Purdue University

Federal Awards Supplemental Information June 30, 2022

Purdue University

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

Independent Auditor's Report

To the Board of Trustees Purdue University

We have audited the financial statements of the business-type activities, the fiduciary activities, and the aggregate discretely presented component units of Purdue University (the "University"), a component unit of the State of Indiana, as of and for the year ended June 30, 2022 and the related notes to the financial statements, which collectively comprise the University's basic financial statements. We issued our report thereon dated October 26, 2022, which contained an unmodified opinion on the 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 26, 2022.

We did not audit the financial statements of Purdue Research Foundation, which represents 95 percent, 98 percent, and 96 percent of the assets, net position, and revenue, respectively, of the discretely presented component units. Purdue Research Foundation's financial statements were audited by other auditors, whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Purdue Research Foundation, is based solely on the report of the other auditors.

The University's basic financial statements include the operations of Purdue University Global, Inc. (Purdue Global), a blended component unit. Purdue Global expended 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, 2022.

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

Plante i Moran, PLLC

March 7, 2023





Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Independent Auditor's Report

To Management and the Board of Trustees Purdue University

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the basic financial statements of the business-type activities, the fiduciary activities, and the aggregate discretely presented component units of Purdue University (the "University"), a component unit of the State of Indiana, as of and for the year ended June 30, 2022 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 26, 2022. Our report includes a reference to other auditors who audited the financial statements of Purdue Research Foundation, as described in our report on Purdue University's financial statements. The financial statements of Purdue International, Inc., a blended component unit, were not audited in accordance with *Government Auditing Standards*, and, accordingly, this report does not include reporting on internal control over financial reporting or compliance and other matters associated with Purdue International, Inc. or that are reported on separately by those auditors who audited the financial statements of Purdue Research Foundations.

Report on Internal Control Over Financial Reporting

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

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

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



To Management and the Board of Trustees Purdue University

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Alante i Moran, PLLC

October 26, 2022



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

Independent Auditor's Report

To the Board of Trustees Purdue University

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Purdue University's (the "University") compliance with the types of compliance requirements identified as subject to audit in the Office of Management and Budget (OMB) Compliance Supplement that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2022. The University's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. The University's basic financial statements include the operations of Purdue Global, Inc., a blended component unit, which expended federal awards that are not included in the University's schedule of expenditures of federal awards during the year ended June 30, 2022. Our compliance audit, described in this paragraph, does not include the operations of Purdue Global, Inc. because Purdue Global, Inc. completed a separate audit of compliance.

In our opinion, the University complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of the major federal programs for the year ended June 30, 2022.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (the "Uniform Guidance"). Our responsibilities under those standards and the Uniform Guidance are further described in the *Auditor's Responsibilities for the Audit of Compliance* section of our report.

We are required to be independent of the University and to meet our other ethical responsibilities in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the University's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules, and provisions of contracts or grant agreements applicable to the University's federal programs.



To the Board of Trustees Purdue University

Auditor's Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the University's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the University's compliance with the requirements of each major federal program as a whole.

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

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform
 audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence
 regarding the University's compliance with the compliance requirements referred to above and performing such
 other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the University's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

Our consideration of internal control over compliance was for the limited purpose described in the *Auditor's Responsibilities for the Audit of Compliance* section above and was not designed to identify all deficiencies in internal control over compliance, and, therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we did identify certain deficiencies in internal control over compliance that we consider to be a material weakness and significant deficiencies.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance such that there is reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. We consider the deficiency in internal control over compliance described in the accompanying schedule of findings and questioned costs as Finding 2022-003 to be a material weakness.

A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance. We consider the deficiencies in internal control over compliance described in the accompanying schedule of findings and questioned costs as Findings 2022-001, 2022-002, and 2022-004 to be significant deficiencies.

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

To the Board of Trustees Purdue University

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

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

Alante i Moran, PLLC

March 7, 2023

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.007	Federal Supplemental Educational Opportunity Grants	2,591,790	
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.033	Federal Work-Study Program	835,189	
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.038	LOAN/LOAN GUARANTEE - Federal Perkins Loan Program_Federal Capital Contributions	8,822,805	
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.063	Federal Pell Grant Program	47,038,980	
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.268	LOAN/LOAN GUARANTEE - Federal Direct Student Loans	165,891,759	
Student Financial Assistance Cluster*	U.S. Department of Education	Direct			84.379	Teacher Education Asst for College & Higher Education Grants (TEACH Grants)	s 20,690	
Student Financial Assistance Cluster*	Total - U.S. Department of Education						225,201,213	
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	3,449,318	
Student Financial Assistance Cluster*	Total - U.S. Department of Health & Human Services						3,449,318	
Total - Student Financial Assistance Cluster	*						228,650,531	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.001	Agricultural Research_Basic and Applied Research	2,872,046	13,89
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	021220B	10.001	Agricultural Research_Basic and Applied Research	34,176	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AGRICULTURAL RESEARCH SERVICE	59-5020-1-001	10.001	Agricultural Research_Basic and Applied Research	45,539	
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	38,567	
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	-2,305	
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	99,992	
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	-815	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	FLORIDA ATLANTIC UNIVERSITY	PR-K195	10.001	Agricultural Research_Basic and Applied Research	88,904	
					Total - 10.001		3,176,104	13,89
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.025	Plant and Animal Disease, Pest Control, and Animal Care	1,531,136	20,484
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	62446	10.025	Plant and Animal Disease, Pest Control, and Animal Care	11,602	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT NO 52169	10.025	Plant and Animal Disease, Pest Control, and Animal Care	49,625	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT NO 52633	10.025	Plant and Animal Disease, Pest Control, and Animal Care	62,339	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	NTP22014424	10.025	Plant and Animal Disease, Pest Control, and Animal Care	2,273	
					Total - 10.025		1,656,975	20,48
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.028	Wildlife Services	111,955	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.163	Market Protection and Promotion	100,389	39,04
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	THE CENTER FOR PRODUCE SAFETY	2021CPS12	10.170	Specialty Crop Block Grant Program - Farm Bill	198,799	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	THE CENTER FOR PRODUCE SAFETY	2022CPS10	10.170	Specialty Crop Block Grant Program - Farm Bill	34,614	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	57830	10.170	Specialty Crop Block Grant Program - Farm Bill	12,962	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	57833	10.170	Specialty Crop Block Grant Program - Farm Bill	213	
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	5	
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	40,452	
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	905	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-21-SCBG-20-101	10.170	Specialty Crop Block Grant Program - Farm Bill	44,870	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-21-SCBG-20-102	10.170	Specialty Crop Block Grant Program - Farm Bill	24,728	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	A337-21-SCBG-20-103	10.170	Specialty Crop Block Grant Program - Farm Bill	39,606	
Research and Development Cluster	U.S. Department of Agriculture		IN STATE DEPARTMENT OF AGRICULTURE		10.170	Specialty Crop Block Grant Program - Farm Bill	59,637	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #38038	10.170	Specialty Crop Block Grant Program - Farm Bill	34,252	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #38040	10.170	Specialty Crop Block Grant Program - Farm Bill	60,545	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #38043	10.170	Specialty Crop Block Grant Program - Farm Bill	31,220	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #57824	10.170	Specialty Crop Block Grant Program - Farm Bill	24,511	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #57832	10.170	Specialty Crop Block Grant Program - Farm Bill	38,584	
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	-11	
					Total - 10.170		645,892	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF KENTUCKY	3200003709-21-207	10.174	Acer Access & Development Program	19,307	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	019585G	10.200	Grants for Agricultural Research, Special Research Grants	3,195	2,82
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	019585M	10.200	Grants for Agricultural Research, Special Research Grants	19,591	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	019585T	10.200	Grants for Agricultural Research, Special Research Grants	63,334	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	019585U	10.200	Grants for Agricultural Research, Special Research Grants	2,192	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	PO 514073	10.200	Grants for Agricultural Research, Special Research Grants	15,186	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	PO 630500	10.200	Grants for Agricultural Research, Special Research Grants	2,771	
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	9	
					Total - 10.200		106,278	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.202	Cooperative Forestry Research	611,430	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.203	Payments to Agricultural Experiment Stations Under the Hatch Act	6,997,279	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA A & T UNIVERSITY	240948A - 88118	10.205	Payments to 1890 Land-Grant Colleges and Tuskegee University	-341	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA A & T UNIVERSITY	240989A/EA240970	10.205	Payments to 1890 Land-Grant Colleges and Tuskegee University	10,336	
					Total - 10.205		9,995	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.207	Animal Health and Disease Research	23,948	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NOVATEUR RESEARCH SOLUTIONS LLC	2019-33610-30180	10.212	Small Business Innovation Research	16,549)
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NUTRAMAIZE	80542	10.212	Small Business Innovation Research	614	. (
					Total - 10.212		17,163	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	CENTRAL STATE UNIVERSITY	8551-01	10.215	Sustainable Agriculture Research and Education	6,749)
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607403	10.215	Sustainable Agriculture Research and Education	370) (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607404	10.215	Sustainable Agriculture Research and Education	15,168	6
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006607431	10.215	Sustainable Agriculture Research and Education	2,995	5
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H007179315	10.215	Sustainable Agriculture Research and Education	50,704	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H007813943	10.215	Sustainable Agriculture Research and Education	918	5 (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008334008	10.215	Sustainable Agriculture Research and Education	10,293	3
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008334013	10.215	Sustainable Agriculture Research and Education	7,193	5
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008568305	10.215	Sustainable Agriculture Research and Education	33,436	5
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008917105	10.215	Sustainable Agriculture Research and Education	72,553	11,026
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008917109	10.215	Sustainable Agriculture Research and Education	57,209	38,286
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008917112	10.215	Sustainable Agriculture Research and Education	92,913	5
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H008917120	10.215	Sustainable Agriculture Research and Education	9,962	2 (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H009277408	10.215	Sustainable Agriculture Research and Education	1,990) (
					Total - 10.215		362,453	49,312
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	LANGSTON UNIVERSITY	2017-38821-26445	10.216	1890 Institution Capacity Building Grants	31,937	(
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.217	Higher Education Challenge Grants	159,502	63,789
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.219	Biotechnology Risk Assessment Research	62,287	8,230
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	RICE UNIVERSITY	R19322	10.219	Biotechnology Risk Assessment Research	396	5 (
					Total - 10.219		62,683	8,230
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.250	Agricultural and Rural Economic Research	120,271	(
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.253	Consumer Data and Nutrition Research	21,330) (
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.290	Agricultural Market and Economic Research	54,965	5 (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	VIRGINIA POLYTECHNIC INST & STATE UNIV	423634-19084	10.290	Agricultural Market and Economic Research	42,939) (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	9500105314	10.290	Agricultural Market and Economic Research	51,286	5 (
					Total - 10.290		149,190	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.303	Integrated Programs	499,769	63,173

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.304	Homeland Security_Agricultural	339,421	55,735
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC106556E	10.304	Homeland Security_Agricultural	-4,792	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC112910F	10.304	Homeland Security_Agricultural	37,513	3 (
					Total - 10.304		372,142	2 55,738
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.307	Organic Agriculture Research and Extension Initiative	298,340	128,644
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2019-3156-02	10.307	Organic Agriculture Research and Extension Initiative	56,535	5 (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC106531A	10.307	Organic Agriculture Research and Extension Initiative	-21,086	
					Total - 10.307		333,789	128,644
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.309	Specialty Crop Research Initiative	97,366	57,529
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	06-M1703517	10.309	Specialty Crop Research Initiative	-245	5
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	H006335003	10.309	Specialty Crop Research Initiative	85,428	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	M1900056	10.309	Specialty Crop Research Initiative	61,028	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC110566PU	10.309	Specialty Crop Research Initiative	9,492	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	SYNERGISTIC HAWAII AG COUNCIL	SCRIPURDUE-2022	10.309	Specialty Crop Research Initiative	15,425	5 (
					Total - 10.309		268,494	57,529
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.310	Agriculture and Food Research Initiative	4,572,888	3 576,973
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MISSISSIPPI STATE UNIVERSITY	010500.340919.01	10.310	Agriculture and Food Research Initiative	18,436	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ILLINOIS	099354-18805	10.310	Agriculture and Food Research Initiative	13,133	i (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	INDIANA WESLEYAN UNIVERSITY	101	10.310	Agriculture and Food Research Initiative	16,719	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2019-1507-03	10.310	Agriculture and Food Research Initiative	168,512	i c
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF OKLAHOMA	2021-31	10.310	Agriculture and Food Research Initiative	7,315	i (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NOTRE DAME	204064PU	10.310	Agriculture and Food Research Initiative	18,526	i (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	KENTUCKY STATE UNIVERSITY	210174 202092 3100	10.310	Agriculture and Food Research Initiative	15,999	i (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA A & T UNIVERSITY	241049A	10.310	Agriculture and Food Research Initiative	19,302	!
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	25-6226-0664-002	10.310	Agriculture and Food Research Initiative	14,604	. (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	OHIO STATE UNIVERSITY	60064615	10.310	Agriculture and Food Research Initiative	6,948	i (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	OHIO STATE UNIVERSITY	60076795	10.310	Agriculture and Food Research Initiative	4,718	i (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ARKANSAS	AWD-100401-02	10.310	Agriculture and Food Research Initiative	5,899	1
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH DAKOTA STATE UNIVERSITY	FAR0035357	10.310	Agriculture and Food Research Initiative	92	: (
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	M1903128	10.310	Agriculture and Food Research Initiative	76,558	;

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF IDAHO	NR3396-SB-691717	10.310	Agriculture and Food Research Initiative	42,945	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC111174A	10.310	Agriculture and Food Research Initiative	6,201	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC111302D	10.310	Agriculture and Food Research Initiative	62,114	
Research and Development Gluster	0.5. Department of Agriculture	Pass- mough		NGTT1302D	10.510	Agriculture and Food Research Initiative	02,114	
					Total - 10.310		5,070,909	576,973
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	KANSAS STATE UNIVERSITY	A21-0692-S001	10.320	Sun Grant Program	21,512	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.328	Natnl Food Safety Training, Educ, Extn, Outreach & Tech Asst	22,547	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.329	Compet.Grant Prog Crop Protection and Pest Management Competitive Grants	184,219	C
						Program		
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2019-0465-01	10.329	Crop Protection and Pest Management Competitive Grants Program	33,486	C
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	18,919	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC108974BB	10.329	Crop Protection and Pest Management Competitive Grants Program	24,491	19,365
					Total - 10.329	- Togram		
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF WISCONSIN-MADISON	0000001579	10tal - 10.329	Alfalfa and Forage Research Program	261,115 587	
		r ass- mough						
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	022840F	10.332	Agricultural Genome to Phenome Initiative	11,990	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	PEOPLES FOUNDATION	LIFE 00087918	10.443	Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers	37,998	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.500	Cooperative Extension Service	224,032	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	KANSAS STATE UNIVERSITY	A22-0256-S002	10.500	Cooperative Extension Service	24,065	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	EXTENSION FOUNDATION	NTAE-2021-2140	10.500	Cooperative Extension Service	25,491	C
					Total - 10.500		273,588	a
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.516	Rural Health and Safety Education (RHSE)	24,353	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	U OF KENTUCKY CTR FOR POVERTY RES	3200002889-20-241	10.565	Commodity Supplemental Food Program	9,487	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.652	Forestry Research	179,975	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	OREGON STATE UNIVERSITY	J2401A-A	10.652	Forestry Research	33	C
					Total - 10.652		180,008	a
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	9500075412	10.675	Urban and Community Forestry Program	260	C
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF TENNESSEE (THE)	9500094793	10.675	Urban and Community Forestry Program	14,770	C
					Total - 10.675		15,030	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.678	Forest Stewardship Program	61,971	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.680	Forest Health Protection	-14,014	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.699	Partnership Agreement Program	95,950	C
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.707	Research Joint Ventures and Cost Reimbursable Agreements	16,885	C

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.777	Norman E. Borlaug International Agricultural Science and Technology Fellowship	6,488	(
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.902	Soil and Water Conservation	192,886	(
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ILLINOIS	101917-18195	10.902	Soil and Water Conservation	71,184	(
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF WISCONSIN	144-AAI4597	10.902	Soil and Water Conservation	75,828	(
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	NATURE CONSERVANCY, THE	2041-0025	10.902	Soil and Water Conservation	49,188	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	IN ASSOC OF SOIL & WATER CONSERV DIST	21014457	10.902	Soil and Water Conservation	36,658	(
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AMER SOC OF AG & BIO ENGINEERS	NR183A750007C006	10.902	Soil and Water Conservation	12,083	(
					Total - 10.902		437,827	
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.903	Soil Survey	34,707	3,55
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ILLINOIS	103926-18438	10.912	Environmental Quality Incentives Program	5,454	(
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	BROOKSIDE LABORATORIES, INC	20013295	10.912	Environmental Quality Incentives Program	10,868	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF MINNESOTA	A008715101	10.912	Environmental Quality Incentives Program	17,597	
		· · ···g··					,	
					Total - 10.912		33,919	
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	AMERICAN FARMLAND TRUST	21089769	10.913	Farm and Ranch Lands Protection Program	59,623	(
Research and Development Cluster	U.S. Department of Agriculture	Pass-Through	MICHIGAN STATE UNIVERSITY	RC111953-PU	10.960	Technical Agricultural Assistance	24,008	(
Research and Development Cluster	U.S. Department of Agriculture	Direct			10.961	Scientific Cooperation and Research	20,020	(
Research and Development Cluster	U.S. Department of Agriculture	Direct		E17-19	10.RD	U.S. Department of Agriculture	21,017	(
Research and Development Cluster	Total - U.S. Department of Agriculture						22,585,800	1,102,552
Research and Development Cluster	U.S. Department of Commerce	Direct			11.001	Census Bureau Data Products	4,583	(
Research and Development Cluster	U.S. Department of Commerce	Direct			11.020	Cluster Grants	56,664	(
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	ECONOMIC DEVELOPMENT ADMINISTRATION	ED21HDQ3070043	11.307	Economic Adjustment Assistance	355,177	(
Research and Development Cluster	U.S. Department of Commerce	Direct			11.417	Sea Grant Support	397,648	252,47
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	MISSISSIPPI STATE UNIVERSITY	016200.320565.05	11.417	Sea Grant Support	3,858	(
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF MINNESOTA	D007941107	11.417	Sea Grant Support	34,752	(
					Total - 11.417		436,258	252,47
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT #46760	11.419	Coastal Zone Management Administration Awards	421	
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	UNIVERSITY OF OKLAHOMA	2021-53	11.432	Office of Oceanic and Atmospheric Research (OAR) Joint and Cooperative Institute	1 20,366	(
Research and Development Cluster	U.S. Department of Commerce	Direct			11.459	Weather and Air Quality Research	95,110	(
Research and Development Cluster	U.S. Department of Commerce	Pass-Through	TEXAS TECH UNIVERSITY	21B053-03	11.459	Weather and Air Quality Research	11,511	(
					Total - 11.459		106,621	

ubrecipient Expenditures	Federal Expenditures	ALN Program Title	ALN	Award Identifier	Pass-Through Grantor	Туре	Federal Grantor	Clusters
1,094,65	2,032,068	Measurement and Engineering Research and Standards	11.609			Direct	U.S. Department of Commerce	Research and Development Cluster
(70,176	Measurement and Engineering Research and Standards	11.609	86272/2/1157293	STONY BROOK UNIVERSITY	Pass-Through	U.S. Department of Commerce	Research and Development Cluster
1,094,65	2,102,244		Total - 11.609					
(-172	Arrangements for Interdisciplinary Research Infrastructure	11.619	PC 2.1-001	NATNL INST FOR INNOVATION IN MF BIO	Pass-Through	U.S. Department of Commerce	Research and Development Cluster
(26,301	Arrangements for Interdisciplinary Research Infrastructure	11.619	PC4.1-307	NATNL INST FOR INNOVATION IN MF BIO	Pass-Through	U.S. Department of Commerce	Research and Development Cluster
	347,845	Arrangements for Interdisciplinary Research Infrastructure	11.619	UDR0000032 ARP-18	UNIVERSITY OF DELAWARE	Pass-Through	U.S. Department of Commerce	Research and Development Cluster
	98,637	Arrangements for Interdisciplinary Research Infrastructure	11.619	UDR0000116 ARP-11	UNIVERSITY OF DELAWARE	Pass-Through	U.S. Department of Commerce	Research and Development Cluster
(472,611		Total - 11.619					
(45,951	U.S. Department of Commerce	11.RD	1305M320PNRMA0628		Direct	U.S. Department of Commerce	Research and Development Cluster
1,347,120	3,600,896						Total - U.S. Department of Commerce	Research and Development Cluster
(30,310	Conservation and Rehabilitation of Natural Resources on Military Installations	12.005	M2200866	TEXAS A&M AGRILIFE RESEARCH	Pass-Through	U.S. Department of Defense	Research and Development Cluster
8,306	242,092	National Defense Education Program	12.006			Direct	U.S. Department of Defense	Research and Development Cluster
4,161,126	16,520,650	Basic and Applied Scientific Research	12.300			Direct	U.S. Department of Defense	Research and Development Cluster
(2,006	Basic and Applied Scientific Research	12.300	SP00012914-02	GEORGIA STATE UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(18,979	Basic and Applied Scientific Research	12.300	00010541	UNIVERSITY OF CALIFORNIA - BERKELEY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(75,456	Basic and Applied Scientific Research	12.300	137850-20943	CORNELL UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(234,905	Basic and Applied Scientific Research	12.300	163164	UNIVERSITY OF CONNECTICUT	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(12,812	Basic and Applied Scientific Research	12.300	21036153	GUIDED PARTICLE SYSTEMS, INC	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(42,368	Basic and Applied Scientific Research	12.300	21089777	P. C. KRAUSE AND ASSOCIATES, INC.	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(104,096	Basic and Applied Scientific Research	12.300	572339	UNIVERSITY OF PENNSYLVANIA	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(25	Basic and Applied Scientific Research	12.300	81424-10839	CORNELL UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(50,137	Basic and Applied Scientific Research	12.300	M1901497	TEXAS A&M AGRILIFE RESEARCH	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(48,489	Basic and Applied Scientific Research	12.300	N00164-20-2008-PURDUE	UNIVERSITY OF TENNESSEE SPACE	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(122,308	Basic and Applied Scientific Research	12.300	R000002831	FLORIDA STATE UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(1,898	Basic and Applied Scientific Research	12.300	R000002979	FLORIDA STATE UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(-3,649	Basic and Applied Scientific Research	12.300	R01850	FLORIDA STATE UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(12,094	Basic and Applied Scientific Research	12.300	R02119	FLORIDA STATE UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
(234,396	Basic and Applied Scientific Research	12.300	SUBK00014010-01	UNIVERSITY OF MICHIGAN	Pass-Through	U.S. Department of Defense	Research and Development Cluster
4,161,120	17,476,970		Total - 12.300					
(-14,051	Basic Scientific Research - Combating Weapons of Mass Destruction				Direct	U.S. Department of Defense	Research and Development Cluster

