct		074483-16960	11.U01	U.S. Department of Commerce	7,333	0
	Total - U.S. Department of Commerce						4,466,937	401,543
	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	3004036942	12.611	Community Economic Adjustment Planning Assistance for Reductions in Defense Indu	-60	0
	U.S. Department of Defense	Pass-Through	NEW JERSEY INSTITUTE OF TECHNOLOGY	996705	12.617	Economic Adjustment Assistance for State Governments	74,889	0
	U.S. Department of Defense	Direct			12.630	Basic, Applied, and Advanced Research in Science and Engineering	57,186	0
	U.S. Department of Defense	Pass-Through	HENRY M JACKSON FOUNDATION	3461	12.750	Uniformed Services University Medical Research Projects	76,244	0
	U.S. Department of Defense	Direct			12.903	GenCyber Grants Program	29,322	0
	U.S. Department of Defense	Direct			12.910	Research and Technology Development	83	0
	U.S. Department of Defense	Direct		18100646	12.U00	U.S. Department of Defense	105,809	0
	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00009307	12.U01	U.S. Department of Defense	309,701	0
	U.S. Department of Defense	Pass-Through	AMERICAN LIGHTWEIGHT MATERIALS MF INST	4003-03	12.U02	U.S. Department of Defense	84,140	0
	U.S. Department of Defense	Direct		15892	12.U03	U.S. Department of Defense	10,793	0
	U.S. Department of Defense	Direct		19089004	12.U04	U.S. Department of Defense	54,741	0
	U.S. Department of Defense	Pass-Through	EXO-ATMOSPHERIC TECHNOLOGIES LLC	S1005	12.U05	U.S. Department of Defense	18,011	0
	U.S. Department of Defense	Pass-Through	HYPERCOMP INC	18122985	12.U06	U.S. Department of Defense	27,613	0
	U.S. Department of Defense	Pass-Through	IN SPACE, LLC	INS-51810-1	12.U07	U.S. Department of Defense	61,346	0
	Total - U.S. Department of Defense						909,818	0
	U.S. Department of Justice	Direct			16.562	Criminal Justice Research and Development_Graduate Research Fellowships	45,425	0
	Total - U.S. Department of Justice						45,425	0
	U.S. Department of Labor	Direct			17.502	Occupational Safety and Health_Susan Harwood Training Grants	375	0
	Total - U.S. Department of Labor						375	0
	U.S. Department of State	Direct			19.040	Public Diplomacy Programs	2,270	0
	U.S. Department of State	Direct			19.415	Professional Exchanges_Annual Open Grant	50,096	0
	U.S. Department of State	Direct			19.501	Public Diplomacy Programs for Afghanistan and Pakistan	1,451	0
	U.S. Department of State	Direct		1042-801737	19.U00	U.S. Department of State	20,000	0
	Total - U.S. Department of State						73,817	0
	U.S. Department of Transportation	Direct			20.106	Airport Improvement Program	1,433,340	0
	U.S. Department of Transportation	Direct			20.109	Air Transportation Centers of Excellence	3,750	0
	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	PO: 18812565	20.200	Highway Research & Development Program	13,196	0
	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4228	20.200	Highway Research & Development Program	67,591	0
	U.S. Department of Transportation				Total - 20.200		80,787	0

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	U.S. Department of Transportation	Direct			20.215	Highway Training and Education	6,250	0
	U.S. Department of Transportation	Pass-Through	UNIVERSITY OF MICHIGAN	3004631368	20.701	University Transportation Centers Program	30,165	0
	U.S. Department of Transportation	Direct		DTFACT-13-D-00010 0005	20.U00	U.S. Department of Transportation	57,024	0
	U.S. Department of Transportation	Direct		DTFACT-13-D-00010 0006	20.U01	U.S. Department of Transportation	27,117	0
	Total - U.S. Department of Transportation						1,638,433	0
	National Aeronautics & Space Administration	Direct			43.001	Science	122,786	0
	National Aeronautics & Space Administration	Direct			43.002	Aeronautics	12,429	0
	National Aeronautics & Space Administration	Direct			43.008	Education	694,143	256,020
	National Aeronautics & Space Administration	Direct			43.012	Space Technology	680,314	0
	National Aeronautics & Space Administration	Pass-Through	ULTRAMET	SC NNX15CS02C	43.U00	National Aeronautics & Space Administration	22,846	0
	National Aeronautics & Space Administration	Direct		80NSSC17K0368	43.U01	National Aeronautics & Space Administration	45,196	0
	National Aeronautics & Space Administration	Pass-Through	UNIVERSITIES SPACE RESEARCH ASSOCIATION	08600-021	43.U02	National Aeronautics & Space Administration	10,400	0
	National Aeronautics & Space Administration	Pass-Through	UNIVERSITIES SPACE RESEARCH ASSOCIATION	08600-021	43.U03	National Aeronautics & Space Administration	16,494	0
	National Aeronautics & Space Administration	Direct		80NSSC19P0397	43.U04	National Aeronautics & Space Administration	103,604	0
	Total - National Aeronautics & Space Administration						1,708,212	256,020
	National Endowment for the Arts & Humanities	Pass-Through	ARTS MIDWEST	18101012	45.025	Promotion of the Arts_Partnership Agreements	3,200	0
	National Endowment for the Arts & Humanities	Pass-Through	ARTS UNITED OF GREATER FORT WAYNE	GRANT# 1809842-61-18	45.025	Promotion of the Arts_Partnership Agreements	5,000	0
	National Endowment for the Arts & Humanities	Pass-Through	INDIANA ARTS COMMISSION	RIG4-18-2874427	45.025	Promotion of the Arts_Partnership Agreements	4,780	0
					Total - 45.025		12,980	0
	National Endowment for the Arts & Humanities	Direct			45.161	Promotion of the Humanities_Research	53,294	0
	Total - National Endowment for the Arts & Humanities						66,274	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	A343-9-PSA-SBDC-11	59.037	Small Business Development Center	81,068	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	A343-9-PSA-SBDC-12	59.037	Small Business Development Center	72,440	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	A343-9-PSA-SBDC-14	59.037	Small Business Development Center	96,860	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	EDS# A342-8-SBDC-18-109	59.037	Small Business Development Center	86,998	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	EDS# A342-8-SBDC-18-110	59.037	Small Business Development Center	70,398	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	EDS# A342-8-SBDC-18-111	59.037	Small Business Development Center	40,625	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	EDS# A342-8-SBDC-18-113	59.037	Small Business Development Center	68,008	0
					Total - 59.037		516,397	0
	Total - Small Business Administration						516,397	0
	Environmental Protection Agency	Direct			66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	8,986	7,010
					Total - 66.436		8,986	7,010

* denotes major programs
 The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
	Environmental Protection Agency	Pass-Through	IN DEPARTMENT OF ENVIRONMENTAL MGMT	CONTRACT ID 23109	66.460	Nonpoint Source Implementation Grants	27,688	0
	Environmental Protection Agency	Direct			66.514	Science To Achieve Results (STAR) Fellowship Program	4,577	0
	Environmental Protection Agency	Direct			66.700	Consolidated Pesticide Enforcement Cooperative Agreements	657,851	0
	Total - Environmental Protection Agency						699,102	7,010
	Nuclear Regulatory Commission	Direct			77.008	Nuclear Regulatory Commission Scholarship & Fellowship Program	58,694	0
	Total - Nuclear Regulatory Commission						58,694	0
	U.S. Department of Energy	Pass-Through	ARIZONA STATE UNIVERSITY	17-091	81.087	Renewable Energy Research and Development	80,947	0
	U.S. Department of Energy	Direct		368096	81.U00	U.S. Department of Energy	173,915	0
	U.S. Department of Energy	Pass-Through	UNIVERSITY OF KENTUCKY	3200001517-18-076	81.U01	U.S. Department of Energy	219,483	0
	Total - U.S. Department of Energy						474,345	0
TRIO Cluster	U.S. Department of Education	Direct			84.042	TRIO_Student Support Services	976,069	0
TRIO Cluster	U.S. Department of Education	Direct			84.044	TRIO_Talent Search	755,196	0
TRIO Cluster	U.S. Department of Education	Direct			84.047	TRIO_Upward Bound	1,123,462	0
	Total - TRIO Cluster						2,854,727	0
	U.S. Department of Education	Pass-Through	GEORGIA STATE UNIVERSITY	SP00012139-09	84.116	Fund for the Improvement of Postsecondary Education	223,191	0
	U.S. Department of Education	Direct			84.200	Graduate Assistance in Areas of National Need	584,983	0
	U.S. Department of Education	Direct			84.206	Javits Gifted and Talented Students Education Grant Program	422,965	0
	U.S. Department of Education	Direct			84.334	Gaining Early Awareness and Readiness for Undergraduate Programs	2,920,451	332,065
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT# 19272	84.366	Mathematics and Science Partnerships	240,035	7,949
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT# 19396	84.366	Mathematics and Science Partnerships	69,577	0
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT# 19644	84.366	Mathematics and Science Partnerships	7,866	0
	U.S. Department of Education				Total - 84.366		317,478	340,014
	U.S. Department of Education	Direct			84.367	Improving Teacher Quality State Grants	1,760	0
	U.S. Department of Education	Direct		P217A170345	84.U00	U.S. Department of Education	272,814	0
	U.S. Department of Education	Direct		18101149	84.U01	U.S. Department of Education	-95	0
	Total - U.S. Department of Education						7,598,274	340,014
Health Center Program Cluster	U.S. Department of Health & Human Services	Direct			93.224	Consolidated Health Centers (Community Health Centers, Migrant Health Centers, H	2,580,480	0
	Total - Health Center Program Cluster						2,580,480	0
Medicaid Cluster	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	CONTRACT# 18963	93.778	Medical Assistance Program	2,424,391	0
	Total - Medicaid Cluster						2,424,391	0
	U.S. Department of Health & Human Services	Direct			93.103	Food and Drug Administration_Research	171,971	0
	U.S. Department of Health & Human Services	Pass-Through	IOWA STATE UNIVERSITY	430-30-01D, AMENDMENT #2	93.103	Food and Drug Administration_Research	6,517	0