ubrecipient Expenditures	Federal Expenditures	ALN Program Title	ALN	Award Identifier	Pass-Through Grantor	Туре	Federal Grantor	Clusters
106,2	1,463,382	Military Medical Research and Development	12.420			Direct	U.S. Department of Defense	Research and Development Cluster
	36,551	Military Medical Research and Development	12.420	1(GG015390-01)	COLUMBIA UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
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	63	Military Medical Research and Development	12.420	19-02	SOUTHERN ILLINOIS UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	109,557	Military Medical Research and Development	12.420	2021-1581	UNIVERSITY OF CALIFORNIA-IRVINE	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	37,744	Military Medical Research and Development	12.420	5782	HENRY M JACKSON FOUNDATION	Dees Through	U.S. Department of Defense	Research and Development Cluster
	51,144	Initially Medical Research and Development	12.420	5762	HENRY M JACKSON FOUNDATION	Pass-Through	0.5. Department of Defense	Research and Development Cluster
	50,691	Military Medical Research and Development	12.420	9176-PU	INDIANA UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	57,516	Military Medical Research and Development	12.420	FY2019-115	UNIVERSITY OF KANSAS	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	76,147	Military Medical Research and Development	12.420	S-1424-02	THE GENEVA FOUNDATION	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	234	Military Medical Research and Development	12.420	S374892	CALIFORNIA INSTITUTE OF TECHNOLOGY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
106,2	1,831,885		Total - 12.420					
5,164,2	16,361,341	Basic Scientific Research	12.431			Direct	U.S. Department of Defense	Research and Development Cluster
	34,544	Basic Scientific Research	12.431	00001603	BROWN UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	93,064	Basic Scientific Research	12.431	10900-GR	WORCESTER POLYTECHNIC INSTITUTE	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	55,004		12.431	10300-GI	WORGESTER FOETTECHNIC INSTITUTE	r ass=mough	0.5. Department of Defense	Research and Development Gluster
	1,321	Basic Scientific Research	12.431	AWD-101190-G4	GEORGIA TECH	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	137,401	Basic Scientific Research	12.431	CON-80003444(GR115165)	YALE UNIVERSITY	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	43,093	Basic Scientific Research	12.431	PO# CCD 063030 01 CLC	BAE SYSTEMS ADVANCED TECHNOLOGIES,	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	43,093		12.431	PO# CCD-003020-01-CLC	INC.	Pass-Through	0.5. Department of Defense	Research and Development Cluster
	157,948	Basic Scientific Research	12.431	SUBK00010157	UNIVERSITY OF MICHIGAN	Pass-Through	U.S. Department of Defense	Research and Development Cluster
5,164,2	16,828,712		Total - 12.431					
	81,734	Basic, Applied, and Advanced Research in Science and Engineering				Direct	U.S. Department of Defense	Research and Development Cluster
	194,603	Basic, Applied, and Advanced Research in Science and Engineering		20090760	CONTINUOUS SOLUTIONS	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	-1,018	Basic, Applied, and Advanced Research in Science and		56869	UNIVERSITY OF DELAWARE	Pass-Through	U.S. Department of Defense	Research and Development Cluster
		Engineering						
	59,864	Basic, Applied, and Advanced Research in Science and Engineering		UDR0000009	UNIVERSITY OF DELAWARE	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	335,183		Total - 12.630					
1,095,3	7,186,717	Air Force Defense Research Sciences Program				Direct	U.S. Department of Defense	Research and Development Cluster
1,000,0	7,100,717		12.000			Direct	o.o. Bepartment of Beterise	Research and Development Oldster
	53,832	Air Force Defense Research Sciences Program	12.800	119-003-002	UES INC.	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	128,783	Air Force Defense Research Sciences Program	12.800	130427-5114548	PRESIDENT & FELLOWS OF HARVARD	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	000.010	Air Franz Defense Desearch Onizana Desearch	10.000	400740500		Dees Three '		Descent and Development Obs'
	269,612	Air Force Defense Research Sciences Program	12.800	136712590	UNIVERSITY OF SOUTHERN CALIFORNIA	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	15,374	Air Force Defense Research Sciences Program	12.800	14-2-12-153426-66019	UNIVERSITY OF TULSA	Pass-Through	U.S. Department of Defense	Research and Development Cluster
	70,871	Air Force Defense Research Sciences Program	12.800	2020-1389	UNIVERSITY OF CALIFORNIA-IRVINE	Pass-Through	U.S. Department of Defense	Research and Development Cluster
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	32,159	Air Force Defense Research Sciences Program	12.800	3004428167	UNIVERSITY OF MICHIGAN	Pass-Through	U.S. Department of Defense	Research and Development Cluster

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STANFORD UNIVERSITY	62741613-204669	12.800	Air Force Defense Research Sciences Program	155,704	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	FLORIDA INTERNATIONAL UNIVERSITY	800011034-01UG/000143	12.800	Air Force Defense Research Sciences Program	207,978	
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Research and Development Cluster	U.S. Department of Defense	Pass-Through	BOISE STATE UNIVERSITY	8583-PO132260	12.800	Air Force Defense Research Sciences Program	96,721	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MISSOURI-COLUMBIA	C00064537-5	12.800	Air Force Defense Research Sciences Program	212,381	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SMART INFORMATION FLOW	NEUTRON-PH2-PURDUE-01	12.800	Air Force Defense Research Sciences Program	30,933	
Research and Development Oldster	0.0. Department of Defense	r ass- mough	TECHNOLOGIES		12.000		00,000	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CENTAURI	PO# 1461	12.800	Air Force Defense Research Sciences Program	42,068	
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	76,898	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1908-001-1	12.800	Air Force Defense Research Sciences Program	57,959	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB 1908-001-1	12.800	Air Force Delense Research Sciences Program	57,959	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF FLORIDA	SUB00002946	12.800	Air Force Defense Research Sciences Program	46,894	
					Total - 12.800		8,684,884	
Research and Development Cluster	U.S. Department of Defense	Direct			12.902	Information Security Grants	-1,248	
Research and Development Cluster	U.S. Department of Defense	Direct			12.903	GenCyber Grants Program	112,007	
Research and Development Cluster	U.S. Department of Defense	Direct			12.905	CyberSecurity Core Curriculum	444,817	
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Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF ALABAMA HUNTSVILLE	2020-1268	12.905	CyberSecurity Core Curriculum	134,599	
					Total - 12.905		579,416	
Research and Development Cluster	U.S. Department of Defense	Direct			12.910	Research and Technology Development	4,430,443	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103299-01	12.910	Research and Technology Development	22,868	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ROCHESTER INSTITUTE OF TECHNOLOGY	417385/URFAO GR510841	12.910	Research and Technology Development	62,219	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5621-PU-DARPA-0032	12.910	Research and Technology Development	78,772	
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					Total - 12.910		4,594,302	819,5
Research and Development Cluster	U.S. Department of Defense	Direct		100720-1	12.RD	U.S. Department of Defense	26,083	
Research and Development Cluster	U.S. Department of Defense	Direct		1131-00059	12.RD	U.S. Department of Defense	14,736	
Research and Development Cluster	U.S. Department of Defense	Direct		149001305	12.RD	U.S. Department of Defense	18,246	
Research and Development Cluster	U.S. Department of Defense	Direct		167017	12.RD	U.S. Department of Defense	-78	
Research and Development Cluster	U.S. Department of Defense	Direct		19089079	12.RD	U.S. Department of Defense	26,667	
Research and Development Oldstei	0.0. Department of Defense	Direct		10000010	12.110		20,007	
Research and Development Cluster	U.S. Department of Defense	Direct		2019-016	12.RD	U.S. Department of Defense	145,780	
Research and Development Cluster	U.S. Department of Defense	Direct		2021-21090200002	12.RD	U.S. Department of Defense	689,828	199,7
Research and Davidenment Olivite	U.S. Department of D-f	Direct		01102804	12.RD	U.S. Department of Defense	440.000	
Research and Development Cluster	U.S. Department of Defense	Direct		21123824	12.KU	U.S. Department of Defense	119,925	
Research and Development Cluster	U.S. Department of Defense	Direct		F1SRQ22062M001	12.RD	U.S. Department of Defense	67,012	
Research and Development Cluster	U.S. Department of Defense	Direct		FA864921P0368	12.RD	U.S. Department of Defense	5,368	
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Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Defense	Direct		FA8650-19-C-2410	12.RD	U.S. Department of Defense	849,425	115,798
Research and Development Cluster	U.S. Department of Defense	Direct		FA930022P6006 - 01	12.RD	U.S. Department of Defense	11,243	0
Research and Development Cluster	U.S. Department of Defense	Direct		FA930022P6006 - 01	12.RD	0.5. Department of Defense	11,243	
Research and Development Cluster	U.S. Department of Defense	Direct		H98230-21-1-0180	12.RD	U.S. Department of Defense	34,808	0
Research and Development Cluster	U.S. Department of Defense	Direct		HR001119C0038	12.RD	U.S. Department of Defense	-159	0
	olo. Dopartment of Dolondo	Biroot				c.c. Doparation of Doroneo		
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112090010	12.RD	U.S. Department of Defense	134,468	41,371
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112090069	12.RD	U.S. Department of Defense	213,309	0
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112090083	12.RD	U.S. Department of Defense	309,000	89,958
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112090124	12.RD	U.S. Department of Defense	253,179	C
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112190006-04	12.RD	U.S. Department of Defense	498,420	0
Research and Development ofdater	0.0. Department of Defense	Direct		111100112130000-04	12.110	0.0. Department of Defense	400,420	
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112190007	12.RD	U.S. Department of Defense	344,950	C
Research and Development Cluster	U.S. Department of Defense	Direct		HR00112190038	12.RD	U.S. Department of Defense	375,459	0
Research and Development Cluster	U.S. Department of Defense	Direct		N0016420PJ176	12.RD	U.S. Department of Defense	55,969	C
Research and Development Cluster	U.S. Department of Defense	Direct		N00173-19-P-1124	12.RD	U.S. Department of Defense	-1,515	0
Research and Development Cluster	U.S. Department of Defense	Direct		N00173-20-P-0210	12.RD	U.S. Department of Defense	g	0
Research and Development Cluster	0.5. Department of Defense	Direct		100173-20-F-0210	12.RD	0.5. Department of Defense	8	
Research and Development Cluster	U.S. Department of Defense	Direct		N00178-21-P-6682	12.RD	U.S. Department of Defense	12,709	0
Research and Development Cluster	U.S. Department of Defense	Direct		N6893622P0099	12.RD	U.S. Department of Defense	24,616	. 0
Research and Development Cluster	U.S. Department of Defense	Direct		NTP-22090312	12.RD	U.S. Department of Defense	24,011	C
Research and Development Cluster	U.S. Department of Defense	Direct		W911NF-16-2-0020	12.RD	U.S. Department of Defense	-390	C
		D : 1			10.55		000.040	50.000
Research and Development Cluster	U.S. Department of Defense	Direct		W911QY1910009	12.RD	U.S. Department of Defense	226,649	50,668
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-14-C-0047	12.RD	U.S. Department of Defense	-141	C
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-16-C-0048	12.RD	U.S. Department of Defense	56,686	. 0
		Billoot				e.e. Boparanoni or Boronao	00,000	, , , , , , , , , , , , , , , , , , ,
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-18-C-0021	12.RD	U.S. Department of Defense	43,668	C
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ-22-P-0020	12.RD	U.S. Department of Defense	139,043	1,157
		D : 1			10.55		100.010	
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ19C0063	12.RD	U.S. Department of Defense	138,942	0
Research and Development Cluster	U.S. Department of Defense	Direct		W912HQ20C0020	12.RD	U.S. Department of Defense	491,354	0
Research and Development Cluster	U.S. Department of Defense	Direct		W912HZ20C0019	12.RD	U.S. Department of Defense	147,348	
Research and Development ofdater	0.0. Department of Defense	Direct		W3121122000013	12.110	0.0. Department of Defende	1-1,0-0	
Research and Development Cluster	U.S. Department of Defense	Direct		W9132V22C0002	12.RD	U.S. Department of Defense	29,288	C
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INST FOR ADVCD COMPOSITES MF	020-900-002	12.RD	U.S. Department of Defense	33,267	0
		_	INNOVATION					
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ENERGETICS TECHNOLOGY CENTER	0258 TO 0001	12.RD	U.S. Department of Defense	7,408	C
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IN TECH & MANUFACTURING CO	08012020SC1	12.RD	U.S. Department of Defense	172,568	0

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PHYSICAL SCIENCES, INC	10-11617-4585-46	12.RD	U.S. Department of Defense	32,200	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BAE SYSTEMS ADVANCED TECHNOLOGIES, INC.	1105750-1	12.RD	U.S. Department of Defense	329,009	
Research and Development Cluster	U.S. Department of Defense		BAE SYSTEMS ADVANCED TECHNOLOGIES, INC.	1119482-1	12.RD	U.S. Department of Defense	125,227	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TANGRAM FLEX, INC	125_01_PURDUE	12.RD	U.S. Department of Defense	223	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF SOUTHERN CALIFORNIA	125053027	12.RD	U.S. Department of Defense	351,199	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TANGRAM FLEX, INC	130_01_PURDUE	12.RD	U.S. Department of Defense	134,956	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	APTIMA, INC.	1477-2220	12.RD	U.S. Department of Defense	127,226	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	HELICON CHEMICAL COMPANY	15109773	12.RD	U.S. Department of Defense	4,756	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS	155220	12.RD	U.S. Department of Defense	-632	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ARCTOS TECHNOLOGY SOLUTIONS, LLC	162642.01.00.0001.00.42	12.RD	U.S. Department of Defense	61,063	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF ILLINOIS AT CHICAGO	18428	12.RD	U.S. Department of Defense	81,989	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TWINLEAF LLC	19035493	12.RD	U.S. Department of Defense	145	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CORVID TECHNOLOGIES	20-034	12.RD	U.S. Department of Defense	22	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CORVID TECHNOLOGIES	20-037	12.RD	U.S. Department of Defense	30,065	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PC KRAUSE AND ASSOCIATES	20035240	12.RD	U.S. Department of Defense	120,179	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BDYWR, LLC	20046553	12.RD	U.S. Department of Defense	-1,401	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	FLIR SYSTEMS INC	20089402	12.RD	U.S. Department of Defense	221,572	
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	63,541	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GALOIS, INC	2020-017	12.RD	U.S. Department of Defense	71,195	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ADVANCED TECHNOLOGY INTERNATIONAL	2021-432	12.RD	U.S. Department of Defense	881,135	336,11
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GALOIS, INC	2022-003	12.RD	U.S. Department of Defense	20,885	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CFD RESEARCH CORPORATION	206951	12.RD	U.S. Department of Defense	12,420	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CONTINUOUS SOLUTIONS	21013851	12.RD	U.S. Department of Defense	296,255	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BDYWR, LLC	21013954	12.RD	U.S. Department of Defense	74,998	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	VORCAT, INC	21014423	12.RD	U.S. Department of Defense	5,463	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STREAMLINE AUTOMATION LLC	21024698	12.RD	U.S. Department of Defense	59,205	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2102990-01	12.RD	U.S. Department of Defense	-5	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103000-01	12.RD	U.S. Department of Defense	-6	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103014-02	12.RD	U.S. Department of Defense	33,122	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103190-02	12.RD	U.S. Department of Defense	197,094	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103221-05	12.RD	U.S. Department of Defense	49,997	7
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103221-13	12.RD	U.S. Department of Defense	765,808	3
Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEVENS INSTITUTE OF TECHNOLOGY	2103255-01	12.RD	U.S. Department of Defense	136,735	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INTRINSIX, INC	21035375	12.RD	U.S. Department of Defense	102,319	9
Research and Development Cluster	U.S. Department of Defense	Pass-Through	FLIGHTPROFILER LLC	21057224 - STTR P1	12.RD	U.S. Department of Defense	17,500)
Research and Development Cluster	U.S. Department of Defense	Pass-Through	FLIGHTPROFILER LLC	21068183	12.RD	U.S. Department of Defense	50,000)
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SOFTWARE FACTORY LABS INC	21112206	12.RD	U.S. Department of Defense	67,440)
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LUNA INNOVATIONS INCORPORATED	3682-DHA-2S/PURDUE	12.RD	U.S. Department of Defense	137,051	
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Research and Development Cluster	U.S. Department of Defense	-	NATIONAL AEROSPACE SOLUTIONS, LLC	418620	12.RD	U.S. Department of Defense	-2,713	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	NEWPORT NEWS SHIPBUILDING	4500662778	12.RD	U.S. Department of Defense	10,666	3
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	4700059853	12.RD	U.S. Department of Defense	80,107	7
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	4700184269	12.RD	U.S. Department of Defense	27,704	1
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IBM	4700185103	12.RD	U.S. Department of Defense	86,042	2
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GENERAL DYNAMICS INFORMATION TECH	4SK00008LB	12.RD	U.S. Department of Defense	4,510	2
Research and Development Cluster	U.S. Department of Defense	Pass-Through	MASSACHUSETTS INST OF TECH LINCOLN LAB	7000506291	12.RD	U.S. Department of Defense	61,163	3
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN DIEGO	703731	12.RD	U.S. Department of Defense	153,016	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	CFD RESEARCH CORPORATION	9391	12.RD	U.S. Department of Defense	171,929	9
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LYNNTECH INC	AF-002 II	12.RD	U.S. Department of Defense	165,740)
Research and Development Cluster	U.S. Department of Defense	Pass-Through	ARIZONA STATE UNIVERSITY	ASUB00000424-06	12.RD	U.S. Department of Defense	275,239	9
Research and Development Cluster	U.S. Department of Defense	Pass-Through	RAYTHEON BBN TECHNOLOGIES	BBN REF #90189	12.RD	U.S. Department of Defense	245,756	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	EXPEDITION TECHNOLOGY INC	EXP-21-09	12.RD	U.S. Department of Defense	35,549	9
Research and Development Cluster	U.S. Department of Defense	Pass-Through	RHEA SPACE ACTIVITY	FA8649-21-9-9004	12.RD	U.S. Department of Defense	142,222	2
Research and Development Cluster	U.S. Department of Defense	Pass-Through	POLAR CLEAN, LLC	FA864921P1360-S001	12.RD	U.S. Department of Defense	23,164	1
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BCI SOLUTIONS, INC	FA864922P0095-PU-S001	12.RD	U.S. Department of Defense	13,538	3
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GLOBAL ENGINEERING & MATERIALS, INC	FFP-2021-PU-0324	12.RD	U.S. Department of Defense	153,505	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	IN SPACE, LLC	INS-22002-1	12.RD	U.S. Department of Defense	123,545	5
Research and Development Cluster	U.S. Department of Defense	-	MRL MATERIALS RESOURCES LLC	MRL-22-0010	12.RD	U.S. Department of Defense	45,810	
		_	LEIDOS				12	
Research and Development Cluster	U.S. Department of Defense	Ŭ		P010204872	12.RD	U.S. Department of Defense		
Research and Development Cluster	U.S. Department of Defense	Ū	LEIDOS	P010234740	12.RD	U.S. Department of Defense	227,836	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LEIDOS	P010246279	12.RD	U.S. Department of Defense	57,383	3