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Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT ID#30149	93.103	Food and Drug Administration_Research	438,833	0
	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2019-001	93.103	Food and Drug Administration_Research	10,798	0
	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2019-002	93.103	Food and Drug Administration_Research	77,789	0
					Total - 93.103		705,908	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT# 18975	93.136	Injury Prevention and Control Research and State and Community Based Programs	82,597	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT# 31069	93.136	Injury Prevention and Control Research and State and Community Based Programs	36,426	0
					Total - 93.136		119,023	0
	U.S. Department of Health & Human Services	Direct			93.137	Community Programs to Improve Minority Health Grant Program	185,693	63,769
	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	60039471 PU	93.226	Research on Healthcare Costs, Quality and Outcomes	118,562	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE OFFICE OF RURAL HEALTH	CONTRACT# 21244	93.241	State Rural Hospital Flexibility Program	161,417	0
	U.S. Department of Health & Human Services	Direct			93.243	Substance Abuse and Mental Health Services_Projects of Regional and National Sig	70,683	0
	U.S. Department of Health & Human Services	Direct			93.247	Advanced Education Nursing Grant Program	402,546	0
	U.S. Department of Health & Human Services	Direct			93.262	Occupational Safety and Health Program	132,192	0
	U.S. Department of Health & Human Services	Pass-Through	HEALTH CARE EDUCATION-TRAINING INC	18024172	93.297	Teenage Pregnancy Prevention Program	10,125	0
	U.S. Department of Health & Human Services	Pass-Through	HEALTH CARE EDUCATION-TRAINING INC	19067746	93.297	Teenage Pregnancy Prevention Program	31,070	0
					Total - 93.297		41,195	0
	U.S. Department of Health & Human Services	Pass-Through	OREGON HEALTH SCIENCES UNIVERSITY	1008998_PURDUE_SHIP	93.301	Small Rural Hospital Improvement Grant Program	66,861	0
	U.S. Department of Health & Human Services	Direct			93.526	Affordable Care Act (ACA) Grants for Capital Development in Health Centers	81,211	0
	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	1L1CMS331444-03-00	93.638	ACA-Transforming Clinical Practice Initiative: Practice Transf Networks(PTNs)	446,794	0
	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4680993PU	93.638	ACA-Transforming Clinical Practice Initiative: Practice Transf Networks(PTNs)	849,104	0
					Total - 93.638		1,295,898	0
	U.S. Department of Health & Human Services	Pass-Through	INDIANA FAMILY HEALTH COUNCIL, INC.	TITLE XX/TANF	93.667	Social Services Block Grant	-13,771	0
	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	GRANT ID: 32087	93.788	Opioid STR	141,805	0
	U.S. Department of Health & Human Services	Pass-Through	HEALTH CARE EDUCATION-TRAINING INC	17067143	93.U00	U.S. Department of Health & Human Services	-4,741	0
	U.S. Department of Health & Human Services	Direct			HHSF223201610019C	U.S. Department of Health & Human Services	886	0
	U.S. Department of Health & Human Services	Pass-Through	HEALTH CARE EDUCATION-TRAINING INC	18057448	93.U02	U.S. Department of Health & Human Services	7,911	0
	U.S. Department of Health & Human Services	Direct			HHSF223201710104C	U.S. Department of Health & Human Services	11,099	0
	U.S. Department of Health & Human Services	Direct			HHSF223201410373A	U.S. Department of Health & Human Services	56,632	0
	U.S. Department of Health & Human Services	Direct			IPA -KIERSTEN WALTER	U.S. Department of Health & Human Services	7,400	0
	U.S. Department of Health & Human Services	Direct			HHSF223201610019C	U.S. Department of Health & Human Services	120,852	0
	U.S. Department of Health & Human Services	Direct			HHSF223201810131C	U.S. Department of Health & Human Services	17,944	0
	U.S. Department of Health & Human Services	Direct			IPA - J WASYNCZUK	U.S. Department of Health & Human Services	33,004	0