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SCIENCE APPLICATIONS INTNL	P010250986 LINE 3	12.RD	U.S. Department of Defense	5,070	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SCIENCE APPLICATIONS INTNL	P010254479 LINE 1,2,3	12.RD	U.S. Department of Defense	74,298	8
Research and Development Cluster	U.S. Department of Defense	Pass-Through	LEIDOS	P010269653	12.RD	U.S. Department of Defense	44,057	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PALO ALTO RESEARCH CENTER	P315539	12.RD	U.S. Department of Defense	67,631	
Research and Development Cluster	U.S. Department of Defense		PALO ALTO RESEARCH CENTER	P316829	12.RD	U.S. Department of Defense	52,799	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	DEFENSE ENGINEERING CORP	PO 10312	12.RD	U.S. Department of Defense	138,474	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	PERSPECTA LABS	PO-0021592	12.RD	U.S. Department of Defense	840,344	273,68
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SCIENCE APPLICATIONS INTNL	PO10250986-LINE1	12.RD	U.S. Department of Defense	11,086	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SCIENCE APPLICATIONS INTNL	PO10250986-LINE2	12.RD	U.S. Department of Defense	-106	6
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SRI INTERNATIONAL	PO51396	12.RD	U.S. Department of Defense	565,176	6
Research and Development Cluster	U.S. Department of Defense	Pass-Through	AXNANO LLC	PURDUE-2	12.RD	U.S. Department of Defense	22,467	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	MICHIGAN STATE UNIVERSITY	RC113206-PURDUE	12.RD	U.S. Department of Defense	16,073	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DAYTON RESEARCH	RSC19028	12.RD	U.S. Department of Defense	432,888	8
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DAYTON RESEARCH	RSC20028	12.RD	U.S. Department of Defense	653,255	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF DAYTON RESEARCH	RSC21045	12.RD	U.S. Department of Defense	52,598	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	APPLIED RESEARCH ASSOCIATES, INC	S-004528-02-PURDUE	12.RD	U.S. Department of Defense	259,707	,
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-109-5P9-001	12.RD	U.S. Department of Defense	3,032	2
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-109-5Z6-001	12.RD	U.S. Department of Defense	23,812	2
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-111-051-002	12.RD	U.S. Department of Defense	23,434	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-114-006-010	12.RD	U.S. Department of Defense	1,021	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	FREEDOM PHOTONICS, LLC.	S-7208	12.RD	U.S. Department of Defense	216,804	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UES INC.	S-987-001-001	12.RD	U.S. Department of Defense	166,186	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF IOWA	S02933-01	12.RD	U.S. Department of Defense	29,583	8
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SURVICE ENGINEERING COMPANY	S19-095006	12.RD	U.S. Department of Defense	33,057	,
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1814-001-1	12.RD	U.S. Department of Defense	43,828	8
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1921-001-1	12.RD	U.S. Department of Defense	137,764	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB1921-003C-03	12.RD	U.S. Department of Defense	1,705	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB2003-001-1	12.RD	U.S. Department of Defense	37,215	5
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB2012-001-1	12.RD	U.S. Department of Defense	87,431	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	INNOVATIVE SCIENTIFIC SOLUTIONS, INC.	SB20274	12.RD	U.S. Department of Defense	29,247	
	Let Department of Defende	ass-mough			12.110	E.E. Doparation of Defende	23,247	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SPECTRAL ENERGIES, LLC	SB2114-001-1	12.RD	U.S. Department of Defense	30,707	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	SOAR TECHNOLOGY, INC	SC-21-015	12.RD	U.S. Department of Defense	27,029	
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Research and Development Cluster	U.S. Department of Defense	Pass-Through	STEEL FOUNDERS SOCIETY OF AMER	SP1009	12.RD	U.S. Department of Defense	139,817	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	BAE SYSTEMS ADVANCED TECHNOLOGIES	, SUB NO. 1146893	12.RD	U.S. Department of Defense	2,293	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	HONEYWELL INC.	SUB10193	12.RD	U.S. Department of Defense	183,897	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	GALOIS, INC	SUBCONTRACT NO. 2019-012	12.RD	U.S. Department of Defense	172,132	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00011570	12.RD	U.S. Department of Defense	286,236	
Research and Development Cluster	0.5. Department of Defense	Fass-Infough	UNIVERSITY OF MICHIGAN	30BR00011370	12.RD	0.5. Department of Defense	200,230	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TORCH TECHNOLOGIES	T19S053-0339	12.RD	U.S. Department of Defense	-127	
Research and Development Cluster	U.S. Department of Defense	Pass-Through	TRITON SYSTEMS, INC	TSI-2708-21-20203271	12.RD	U.S. Department of Defense	9,227	
					Total - 12.RD		17,421,978	1,108,50
Research and Development Cluster	Total - U.S. Department of Defense						68,122,440	12,463,37
Research and Development Cluster	Housing & Urban Development	Pass-Through	VIRGINIA TECH	451625-19084	14.906	Healthy Homes Technical Studies Grants	-17,356	
Research and Development Cluster	Total - Housing & Urban Development						-17,356	
Research and Development Cluster	U.S. Department of Interior	Direct			15.246	BLM CA Threatened and Endangered Species	93,168	
Research and Development Cluster	U.S. Department of Interior	Direct			15.506	Water Desalination Research and Development Program	100,307	26,79
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL	CONTRACT #60805	15.605	Sport Fish Restoration	29,149	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	RESOURCES	CONTRACT #27739	15.611	Wildlife Restoration	320,651	
Research and Development Cluster	0.5. Department of Interior	Fass-Infough	RESOURCES	CONTRACT #21139	15.011	Wildlife Restoration	320,031	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT #47460	15.611	Wildlife Restoration	76,895	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT #48711	15.611	Wildlife Restoration	197,400	8,80
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT NO 52496	15.611	Wildlife Restoration	16,119	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	GRANT #46038	15.611	Wildlife Restoration	46,918	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	TEXAS A&M AGRILIFE RESEARCH	M1901198	15.611	Wildlife Restoration	11,775	
					Total - 15.611		669,758	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	BALL STATE UNIVERSITY	19100472	15.629	Great Apes Conservation Fund	3,181	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	TOLEDO ZOO AND AQUARIUM	18112181	15.634	State Wildlife Grants	5,065	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	CONTRACT ID 23557	15.634	State Wildlife Grants	55,733	
Research and Development Cluster	U.S. Department of Interior	Pass-Through	IN DEPARTMENT OF NATURAL RESOURCES	GRANT: 00035792	15.634	State Wildlife Grants	185,157	
					Total - 15.634		245,955	
Research and Development Cluster	U.S. Department of Interior	Direct			15.678	Cooperative Ecosystem Studies Units	21,121	
Research and Development Cluster	U.S. Department of Interior	Direct			15.805	Assistance to State Water Resources Research Institutes	292.901	174.21
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Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Interior	Direct			15.808	U.S. Geological Survey_ Research and Data Collection	96,197	C
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	37,688	C
Research and Development Cluster	U.S. Department of Interior	Direct			15.945	Cooperative Research and Training Programs Resources of the National Park Syst	23,498	C
Research and Development Cluster	U.S. Department of Interior	Direct		140G0220F0338	15.RD	U.S. Department of Interior	16,926	C
Research and Development Cluster	U.S. Department of Interior	Direct		140G0221F0033	15.RD	U.S. Department of Interior	7,035	C
Research and Development Cluster	U.S. Department of Interior	Direct		140G0320P0193	15.RD	U.S. Department of Interior	6,309	C
Research and Development Cluster	U.S. Department of Interior	Direct		140G0320P0213	15.RD	U.S. Department of Interior	10,308	C
Research and Development Cluster	U.S. Department of Interior	Direct		140R8121P0002	15.RD	U.S. Department of Interior	16,043	C
Research and Development Cluster	U.S. Department of Interior	Direct		20123468	15.RD	U.S. Department of Interior	3,350	C
Research and Development Cluster	U.S. Department of Interior	Direct		DSC-21007	15.RD	U.S. Department of Interior	8,314	C
Research and Development Cluster	U.S. Department of Interior	Direct		P103716-A106153	15.RD	U.S. Department of Interior	477	C
					Total - 15.RD		68,762	C
Research and Development Cluster	Total - U.S. Department of Interior						1,681,685	209,809
Research and Development Cluster	U.S. Department of Justice	Direct			16.543	Missing Children's Assistance	116,475	C
Research and Development Cluster	U.S. Department of Justice	Direct			16.560	National Institute of Justice Research, Evaluation, and Development Project Gran	1,047,612	487,173
Research and Development Cluster	U.S. Department of Justice	Direct			16.752	Economic, High-Tech, and Cyber Crime Prevention	42,341	C
Research and Development Cluster	Total - U.S. Department of Justice						1,206,428	487,173
Research and Development Cluster	U.S. Department of Labor	Direct			17.502	Occupational Safety and Health_Susan Harwood Training Grants	41,874	C
Research and Development Cluster	Total - U.S. Department of Labor						41,874	a
Research and Development Cluster	U.S. Department of State	Pass-Through	CRDF GLOBAL	G-202105-67839	19.878	EUR-Other	3,258	C
Research and Development Cluster	U.S. Department of State	Pass-Through	THE HASHEMITE UNIVERSITY	22057321	19.RD	U.S. Department of State	24,785	C
Research and Development Cluster	Total - U.S. Department of State						28,043	a
Research and Development Cluster	U.S. Department of Transportation	Direct			20.109	Air Transportation Centers of Excellence	988,497	C
Research and Development Cluster	U.S. Department of Transportation	Direct			20.200	Highway Research & Development Program	453,288	202,349
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	20122693	20.200	Highway Research & Development Program	22,070	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	2019-2020 APPROPRIATION	20.200	Highway Research & Development Program	118,965	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	2042	20.200	Highway Research & Development Program	4,574	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	21090504	20.200	Highway Research & Development Program	116,553	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	21101963	20.200	Highway Research & Development Program	65,000	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	22101424	20.200	Highway Research & Development Program	20,030	C

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	EDS# A249-20-ON200001	20.200	Highway Research & Development Program	166,716	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-2352/4345	20.200	Highway Research & Development Program	77,935	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3727	20.200	Highway Research & Development Program	498,721	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-3914	20.200	Highway Research & Development Program	812	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4009	20.200	Highway Research & Development Program	1	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4102	20.200	Highway Research & Development Program	453	
Descent and Development Obstan		Deep Through		000 (452	00.000	Lishuru Deserth & Development Deserte	0.007	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4153	20.200	Highway Research & Development Program	9,327	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4212	20.200	Highway Research & Development Program	-3	1
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4215	20.200	Highway Research & Development Program	16	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4225	20.200	Highway Research & Development Program	27,151	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4234	20.200	Highway Research & Development Program	45,295	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4251	20.200	Highway Research & Development Program	484,980	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4252	20.200	Highway Research & Development Program	81,556	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4309	20.200	Highway Research & Development Program	19,612	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4314	20.200	Highway Research & Development Program	1,118	1
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4315	20.200	Highway Research & Development Program	-205	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4322	20.200	Highway Research & Development Program	44,217	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4325	20.200	lister Present & Druckers at Present	82,617	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	5PR-4325	20.200	Highway Research & Development Program	82,017	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4326	20.200	Highway Research & Development Program	28,510	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4327	20.200	Highway Research & Development Program	56,150	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4329	20.200	Highway Research & Development Program	92,386	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4332	20.200	Highway Research & Development Program	3,020	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4334	20.200	Highway Research & Development Program	33,313	12,64
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4335	20.200	Highway Research & Development Program	-2,300	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4336	20.200	Highway Research & Development Program	42,444	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4350	20.200	Highway Research & Development Program	25,310	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4351	20.200	Highway Research & Development Program	9,719	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4404	20.200	Highway Research & Development Program	-6,835	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4406	20.200	Highway Research & Development Program	57,792	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4407	20.200	Highway Research & Development Program	92,786	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4413	20.200	Highway Research & Development Program	68,092	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4414	20.200	Highway Research & Development Program	70,738	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4415	20.200	Highway Research & Development Program	39,260	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4418	20.200	Highway Research & Development Program	77,686	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4419	20.200	Highway Research & Development Program	16,424	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4420	20.200	Highway Research & Development Program	51,364	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4421	20.200	Highway Research & Development Program	16,983	(
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4423	20.200	Highway Research & Development Program	17,666	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4429	20.200	Highway Research & Development Program	20,701	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4430	20.200	Highway Research & Development Program	49,245	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4431	20.200	Highway Research & Development Program	38,611	38,61
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4432	20.200	Highway Research & Development Program	50,174	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4433	20.200	Highway Research & Development Program	45,715	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4436	20.200	Highway Research & Development Program	76,483	76,48
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4437	20.200	Highway Research & Development Program	26,928	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4438	20.200	Highway Research & Development Program	54,627	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4439	20.200	Highway Research & Development Program	73,105	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4440	20.200	Highway Research & Development Program	120,850	48,91
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4442	20.200	Highway Research & Development Program	32,466	
Research and Development Cluster	U.S. Department of Transportation	Doop Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4443	20.200	Highway Research & Development Program	67,011	
Research and Development Gluster	0.5. Department of Transportation	Pass=mough	IN DEPARTMENT OF TRANSPORTATION	5FT(-4445	20.200	Fighway Research & Development Program	07,011	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4445	20.200	Highway Research & Development Program	418,953	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4446	20.200	Highway Research & Development Program	-190	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4447	20.200	Highway Research & Development Program	58,316	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4449	20.200	Highway Research & Development Program	3,083	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4450	20.200	Highway Research & Development Program	63,567	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4451	20.200	Highway Research & Development Program	71,254	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4452	20.200	Highway Research & Development Program	51,872	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4502	20.200	Highway Research & Development Program	57,002	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4508	20.200	Highway Research & Development Program	85,675	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4509	20.200	Highway Research & Development Program	173,497	49,95
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Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4511	20.200	Highway Research & Development Program	32,855	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4512	20.200	Highway Research & Development Program	83,828	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4513	20.200	Highway Research & Development Program	97,132	
Research and Development Cluster	U.S. Department of Transportation	Page Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4514	20.200	Highway Research & Development Program	131,847	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4516	20.200	Highway Research & Development Program	38,003	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4518	20.200	Highway Research & Development Program	93,473	(
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4521	20.200	Highway Research & Development Program	142,804	42,49
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4522	20.200	Highway Research & Development Program	24,009	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4523	20.200	Highway Research & Development Program	51,318	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4524	20.200	Highway Research & Development Program	52,429	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4526	20.200	Highway Research & Development Program	105,235	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4527	20.200	Highway Research & Development Program	127,991	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4532	20.200	Highway Research & Development Program	59,899	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4535	20.200	Highway Research & Development Program	39,920	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4536	20.200	Highway Research & Development Program	175,382	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4537	20.200	Highway Research & Development Program	65,473	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4540	20.200	Highway Research & Development Program	43,906	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4541	20.200	Highway Research & Development Program	150,209	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4542	20.200	Highway Research & Development Program	86,008	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4545	20.200	Highway Research & Development Program	82,200	82,20
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4546	20.200	Highway Research & Development Program	25,830	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4547	20.200	Highway Research & Development Program	53,142	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4548	20.200	Highway Research & Development Program	3,944	3,94
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4549	20.200	Highway Research & Development Program	105,716	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4600	20.200	Highway Research & Development Program	76,532	
Research and Development Gluster	0.5. Department of Transportation	Pass-Thiough	IN DEPARTMENT OF TRANSPORTATION	SFR-4000	20.200	ngnway Research & Development Program	10,532	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4601	20.200	Highway Research & Development Program	56,272	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4603	20.200	Highway Research & Development Program	55,630	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4605	20.200	Highway Research & Development Program	26,588	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4606	20.200	Highway Research & Development Program	99,279	
Research and Development Cluster	U.S. Department of Transportation	Page Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4607	20.200	Highway Research & Development Program	164,126	
noscaron and Development Gluster	o.o. Department of Transportation	r'ass-mough	DEFAILTMENT OF TRAINSPORTATION	Gr 11-4007	20.200	ngmvay nesearch a Development Program	104,120	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4608	20.200	Highway Research & Development Program	58,596	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4609	20.200	Highway Research & Development Program	38,897	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4610	20.200	Highway Research & Development Program	28,584	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4615	20.200	Highway Research & Development Program	83,062	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4616	20.200	Highway Research & Development Program	4,672	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4620	20.200	Highway Research & Development Program	6,501	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4622	20.200	Highway Research & Development Program	30,470	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4623	20.200	Highway Research & Development Program	21,267	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4625	20.200	Highway Research & Development Program	8,797	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4628	20.200	Highway Research & Development Program	22,949	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4629	20.200	Highway Research & Development Program	132,459	48,61
Personal and Development Olympic		-		SPR-4630	00.000	Linkuru Daaaaak & Dauslaaraaat Daaaraa	00.040	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4630	20.200	Highway Research & Development Program	28,943	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4631	20.200	Highway Research & Development Program	69,567	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4632	20.200	Highway Research & Development Program	22,297	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4634	20.200	Highway Research & Development Program	29,174	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4635	20.200	Highway Research & Development Program	44,991	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4636	20.200	Highway Research & Development Program	30,280	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4637	20.200	Highway Research & Development Program	77,479	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4638	20.200	Highway Research & Development Program	24,266	24,26
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4639	20.200	Highway Research & Development Program	19,658	
				000 1010	00.000			2,58
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4640	20.200	Highway Research & Development Program	27,814	2,58
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4646	20.200	Highway Research & Development Program	16,484	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4651	20.200	Highway Research & Development Program	42,617	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	SPR-4652	20.200	Highway Research & Development Program	40,182	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5 (471)	20.200	Highway Research & Development Program	10,444	
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Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(281)	20.200	Highway Research & Development Program	191,483	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(377)	20.200	Highway Research & Development Program	190,488	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(387)	20.200	Highway Research & Development Program	124,144	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN DEPARTMENT OF TRANSPORTATION	TPF-5(436)	20.200	Highway Research & Development Program	159,915	
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					Total - 20.200		8,707,712	633,05

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Transportation	Direct			20.205	Highway Planning and Construction	8,671	(
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	UNIVERSITY OF MARYLAND	108765-Z9815203	20.205	Highway Planning and Construction	12,052	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	NEVADA DEPT OF TRANSPORTATION	P302-19-803	20.205	Highway Planning and Construction	57,958	
					Total - 20.205		78,681	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN CRIMINAL JUSTICE INSTITUTE	56882	20.600	State and Community Highway Safety	291,487	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN CRIMINAL JUSTICE INSTITUTE	CONTRACT #48906	20.600	State and Community Highway Safety	112,847	
					Total - 20.600		404,334	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN CRIMINAL JUSTICE INSTITUTE	CONTRACT #00061557	20.616	National Priority Safety Program	117,830	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	IN CRIMINAL JUSTICE INSTITUTE	CONTRACT #55251	20.616	National Priority Safety Program	75,282	C
					Total - 20.616		193,112	c c
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	UNIVERSITY OF MICHIGAN	3004631368	20.701	University Transportation Centers Program	991,573	371,448
Research and Development Cluster	U.S. Department of Transportation	Direct		693JJ321C000034	20.RD	U.S. Department of Transportation	42,381	(
Research and Development Cluster	U.S. Department of Transportation	Direct		693JJ620C000032	20.RD	U.S. Department of Transportation	119,968	
Research and Development Cluster	U.S. Department of Transportation	Direct		DOT-DESIGN_2021	20.RD	U.S. Department of Transportation	5,316	
Research and Development Cluster	U.S. Department of Transportation	Direct		DTFACT-13-D-00010-0004	20.RD	U.S. Department of Transportation	-26,711	
Research and Development Cluster	U.S. Department of Transportation	Direct		SUB0001608	20.RD	U.S. Department of Transportation	66,525	(
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	CAMBRIDGE SYSTEMATICS INC	160140.029	20.RD	U.S. Department of Transportation	15,251	(
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	OLD DOMINION UNIV RESEARCH FDN	20111970	20.RD	U.S. Department of Transportation	916	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	OLD DOMINION UNIV RESEARCH FDN	21-164-400204-010	20.RD	U.S. Department of Transportation	25,753	C
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	OLD DOMINION UNIVERSITY	21-174-400204-010	20.RD	U.S. Department of Transportation	13,916	(
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	INTERVISTAS CONSULTING, INC	21090407	20.RD	U.S. Department of Transportation	66,680	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	STATE OF SOUTH CAROLINA	4400022446	20.RD	U.S. Department of Transportation	49,660	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	UNIVERSITY OF MARYLAND	80924-Z9415201	20.RD	U.S. Department of Transportation	5,325	
Research and Development Cluster	U.S. Department of Transportation	Pass-Through	NATIONAL ACADEMY OF SCIENCES	ACRP A03-62	20.RD	U.S. Department of Transportation	202,526	64,461
					Total - 20.RD		587,506	64,461
Research and Development Cluster	Total - U.S. Department of Transportation						11,951,415	1,068,965
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.001	Science	3,030,905	559,382
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITIES SPACE RESEARCH ASSOCIATION	02299-01	43.001	Science	38,764	. (
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	NORTHERN ARIZONA UNIVERSITY	1004540-01	43.001	Science	2,897	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF COLORADO AT BOULDER	1555205	43.001	Science	15,240	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	PLANETARY SCIENCE INSTITUTE	1612-PU	43.001	Science	44,328	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1657892	43.001	Science	18,235	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	1681089	43.001	Science	22,639	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF CENTRAL FLORIDA	66016A16	43.001	Science	59,352	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF ALABAMA	A20-0041-S001	43.001	Science	14,436	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF MISSOURI-COLUMBIA	C00077406-1	43.001	Science	72,955	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	GO0-21089X	43.001	Science	12,046	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	TEXAS A&M UNIVERSITY	M1900178	43.001	Science	60,213	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF CALIFORNIA-RIVERSIDE	S-001435	43.001	Science	83,737	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	S5011	43.001	Science	19,963	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF TEXAS AT AUSTIN	UTA22-000021	43.001	Science	2,768	0
					Total - 43.001		3,498,478	559,382
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.002	Aeronautics	419,444	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	NORTH CAROLINA A & T UNIVERSITY	220072B	43.002	Aeronautics	420,262	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	5710003954	43.002	Aeronautics	16,373	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	GEORGIA INSTITUTE OF TECHNOLOGY	AWD-100719-G2	43.002	Aeronautics	1,431	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF TEXAS AT AUSTIN	UTA21-000384	43.002	Aeronautics	118,147	0
					Total - 43.002		975,657	124,238
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.003	Exploration	30,948	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.007	Space Operations	240,333	26,219
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	NATIONAL INSTITUTE OF AEROSPACE	C20-202023-PU	43.008	Education	-4,207	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct			43.012	Space Technology	4,335,635	1,160,397
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF PUERTO RICO - SAN JUAN	2021-000053	43.012	Space Technology	-2,705	0
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	RENSSELAER POLYTECHNIC INSTITUTE	A20-0091-S001	43.012	Space Technology	-852	0
					Total - 43.012		4,332,078	1,160,397
Research and Development Cluster	National Aeronautics & Space Administration	Direct		1547388	43.RD	National Aeronautics & Space Administration	68,596	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		164329	43.RD	National Aeronautics & Space Administration	34,069	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		169181	43.RD	National Aeronautics & Space Administration	201,999	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		2021-193-ST SOW 7110-01	43.RD	National Aeronautics & Space Administration	24,290	0
Research and Development Cluster	National Aeronautics & Space Administration	Direct		21078753	43.RD	National Aeronautics & Space Administration	43,349	0