* denotes major programs
 The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
	U.S. Department of Health & Human Services	Direct		IPA - K MONTAGANO	93.U09	U.S. Department of Health & Human Services	32,946	0
	U.S. Department of Health & Human Services	Direct		IPA - NICOLE SEBAHAR	93.U10	U.S. Department of Health & Human Services	32,641	0
	U.S. Department of Health & Human Services	Pass-Through	HEALTH CARE EDUCATION-TRAINING INC	19067759	93.U11	U.S. Department of Health & Human Services	12,770	0
	U.S. Department of Health & Human Services	Direct		HHSF223201850066A	93.U12	U.S. Department of Health & Human Services	70,630	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT# 32251	93.U13	U.S. Department of Health & Human Services	11,577	0
	U.S. Department of Health & Human Services	Direct		Unknown	93.U14	U.S. Department of Health & Human Services	57	0
	U.S. Department of Health & Human Services	Direct		Unknown	93.U15	U.S. Department of Health & Human Services	-1,603	0
	Total - U.S. Department of Health & Human Services						8,924,099	63,769
	U.S. Department of Homeland Security	Pass-Through	NORTHEASTERN UNIVERSITY	505035-78054	97.061	Centers for Homeland Security	72,651	0
	U.S. Department of Homeland Security	Direct		Unknown	97.U00	U.S. Department of Homeland Security	82,800	0
	Total - U.S. Department of Homeland Security						155,451	0
	Agency for International Development	Direct			98.001	USAID Foreign Assistance for Programs Overseas	1,871,199	674,679
	Agency for International Development	Pass-Through	CULTIVATING NEW FRONTIERS IN AGRIC	01PURDUE	98.001	USAID Foreign Assistance for Programs Overseas	7,698	0
	Agency for International Development	Pass-Through	NATIONAL ACADEMY OF SCIENCES	2000008310	98.001	USAID Foreign Assistance for Programs Overseas	84,294	0
	Agency for International Development	Pass-Through	NATIONAL ACADEMY OF SCIENCES	2000009139	98.001	USAID Foreign Assistance for Programs Overseas	77,497	0
	Agency for International Development	Pass-Through	VIRGINIA TECH	451242-19084	98.001	USAID Foreign Assistance for Programs Overseas	835	0
	Agency for International Development	Pass-Through	CORNELL UNIVERSITY	87718-11203	98.001	USAID Foreign Assistance for Programs Overseas	27,457	0
	Agency for International Development	Pass-Through	UNIVERSITY OF CALIFORNIA - DAVIS	A10-0001-S001	98.001	USAID Foreign Assistance for Programs Overseas	72,697	5,335
	Agency for International Development	Pass-Through	TUFTS UNIVERSITY	AID-OAA-L-10-00006	98.001	USAID Foreign Assistance for Programs Overseas	70,321	0
	Agency for International Development	Pass-Through	OREGON STATE UNIVERSITY	RD011G-D	98.001	USAID Foreign Assistance for Programs Overseas	55,137	30,734
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S14201	98.001	USAID Foreign Assistance for Programs Overseas	28,707	0
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S14207	98.001	USAID Foreign Assistance for Programs Overseas	-22	0
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S15005	98.001	USAID Foreign Assistance for Programs Overseas	65,619	27,538
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S15006	98.001	USAID Foreign Assistance for Programs Overseas	84,829	10,056
					Total - 98.001		2,446,268	748,342
	Agency for International Development	Pass-Through	FAMILY HEALTH INTERNATIONAL	4576-01-PURDUE-01	98.012	USAID Development Partnerships for University Cooperation and Development	892,608	0
	Agency for International Development	Direct		AID-OAA-L-14-00003	98.U00	Agency for International Development	1,090,350	328,346
	Agency for International Development	Pass-Through	RUTGERS, THE STATE UNIVERSITY	5736	98.U01	Agency for International Development	17,216	0
	Total - Agency for International Development						4,446,442	1,076,688
	Department of Veterans Affairs	Direct			64.U00	Department of Veteran's Affairs	76,364	0
	Total - Department of Veterans Affairs						76,364	0
	U.S. International Trade Commission	Direct			99.002	U.S. International Trade Commission	141,286	0

* denotes major programs
 The accompanying notes are an integral part of the Schedule of Expenditures of Federal Awards

Clusters	Federal Grantor	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Expenditures to Subrecipients
	Total - U.S. International Trade Commission						141,286	0
Total - Other Programs							52,109,082	3,349,757
Grand Total							547,729,949	28,166,465

PURDUE UNIVERSITY
NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
June 30, 2019

Note 1. Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (Schedule) includes the federal award activity of Purdue University (University). The information in the Schedule is presented in accordance with the requirements of Title 2 U.S Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). Because the Schedule presents only a selective portion of the activities of the University, it is not intended to and does not present the financial position, change in financial position, or cash flows of the University. For reporting purposes, federal awards have been classified into three types:

1. Student financial aid
2. Research and development
3. Other federal programs

Note 2. Summary of Significant Accounting Policies

Expenditures reported on the Schedule are reported on a modified cash basis of accounting. Such expenditures are recognized following the cost principles contained in Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), wherein certain types of expenditures are not allowable or are limited as to reimbursement. Under Uniform Guidance, an award is considered expended when certain events related to the award occur. These include:

- Date of work being performed for payroll related transactions
- Receipt of goods for those ordered via a purchase order; generally all goods are required to be purchased via a purchase order except for small dollars approved for purchasing card processing
- Use of loan proceeds under loan and loan guarantee programs
- Disbursement of funds to sub recipients
- Receipt or use of program income
- Payment for other supplies and expenses
- A portion of costs associated with general University activities that are allocated to certain federal awards under negotiated formulas commonly referred to as facilities and administrative rates and assessed for applicable underlying expense

As a result of these criteria, some amounts presented in the Schedule may differ from amounts presented in, or used in the preparation of the University's basic financial statements which are prepared on an accrual basis of accounting.

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 identifying numbers are presented when available.

PURDUE UNIVERSITY
NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
June 30, 2019
(Continued)

The University did not elect to use the 10% de minimus indirect cost rate allowed under the Uniform Guidance.

Note 3. Federal Student Loan Programs

The University considers the federal capital contribution of federally sponsored student loan programs as a liability. Balances of loan advances and 2018-19 federal capital contributions were:

Balance, July 1, 2018	\$ 14,934,557
Net Federal Capital Contributions:	
Federal Perkins Loan Program	<u>276,368</u>
Balance, June 30, 2019	\$ <u>15,210,925</u>

Amounts loaned to students are recorded as notes receivable. Gross student notes receivable outstanding as of June 30, 2019 were:

<u>Program Title</u>	<u>Federal CFDA Number</u>	<u>Amount</u>
Federal Perkins Loan Program	84.038	\$ 15,257,430
Health Professions Student Loans	93.342	<u>2,718,200</u>
Total Student Notes Receivable		\$ <u>17,975,630</u>

Note 4. Federal Direct Loan Program

The University participates in the Federal Direct Loan Program, which facilitates direct borrowing for students and parents from the Federal Government. During the fiscal year ended June 30, 2019, the University had the following gross loan activity related to new loans under this program:

<u>Program</u>	<u>Federal CFDA Number</u>	<u>Number of Loans Issued</u>	<u>Amount</u>
Federal Stafford Loans	84.268	28,044	\$136,931,543
Federal PLUS Loans	84.268	<u>2,676</u>	<u>39,218,013</u>
Totals		<u>30,720</u>	\$ <u>176,149,556</u>

PURDUE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS

Section I - Summary of Auditor's Results

Financial Statements:

Type of auditor's report issued:	Unmodified
Internal control over financial reporting:	
Material weaknesses identified?	no
Significant deficiencies identified?	none reported
Noncompliance material to financial statements noted?	no

Federal Awards:

Internal control over major programs:	
Material weaknesses identified?	yes
Significant deficiencies identified?	yes
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	yes

Identification of Major Programs and type of auditor's report issued on compliance for each:

CFDA Number	Name of Federal Program or Cluster	Opinion Issued
10.500	Student Financial Assistance Cluster	Unmodified
11.611	Cooperative Extension Service	Unmodified
11.611	Hollings Manufacturing Extension Partnership	Unmodified

Dollar threshold used to distinguish between Type A and Type B programs:	\$3,000,000
Auditee qualified as low-risk auditee?	yes

Section II - Financial Statement Findings

No matters are reportable.

Section III - Federal Award Findings and Questioned Costs

FINDING 2019-001

Subject: Student Financial Assistance Cluster - Cash Management
 Federal Agency: Department of Education
 Federal Programs: Federal Supplemental Educational Opportunity Grants, Federal Work-Study Program, Federal Direct Student Loans
 CFDA Numbers: 84.007, 84.033, 84.268
 Compliance Requirement: Cash Management
 Audit Findings: Significant Deficiency, Other Matters

PURDUE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
(Continued)

Repeat Finding

This is a repeat finding from the immediately prior audit report. The prior finding number was 2018-001 and was in relation to the Cash Management compliance requirement for Federal Direct Student Loans program.

Condition and Context

The Purdue Northwest and Fort Wayne campuses did not properly design or implement effective internal control systems to ensure compliance with the requirements related to the Cash Management compliance requirement.

The Northwest campus requested funds in excess of the amount immediately needed for disbursements and did not make the disbursements within three business days following receipt of the funds for the Federal Supplemental Education Opportunity Grants and Federal Direct Student Loans programs. These were due to errors in manual calculations that were occurring at the campus and lack of oversight of the reconciliation process.

The Fort Wayne campus requested funds in excess of the amount immediately needed for disbursements and did not make the disbursements within three business days following receipt of the funds for the Federal Work-Study Program. This was due to a report error related to the conversion of the payroll system and lack of oversight of the reconciliation process.