Research and Development Cluster	National Aeronautics & Space Administration National Aeronautics & Space Administration	Pass-Through Pass-Through Pass-Through Pass-Through	SOFTINWAY INC ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY P. C. KRAUSE AND ASSOCIATES, INC.	80GRC018C0055 80NSSC21K1719 80NSSC22P0200 HST-AR-16154.003-A HST-GO-15995.005-A HST-GO-16165.008-A 1422-03-SA1 15-704 165830 1670452	43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD	National Aeronautics & Space Administration National Aeronautics & Space Administration	109,457 78,864 25,202 19,936 23,374 5,978 94,124 110,748 -212 37,512	
Research and Development Cluster	National Aeronautics & Space Administration	Direct Direct Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through	ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	80NSSC22P0200 HST-AR-16154.003-A HST-GO-15995.005-A HST-GO-16165.008-A 1422-03-SA1 15-704 165830	43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD	National Aeronautics & Space Administration	25,202 19,936 23,374 5,978 94,124 110,748 -212	
Research and Development Cluster	National Aeronautics & Space Administration	Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	HST-AR-16154.003-A HST-GO-15995.005-A HST-GO-16165.008-A 1422-03-SA1 15-704 165830	43.RD 43.RD 43.RD 43.RD 43.RD 43.RD 43.RD	National Aeronautics & Space Administration	19,936 23,374 5,978 94,124 110,748 -212	
Research and Development Cluster	National Aeronautics & Space Administration	Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through	ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	HST-GO-15995.005-A HST-GO-16165.008-A 1422-03-SA1 15-704 165830	43.RD 43.RD 43.RD 43.RD 43.RD 43.RD	National Aeronautics & Space Administration	23,374 5,978 94,124 110,748 -212	
Research and Development Cluster	National Aeronautics & Space Administration	Direct Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	HST-GO-16165.008-A 1422-03-SA1 15-704 165830	43.RD 43.RD 43.RD 43.RD 43.RD	National Aeronautics & Space Administration	94,124 110,748	
Research and Development Cluster	National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	1422-03-SA1 15-704 165830	43.RD 43.RD 43.RD	National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration	94,124 110,748 -212	
Research and Development Cluster Research and Development Cluster Research and Development Cluster Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through Pass-Through Pass-Through Pass-Through	ARIZONA STATE UNIVERSITY JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	15-704	43.RD 43.RD	National Aeronautics & Space Administration National Aeronautics & Space Administration	-212	
Research and Development Cluster Research and Development Cluster Research and Development Cluster	National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration	Pass-Through Pass-Through Pass-Through	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS JET PROPULSION LABORATORY	165830	43.RD	National Aeronautics & Space Administration	-212	
Research and Development Cluster	National Aeronautics & Space Administration National Aeronautics & Space Administration National Aeronautics & Space Administration	Pass-Through Pass-Through	PHYSICS JET PROPULSION LABORATORY					
Research and Development Cluster	National Aeronautics & Space Administration National Aeronautics & Space Administration	Pass-Through		1670452	43 RD	National Agronautica & Chase Administrati	37.512	
	National Aeronautics & Space Administration		P. C. KRAUSE AND ASSOCIATES, INC.		10.110	National Aeronautics & Space Administration		
Research and Development Cluster		Pass-Through		18122509	43.RD	National Aeronautics & Space Administration	2	
Research and Development Gluster	National Aeronautics & Space Administration	. Loo moogn	VESTIGO AEROSPACE	20089549	43.RD	National Aeronautics & Space Administration	64,111	
Research and Development Cluster		Pass-Through	ANALYSWIFT LLC	20090595	43.RD	National Aeronautics & Space Administration	5,526	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	AIR SQUARED	20122783	43.RD	National Aeronautics & Space Administration	-11	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ROBUST ANALYTICS	20122881	43.RD	National Aeronautics & Space Administration	79,724	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	MUDAWAR THERMAL SYSTEMS	21068216	43.RD	National Aeronautics & Space Administration	26,781	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	INTELLIGENT AUTOMATION INC	2282-1	43.RD	National Aeronautics & Space Administration	46,030	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF MICHIGAN	3002485426	43.RD	National Aeronautics & Space Administration	13,451	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	OLD DOMINION UNIV RESEARCH FDN	ACRP 11-04 2020	43.RD	National Aeronautics & Space Administration	3,000	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ARIZONA STATE UNIVERSITY	ASUB00000621	43.RD	National Aeronautics & Space Administration	60,989	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	FRONTIER AEROSPACE CORPORATION	FAD000744	43.RD	National Aeronautics & Space Administration	112,705	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	IN SPACE, LLC	INS-41703-1	43.RD	National Aeronautics & Space Administration	-15,231	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	FREEDOM PHOTONICS, LLC.	S-7210-PURDUE	43.RD	National Aeronautics & Space Administration	42,167	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	SPECTRAL ENERGIES, LLC	SB2102-001-1	43.RD	National Aeronautics & Space Administration	253,540	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	SETI INSTITUTE	SC 3447	43.RD	National Aeronautics & Space Administration	18,431	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	PHYSICAL SCIENCES, INC	SC-7378-059-4171-001	43.RD	National Aeronautics & Space Administration	39,332	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	JET PROPULSION LABORATORY	SUBCONTRACT NO. 1667032	43.RD	National Aeronautics & Space Administration	19,635	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00015917	43.RD	National Aeronautics & Space Administration	103,620	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	NATIONAL INSTITUTE OF AEROSPACE	T16-6500-PU TO 602022	43.RD	National Aeronautics & Space Administration	138,195	
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	T3-0583-FY21	43.RD	National Aeronautics & Space Administration	17,406	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	TEAMS3-PURDUE	43.RD	National Aeronautics & Space Administration	1,394	0
					Total - 43.RD		1,908,083	0
Research and Development Cluster	Total - National Aeronautics & Space Administration						10,981,370	1,870,236
Research and Development Cluster	National Endowment for the Arts & Humanities	Pass-Through	INDIANA HUMANITIES	20-2006	45.129	Promotion of the Humanities_Federal/State Partnership	4,973	0
Research and Development Cluster	National Endowment for the Arts & Humanities	Direct			45.149	Promotion of the Humanities_Division of Preservation and Access	15,523	0
Research and Development Cluster	National Endowment for the Arts & Humanities	Direct			45.313	Laura Bush 21st Century Librarian Program	54,794	0
Research and Development Cluster	Total - National Endowment for the Arts & Humanities						75,290	0
Research and Development Cluster	National Science Foundation	Direct			47.041	Engineering Grants	24,899,472	6,565,626
Research and Development Cluster	National Science Foundation	Pass-Through	AMERICAN UNIVERSITY	31663-A220027-S14	47.041	Engineering Grants	15,063	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NOTRE DAME	204143PU	47.041	Engineering Grants	8,907	0
Research and Development Cluster	National Science Foundation	Pass-Through	AUBURN UNIVERSITY	17-ENG-200641-PU	47.041	Engineering Grants	57,430	0
Research and Development Cluster	National Science Foundation	Pass-Through	CROSSLIFE TECHNOLOGIES INC	17066873	47.041	Engineering Grants	892	0
Research and Development Cluster	National Science Foundation	Pass-Through	NUTRAMAIZE	19089464	47.041	Engineering Grants	56,794	0
Research and Development Cluster	National Science Foundation	Pass-Through	QCML LABS, LLC	20090076	47.041	Engineering Grants	108,268	0
Research and Development Cluster	National Science Foundation	Pass-Through	KAMPANICS, LLC	2014804	47.041	Engineering Grants	-117	0
Research and Development Cluster	National Science Foundation	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2019-0901-01	47.041	Engineering Grants	41,141	0
Research and Development Cluster	National Science Foundation	Pass-Through	UTAH STATE UNIVERSITY	203085-731	47.041	Engineering Grants	950,929	0
Research and Development Cluster	National Science Foundation	Pass-Through	RCAM TECHNOLOGIES	21057784	47.041	Engineering Grants	70,753	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF SOUTH FLORIDA	2106-1331-00-A	47.041	Engineering Grants	92,685	0
Research and Development Cluster	National Science Foundation	Pass-Through	ERADIVIR, INC	21079084	47.041	Engineering Grants	45,836	0
Research and Development Cluster	National Science Foundation	Pass-Through	ZS SYSTEMS, LLC	21090636	47.041	Engineering Grants	8,122	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MICHIGAN	3004362735	47.041	Engineering Grants	416,523	0
Research and Development Cluster	National Science Foundation	Pass-Through	VIRGINIA TECH	480081-19084	47.041	Engineering Grants	81,102	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF PENNSYLVANIA	580247	47.041	Engineering Grants	564,580	0
Research and Development Cluster	National Science Foundation	Pass-Through	AMERICAN SOCIETY FOR ENGINEERING EDUC	769-2055	47.041	Engineering Grants	93,406	0
Research and Development Cluster	National Science Foundation	Pass-Through	INDIANA UNIVERSITY	8945-PU	47.041	Engineering Grants	6,511	0
Research and Development Cluster	National Science Foundation	Pass-Through	RENSSELAER POLYTECHNIC INSTITUTE	A21-0044-S-001	47.041	Engineering Grants	20,262	0
Research and Development Cluster	National Science Foundation	Pass-Through	ARIZONA STATE UNIVERSITY	ASUB00000557	47.041	Engineering Grants	21,448	0
Research and Development Cluster	National Science Foundation	Pass-Through	VALGOTECH LLC	NSF-21057822-02	47.041	Engineering Grants	80,747	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF BUFFALO	R1294352	47.041	Engineering Grants	15,151	0

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	National Science Foundation	Pass-Through	CALIFORNIA STATE UNIVERSITY FRESNO	SC360453-18-01	47.041	Engineering Grants	56,305	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00012978	47.041	Engineering Grants	168,391	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00015196	47.041	Engineering Grants	46,068	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF DELAWARE	UDR0000163	47.041	Engineering Grants	368	0
					Total - 47.041		27,927,037	6,565,626
Research and Development Cluster	National Science Foundation	Direct			47.049	Mathematical and Physical Sciences	11,213,255	
Research and Development Cluster	National Science Foundation	Pass-Through	COMPUTING RESEARCH ASSOCIATION	2021CIF-PURDUE-13	47.049	Mathematical and Physical Sciences	106,244	0
Research and Development Cluster	National Science Foundation	Pass-Through	CARNEGIE-MELLON UNIVERSITY	1123266-388661	47.049	Mathematical and Physical Sciences	19,970	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF MASSACHUSETTS	21-015990-A-00	47.049	Mathematical and Physical Sciences	5,024	0
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Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NOTRE DAME	21123515	47.049	Mathematical and Physical Sciences	3,249	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	25-0521-0244-013	47.049	Mathematical and Physical Sciences	231,425	0
Research and Development Cluster	National Science Foundation	Pass-Through	DUKE UNIVERSITY	333-2726	47.049	Mathematical and Physical Sciences	2,492	0
Research and Development Cluster	National Science Foundation	Pass-Through	NORTHEASTERN UNIVERSITY	512070-78050	47.049	Mathematical and Physical Sciences	3,739	0
Research and Development Cluster	National Science Foundation	Pass-Through	CORNELL UNIVERSITY	79433-20682	47.049	Mathematical and Physical Sciences	3,337	0
Research and Development Cluster	National Science Foundation	Pass-Through	ARIZONA STATE UNIVERSITY	ASUB00000730	47.049	Mathematical and Physical Sciences	63,209	0
Research and Development Cluster	National Science Foundation	Pass-Through	YALE UNIVERSITY	CON-80003109(GR113508)	47.049	Mathematical and Physical Sciences	70,784	0
Research and Development Cluster	National Science Foundation	Pass-Through	PRINCETON UNIVERSITY	SUB0000181	47.049	Mathematical and Physical Sciences	558,771	0
					Total - 47.049		12,281,499	133,732
Research and Development Cluster	National Science Foundation	Direct			47.050	Geosciences	3,174,619	24,760
Research and Development Cluster	National Science Foundation	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	072212-14701	47.050	Geosciences	11,631	0
Research and Development Cluster	National Science Foundation	Pass-Through	VIRGINIA TECH	480773-19084	47.050	Geosciences	9,788	0
					Total - 47.050		3,196,038	24,760
Research and Development Cluster	National Science Foundation	Direct			47.070	Computer and Information Science and Engineering	26,123,126	1,015,833
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF WASHINGTON	UWSC13244	47.070	Computer and Information Science and Engineering	87,862	0
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	239,855	0
Research and Development Cluster	National Science Foundation	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	106203-18636	47.070	Computer and Information Science and Engineering	132,208	0
Research and Development Cluster	National Science Foundation	Pass-Through	OHIO STATE UNIVERSITY	1839252	47.070	Computer and Information Science and Engineering	1,004	0
Research and Development Cluster	National Science Foundation	Pass-Through	THE KRELL INSTITUTE	2154495-03	47.070	Computer and Information Science and Engineering	2,224	0
Research and Development Cluster	National Science Foundation	Pass-Through	MOLECULAR SCIENCES SOFTWARE INST	479590-19084	47.070	Computer and Information Science and Engineering	52,895	0
Research and Development Cluster	National Science Foundation	Pass-Through	VIRGINIA POLYTECHNIC INST & STATE UNIV	480299-19084	47.070	Computer and Information Science and Engineering	57,076	0

Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
National Science Foundation	Pass-Through	NORTHWESTERN UNIVERSITY	60054249 PURDUE	47.070	Computer and Information Science and Engineering	3,989	C
National Science Foundation	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN DIEGO	78283280-011	47.070	Computer and Information Science and Engineering	91,265	c
National Science Foundation	Pass-Through	UNIVERSITY OF MINNESOTA	A006581302	47.070	Computer and Information Science and Engineering	43,841	C
National Science Foundation	Pass-Through	UNIVERSITY OF CALIFORNIA - SANTA CRUZ	A21-0568-S002 P0756393	47.070	Computer and Information Science and Engineering	40.425	C
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National Science Foundation	Pass-Through	COMPUTING RESEARCH ASSOCIATION	CNS2123180-CRA-PURDUE	47.070	Computer and Information Science and Engineering	16,917	C
National Science Foundation	Pass-Through	GEORGE MASON UNIVERSITY	E2043283	47.070	Computer and Information Science and Engineering	4,278	C
National Science Foundation	Pass-Through	UNIVERSITY OF TOLEDO	F-2020-11	47.070	Computer and Information Science and Engineering	945	C
National Science Foundation	Pass-Through	OHIO STATE UNIVERSITY	SPC1000005450/GR124626	47.070	Computer and Information Science and Engineering	171,311	C
National Science Foundation	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00014127	47.070	Computer and Information Science and Engineering	51,492	C
				Total - 47.070		27,120,713	1,015,833
National Science Foundation	Direct			47.074	Biological Sciences	6,296,733	557,921
National Science Foundation	Pass-Through	SPIRROW THERAPEUTICS LLC	20101411	47.074	Biological Sciences	32,248	C
National Science Foundation	Pass-Through	UNIVERSITY OF UTAH	10040050-01	47.074	Biological Sciences	4,652	C
National Science Foundation	Pass-Through	NORTH CAROLINA A & T UNIVERSITY	260386A	47.074	Biological Sciences	20,025	C
National Science Foundation	Pass-Through	COLD SPRING HARBOR LABORATORY	52670216	47.074	Biological Sciences	89,523	C
National Science Foundation	Pass-Through	UNIVERSITY OF ARIZONA	646436	47.074	Biological Sciences	27,681	C
National Science Foundation	Pass-Through	CARNEGIE INSTITUTE OF PA	S01-2101926	47.074	Biological Sciences	12,501	C
National Science Foundation	Pass-Through	UNIVERSITY OF FLORIDA	SUB00002485	47.074	Biological Sciences	19,864	C
				Total - 47.074		6,503,227	557,921
National Science Foundation	Direct			47.075	Social, Behavioral, and Economic Sciences	1,228,895	167,324
National Science Foundation	Pass-Through	UNIVERSITY OF NEBRASKA	25-6238-0905-004	47.075	Social, Behavioral, and Economic Sciences	4,891	C
				Total - 47.075		1,233,786	167,324
National Science Foundation	Direct			47.076	Education and Human Resources	8,679,071	261,231
National Science Foundation	Pass-Through	VIRGINIA TECH	NTP-22090388	47.076	Education and Human Resources	9,906	C
National Science Foundation	Pass-Through	UNIVERSITY OF NOTRE DAME	22090588	47.076	Education and Human Resources	211	C
National Science Foundation	Pass-Through	UNIVERSITY OF ILLINOIS AT CHICAGO	17765	47.076	Education and Human Resources	18,382	C
National Science Foundation	Pass-Through	PASADENA CITY COLLEGE	2000281PURDUE-PACCD B210	47.076	Education and Human Resources	38,471	C
National Science Foundation	Pass-Through	INSTITUTE FOR FUTURE INTELLIGENCE	2131097	47.076	Education and Human Resources	105,499	C
National Science Foundation	Pass-Through	THE CONCORD CONSORTIUM INC	299-01	47.076	Education and Human Resources	27,980	C
National Science Foundation	Pass-Through	UNIVERSITY OF MONTANA	PG20-66254-01	47.076	Education and Human Resources	68,405	C
	National Science Foundation National Science Foundation <td>National Science Foundation Pass-Through National Science Foundation</td> <td>National Science Foundation Pase-Through NORTHWESTERN UNIVERSITY National Science Foundation Pase-Through UNIVERSITY OF CALIFORNIA - SAN DIEGO National Science Foundation Pase-Through UNIVERSITY OF CALIFORNIA - SANTA CRUZ National Science Foundation Pase-Through UNIVERSITY OF CALIFORNIA - SANTA CRUZ National Science Foundation Pase-Through COMPUTING RESEARCH ASSOCIATION National Science Foundation Pase-Through COMPUTING RESEARCH ASSOCIATION National Science Foundation Pase-Through OHIO STATE UNIVERSITY National Science Foundation Pase-Through UNIVERSITY OF TOLEDO National Science Foundation Pase-Through UNIVERSITY OF MICHIGAN National Science Foundation Pase-Through UNIVERSITY OF MICHIGAN National Science Foundation Pase-Through UNIVERSITY OF MICHIGAN National Science Foundation Pase-Through UNIVERSITY OF UTAH National Science Foundation Pase-Through UNIVERSITY OF FLORIA National Science Foundation Pase-Through UNIVERSITY OF FLORIA National Science Foundation Pase-Through UNIVERSITY OF RERASKA<</td> <td>National Science Foundation Paies-Through NORTIWERSTEW UNIVERSITY BOSI248 PURCUE National Science Foundation Paies-Through UNIVERSITY OF CALIFORNIA - 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SANTA CRUZ A1065861002 47.070 National Science Foundation Pase-Trioragin UNIVERSITY OF CALLFORNIA - SANTA CRUZ A210656-6002 47.070 National Science Foundation Pase-Trioragin UNIVERSITY E0543258 47.070 National Science Foundation Pase-Trioragin UNIVERSITY E0543258 47.070 National Science Foundation Pase-Trioragin UNIVERSITY E0543258 47.070 National Science Foundation Pase-Trioragin UNIVERSITY E0500000400081124626 47.070 National Science Foundation Pase-Trioragin UNIVERSITY OF MCHGAM SUB400014127 47.070 National Science Foundation Pase-Trioragin UNIVERSITY OF MCHGAM SUB400014127</td> <td>National Science Foundation New Through NATIONAL SCIENT VIEW SCIENT V</td> <td>National Sciences Foundation Name Processing Processing Processing Processing Processing National Sciences Foundation Name Processing Procesproce Processing Processing Processing Procesproce Proce</td>	National Science Foundation Pass-Through National Science Foundation	National Science Foundation Pase-Through NORTHWESTERN UNIVERSITY National Science Foundation Pase-Through UNIVERSITY OF CALIFORNIA - 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Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	National Science Foundation	Pass-Through	SINCLAIR COMMUNITY COLLEGE	SCC-1700531	47.076	Education and Human Resources	2,576	
					Total - 47.076		8,950,501	261,23
Research and Development Cluster	National Science Foundation	Direct			47.078	Polar Programs	207,857	
Research and Development Cluster	National Science Foundation	Direct			47.079	International Science and Engineering (OISE)	408,479	14,44
Research and Development Cluster	National Science Foundation	Pass-Through	ARIZONA STATE UNIVERSITY	ASUB00000616	47.079	International Science and Engineering (OISE)	16,758	
					Total - 47.079		425,237	14,44
Research and Development Cluster	National Science Foundation	Direct			47.083	Office of Integrative Activities	95,099	62,51
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF CINCINNATI	013204-002	47.083	Office of Integrative Activities	67,835	
Research and Development Cluster	National Science Foundation	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	097434-17672	47.083	Office of Integrative Activities	-8	
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF WYOMING	20101048	47.083	Office of Integrative Activities	8,516	
Research and Development Cluster	National Science Foundation	Pass-Through	UNIVERSITY OF ARIZONA	642009	47.083	Office of Integrative Activities	9,592	
					Total - 47.083		181,034	62,51
Research and Development Cluster	National Science Foundation	Direct			47.084	NSF Technology, Innovation and Partnerships	16,985	
Research and Development Cluster	National Science Foundation	Direct		1946683	47.RD	National Science Foundation	31,727	
Research and Development Cluster	National Science Foundation	Direct		20035832	47.RD	National Science Foundation	1,186	
Research and Development Cluster	National Science Foundation	Direct		2052860	47.RD	National Science Foundation	36,079	
Research and Development Cluster	National Science Foundation	Direct		2052860-CHE	47.RD	National Science Foundation	214,536	
Research and Development Cluster	National Science Foundation	Direct		2053097	47.RD	National Science Foundation	227,856	
Research and Development Cluster	National Science Foundation	Direct		21035873	47.RD	National Science Foundation	40,051	
Research and Development Cluster	National Science Foundation	Direct		21036089	47.RD	National Science Foundation	37,548	
Research and Development Cluster	National Science Foundation	Direct		21080194	47.RD	National Science Foundation	428	
Research and Development Cluster	National Science Foundation	Direct		2140612-IIS	47.RD	National Science Foundation	219,868	
Research and Development Cluster	National Science Foundation	Direct		2217255	47.RD	National Science Foundation	75,290	
Research and Development Cluster	National Science Foundation	Pass-Through	AMER INST OF MATHEMATICS	20024947	47.RD	National Science Foundation	10,000	
Research and Development Cluster	National Science Foundation	Pass-Through	COMPUTING RESEARCH ASSOCIATION	2021CIF-PURDUE-12	47.RD	National Science Foundation	89,577	
Research and Development Cluster	National Science Foundation	Pass-Through	OMNIVIS	21057449	47.RD	National Science Foundation	40,243	
Research and Development Cluster	National Science Foundation	Pass-Through	CENTER FOR BIOANALYTIC METROLOGY	307915PU	47.RD	National Science Foundation	48,247	
Research and Development Cluster	National Science Foundation	Pass-Through	CENTER FOR BIOANALYTIC METROLOGY	307915PU-LINNES	47.RD	National Science Foundation	26,577	
					Total - 47.RD		1,099,213	
Research and Development Cluster	Total - National Science Foundation						89,143,127	8,803,38

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	21068307	59.037	Small Business Development Center	130,128	
Research and Development Cluster	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	A229-2-SBA-1070	59.037	Small Business Development Center	120,771	
Research and Development Cluster	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	CARES ACTA229-1-SBA-1039	59.037	Small Business Development Center	41,115	
					Total - 59.037		292,014	
Research and Development Cluster	Total - Small Business Administration						292,014	
Research and Development Cluster	Department of Veterans Affairs	Direct			64.009	Veterans Medical Care Benefits	42,444	
Research and Development Cluster	Department of Veterans Affairs	Direct		21123617	64.RD	Department of Veteran's Affairs	14,742	
Research and Development Cluster	Department of Veterans Affairs	Direct		583-D25030	64.RD	Department of Veteran's Affairs	12,433	
Research and Development Cluster	Department of Veterans Affairs	Direct		583D15090	64.RD	Department of Veteran's Affairs	3,719	
					Total - 64.RD		30,894	
Research and Development Cluster	Total - Department of Veterans Affairs						73,338	
Research and Development Cluster	Environmental Protection Agency	Direct			66.034	Surveys, Studies, Investigations, Demonstrations and Special Purpose Activities	1,261	
Research and Development Cluster	Environmental Protection Agency	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #42559	66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	39,153	
Research and Development Cluster	Environmental Protection Agency	Pass-Through	IN DEPARTMENT OF ENVIRONMENTAL MGMT	CONTRACT# 19146	66.460	Nonpoint Source Implementation Grants	81,395	
Research and Development Cluster	Environmental Protection Agency	Pass-Through	MICHIGAN DEPT OF NATURAL RESOURCES	FISH112020-1	66.469	Great Lakes Program	92,048	
Research and Development Cluster	Environmental Protection Agency	Direct			66.509	Science To Achieve Results (STAR) Research Program	529,985	269,24
Research and Development Cluster	Environmental Protection Agency	Pass-Through	NEW YORK UNIVERSITY	F1842-01	66.509	Science To Achieve Results (STAR) Research Program	80,398	
					Total - 66.509		610,383	269,24
Research and Development Cluster	Environmental Protection Agency	Direct			66.511	Office of Research and Development Consolidated Research/Training	651,977	364,09
Research and Development Cluster	Environmental Protection Agency	Pass-Through	WATER ENVIRONMENT RESEARCH FOUNDATION	5137	66.511	Office of Research and Development Consolidated Research/Training	102,717	
					Total - 66.511		754,694	364,09
Research and Development Cluster	Environmental Protection Agency	Direct			66.608	Environmental Information Exchange Network Grant Program and Related Assistance	147,863	1
Research and Development Cluster	Environmental Protection Agency	Pass-Through	AMEC	16098772	66.RD	Environmental Protection Agency	2,915	
Research and Development Cluster	Environmental Protection Agency	Pass-Through	XCMR INC	22079080	66.RD	Environmental Protection Agency	9,961	
Research and Development Cluster	Environmental Protection Agency	Pass-Through	WOOD ENVRNT & INFRAS SOLUTIONS INC	F013201000	66.RD	Environmental Protection Agency	9,625	
Research and Development Cluster	Environmental Protection Agency	Pass-Through	PEGASUS TECHNICAL SERVICES INC	PUR-21-001	66.RD	Environmental Protection Agency	170	
					Total - 66.RD		22,671	
Research and Development Cluster	Total - Environmental Protection Agency						1,749,468	633,33
Research and Development Cluster	Nuclear Regulatory Commission	Direct			77.006	U. S. Nuclear Regulatory Commission Nuclear Education Grant Program	21,832	
Research and Development Cluster	Nuclear Regulatory Commission	Direct			77.008	Nuclear Regulatory Commission Scholarship & Fellowship Program	212,316	

Subrecipient Expenditures	Federal Expenditures	ALN Program Title	ALN	Award Identifier	Pass-Through Grantor	Туре	Federal Grantor	Clusters
	234,148						Total - Nuclear Regulatory Commission	Research and Development Cluster
900,61	9,738,547	Office of Science Financial Assistance Program	81.049			Direct	U.S. Department of Energy	Research and Development Cluster
	82,923	Office of Science Financial Assistance Program	81.049	1070142-450786	CARNEGIE-MELLON UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	55,644	Office of Science Financial Assistance Program	81.049	21090931	RIKARBON, INC.	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	149,516	Office of Science Financial Assistance Program	81.049	23706-P	DONALD DANFORTH PLANT SCIENCE CENTER	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	26,549	Office of Science Financial Assistance Program	81.049	25-1215-0208-004	UNIVERSITY OF NEBRASKA-LINCOLN	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	2,306,710	Office of Science Financial Assistance Program	81.049	4000194294	OAK RIDGE NATIONAL LABORATORY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	-1,375	Office of Science Financial Assistance Program	81.049	61351722-124215	STANFORD UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	9,564	Office of Science Financial Assistance Program	81.049	85526/2/1155763	STONY BROOK UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	168,188	Office of Science Financial Assistance Program	81.049	DE-SC0020542	GEOMETRIC DATA ANALYTICS, INC	Pass-Through	U.S. Department of Energy	Research and Development Cluster
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	61,622	Office of Science Financial Assistance Program	81.049	KK1935	UNIV OF CALIFORNIA-SANTA BARBARA	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	147,902	Office of Science Financial Assistance Program	81.049	S001325-USDOE	PENNSYLVANIA STATE UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	92,981	Office of Science Financial Assistance Program	81.049	S002346-USDOE	PENNSYLVANIA STATE UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
900,61	12,838,771		Total - 81.049					
475,67	2,781,773	Conservation Research and Development	81.086			Direct	U.S. Department of Energy	Research and Development Cluster
	237,339	Conservation Research and Development	81.086	DE-EE0009203	FORD MOTOR COMPANY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	153,710	Conservation Research and Development	81.086	000000464	UNIVERSITY OF WISCONSIN-MADISON	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	71,766	Conservation Research and Development	81.086	203220-744	UTAH STATE UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	3	Conservation Research and Development	81.086	PA16-0349-3.12-01	INST FOR ADVCD COMPOSITES MF	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	4,236	Conservation Research and Development	81.086	PA16-0349-7.1-01	UNIVERSITY OF TENNESSEE (THE)	Pass-Through	U.S. Department of Energy	Research and Development Cluster
475,67	3,248,827		Total - 81.086					
362,77	2,840,382	Renewable Energy Research and Development				Direct	U.S. Department of Energy	Research and Development Cluster
	-453	Renewable Energy Research and Development	81.087	4550 G WA302	ARCELORMITTAL USA	Pass-Through	U.S. Department of Energy	Research and Development Cluster
260,39	421,583	Renewable Energy Research and Development	81.087	10039612-PURDUE-5-2557	UNIVERSITY OF UTAH	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	272,145	Renewable Energy Research and Development	81.087	4550 G YA226	THE REGENTS OF THE UNIV OF CA	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	161,343	Renewable Energy Research and Development	81.087	RC111121 - PU	MICHIGAN STATE UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster
623,17	3,695,000		Total - 81.087					
30,94	351,929	Fossil Energy Research and Development				Direct	U.S. Department of Energy	Research and Development Cluster
	943	Fossil Energy Research and Development	81.089	16266A67	UNIVERSITY OF CENTRAL FLORIDA	Pass-Through	U.S. Department of Energy	Research and Development Cluster
	-6,232	Fossil Energy Research and Development	81.089	BL125409438	TENNESSEE TECH UNIVERSITY	Pass-Through	U.S. Department of Energy	Research and Development Cluster

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SOUTHWEST RESEARCH INSTITUTE	P99007RR	81.089	Fossil Energy Research and Development	420,064	C
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NATIONAL RURAL ELECTRIC COOPERATIVE ASSN	PURDUE-001-SUBK	81.089	Fossil Energy Research and Development	321,463	C
					Total - 81.089		1,088,167	30,940
Research and Development Cluster	U.S. Department of Energy	Direct			81.121	Nuclear Energy Research, Development and Demonstration	988,875	35,957
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF NEBRASKA-LINCOLN	25-1123-0061-002	81.121	Nuclear Energy Research, Development and Demonstration	277	C
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	6	C
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OHIO STATE UNIVERSITY	PO# RF 01579974	81.121	Nuclear Energy Research, Development and Demonstration	40,890	C
					Total - 81.121		1,030,048	
Research and Development Cluster	U.S. Department of Energy	Direct			81.122	Electricity Delivery and Energy Reliability, Research, Development and Analysis	558,923	251,554
Research and Development Cluster	U.S. Department of Energy	Pass-Through	STANFORD UNIVERSITY	62486845-138242-01	81.124	Predictive Science Academic Alliance Program	256,682	C
Research and Development Cluster	U.S. Department of Energy	Direct			81.135	Advanced Research and Projects Agency Tenergy Financial Assistance Program	1,577,572	618,961
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SONRISA RESEARCH INC	19013714	81.135	Advanced Research and Projects Agency Tenergy Financial Assistance Program	223,392	C
Research and Development Cluster	U.S. Department of Energy	Pass-Through	COLORADO SCHOOL OF MINES	401567-5802	81.135	Advanced Research and Projects Agency I Energy Financial Assistance Program	116,537	C
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OREGON STATE UNIVERSITY	G0183A-A	81.135	Advanced Research and Projects Agency I Energy Financial Assistance Program	74,477	C
Research and Development Cluster	U.S. Department of Energy	Pass-Through	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	S4894-PO397313	81.135	Advanced Research and Projects Agency Tenergy Financial Assistance Program	159,444	C
					Total - 81.135		2,151,422	870,515
Research and Development Cluster	U.S. Department of Energy	Direct		115108	81.RD	U.S. Department of Energy	37,435	C
Research and Development Cluster	U.S. Department of Energy	Direct		133569	81.RD	U.S. Department of Energy	59,505	C
Research and Development Cluster	U.S. Department of Energy	Direct		140520	81.RD	U.S. Department of Energy	50,102	C
Research and Development Cluster	U.S. Department of Energy	Direct		1852765	81.RD	U.S. Department of Energy	1,790	C
Research and Development Cluster	U.S. Department of Energy	Direct		1971341	81.RD	U.S. Department of Energy	-1,863	C
Research and Development Cluster	U.S. Department of Energy	Direct		1975861	81.RD	U.S. Department of Energy	39,165	C
Research and Development Cluster	U.S. Department of Energy	Direct		2041483	81.RD	U.S. Department of Energy	238,823	C
Research and Development Cluster	U.S. Department of Energy	Direct		2056944	81.RD	U.S. Department of Energy	-10	C
Research and Development Cluster	U.S. Department of Energy	Direct		2081656	81.RD	U.S. Department of Energy	38,641	C
Research and Development Cluster	U.S. Department of Energy	Direct		2083577	81.RD	U.S. Department of Energy	32,597	C
Research and Development Cluster	U.S. Department of Energy	Direct		2084425	81.RD	U.S. Department of Energy	129,551	C
Research and Development Cluster	U.S. Department of Energy	Direct		2090974	81.RD	U.S. Department of Energy	32,845	C
Research and Development Cluster	U.S. Department of Energy	Direct		2091335	81.RD	U.S. Department of Energy	5,384	C
Research and Development Cluster	U.S. Department of Energy	Direct		2095505	81.RD	U.S. Department of Energy	119,613	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Energy	Direct		2097716	81.RD	U.S. Department of Energy	52,970	37,628
Research and Development Cluster	U.S. Department of Energy	Direct		21014224	81.RD	U.S. Department of Energy	9,700	0 0
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Research and Development Cluster	U.S. Department of Energy	Direct		2104827	81.RD	U.S. Department of Energy	71,989	9 0
Research and Development Cluster	U.S. Department of Energy	Direct		2106142	81.RD	U.S. Department of Energy	96,742	2 0
Research and Development Cluster	U.S. Department of Energy	Direct		21068148	81.RD	U.S. Department of Energy	6,536	3
Research and Development ofdater	0.0. Department of Energy	Direct		21000140	01.112	0.0. Department of Energy	0,000	,
Research and Development Cluster	U.S. Department of Energy	Direct		2162652	81.RD	U.S. Department of Energy	-508	3 0
Research and Development Cluster	U.S. Department of Energy	Direct		216331	81.RD	U.S. Department of Energy	5,866	6 0
Research and Development Cluster	U.S. Department of Energy	Direct		2167336	81.RD	U.S. Department of Energy	94,466	
Research and Development Cluster	0.5. Department of Energy	Direct		210/330	01.00	0.5. Department of Energy	54,400	
Research and Development Cluster	U.S. Department of Energy	Direct		2174242	81.RD	U.S. Department of Energy	6,184	1 O
Research and Development Cluster	U.S. Department of Energy	Direct		2176317	81.RD	U.S. Department of Energy	72,913	3 0
				017007	01.00	110 D 1 1 1 1 5	0.000	
Research and Development Cluster	U.S. Department of Energy	Direct		217897	81.RD	U.S. Department of Energy	-8,630	0 0
Research and Development Cluster	U.S. Department of Energy	Direct		2189722	81.RD	U.S. Department of Energy	99,312	2 0
Research and Development Cluster	U.S. Department of Energy	Direct		2193858	81.RD	U.S. Department of Energy	64,959	ə 0
				0105001	01.00	110 D 1 1 1 1 5	510.000	
Research and Development Cluster	U.S. Department of Energy	Direct		2195291	81.RD	U.S. Department of Energy	543,628	3 ()
Research and Development Cluster	U.S. Department of Energy	Direct		2195626	81.RD	U.S. Department of Energy	37,349	9 0
Research and Development Cluster	U.S. Department of Energy	Direct		2201442	81.RD	U.S. Department of Energy	103,374	4 C
Research and Development Cluster	U.S. Department of Energy	Direct		2204365	81.RD	U.S. Department of Energy	22,621	i a
Research and Development Cluster	U.S. Department of Energy	Direct		2204400	81.RD	U.S. Department of Energy	97,800	0
Research and Development Cluster	U.S. Department of Energy	Direct		2204478	81.RD	U.S. Department of Energy	19,865	5 0
Research and Development Cluster	U.S. Department of Energy	Direct		2205519	81.RD	U.S. Department of Energy	83,153	3 0
Research and Development Cluster	U.S. Department of Energy	Direct		2206255	81.RD	U.S. Department of Energy	86,761	0
Research and Development Cluster	U.S. Department of Energy	Direct		2207382	81.RD	U.S. Department of Energy	56,844	4 0
Research and Development Cluster	U.S. Department of Energy	Direct		220926	81.RD	U.S. Department of Energy	6,884	4 C
Research and Development Cluster	U.S. Department of Energy	Direct		220928	81.RD	U.S. Department of Energy	116,866	39,978
Research and Development Cluster	U.S. Department of Energy	Direct		2210356	81.RD	U.S. Department of Energy	15,011	0
	e.e. Doparation of Enorgy	Diroct		2210000		e.e. Department of Energy	10,011	
Research and Development Cluster	U.S. Department of Energy	Direct		2215195	81.RD	U.S. Department of Energy	94,629	9 0
Research and Development Cluster	U.S. Department of Energy	Direct		2218371	81.RD	U.S. Department of Energy	26,055	5 0
Research and Development Cluster	U.S. Department of Energy	Direct		2224095	81.RD	U.S. Department of Energy	32,159	<u>م</u>
a construction and provolopment ofuster	S.S. Department of Energy	Diect		2227033	51.00	o.o. Department or Energy	32,135	
Research and Development Cluster	U.S. Department of Energy	Direct		2230622	81.RD	U.S. Department of Energy	14,042	2 0
Research and Development Cluster	U.S. Department of Energy	Direct		2232217	81.RD	U.S. Department of Energy	7,083	3 0