At the Northwest campus, a draw completed on February 1, 2019, resulted in excess cash that was held from February 1, 2019 to March 11, 2019, or 38 days. A draw completed on December 3, 2018, for the Federal Direct Student Loans program resulted in excess cash that was held from December 3, 2018 to December 10, 2018, or 7 days. These excess cash positions did not exceed the 1 percent of the total amounts of funds the campus drew down in the prior audit year.

At the Fort Wayne campus, a draw completed on January 15, 2019, resulted in excess cash that was held from January 15, 2019 to February 3, 2019, or 18 days. This excess cash position did not exceed the 1 percent of the total amount of funds the campus drew down in the prior audit year.

Criteria

2 CFR 200.303 states in part:

"The non-Federal entity must:

- (a) Establish and maintain effective internal control over the Federal award that provides reasonable assurance that the non-Federal entity is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the Federal award. These internal controls should be in compliance with guidance in 'Standards for Internal Control in the Federal Government' issued by the Comptroller General of the United States or the 'Internal Control Integrated Framework', issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). . . ."

PURDUE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
(Continued)

34 CFR 668.162(b) states in part:

". . . (1) Under the advance payment method, an institution submits a request for funds to the Secretary. The institution's request may not exceed the amount of funds the institution needs immediately for disbursements the institution has made or will make to eligible students and parents. . . .

(3) The institution must disburse the funds requested as soon as administratively feasible but no later than three business days following the date the institution received those funds."

34 CFR 668.166 states:

"(a) *General*. The Secretary considers excess cash to be any amount of title IV, HEA program funds, other than Federal Perkins Loan program funds, that an institution does not disburse to student by the end of the third business day following the date the institution –

- (1) Received those funds from the Secretary; or
- (2) Deposited or transferred to its depository account previously disbursed title IV, HEA program funds, such as those resulting from award adjustments, recoveries, or cancellations.

(b) *Excess cash tolerance*. An institution may maintain for up to seven days an amount of excess cash that does not exceed one percent of the total amount of funds the institution drew down in the prior award year. The institution must return immediately to the Secretary any amount of excess cash over the one-percent tolerance and any amount of excess cash remaining in its account after the seven-day tolerance period.

(c) *Consequences for maintaining excess cash*. Upon a finding that an institution maintained excess cash for any amount or time over that allowed in the tolerance provisions in paragraph (b) of this section, the actions the Secretary may take include, but are not limited to—

- (1) Requiring the institution to reimburse the Secretary for the costs the Federal government incurred in providing that excess cash to the institution; and
- (2) Providing funds to the institution under the reimbursement payment method or heightened cash monitoring payment method described in § 668.162(c) and (d), respectively."

Cause

Management's system of internal controls did not ensure compliance with the Cash Management compliance requirement related to maintaining an excess cash balance for up to seven days after the institution drew funds.

Effect

The deficiency in Management's system of internal controls related to maintaining excess cash balances enabled noncompliance to go undetected beyond the seven day requirement.

PURDUE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
(Continued)

Questioned Costs

There were no questioned costs identified.

Recommendation

We recommended that the University's management modify the system of internal controls related to maintaining excess cash balances to comply with the Cash Management compliance requirement.

Views of Responsible Officials

For the views of responsible officials, refer to the Corrective Action Plan that is part of this report.

FINDING 2019-002

Subject: Student Financial Assistance Cluster - Special Tests and Provisions - Enrollment Reporting
Federal Agency: Department of Education
Federal Programs: Federal Pell Grant Program, Federal Direct Student Loans
CFDA Numbers: 84.063, 84.268
Compliance Requirement: Special Tests and Provisions - Enrollment Reporting
Audit Findings: Material Weakness, Other Matters

Condition and Context

An effective internal control system was not in place to ensure compliance with requirements related to the grant agreement and the enrollment reporting requirement of the Special Test and Provisions - Enrollment Reporting compliance requirement. The Northwest and Fort Wayne campuses did not accurately report the withdrawal and/or confirm the enrollment status of students within 60 days. The West Lafayette campus did not accurately report the status change date.

We selected a sample of 59 students who had attendance changes to determine whether changes were being properly reported to the National Student Loan Data System (NSLDS). Attendance changes were either reductions or increases in attendance levels, withdrawals, or graduations. Errors specific to withdrawals were identified as described below.

The following errors were noted at the Northwest campus:

- The withdrawal status for 1 student was not timely or accurately reported to the NSLDS.
- Status changes were not reported to the NSLDS for 2 students. Of the 2 students, 1 did not have an NSLDS record.

The following errors were noted at the Fort Wayne campus:

- The withdrawal statuses for 2 students were not timely or accurately reported to the NSLDS.
- A status change for 1 student was not reported to the NSLDS.

PURDUE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
(Continued)

The following error was noted at the West Lafayette campus:

- The effective dates of 11 students were not accurately reported to the NSLDS.