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Energy	Direct		2234344	81.RD	U.S. Department of Energy	79,105	
Research and Development Cluster	U.S. Department of Energy	Direct		2248552	81.RD	U.S. Department of Energy	56,122	
Research and Development Cluster	U.S. Department of Energy	Direct		2248643	81.RD	U.S. Department of Energy	35,162	
Research and Development Cluster	U.S. Department of Energy	Direct		2249251	81.RD	U.S. Department of Energy	38,397	
Research and Development Cluster	U.S. Department of Energy	Direct		2259625	81.RD	U.S. Department of Energy	16,267	
Research and Development Cluster	U.S. Department of Energy	Direct		2300437	81.RD	U.S. Department of Energy	20,000	
Research and Development Cluster	U.S. Department of Energy	Direct		2300939	81.RD	U.S. Department of Energy	51,789	
Research and Development Cluster	U.S. Department of Energy	Direct		2304745	81.RD	U.S. Department of Energy	12,757	
Research and Development Cluster	U.S. Department of Energy	Direct		2313225	81.RD	U.S. Department of Energy	67,771	
Research and Development Cluster	U.S. Department of Energy	Direct		2313773	81.RD	U.S. Department of Energy	17,113	
Research and Development Cluster	U.S. Department of Energy	Direct		231417	81.RD	U.S. Department of Energy	31,416	; ;
Research and Development Cluster	U.S. Department of Energy	Direct		231427	81.RD	U.S. Department of Energy	24,573	
Research and Development Cluster	U.S. Department of Energy	Direct		2317516	81.RD	U.S. Department of Energy	34,407	
Research and Development Cluster	U.S. Department of Energy	Direct		2317662	81.RD	U.S. Department of Energy	26,855	5
Research and Development Cluster	U.S. Department of Energy	Direct		2320621	81.RD	U.S. Department of Energy	35,375	5
Research and Development Cluster	U.S. Department of Energy	Direct		2330618	81.RD	U.S. Department of Energy	28,623	
Research and Development Cluster	U.S. Department of Energy	Direct		2332029	81.RD	U.S. Department of Energy	26,566	
Research and Development Cluster	U.S. Department of Energy	Direct		2350208	81.RD	U.S. Department of Energy	644	
Research and Development Cluster	U.S. Department of Energy	Direct		2352373	81.RD	U.S. Department of Energy	54,999	
Research and Development Cluster	U.S. Department of Energy	Direct		239544	81.RD	U.S. Department of Energy	2,813	
Research and Development Cluster	U.S. Department of Energy	Direct		3010504729	81.RD	U.S. Department of Energy	-15	
Research and Development Cluster	U.S. Department of Energy	Direct		4000151703	81.RD	U.S. Department of Energy	108,033	
Research and Development Cluster	U.S. Department of Energy	Direct		4000192758	81.RD	U.S. Department of Energy	85,024	
Research and Development Cluster	U.S. Department of Energy	Direct		4000193872	81.RD	U.S. Department of Energy	58,378	
Research and Development Cluster	U.S. Department of Energy	Direct		425170	81.RD	U.S. Department of Energy	19,880	
Research and Development Cluster	U.S. Department of Energy	Direct		498532	81.RD	U.S. Department of Energy	71,934	
Research and Development Cluster	U.S. Department of Energy	Direct		4F-32042	81.RD	U.S. Department of Energy	g	
Research and Development Cluster	U.S. Department of Energy	Direct		8F-30010	81.RD	U.S. Department of Energy	34,758	
Research and Development Cluster	U.S. Department of Energy	Direct		PO 2334433	81.RD	U.S. Department of Energy	41,890	
Research and Development Cluster	U.S. Department of Energy	Direct		PO 2340297	81.RD	U.S. Department of Energy	44,692	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Energy	Direct		SC-18-476	81.RD	U.S. Department of Energy	651,989	40,21
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SAVANNAH RIVER NUCLEAR SOLUTIONS	0000386328	81.RD	U.S. Department of Energy	-210	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SAVANNAH RIVER NUCLEAR SOLUTIONS	0000457811	81.RD	U.S. Department of Energy	-3,858	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SAVANNAH RIVER NUCLEAR SOLUTIONS	0000483105	81.RD	U.S. Department of Energy	213,551	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE SAVANNAH RIVER ALLIANCE,	0000557757	81.RD	U.S. Department of Energy	19,845	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	GE-HITACHI NUCLEAR ENERGY AMERICAS	02859160	81.RD	U.S. Department of Energy	293,211	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF TEXAS AT SAN ANTONIO	1000003891	81.RD	U.S. Department of Energy	895,972	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ELECTRIC POWER RESEARCH INSTITUTE (EPRI)	10014924	81.RD	U.S. Department of Energy	203,336	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UNIVERSITY OF CALIFORNIA - SAN DIEGO	111119283	81.RD	U.S. Department of Energy	76,604	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	RAYTHEON TECHNOLOGIES RESEARCH CENTER	1259830	81.RD	U.S. Department of Energy	31,226	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	RAYTHEON TECHNOLOGIES RESEARCH CENTER	1261966	81.RD	U.S. Department of Energy	184,213	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	1F-60258	81.RD	U.S. Department of Energy	472	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	1F-60318	81.RD	U.S. Department of Energy	52,764	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	1F-60386	81.RD	U.S. Department of Energy	14,222	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	1F-60453	81.RD	U.S. Department of Energy	28,449	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SONRISA RESEARCH INC	2014-0654-91	81.RD	U.S. Department of Energy	17,124	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	208358	81.RD	U.S. Department of Energy	416,485	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	XCMR INC	21080105	81.RD	U.S. Department of Energy	15,832	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NATIONAL RENEWABLE ENERGY LAB	21123850	81.RD	U.S. Department of Energy	9,766	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	212848	81.RD	U.S. Department of Energy	16,725	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LOS ALAMOS NATIONAL LABORATORY	22025204	81.RD	U.S. Department of Energy	29,220	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	CLEVELAND-CLIFFS STEEL LLC	22036238	81.RD	U.S. Department of Energy	12,463	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SANDIA NATIONAL LABORATORIES	2312343	81.RD	U.S. Department of Energy	49,550	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	SANDIA NATIONAL LABORATORIES	2313219	81.RD	U.S. Department of Energy	7,264	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	243477	81.RD	U.S. Department of Energy	148,287	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	245993	81.RD	U.S. Department of Energy	162,552	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	246778	81.RD	U.S. Department of Energy	75,618	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	250584	81.RD	U.S. Department of Energy	19,955	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	254567	81.RD	U.S. Department of Energy	38,811	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BATTELLE ENERGY ALLIANCE LLC	260630	81.RD	U.S. Department of Energy	74,999	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	261560	81.RD	U.S. Department of Energy	53,360	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	IDAHO NATIONAL LABORATORY	261565	81.RD	U.S. Department of Energy	6,629	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	2F-60033	81.RD	U.S. Department of Energy	12,078	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	2F-60054	81.RD	U.S. Department of Energy	15,666	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	BROOKHAVEN NATIONAL LABORATORY	382247	81.RD	U.S. Department of Energy	17,096	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UT-BATTELLE LLC	4000169270	81.RD	U.S. Department of Energy	6,575	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	UT-BATTELLE LLC	4000179033	81.RD	U.S. Department of Energy	42,040	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	4000181577	81.RD	U.S. Department of Energy	4,343	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	4000184914	81.RD	U.S. Department of Energy	687	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	4000191983	81.RD	U.S. Department of Energy	50,803	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	4000195879	81.RD	U.S. Department of Energy	125,788	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	PACIFIC NORTHWEST NATIONAL LABORATORY	539426	81.RD	U.S. Department of Energy	201,182	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LOS ALAMOS NATIONAL LABORATORY	589334	81.RD	U.S. Department of Energy	256,714	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LOS ALAMOS NATIONAL LABORATORY	601213	81.RD	U.S. Department of Energy	98,780	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LOS ALAMOS NATIONAL LABORATORY	607537	81.RD	U.S. Department of Energy	60,319	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FERMI NATIONAL ACCELERATOR LABORATORY	668388	81.RD	U.S. Department of Energy	634,881	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FERMI NATIONAL ACCELERATOR LABORATORY	672713	81.RD	U.S. Department of Energy	27,482	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FERMI NATIONAL ACCELERATOR	677848	81.RD	U.S. Department of Energy	104,738	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FERMI NATIONAL ACCELERATOR LABORATORY	683463	81.RD	U.S. Department of Energy	9,245	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	8F-30072	81.RD	U.S. Department of Energy	21,559	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	9F-60152	81.RD	U.S. Department of Energy	13,676	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	ARGONNE NATIONAL LABORATORY	9F-60181 M0006	81.RD	U.S. Department of Energy	38,539	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LAWRENCE LIVERMORE NATNL LAB	B646672	81.RD	U.S. Department of Energy	64,247	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LAWRENCE LIVERMORE NATNL LAB	B648789	81.RD	U.S. Department of Energy	29,606	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	LAWRENCE LIVERMORE NATNL LAB	B649684	81.RD	U.S. Department of Energy	42,059	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	C1716-V4	81.RD	U.S. Department of Energy	15,356	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	CW31464	81.RD	U.S. Department of Energy	20,473	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	OAK RIDGE NATIONAL LABORATORY	CW31597	81.RD	U.S. Department of Energy	14,740	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	FREEDOM PHOTONICS, LLC.	S-7198	81.RD	U.S. Department of Energy	63,288	
Research and Development Cluster	U.S. Department of Energy	Pass-Through	AMES LABORATORY	SC-20-518	81.RD	U.S. Department of Energy	374,837	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NATIONAL RENEWABLE ENERGY LAB	SUB-2020-10359	81.RD	U.S. Department of Energy	21,436	(
Research and Development Cluster	U.S. Department of Energy	Pass-Through	NATIONAL RENEWABLE ENERGY LAB	SUB-2021-10583	81.RD	U.S. Department of Energy	20,000	(
					Total - 81.RD		10,070,197	117,819
Research and Development Cluster	Total - U.S. Department of Energy						34,938,037	3,054,690
Research and Development Cluster	U.S. Department of Education	Direct			84.305	Education Research, Development and Dissemination	437,937	154,316
Research and Development Cluster	U.S. Department of Education	Pass-Through	LEHIGH UNIVERSITY	544220-78002	84.305	Education Research, Development and Dissemination	36,504	
Research and Development Cluster	U.S. Department of Education	Pass-Through	OREGON STATE UNIVERSITY	ED175A-B	84.305	Education Research, Development and Dissemination	23,800	(
					Total - 84.305		498,241	154,31
Research and Development Cluster	U.S. Department of Education	Direct			84.324	Research in Special Education	118,994	57,982
Research and Development Cluster	U.S. Department of Education	Direct			84.325	Special Education - Personnel Development to Improve Services and Results for Ch	350,182	(
Research and Development Cluster	U.S. Department of Education	Direct			84.365	English Language Acquisition State Grants	711,831	(
Research and Development Cluster	U.S. Department of Education	Direct		21112398	84.RD	U.S. Department of Education	32,978	. (
Research and Development Cluster	U.S. Department of Education	Pass-Through	NISWONGER FOUNDATION	S411B200035	84.RD	U.S. Department of Education	17,895	(
					Total - 84.RD		50,873	
Research and Development Cluster	Total - U.S. Department of Education						1,730,121	212,293
Research and Development Cluster	National Archives	Direct			89.003	National Historical Publications and Records Grants	53,720	(
Research and Development Cluster	Total - National Archives						53,720	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LEIDOS BIOMEDICAL RESEARCH INC	20X095 Q2	93.001	Civil Rights and Privacy Rule Compliance Activities	380,650	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TEICHOS LABORATORIES, LLC	21025128	93.083	Prevention of Disease, Disability, and Death through Immunization and Control of	48,237	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.103	Food and Drug Administration_Research	1,409,439	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	RUTGERS, THE STATE UNIVERSITY	1251	93.103	Food and Drug Administration_Research	-80	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	RUTGERS, THE STATE UNIVERSITY	2151	93.103	Food and Drug Administration_Research	124,511	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF DELAWARE	58082	93.103	Food and Drug Administration_Research	304,458	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2022-002	93.103	Food and Drug Administration_Research	13,196	; ;
					Total - 93.103		1,851,524	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.107	Model State-Supported Area Health Education Centers	26,034	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8119 4683364	93.107	Model State-Supported Area Health Education Centers	79,651	(
					Total - 93.107		105,685	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.113	Biological Response to Environmental Health Hazards	1,800,573	344,73
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	32,810	18,182

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
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	264,890	49,32
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	ALBERT EINSTEIN COLLEGE OF MEDICINE	312096	93.113	Biological Response to Environmental Health Hazards	110,130	
					Total - 93.113		2,208,403	412,24
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.121	Oral Diseases and Disorders Research	658	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MARION COUNTY HEALTH DEPARTMENT	22046728	93.136	Injury Prevention and Control Research and State and Community Based Programs	21,433	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.143	NIEHS Superfund Hazardous Substances_Basic Research and Education	80,323	13,61
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF TEXAS AT SAN ANTONIO	170470/170015	93.155	Rural Health Research Centers	21,889	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.173	Research Related to Deafness and Communication Disorders	3,353,242	
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	8,241	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IU SCHOOL OF MEDICINE	9052-PU	93.173	Research Related to Deafness and Communication Disorders	120,297	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	GR120213	93.173	Research Related to Deafness and Communication Disorders	16,052	
					Total - 93.173		3,497,832	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA CENTER FOR NURSING	22024770	93.178	Nursing Workforce Diversity	57,940	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.213	Research and Training in Complementary and Alternative Medicine	155,530	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.226	Research on Healthcare Costs, Quality and Outcomes	303,009	199,28
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	106187-18696	93.233	National Center on Sleep Disorders Research	105,993	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.242	Mental Health Research Grants	3,171,029	295,53
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00012614	93.242	Mental Health Research Grants	84,640	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BROWN UNIVERSITY	00001446	93.242	Mental Health Research Grants	34,525	22,72
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OREGON HEALTH SCIENCES UNIVERSITY	1018022_PURDUE	93.242	Mental Health Research Grants	34,858	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CINCINNATI CHILDRENS HOSPITAL MED CTR	312122	93.242	Mental Health Research Grants	16,349	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	DUKE UNIVERSITY	A034063	93.242	Mental Health Research Grants	7,564	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	FEINSTEIN INST FOR MEDICAL RES	AWD00001246-PU	93.242	Mental Health Research Grants	44,479	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF KANSAS	FY2022-005	93.242	Mental Health Research Grants	13,228	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN-4679720-PU	93.242	Mental Health Research Grants	-8,618	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00010086	93.242	Mental Health Research Grants	114,828	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	WASHINGTON UNIVERSITY	WU-22-0027	93.242	Mental Health Research Grants	65,751	
					Total - 93.242		3,578,633	318,25
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.243	Substance Abuse and Mental Health Services_Projects of Regional and National Sig	170,040	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OKLAHOMA STATE UNIVERSITY	97695	93.243	Substance Abuse and Mental Health Services_Projects of Regional and National Sig	3,388	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
					Total - 93.243		173,428	3 0
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.262	Occupational Safety and Health Program	7,641	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CINCINNATI	010412-102	93.262	Occupational Safety and Health Program	6,486	6 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF NEBRASKA	34-5420-2006-211	93.262	Occupational Safety and Health Program	12,804	4 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF IOWA	S02401-01	93.262	Occupational Safety and Health Program	3,690	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00014286	93.262	Occupational Safety and Health Program	5,200) 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00014287	93.262	Occupational Safety and Health Program	-622	2 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00016038	93.262	Occupational Safety and Health Program	17,302	2 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00016152	93.262	Occupational Safety and Health Program	13,976	
Research and Development Cluster	0.5. Department of Health & Human Services	Pass-mough		30BR00010132	93.202		13,970	0
					Total - 93.262		66,477	, o
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.273	Alcohol Research Programs	1,360,326	52,844
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UTAH STATE UNIVERSITY	201356-490	93.273	Alcohol Research Programs	11,601	0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8900	93.273	Alcohol Research Programs	14,419) 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	9211-PU	93.273	Alcohol Research Programs	20,996	5 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	9215	93.273	Alcohol Research Programs	13,614	4 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MONTANA STATE UNIVERSITY	G259-21-W8643	93.273	Alcohol Research Programs	14,294	4 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4687305PU	93.273	Alcohol Research Programs	29,672	2 0
Descent and Development Olyster		Direct			Total - 93.273	Deve Alexan and Addiction December December	1,464,922	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.279	Drug Abuse and Addiction Research Programs	1,408,671	
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	-52,663	3 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	PENNSYLVANIA STATE UNIVERSITY	5877-PU-DHHS-5108-04	93.279	Drug Abuse and Addiction Research Programs	143,049	9 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MINNESOTA	D009105902	93.279	Drug Abuse and Addiction Research Programs	68,473	3 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	SFC FLUIDICS	SFC 2018-01	93.279	Drug Abuse and Addiction Research Programs	1,851	1 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	SPC-1000003679/GR107769	93.279	Drug Abuse and Addiction Research Programs	-3,294	4 0
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	SPC-100008741 / GR109354	93.279	Drug Abuse and Addiction Research Programs	36,791	1 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	44,107	7 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	9,539	9 0
					Total - 93.279		1,656,524	
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	476,374	4 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	-885	0

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
					Total - 93.286		475,489	
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.307	Minority Health and Health Disparities Research	504,980	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHERN ARIZONA UNIVERSITY	1004937-02	93.307	Minority Health and Health Disparities Research	65,952	(
					Total - 93.307		570,932	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.310	Trans-NIH Research Support	4,293,932	2,094,24
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CARNEGIE-MELLON UNIVERSITY	1090667-441650	93.310	Trans-NIH Research Support	8,000	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8715_PUR	93.310	Trans-NIH Research Support	39,993	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	DUKE UNIVERSITY	A03-5087	93.310	Trans-NIH Research Support	216,048	42,980
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00013663	93.310	Trans-NIH Research Support	86,810	(
					Total - 93.310		4,644,783	2,137,22
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.350	National Center for Advancing Translational Sciences	-106	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN CLINICAL & TRANSLATIONAL SCI INST	21112789	93.350	National Center for Advancing Translational Sciences	4,581	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	00088780	93.350	National Center for Advancing Translational Sciences	3,179	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	8475	93.350	National Center for Advancing Translational Sciences	-599	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8681	93.350	National Center for Advancing Translational Sciences	-121	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	8929	93.350	National Center for Advancing Translational Sciences	97,437	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	8940	93.350	National Center for Advancing Translational Sciences	797,961	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	8944	93.350	National Center for Advancing Translational Sciences	179,986	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8946	93.350	National Center for Advancing Translational Sciences	163,794	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4680912PU	93.350	National Center for Advancing Translational Sciences	-605	(
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	5,735	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	NTP-00101161	93.350	National Center for Advancing Translational Sciences	83,878	(
					Total - 93.350		1,335,120	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.351	Research Infrastructure Programs	115,913	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF ALABAMA AT BIRMINGHAM	000516421-SC003	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	19,519	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.361	Nursing Research	143,785	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.393	Cancer Cause and Prevention Research	268,639	13,708
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	56,936	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	HARVARD MEDICAL SCHOOL	1299701	93.393	Cancer Cause and Prevention Research	41,402	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF HAWAII	KA1750	93.393	Cancer Cause and Prevention Research	43,514	(

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF HAWAII	KA1751	93.393	Cancer Cause and Prevention Research	6,250	C
					Total - 93.393		416,741	13,708
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.394	Cancer Detection and Diagnosis Research	1,112,274	340,584
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TYMORA ANALYTICAL OPERATIONS, LLC	4R44CA239845-02	93.394	Cancer Detection and Diagnosis Research	31,372	C
					Total - 93.394		1,143,646	340,584
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.395	Cancer Treatment Research	2,466,092	265,402
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	9014	93.395	Cancer Treatment Research	180,588	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	KINARX, LLC	19025176	93.395	Cancer Treatment Research	40,180	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	KINARX, LLC	20025158	93.395	Cancer Treatment Research	4,356	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IU SCHOOL OF MEDICINE	9010	93.395	Cancer Treatment Research	56,097	C
					Total - 93.395		2,747,313	265,402
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.396	Cancer Biology Research	2,633,260	676,040
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.397	Cancer Centers Support Grants	1,750,903	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.398	Cancer Research Manpower	988,869	50,420
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.600	Head Start	14,772	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CHILDHELP, INC	20123014	93.670	Child Abuse and Neglect Discretionary Activities	74,350	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.747	Elder Abuse Prevention Interventions Program	22,557	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	STATE OF MONTANA	APS-OP-2020-3	93.747	Elder Abuse Prevention Interventions Program	86,052	C
					Total - 93.747		108,609	a
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.774	Medicare_Supplementary Medical Insurance	15,756	8,992
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.788	Opioid STR	462,665	207,868
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	GRANT ID: 32087	93.788	Opioid STR	-1	C
					Total - 93.788		462,664	207,868
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.822	Health Careers Opportunity Program	723,616	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.837	Heart and Vascular Diseases Research	1,738,840	262,453
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MICHIGAN TECHNOLOGICAL UNIVERSITY	1702063Z3	93.837	Heart and Vascular Diseases Research	32,866	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	AQUILO SPORTS LLC	21101919	93.837	Heart and Vascular Diseases Research	30,823	C
					Total - 93.837		1,802,529	262,453
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.839	Blood Diseases and Resources Research	-211	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV. OF NORTH CAROLINA AT CHAPEL HILL	5115293	93.839	Blood Diseases and Resources Research	-2	C

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV. OF NORTH CAROLINA AT CHAPEL HILL	5118100	93.839	Blood Diseases and Resources Research	-11,776	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV. OF NORTH CAROLINA AT CHAPEL HILL	5121821	93.839	Blood Diseases and Resources Research	179,345	C
					Total - 93.839		167,356	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.840	Translation and Implementation Science Research for Heart, Lung, Blood Diseases,	23,816	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MOIUNIVERSITY	22014275	93.840	Translation and Implementation Science Research for Heart, Lung, Blood Diseases,	9,919	C
					Total - 93.840		33,735	a
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.846	Arthritis, Musculoskeletal and Skin Diseases Research	1,891,189	417,482
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF COLORADO AT BOULDER	1559695	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	18,815	C
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	173,726	C
					Total - 93.846		2,083,730	417,482
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.847	Diabetes, Endocrinology and Metabolism Research	1,892,689	136,677
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	21123703	93.847	Diabetes, Endocrinology and Metabolism Research	51,036	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	7916_PUR	93.847	Diabetes, Endocrinology and Metabolism Research	96,102	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8521	93.847	Diabetes, Endocrinology and Metabolism Research	7,962	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8837_PUR	93.847	Diabetes, Endocrinology and Metabolism Research	5,994	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8973_PUR	93.847	Diabetes, Endocrinology and Metabolism Research	49,703	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8975_PUR	93.847	Diabetes, Endocrinology and Metabolism Research	23,233	C
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	-3,761	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF COLORADO DENVER	FY22.115.001_AMD5	93.847	Diabetes, Endocrinology and Metabolism Research	57,235	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IN UNIV PURDUE UNIV AT INDIANAPOLIS	REQ 134762495	93.847	Diabetes, Endocrinology and Metabolism Research	-599	C
					Total - 93.847		2,179,594	136,677
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	2,110,102	169,911
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF IOWA	S00841-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	-432	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF IOWA	S00841-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	124,686	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF IOWA	S00841-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	24,303	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BRIGHAM AND WOMEN'S HOSPITAL	121802	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	525,625	C
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	91	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BACKYARD BRAINS	18078267	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	9,266	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV OF TEXAS S WSTN MEDICAL CENTER, THE	GMO211009 PO0000002095	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	102,943	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	IN4685646PU	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	263,948	C