Criteria

2 CFR 200.303 states in part:

"The non-Federal entity must:

(a) Establish and maintain effective internal control over the Federal award that provides reasonable assurance that the non-Federal entity is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the Federal award. These internal controls should be in compliance with guidance in 'Standards for Internal Control in the Federal Government' issued by the Comptroller General of the United States or the 'Internal Control Integrated Framework', issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). . . ."

34 CFR 690.83(b)(2) states:

"An institution shall submit, in accordance with deadline dates established by the Secretary, through publication in the Federal Register, other reports and information the Secretary requires shall comply with the procedures the Secretary finds necessary to ensure the reports are correct."

34 CFR 685.309(b) states in part:

"Enrollment reporting process.

- (1) Upon receipt of an enrollment report from the Secretary, a school must update all information included in the report and report to the Secretary - . . .
- (2) Unless it expects to submit its next updated enrollment report to the Secretary within the next 60 days, a school must notify the Secretary within 30 days after the date the school discovers that -
 - (i) a loan under title IV of the Act was made to or on behalf of a student who was enrolled or accepted for enrollment at the school, and the student has ceased to be enrolled on at least a half-time basis or failed to enroll on at least a half-time basis for the period for which the loan was intended; or . . ."

As with any school/servicer arrangement for the administration of Title IV programs, if the school uses an Enrollment Reporting Servicer, the school still has the primary responsibility for submitting timely, accurate, and complete responses to Enrollment Reporting Roster files, and for reporting any changes in student enrollment status in a timely manner. (NSLDS Enrollment Reporting Guide, Chapter 3)

Cause

The University had established controls over enrollment reporting; however, those controls were not effective to ensure that enrollment data was submitted timely and accurately for all students.

PURDUE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
(Continued)

Effect

Inaccurate and delayed submission of information affects the determinations that lenders and servicers of student loans make related to in-school status, deferments, grace periods, and repayment schedules, as well as the federal government's payment of interest subsidies.

Questioned Costs

There were no questioned costs identified.

Recommendation

We recommended that the University strengthen its control system, specific to withdrawals, related to the Special Tests and Provisions - Enrollment Reporting compliance requirement.

Views of Responsible Officials

For the views of responsible officials, refer to the Corrective Action Plan that is a part of this report.

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AUDITEE-PREPARED DOCUMENTS

The subsequent documents were provided by management of the University. The documents are presented as intended by the University.

SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS

FINDING 2018-001

Fiscal year in which the finding initially occurred: 2018
Federal Grantor Agency: Department of Education
Contact Person Responsible for Corrective Action: Kimberly Thomas
Contact Phone Number: (219) 989-2853

Status of Audit Finding: **Implemented**

The corrective actions to enhance Purdue Northwest's cash management process to detect excess cash position were implemented in March 2019. A daily reconciliation process is now being performed by the Reconciliation Accountant and is reviewed and verified by the Senior Accountant. In addition, a monthly reconciliation is performed by the Senior Accountant that matches the data from Banner, SAP and G5 to ensure the accuracy of the daily reconciliation process. The federal draw down and disbursement processes were also improved with the addition of an extra layer of reviews by the Senior Accountant and the required journal entries approval by the Director of Financial Accounting.

Kimberly Thomas

(Signature)

Associate Vice Chancellor, Finance

(Title)

September 24, 2019

(Date)



CORRECTIVE ACTION PLAN

FINDING 2019-001

Contact Person Responsible for Corrective Action: Kimberly Thomas, Purdue Northwest Associate Vice Chancellor for Finance and Business Services or Peg Fish, Director of Audits

Contact Phone Number: Kimberly Thomas (219) 989-2853 Peg Fish (765) 494-7588

Views of Responsible Official: The University concurs with the repeat of prior finding number 2018-001 in relation to the Cash Management compliance requirement for Federal Direct Student Loans. This repeat finding occurred prior to the implementation of revised procedures in March 2019.

Description of Corrective Action Plan:

The corrective actions to enhance Purdue Northwest’s cash management process to detect excess cash position were implemented in March 2019. A daily reconciliation process is now being performed by the Reconciliation Accountant and is reviewed and verified by the Senior Accountant. In addition, a monthly reconciliation is performed by the Senior Accountant that matches the data from Banner, SAP and G5 to ensure the accuracy of the daily reconciliation process. The federal drawdown and disbursement processes were also improved with the addition of an extra layer of review by the Senior Accountant.

Anticipated Completion Date: Implemented March 2019

Kimberly Thomas

(Signature)

Associate Vice Chancellor, Finance

(Title)

January 30, 2020

(Date)

CORRECTIVE ACTION PLAN

FINDING 2019-001, Purdue University Fort Wayne

Contact Person Responsible for Corrective Action: Steve George, Purdue University Fort Wayne Associate Vice Chancellor of Financial and Administrative Affairs or Peg Fish, Director of Audits

Contact Phone Number: Steve George (260)481-6622 Peg Fish (765)494-7588

Views of Responsible Official: The University concurs with the finding that enhancements to Purdue Fort Wayne cash management are necessary. A single error in connection with the implementation of Success Factors resulted in an error in reporting. This ultimately caused an excess cash position that did not exceed 1% of the total amount of funds the campus drew down in the prior audit year.