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MINNESOTA	N008262301	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	155,465	5 (
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	BRIGHAM AND WOMEN'S HOSPITAL	NTP22111940	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	31,431	(
					Total - 93.853		3,347,428	169,91 ⁴
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.855	Allergy, Immunology and Transplantation Research	6,689,078	1,243,772
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TEICHOS LABORATORIES, LLC	21046529	93.855	Allergy, Immunology and Transplantation Research	6,701	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LA JOLLA INST FOR ALLERGY & IMMUNOLOGY	27909-02-123-408	93.855	Allergy, Immunology and Transplantation Research	-4,019)
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LA JOLLA INST FOR ALLERGY & IMMUNOLOGY	27909-03-123-408	93.855	Allergy, Immunology and Transplantation Research	199,933	5 (
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	LA JOLLA INST FOR ALLERGY & IMMUNOLOGY	27909-04-123-408	93.855	Allergy, Immunology and Transplantation Research	27,176	5 (
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	VIRGINIA POLYTECHNIC INST & STATE UNIV	412642-19084	93.855	Allergy, Immunology and Transplantation Research	305,419)
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	377,318	6
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	STANFORD UNIVERSITY	62649495-192167	93.855	Allergy, Immunology and Transplantation Research	390,257	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IU SCHOOL OF MEDICINE	8514-PU	93.855	Allergy, Immunology and Transplantation Research	214,098	6
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA - DAVIS	A20-0624-S001-02	93.855	Allergy, Immunology and Transplantation Research	8,630)
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	62,706	5
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	GEORGIA STATE UNIVERSITY	SP00013765-03	93.855	Allergy, Immunology and Transplantation Research	122	2
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	101,316	5 (
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	332,535	5 (
					Total - 93.855		8,711,270	1,243,772
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.859	Biomedical Research and Research Training	11,336,201	365,486
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TYMORA ANALYTICAL OPERATIONS, LLC	19100468	93.859	Biomedical Research and Research Training	58,028	8 (
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	38,281	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF VIRGINIA	GB11056.169317	93.859	Biomedical Research and Research Training	13,377	
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF WASHINGTON	UWSC12039	93.859	Biomedical Research and Research Training	97,536	5
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF WASHINGTON	UWSC13365	93.859	Biomedical Research and Research Training	79,321	(
					Total - 93.859		11,622,744	365,486
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.865	Child Health and Human Development Extramural Research	1,635,829	528,362
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	37,507	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NEW YORK UNIVERSITY	F0998-010	93.865	Child Health and Human Development Extramural Research	42	2 (
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	FLORIDA STATE UNIVERSITY	R000002856	93.865	Child Health and Human Development Extramural Research	12,008	3 (
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	FLORIDA STATE UNIVERSITY	R000002943	93.865	Child Health and Human Development Extramural Research	15,356	6 (

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CONNECTICUT	UCHC7-145205302	93.865	Child Health and Human Development Extramural Research	27,740	C
					Total - 93.865		1,728,482	528,362
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.866	Aging Research	2,166,033	698,789
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	TYMORA ANALYTICAL OPERATIONS, LLC	19100468	93.866	Aging Research	11,831	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	WORK LIFE HELP LLC	20101357	93.866	Aging Research	140,112	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF MASSACHUSETTS	21-015815 A00	93.866	Aging Research	4,614	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	IU SCHOOL OF MEDICINE	22014114	93.866	Aging Research	30,175	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF KENTUCKY	3200004317-22-113	93.866	Aging Research	40,072	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	8160_PUR	93.866	Aging Research	3,337,998	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	9102	93.866	Aging Research	13,612	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIV OF TX HEALTH SCIENCE CTR AT HOUSTON	SA0000226	93.866	Aging Research	19,857	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	SUBAWARD#: 8943	93.866	Aging Research	143,681	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF WASHINGTON	UWSC11021	93.866	Aging Research	-6,512	C
					Total - 93.866		5,901,473	698,789
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.867	Vision Research	1,080,657	129,786
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	CORNELL UNIVERSITY	211848 - 222709	93.867	Vision Research	99,194	C
					Total - 93.867		1,179,851	129,786
Research and Development Cluster	U.S. Department of Health & Human Services	Direct			93.879	Medical Library Assistance	41,587	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	MARION GENERAL HOSPITAL	19100889	93.912	Rural Health Care Services Outreach and Rural Health Network Development Program	138	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	OHIO STATE UNIVERSITY	60074625	93.958	Block Grants for Community Mental Health Services	125	C
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	-154	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	19078529	93.969	Geriatric Education Centers	10,625	C
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	9213-PU	93.991	Preventive Health and Health Services Block Grant	15,610	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		19024324 - PIOTROWSKI	93.RD	U.S. Department of Health & Human Services	2,394	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		19122519 - DAVIS	93.RD	U.S. Department of Health & Human Services	2,394	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		19122660	93.RD	U.S. Department of Health & Human Services	16,660	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		21014254 - HUANG	93.RD	U.S. Department of Health & Human Services	2,993	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		21067911	93.RD	U.S. Department of Health & Human Services	132,674	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		21112227	93.RD	U.S. Department of Health & Human Services	33,565	C
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		21123658	93.RD	U.S. Department of Health & Human Services	22,848	C

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		веск	93.RD	U.S. Department of Health & Human Services	1,378	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		HHSN2712017000221	93.RD	U.S. Department of Health & Human Services	80,662	13,230
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		IP15120879	93.RD	U.S. Department of Health & Human Services	1,378	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		SP0040139 60047648 PU-04	93.RD	U.S. Department of Health & Human Services	28,011	(
Research and Development Cluster	U.S. Department of Health & Human Services	Direct		SP0040139 60047653 PU-04	93.RD	U.S. Department of Health & Human Services	161,438	(
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	35,759	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF CALIFORNIA-LOS ANGELES	1930-S-YA349	93.RD	U.S. Department of Health & Human Services	24,728	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-75F-PU-2021-001	93.RD	U.S. Department of Health & Human Services	99,671	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	SRI INTERNATIONAL	PO64784	93.RD	U.S. Department of Health & Human Services	3,415	(
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	111,967	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	NORTHWESTERN UNIVERSITY	SP0040139 60047648 PU OQ	93.RD	U.S. Department of Health & Human Services	151,850	(
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	110,815	(
Research and Development Cluster	U.S. Department of Health & Human Services	Pass-Through	UNIVERSITY OF TEXAS AT AUSTIN	UTAUS-ONF00000079	93.RD	U.S. Department of Health & Human Services	16,899	(
					Total - 93.RD		1,041,499	13,230
Research and Development Cluster	Total - U.S. Department of Health & Human Services						74,032,752	8,733,09
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	NORTHEASTERN UNIVERSITY	505035-78054	97.061	Centers for Homeland Security	12,624	(
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	GEORGE MASON UNIVERSITY	E2042938	97.061	Centers for Homeland Security	72,869	73,848
					Total - 97.061		85,493	73,848
Research and Development Cluster	U.S. Department of Homeland Security	Direct			97.077	Homeland Security Testing, Evaluation, and Demonstration of Technologies	481,573	169,812
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	101869-18172	97.RD	U.S. Department of Homeland Security	96,754	(
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	106487-18811	97.RD	U.S. Department of Homeland Security	18,476	(
Research and Development Cluster	U.S. Department of Homeland Security	Pass-Through	NORTHEASTERN UNIVERSITY	505185-78051	97.RD	U.S. Department of Homeland Security	-210	(
					Total - 97.RD		115,020	(
Research and Development Cluster	Total - U.S. Department of Homeland Security						682,086	243,660
Research and Development Cluster	Agency for International Development	Direct			98.001	USAID Foreign Assistance for Programs Overseas	8,629,629	6,558,214
Research and Development Cluster	Agency for International Development	Pass-Through	CIMMYT, INT.	17121882	98.001	USAID Foreign Assistance for Programs Overseas	33,530	(
Research and Development Cluster	Agency for International Development	Pass-Through	MICHIGAN STATE UNIVERSITY	RC108887-PURDUE	98.001	USAID Foreign Assistance for Programs Overseas	438,184	(
Research and Development Cluster	Agency for International Development	Pass-Through	MICHIGAN STATE UNIVERSITY	RC111143-PURDUE	98.001	USAID Foreign Assistance for Programs Overseas	504,676	179,402
					Total - 98.001		9,606,019	6,737,610
Research and Development Cluster	Agency for International Development	Direct		CIMMYT	98.RD	Agency for International Development	249	(

Subrecipient Expenditures	Federal Expenditures	ALN Program Title	ALN	Award Identifier	Pass-Through Grantor	Туре	Federal Grantor	Clusters
6,737,616	9,606,268						Total - Agency for International Development	Research and Development Cluster
(88,116	Central Intelligence Agency	99.RD	22068384	DEFENSEWERX	Pass-Through	Central Intelligence Agency	Research and Development Cluster
(5,703	Central Intelligence Agency	99.RD	22089314	DEFENSEWERX	Pass-Through	Central Intelligence Agency	Research and Development Cluster
(36,490	Central Intelligence Agency	99.RD	PO#2346080	UNIVERSITY OF VIRGINIA	Pass-Through	Central Intelligence Agency	Research and Development Cluster
(130,309		Total - 99.RD					
	130,309						Total - Central Intelligence Agency	Research and Development Cluster
46,967,314	332,923,273							Total - Research and Development Cluster
(3,078	State Admin Matching Grants for the Supplemental Nutrition Assistance Program		59504	IN STATE DEPARTMENT OF HEALTH	Pass-Through	U.S. Department of Agriculture	SNAP Cluster
(1,310	State Admin Matching Grants for the Supplemental Nutrition Assistance Program	10.561	CONTRACT #29605 (AMD#1)	IN STATE DEPARTMENT OF HEALTH	Pass-Through	U.S. Department of Agriculture	SNAP Cluster
(5,032,867	State Admin Matching Grants for the Supplemental Nutrition Assistance Program		CONTRACT #47205	IN STATE DEPARTMENT OF HEALTH	Pass-Through	U.S. Department of Agriculture	SNAP Cluster
(3,176	State Admin Matching Grants for the Supplemental Nutrition Assistance Program	10.561	CONTRACT #59506	IN STATE DEPARTMENT OF HEALTH	Pass-Through	U.S. Department of Agriculture	SNAP Cluster
ſ	5,040,431		Total - 10.561					
1	5,040,431							Total - SNAP Cluster
C	67,236	Agricultural Research_Basic and Applied Research	10.001			Direct	U.S. Department of Agriculture	
(18,165	Wildlife Services	10.028	57127	IN DEPARTMENT OF NATURAL RESOURCES	Pass-Through	U.S. Department of Agriculture	
(90,466	Federal-State Marketing Improvement Program	10.156	CONTRACT #38350	IN STATE DEPARTMENT OF AGRICULTURE	Pass-Through	U.S. Department of Agriculture	
(33,475	Market Protection and Promotion	10.163			Direct	U.S. Department of Agriculture	
(5,469	Specialty Crop Block Grant Program - Farm Bill	10.170	A337-19-SCBG-18-005	IN STATE DEPARTMENT OF AGRICULTURE	Pass-Through	U.S. Department of Agriculture	
53,953	54,233	Local Food Promotion Program	10.172			Direct	U.S. Department of Agriculture	
(43,810	Acer Access & Development Program	10.174			Direct	U.S. Department of Agriculture	
(1,561	Grants for Agricultural Research, Special Research Grants	10.200			Direct	U.S. Department of Agriculture	
(26,586	Cooperative Forestry Research	10.202			Direct	U.S. Department of Agriculture	
(133,566	Food and Agricultural Sciences National Needs Graduate Fellowship Grants	10.210			Direct	U.S. Department of Agriculture	
(35,494	Sustainable Agriculture Research and Education	10.215	H007179311	UNIVERSITY OF MINNESOTA	Pass-Through	U.S. Department of Agriculture	
(27,853	Sustainable Agriculture Research and Education	10.215	H007179330	UNIVERSITY OF MINNESOTA	Pass-Through	U.S. Department of Agriculture	
20,955	24,616	Sustainable Agriculture Research and Education	10.215	H007813909	UNIVERSITY OF MINNESOTA	Pass-Through	U.S. Department of Agriculture	
(21,704	Sustainable Agriculture Research and Education	10.215	H008568314	UNIVERSITY OF MINNESOTA	Pass-Through	U.S. Department of Agriculture	
(342	Sustainable Agriculture Research and Education	10.215	H008568334	UNIVERSITY OF MINNESOTA	Pass-Through	U.S. Department of Agriculture	
(3,065	Sustainable Agriculture Research and Education	10.215	H009277401	UNIVERSITY OF MINNESOTA	Pass-Through	U.S. Department of Agriculture	
20,955	113,074		Total - 10.215					

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF AR AT PINE BLUFF	229_33_11011002	10.216	1890 Institution Capacity Building Grants	18,786	C
	U.S. Department of Agriculture	Direct			10.217	Higher Education Challenge Grants	129,983	58,998
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ILLINOIS	104641-18555	10.229	Extension Collaborative on Immunization Teaching & Engagement	9,085	
	U.S. Department of Agriculture	Pass-Through	EXTENSION FOUNDATION	EXC1-2021-2060	10.229	Extension Collaborative on Immunization Teaching & Engagement	17,557	(
					Total - 10.229		26,642	c
	U.S. Department of Agriculture	Direct			10.250	Agricultural and Rural Economic Research	70,040	C
	U.S. Department of Agriculture	Direct			10.304	Homeland Security_Agricultural	-9,353	(
	U.S. Department of Agriculture	Direct			10.307	Organic Agriculture Research and Extension Initiative	331,526	150,131
	U.S. Department of Agriculture	Direct			10.310	Agriculture and Food Research Initiative	1,025,891	7,975
	U.S. Department of Agriculture	Pass-Through	MISSISSIPPI STATE UNIVERSITY	018000.342094.03	10.310	Agriculture and Food Research Initiative	9,319	
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF ILLINOIS	103655-18414	10.310	Agriculture and Food Research Initiative	56,960	(
					Total - 10.310		1,092,170	7,975
	U.S. Department of Agriculture	Pass-Through	FARMER VETERAN COALITION	BFRDP NAP OUTREACH 2018	10.311	Beginning Farmer and Rancher Development Program	60,000	
	U.S. Department of Agriculture	Direct			10.328	Natnl Food Safety Training, Educ, Extn, Outreach & Tech Asst Compet.Grant Prog	32,605	(
	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	024575G	10.328	Natnl Food Safety Training, Educ, Extn, Outreach & Tech Asst Compet.Grant Prog	1,158	
	U.S. Department of Agriculture	Pass-Through	IOWA STATE UNIVERSITY	4163031A	10.328	Natnl Food Safety Training, Educ, Extn, Outreach & Tech Asst Compet.Grant Prog	1,359	
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF CALIFORNIA - DAVIS	A21-1335-S003	10.328	Natnl Food Safety Training, Educ, Extn, Outreach & Tech Asst Compet.Grant Prog	36,160	(
					Total - 10.328		71,282	c
	U.S. Department of Agriculture	Direct			10.329	Crop Protection and Pest Management Competitive Grants Program	192,362	
	U.S. Department of Agriculture	Pass-Through	HOOSIER UPLANDS ECONOMIC DEV CORP	2019-77028-29971	10.334	Enhancing Agricultural Opportunities for Military Veterans Competitive Grants	30,090	
	U.S. Department of Agriculture	Direct			10.351	Rural Business Development Grant	45,835	C
	U.S. Department of Agriculture	Direct			10.475	Cooperative Agreements with States for Intrastate Meat and Poultry Inspection	9,672	(
	U.S. Department of Agriculture	Direct			10.500	Cooperative Extension Service	2,108,790	840,093
	U.S. Department of Agriculture	Pass-Through	MISSISSIPPI STATE UNIVERSITY	080300.340955.02	10.500	Cooperative Extension Service	556	(
	U.S. Department of Agriculture	Pass-Through	NORTH CAROLINA STATE UNIVERSITY	2020-0885-01	10.500	Cooperative Extension Service	23,319	(
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA	25-6324-0187-311	10.500	Cooperative Extension Service	21,990	(
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA	25-6324-0187-312	10.500	Cooperative Extension Service	14,322	(
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF NEBRASKA	25-6324-0187-315	10.500	Cooperative Extension Service	5,781	(
	U.S. Department of Agriculture	Pass-Through	KANSAS STATE UNIVERSITY	A00-0349-S002	10.500	Cooperative Extension Service	24,648	(
	U.S. Department of Agriculture	Pass-Through	KANSAS STATE UNIVERSITY	A22-0394-S009	10.500	Cooperative Extension Service	2,000	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	U.S. Department of Agriculture	Pass-Through	ILLINOIS COOPERATIVE EXTENSION SERVICE	PO:P2288730	10.500	Cooperative Extension Service	84,618	
					Total - 10.500		2,286,024	840,09
	U.S. Department of Agriculture	Direct			10.511	Smith-Lever	8,976,562	
	U.S. Department of Agriculture	Direct			10.514	Expanded Food and Nutrition Education Program	1,243,882	
	U.S. Department of Agriculture	Direct			10.515	Renewable Resources Extension Act and National Focus Fund Project	45,475	
	U.S. Department of Agriculture	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	101598-18251	10.525	Farm and Ranch Stress Assistance Network Competitive Grants Program	156,003	
	U.S. Department of Agriculture	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	101598-18253	10.525	Farm and Ranch Stress Assistance Network Competitive Grants Program	29,016	
	U.S. Department of Agriculture	Pass-Through	WASHINGTON STATE UNIVERSITY	139244 SPC002311	10.525	Farm and Ranch Stress Assistance Network Competitive Grants Program	24,494	
	U.S. Department of Agriculture	Pass-Through	IN STATE DEPARTMENT OF AGRICULTURE	CONTRACT #56943	10.525	Farm and Ranch Stress Assistance Network Competitive Grants Program	129,952	
					Total - 10.525		339,465	
	U.S. Department of Agriculture	Pass-Through	INTERNATIONAL EXECUTIVE SERVICE CORPS	215015	10.606	Food for Progress	102,853	
	U.S. Department of Agriculture	Pass-Through	VIRGINIA POLYTECHNIC INST & STATE UNIV	549123-19084	10.674	Forest Products Lab: Technology Marketing Unit (TMU)	26,124	
	U.S. Department of Agriculture	Direct			10.680	Forest Health Protection	18,356	29,60
	U.S. Department of Agriculture	Direct			10.890	Rural Development Cooperative Agreement Program	43,720	10,59
	U.S. Department of Agriculture	Direct			10.960	Technical Agricultural Assistance	159,401	
	U.S. Department of Agriculture	Pass-Through	UNIVERSITY OF WISCONSIN-MADISON	000000703	10.U00	U.S. Department of Agriculture	6,059	
	U.S. Department of Agriculture	Pass-Through	MISSISSIPPI STATE UNIVERSITY	025075	10.U01	U.S. Department of Agriculture	4,508	
	Total - U.S. Department of Agriculture						20,949,536	1,172,31
	U.S. Department of Commerce	Direct			11.023	Science, Technology, Engineering, and Mathematics (STEM) Talent Challenge Progra	50,000	
	U.S. Department of Commerce	Direct			11.303	Economic Development_Technical Assistance	182,854	92,30
	U.S. Department of Commerce	Direct			11.307	Economic Adjustment Assistance	199,130	52,95
	U.S. Department of Commerce	Direct			11.417	Sea Grant Support	2,865,657	1,432,57
	U.S. Department of Commerce	Pass-Through	UNIVERSITY CORP FOR ATMOSPHERIC RESEARCH	SUBAWD001801	11.431	Climate and Atmospheric Research	24,297	
	U.S. Department of Commerce	Direct			11.611*	Manufacturing Extension Partnership	3,772,040	229,00
	U.S. Department of Commerce	Pass-Through	MISSOURI ENTERPRISE	21101569	11.611*	Manufacturing Extension Partnership	3,525	
					Total - 11.611*		3,775,565	229,00
	U.S. Department of Commerce	Direct			11.619	Arrangements for Interdisciplinary Research Infrastructure	4,788	
	U.S. Department of Commerce	Direct		1332KP21FNEEN0020	11.U00	U.S. Department of Commerce	470,767	
	Total - U.S. Department of Commerce						7,573,058	1,806,83
	U.S. Department of Defense	Direct			12.300	Basic and Applied Scientific Research	51,087	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	U.S. Department of Defense	Direct			12.617	Economic Adjustment Assistance for State Governments	697,820	0
	U.S. Department of Defense	Pass-Through	UNIVERSITY OF MICHIGAN	SUBK00011356	12.617	Economic Adjustment Assistance for State Governments	-4	0
					Total - 12.617		697,816	0
	U.S. Department of Defense	Pass-Through	HENRY M JACKSON FOUNDATION	66033-5106	12.750	Uniformed Services University Medical Research Projects	2	0
	U.S. Department of Defense	Pass-Through	HENRY M JACKSON FOUNDATION	5635	12.750	Uniformed Services University Medical Research Projects	366,054	0
	U.S. Department of Defense	Pass-Through	HENRY M JACKSON FOUNDATION	5636	12.750	Uniformed Services University Medical Research Projects	36,023	0
	U.S. Department of Defense	Pass-Through	HENRY M JACKSON FOUNDATION	5797	12.750	Uniformed Services University Medical Research Projects	33,568	0
	U.S. Department of Defense	Pass-Through	HENRY M JACKSON FOUNDATION	5798	12.750	Uniformed Services University Medical Research Projects	82,423	0
					Total - 12.750		518,070	0
	U.S. Department of Defense	Direct			12.800	Air Force Defense Research Sciences Program	33,434	0
	U.S. Department of Defense	Direct			12.903	GenCyber Grants Program	73,779	0
	U.S. Department of Defense	Direct			12.905	CyberSecurity Core Curriculum	2,078,543	929,807
	U.S. Department of Defense	Direct		CONTRACTF41999-20-D-0001	12.U00	U.S. Department of Defense	624,713	0
	U.S. Department of Defense	Pass-Through	EXO-ATMOSPHERIC TECHNOLOGIES LLC	190620-1	12.U01	U.S. Department of Defense	1,527	0
	U.S. Department of Defense	Direct		F1SRQ21092M002	12.U02	U.S. Department of Defense	49,906	0
	U.S. Department of Defense	Pass-Through	HYSONIC TECHNOLOGIES, LLC	21089929	12.U03	U.S. Department of Defense	55,270	0
	U.S. Department of Defense	Pass-Through	TEXAS ENGINEERING EXPERIMENT STATION	22014388	12.U04	U.S. Department of Defense	25,000	0
	U.S. Department of Defense	Direct		F1SRQ21287M001	12.U05	U.S. Department of Defense	7,882	0
	U.S. Department of Defense	Pass-Through	GHKN ENGINEERING, LLC	22079030	12.U06	U.S. Department of Defense	31,783	C
	U.S. Department of Defense	Direct		131221-1	12.U07	U.S. Department of Defense	8,191	0
	Total - U.S. Department of Defense						4,257,001	929,807
	Housing & Urban Development	Pass-Through	FORT WAYNE, CITY OF	CO# 175PF193-5369-3067	14.272	National Disaster Resilience Competition	23,009	0
	Total - Housing & Urban Development						23,009	0
	U.S. Department of Interior	Direct		140G0320P0096	15.U00	U.S. Department of Interior	3	0
	Total - U.S. Department of Interior						3	. 0
	U.S. Department of Justice	Direct			16.839	STOP School Violence	166,428	0
	Total - U.S. Department of Justice						166,428	0
	U.S. Department of Labor	Direct			17.268	H-1B Job Training Grants	1,380,605	606,323
	U.S. Department of Labor	Direct			17.502	Occupational Safety and Health_Susan Harwood Training Grants	24,654	0
	Total - U.S. Department of Labor						1,405,259	606,323