Description of Corrective Action Plan: After the Success Factors conversion, there was an error in the payroll report. These payroll reports were used for entries to the student information system for the drawdown amount. These reporting errors were discovered after 17 calendar days from the drawdown date and the positive cash position was resolved on the 18th day.

New payroll reporting was implemented to correct this issue. Reconconciliation is completed by the Reconciliation Accountant every pay period (bi-weekly). A final reconciliation compares the general ledger, student information system, and payroll data. Drawdown amounts are recommended to the Director of Financial Aid and subsequently drawn when approved.

Anticipated Completion Date: 01/21/2020



CORRECTIVE ACTION PLAN

FINDING 2019-002, Purdue University Northwest

Contact Person Responsible for Corrective Action: Sandra Steele, Assistant Vice Chancellor for EMSA Reporting & Operational Intelligence

Contact Phone Number: 219-989-2397

Views of Responsible Official:

The University concurs with the finding that the Northwest campus did not accurately report the enrollment status of the three identified students within 60 days.

Description of Corrective Action Plan:

As noted in Finding 2019-002 three errors were reported with one student's withdrawal status not being timely reported to the NSLDS and two students not having status changes reported to NSLDS. In all three instances, the non-reported status and withdrawal changes were related to unofficial withdrawals. An effective process currently exists between the Bursar Office and Financial Aid Office for the return of unearned funds through the R2T4 calculation for unofficial withdrawals. Enhancements will be made to the existing process to include the last date of attendance used for the R2T4 calculation that will be reported to NSLDS directly by Financial aid.

One of the three errors also included a student that did not have an NSLDS record. Through our research, we determined the student was unintentionally excluded from the National Student Clearinghouse enrollment file and thus NSLDS due to a null social security number in our student information system. To ensure no further instances, the University has created a daily exception report to capture any student record that has a FAFSA loaded and a null SSN.

Anticipated Completion Date: March 6, 2020

CORRECTIVE ACTION PLAN

FINDING 2019-002

Purdue University Fort Wayne

Contact Person Responsible for Corrective Action: Doug Hess, Purdue University Fort Wayne Director of Financial Aid, or Peg Fish, Purdue University Director of Audits

Contact Phone Number: Doug Hess (260) 481-6242; Peg Fish (765) 494-7588

Views of Responsible Official:

The University concurs with the finding that the Fort Wayne campus did not accurately report the enrollment status of the three identified students within 60 days.

Description of Corrective Action Plan:

Two students' withdrawal statuses were not timely reported to NSLDS and one student's status change was not reported to NSLDS. These findings regarding the withdrawal changes were related to unofficial withdrawals. R2T4 calculations are being moved to the Financial Aid Office for unofficial withdrawals. Enhancements will be made to the existing process to include the last date of attendance used for the R2T4 calculation that will be reported to NSLDS directly by Financial Aid.

Anticipated Completion Date: March 6, 2020

CORRECTIVE ACTION PLAN

FINDING 2019-002 Purdue University West Lafayette

Contact Person Responsible for Corrective Action: Heidi Carl, Purdue West Lafayette Executive Director of Financial Aid or Peg Fish, Director of Audits

Contact Phone Number: Heidi Carl: 765-494-5089 / Peg Fish: 765-494-7588

Views of Responsible Official: The West Lafayette campus did not report the appropriate effective date for eleven (11) officially withdrawn students as identified in the finding.

Description of Corrective Action Plan:

As soon as staff were notified of the errors, a root cause analysis was initiated with staff from the Office of the Dean of Students, Bursar, Registrar, Financial Aid, Information Technology (IT), and Internal Audit.

Action steps were immediately taken as follows:

1. Within two days of the meeting, the Registrar and IT support staff identified that a vendor change to reporting was made. As a result, PWL found it necessary to manually process students directly with the Clearinghouse. Unfortunately, during this manual review, the staff were reporting an activity date found in the system instead of the effective date of the withdrawal. The staff involved have been notified of the correct date field to report.
2. The Bursar team is reviewing current documentation regarding withdrawals, and will update information pertaining to the field definitions in the student information system. Additional training will be held with all of the involved parties.
3. The involved parties will work together to review all withdrawals from the 2018-19 and 2019-20 years to ensure compliance with NSLDS reporting.
4. An annual meeting will be held, prior to the start of the Fall semester, with the Office of the Dean of Students, Registrar, Bursar, IT and Financial Aid to review our current policies and procedures and identify any necessary updates.

Anticipated Completion Date: March 6, 2020

OTHER REPORTS

In addition to this report, other reports may have been issued for the University. All reports can be found on the Indiana State Board of Accounts' website: <http://www.in.gov/sboa/>.