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	U.S. Department of State	Pass-Through	INTERNATIONAL RESEARCH & EXCHANGE BOARD	FY20-YALI-BE-PU-03	19.009	Academic Exchange Programs - Undergraduate Programs	103,777	C
	U.S. Department of State	Pass-Through	INTERNATIONAL RESEARCH & EXCHANGE BOARD	FY22-YALI-BE-PU-04	19.009	Academic Exchange Programs - Undergraduate Programs	57,390	C
					Total - 19.009		161,167	. a
	U.S. Department of State	Direct			19.021	Investing in People in The Middle East and North Africa	96,952	C
	U.S. Department of State	Direct			19.040	Public Diplomacy Programs	130	C
	U.S. Department of State	Direct			19.415	Professional Exchanges_Annual Open Grant	156,226	C
	U.S. Department of State	Direct			19.501	Public Diplomacy Programs for Afghanistan and Pakistan	-1,451	C
	U.S. Department of State	Pass-Through	AMERICAN COUNCILS FOR INTNL EDUC	SUZ800-18-CA-0001	19.900	AEECA/ESF PD Programs	38,784	11,800
	U.S. Department of State	Direct		100820A0336	19.U00	U.S. Department of State	4	C
	Total - U.S. Department of State						451,812	11,800
	U.S. Department of Transportation	Direct			20.106	Airport Improvement Program	706,580	C
	U.S. Department of Transportation	Direct			20.215	Highway Training and Education	6,537	C
	U.S. Department of Transportation	Direct		DTFACT-13-D-00010 0005	20.U00	U.S. Department of Transportation	26,070	C
	Total - U.S. Department of Transportation						739,187	. a
	National Aeronautics & Space Administration	Direct			43.001	Science	186,621	C
	National Aeronautics & Space Administration	Direct			43.008	Education	531,810	217,616
	National Aeronautics & Space Administration	Direct			43.012	Space Technology	517,403	C
	National Aeronautics & Space Administration	Direct		80NSSC19P0397	43.U00	National Aeronautics & Space Administration	923	C
	National Aeronautics & Space Administration	Pass-Through	IN SPACE, LLC	NTPINS-41703-2	43.U01	National Aeronautics & Space Administration	-303	C
	National Aeronautics & Space Administration	Pass-Through	ROCKET PROPULSION SYSTEMS LLC	20067514	43.U02	National Aeronautics & Space Administration	95,633	C
	National Aeronautics & Space Administration	Direct		20112446	43.U03	National Aeronautics & Space Administration	77,530	C
	National Aeronautics & Space Administration	Pass-Through	STENNIS SPACE CENTER	80NSSC20P2088	43.U04	National Aeronautics & Space Administration	39,232	C
	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	T3-0546-FY21	43.U05	National Aeronautics & Space Administration	25,004	C
	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	T3-0583-FY21	43.U06	National Aeronautics & Space Administration	357,937	C
	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	T3-0584-FY21	43.U07	National Aeronautics & Space Administration	239,273	C
	National Aeronautics & Space Administration	Direct		80NSSC21K1643	43.U08	National Aeronautics & Space Administration	39,255	C
	National Aeronautics & Space Administration	Pass-Through	OLD DOMINION UNIV RESEARCH FDN	21112656	43.U09	National Aeronautics & Space Administration	9,000	C
	National Aeronautics & Space Administration	Pass-Through	ULTRAMET	P.O. NO. 18634	43.U10	National Aeronautics & Space Administration	33,481	C
	National Aeronautics & Space Administration	Direct		80NSSC21K1629	43.U11	National Aeronautics & Space Administration	39,827	C
	National Aeronautics & Space Administration	Direct		80NSSC22PA046	43.U12	National Aeronautics & Space Administration	51,087	C

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	National Aeronautics & Space Administration	Pass-Through	ANALYTICAL MECHANICS ASSOC, INC	T3-0651-FY22	43.U13	National Aeronautics & Space Administration	38,013	0
	National Aeronautics & Space Administration	Pass-Through	FRONTIER AEROSPACE CORPORATION	22090356	43.U14	National Aeronautics & Space Administration	10,203	0
	Total - National Aeronautics & Space Administration						2,291,929	217,616
	National Endowment for the Arts & Humanities	Direct			45.129	Promotion of the Humanities_Federal/State Partnership	3,000	0
	National Endowment for the Arts & Humanities	Direct			45.160	Promotion of the Humanities_Fellowships and Stipends	-71,845	0
	National Endowment for the Arts & Humanities	Direct			45.161	Promotion of the Humanities_Research	107,907	0
	National Endowment for the Arts & Humanities	Direct			45.162	Promotion of the Humanities_Teaching and Learning Resources and Curriculum Devel	12,330	0
	National Endowment for the Arts & Humanities	Direct			45.313	Laura Bush 21st Century Librarian Program	111,493	32,145
	National Endowment for the Arts & Humanities	Direct		20-8126	45.U00	National Endowment for the Arts & Humanities	286	0
	Total - National Endowment for the Arts & Humanities						163,171	32,145
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	20089753	59.037	Small Business Development Center	-5,924	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	21068542	59.037	Small Business Development Center	103,862	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	21090667	59.037	Small Business Development Center	76,515	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	21090669	59.037	Small Business Development Center	94,169	0
	Small Business Administration	Pass-Through	OFFICE OF SMALL BUSINESS & ENTRSHP	A229-0-SBA-1021	59.037	Small Business Development Center	-166	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	A229-0-SBA-1038	59.037	Small Business Development Center	100,062	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	A229-1-SBA-1061	59.037	Small Business Development Center	73,467	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	A229-1-SBA-1071	59.037	Small Business Development Center	94,677	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	A229-2-SBA-1069	59.037	Small Business Development Center	116,267	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	CARES ACT SBAHQ20C0040	59.037	Small Business Development Center	24,637	0
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	CARESACT A229-1-SBA-1040	59.037	Small Business Development Center	118,019	19
	Small Business Administration	Pass-Through	IN ECONOMIC DEVELOPMENT CORPORATION	EDS A229-2-SBA-1063	59.037	Small Business Development Center	33,265	0
					Total - 59.037		828,850	19
	Small Business Administration	Direct			59.075	Shuttered Venue Operators Grant Program	625,637	0
	Total - Small Business Administration						1,454,487	, 19
	Department of Veterans Affairs	Direct		583C20272	64.U00	Department of Veteran's Affairs	79,288	0
	Total - Department of Veterans Affairs						79,288	. 0
	Environmental Protection Agency	Direct			66.436	Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooper	38,557	0
	Environmental Protection Agency	Pass-Through	IN DEPARTMENT OF ENVIRONMENTAL MGMT	CONTRACT ID 23109	66.460	Nonpoint Source Implementation Grants	-115	0
	Environmental Protection Agency	Pass-Through	UNIVERSITY OF WISCONSIN-MADISON	SUBAWARD 0000001458	66.475	Gulf of Mexico Program	18,149	0

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	Environmental Protection Agency	Direct			66.700	Consolidated Pesticide Enforcement Cooperative Agreements	757,811	
	Environmental Protection Agency	Pass-Through	IN DEPARTMENT OF ENVIRONMENTAL MGMT	CONTRACT #38626	66.708	Pollution Prevention Grants Program	6,141	
	Environmental Protection Agency	Pass-Through	IN DEPARTMENT OF ENVIRONMENTAL MGMT	CONTRACT #58554	66.708	Pollution Prevention Grants Program	3,655	
					Total - 66.708		9,796	
	Total - Environmental Protection Agency						824,198	
	Nuclear Regulatory Commission	Direct			77.008	Nuclear Regulatory Commission Scholarship & Fellowship Program	306,249	
	Total - Nuclear Regulatory Commission						306,249	
	U.S. Department of Energy	Direct			81.121	Nuclear Energy Research, Development and Demonstration	87,858	
	U.S. Department of Energy	Pass-Through	UNIVERSITY OF KENTUCKY	3200001517-18-076	81.086	U.S. Department of Energy	-1,101	
	U.S. Department of Energy	Pass-Through	LOS ALAMOS NATIONAL LABORATORY	624154	81.U00	U.S. Department of Energy	4,373	
	U.S. Department of Energy	Pass-Through	LOS ALAMOS NATIONAL LABORATORY	629842	81.U01	U.S. Department of Energy	8,859	
	Total - U.S. Department of Energy						99,989	
TRIO Cluster*	U.S. Department of Education	Direct			84.042	TRIO_Student Support Services	918,932	
TRIO Cluster*	U.S. Department of Education	Direct			84.044	TRIO_Talent Search	935,669	
TRIO Cluster*	U.S. Department of Education	Direct			84.047	TRIO_Upward Bound	1,401,522	
TRIO Cluster*	U.S. Department of Education	Direct			84.217A	TRIO_McNair Post-Baccalaureate Achievement	352,099	
Total - TRIO Cluster*							3,608,222	
	U.S. Department of Education	Direct			84.200	Graduate Assistance in Areas of National Need	-20,150	
	U.S. Department of Education	Direct			84.206	Javits Gifted and Talented Students Education Grant Program	451,543	
	U.S. Department of Education	Direct			84.334	Gaining Early Awareness and Readiness for Undergraduate Programs	2,987,142	608,24
	U.S. Department of Education	Direct			84.336	Teacher Quality Enhancement Grants	506,866	
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT# 43709	84.367	Improving Teacher Quality State Grants	309,128	
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT# 47253	84.367	Improving Teacher Quality State Grants	33,180	
					Total - 84.367		342,308	
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT #48827	84.425C*	COVID-19 Governors Emergency Education Relief Fund	809,446	
	U.S. Department of Education	Direct		_	84.425E*	COVID-19 Higher Education Emergency Relief Fund	48,017,992	
	U.S. Department of Education	Direct			84.425F*	COVID-19 Higher Education Emergency Relief Fund	48,039,430	
	U.S. Department of Education	Direct		_	84.425M*	COVID-19 Higher Education Emergency Relief Fund	839,151	
	U.S. Department of Education	Pass-Through	IN DEPARTMENT OF EDUCATION	CONTRACT # 61754	84.425U*	COVID-19 Elementary and Secondary School Emergency Reli	68,525	
	U.S. Department of Education	Pass-Through	INDIANA UNIVERSITY	4228746	84.U00	U.S. Department of Education	451	

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	U.S. Department of Education	Direct		ANTH 523	84.U01	U.S. Department of Education	391	0
	Total - U.S. Department of Education						105,651,317	608,245
Health Center Program Cluster*	U.S. Department of Health & Human Services	Direct			93.224*	Consolidated Health Centers (Community Health Centers, Migrant Health Centers, H	3,189,370	0
Total - Health Center Program Cluster*							3,189,370	0
Medicaid Cluster	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	CONTRACT# 18963	93.778	Medical Assistance Program	566,502	0
Total - Medicaid Cluster							566,502	0
	U.S. Department of Health & Human Services	Direct			93.103	Food and Drug Administration_Research	36,219	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #00062380	93.103	Food and Drug Administration_Research	11,889	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #56495	93.103	Food and Drug Administration_Research	4,878	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #57504	93.103	Food and Drug Administration_Research	19,993	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT ID#30149	93.103	Food and Drug Administration_Research	-16,898	0
	U.S. Department of Health & Human Services	Pass-Through	NATNL INST FOR PHRMCTCL TECH & EDUC	NIPTE-U01-PU-2022-001	93.103	Food and Drug Administration_Research	4,432	0
					Total - 93.103		CO 540	
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT NO 52867	93.136	Injury Prevention and Control Research and State and	60,513 57,033	
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT# 61735	93.136	Community Based Programs Injury Prevention and Control Research and State and	28,244	0
						Community Based Programs		
					Total - 93.136		85,277	
	U.S. Department of Health & Human Services	Direct			93.137	Community Programs to Improve Minority Health Grant Program	26,470	15,000
	U.S. Department of Health & Human Services	Pass-Through	IN STATE OFFICE OF RURAL HEALTH	CONTRACT #47471	93.241	State Rural Hospital Flexibility Program	10,937	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE OFFICE OF RURAL HEALTH	CONTRACT #57361	93.241	State Rural Hospital Flexibility Program	81,472	0
					Total - 93.241		92,409	0
	U.S. Department of Health & Human Services	Direct			93.243	Substance Abuse and Mental Health Services_Projects of Regional and National Sig	31,627	0
	U.S. Department of Health & Human Services	Direct			93.247	Advanced Education Nursing Grant Program	698,977	60,416
	U.S. Department of Health & Human Services	Direct			93.262	Occupational Safety and Health Program	152,942	0
	U.S. Department of Health & Human Services	Pass-Through	HEALTH CARE EDUCATION-TRAINING INC	21047118	93.297	Teenage Pregnancy Prevention Program	4,201	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT # 60019	93.391*	Activities to Support (STLT) Health Department Response to Public Health	357	0
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #55180	93.391*	Activities to Support (STLT) Health Department Response to Public Health	3,479,722	40,257
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #6224	93.391*	Activities to Support (STLT) Health Department Response to	49,879	0
					T-4-1 00 0-11	Public Health		
	U.S. Department of Health & Human Services	Page-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT# 32251	Total - 93.391* 93.426	Improving the Health of Americans through Prevention and	3,529,958 -30,459	
						Management of Diabetes		
	U.S. Department of Health & Human Services	Pass-Through	IN STATE DEPARTMENT OF HEALTH	CONTRACT #44744	93.426	Improving the Health of Americans through Prevention and Management of Diabetes	75,542	0

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
					Total - 93.426		45,083	
	U.S. Department of Health & Human Services	Direct			93.526	Affordable Care Act (ACA) Grants for Capital Development in Health Centers	69,523	(
	U.S. Department of Health & Human Services	Pass-Through	IN FAMILY & SOCIAL SERVICES ADMIN	GRANT ID: 46898	93.788	Opioid STR	492,671	(
	U.S. Department of Health & Human Services	Direct			93.912	Rural Health Care Services Outreach and Rural Health Network Development Program	256,397	38,15
	U.S. Department of Health & Human Services	Pass-Through	INDIANA UNIVERSITY	9017	93.912	Rural Health Care Services Outreach and Rural Health Network Development Program	9,333	(
					Total - 93.912		265,730	38,15
	U.S. Department of Health & Human Services	Direct		IPA - J NWABUEZE	93.U00	U.S. Department of Health & Human Services	888	(
	U.S. Department of Health & Human Services	Direct		IPA - MINH TRI TRAN	93.U01	U.S. Department of Health & Human Services	13,583	(
	U.S. Department of Health & Human Services	Direct		HHSF223201610019C	93.U02	U.S. Department of Health & Human Services	73,623	(
	U.S. Department of Health & Human Services	Direct		20112138	93.U03	U.S. Department of Health & Human Services	16,393	(
	U.S. Department of Health & Human Services	Direct		IPA - KATHRYN COMANICI	93.U04	U.S. Department of Health & Human Services	1,792	
	U.S. Department of Health & Human Services	Direct		IPA - SHANNON ALEXANDER	93.U05	U.S. Department of Health & Human Services	33,333	(
	U.S. Department of Health & Human Services	Direct		IPA - ANES KARIC	93.U06	U.S. Department of Health & Human Services	12,751	(
	U.S. Department of Health & Human Services	Direct		IPA- JOEL NICOLAS	93.U07	U.S. Department of Health & Human Services	19,461	
	U.S. Department of Health & Human Services	Direct		HHSF223201810131C	93.U08	U.S. Department of Health & Human Services	23,891	
	U.S. Department of Health & Human Services	Direct		HHSF223201850066A	93.U09	U.S. Department of Health & Human Services	39,300	(
	U.S. Department of Health & Human Services	Direct		21024825	93.U10	U.S. Department of Health & Human Services	3,625	(
	U.S. Department of Health & Human Services	Direct		HHSF223201850066A	93.U11	U.S. Department of Health & Human Services	52,938	(
	U.S. Department of Health & Human Services	Direct		21112239	93.U12	U.S. Department of Health & Human Services	33,043	(
	Total - U.S. Department of Health & Human Services						9,635,874	153,824
	AmeriCorps	Pass-Through	IN DEPT OF WORKFORCE DEVELOPMENT	56405	94.006	AmeriCorps	76,683	(
	AmeriCorps	Pass-Through	IN DEPT OF WORKFORCE DEVELOPMENT	CONTRACT #57030	94.006	AmeriCorps	73,024	
	AmeriCorps	Pass-Through	IN DEPT OF WORKFORCE DEVELOPMENT	CONTRACT NO 53376	94.006	AmeriCorps	676	(
	AmeriCorps	Pass-Through	SERVE INDIANA	CONTRACT NO 53376	94.006	AmeriCorps	-568	(
					Total - 94.006		149,815	
	Total - AmeriCorps						149,815	
	U.S. Department of Homeland Security	Direct			97.005	State and Local Homeland Security Training Program	511,063	115,78
	Total - U.S. Department of Homeland Security						511,063	115,785
	Agency for International Development	Direct			98.001	USAID Foreign Assistance for Programs Overseas	3,847,913	1,589,013
	Agency for International Development	Pass-Through	PUBLIC HEALTH INSTITUTE	02155	98.001	USAID Foreign Assistance for Programs Overseas	39,456	(

Clusters	Federal Grantor	Туре	Pass-Through Grantor	Award Identifier	ALN	ALN Program Title	Federal Expenditures	Subrecipient Expenditures
	Agency for International Development	Pass-Through	UNIV OF ILLINOIS AT CHAMPAIGN-URBANA	072112-18044	98.001	USAID Foreign Assistance for Programs Overseas	28,842	0
	Agency for International Development	Pass-Through	TUFTS UNIVERSITY	104042	98.001	USAID Foreign Assistance for Programs Overseas	9,785	0
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	A00-0868-S020	98.001	USAID Foreign Assistance for Programs Overseas	81,949	0
	Agency for International Development	Pass-Through	TUFTS UNIVERSITY	AID-OAA-L-10-00006	98.001	USAID Foreign Assistance for Programs Overseas	33,352	0
	Agency for International Development	Pass-Through	U.S. PHARMACOPEIA	PQM+-21-11	98.001	USAID Foreign Assistance for Programs Overseas	21,736	0
	Agency for International Development	Pass-Through	OREGON STATE UNIVERSITY	RD011G-D	98.001	USAID Foreign Assistance for Programs Overseas	10	0
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S19170	98.001	USAID Foreign Assistance for Programs Overseas	135,917	0
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S19172	98.001	USAID Foreign Assistance for Programs Overseas	35,749	0
	Agency for International Development	Pass-Through	KANSAS STATE UNIVERSITY	S19186	98.001	USAID Foreign Assistance for Programs Overseas	104,108	70,117
	Agency for International Development	Pass-Through	PARTNERS OF THE AMERICAS INC	SG-2020-1	98.001	USAID Foreign Assistance for Programs Overseas	142,364	38,839
					Total - 98.001		4,481,181	1,697,969
	Agency for International Development	Pass-Through	UNIV NACIONAL AGRARIA LA MOLINA	7200AA21CA00030	98.012	USAID Development Partnerships for University Cooperation and Development	104,998	0
	Agency for International Development	Pass-Through	RUTGERS, THE STATE UNIVERSITY	5736	98.U00	Agency for International Development	7	0
	Agency for International Development	Direct		720BHA21CA00012	98.U01	Agency for International Development	116,878	65,702
	Agency for International Development	Pass-Through	FLORIDA INTERNATIONAL UNIVERSITY	000447	98.U02	Agency for International Development	79,405	0
	Agency for International Development	Direct		20220114	98.U03	Agency for International Development	28,995	0
	Total - Agency for International Development						4,811,464	1,763,671
Total - Other Programs							161,544,137	7,418,381
Grand Total							723,117,941	54,385,695

PURDUE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS June 30, 2022

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.

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 modified cash basis, the University considers an award 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.

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

PURDUE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS June 30, 2022 (Continued)

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 2021-22 federal capital contributions were:

Balance, July 1, 2021	\$ 4,895,959
Net Federal Capital Contributions: Federal Perkins Loan Program	<u>(2,994,260)</u>
Balance, June 30, 2022	\$ 1, <u>901,699</u>
tudent notes receivable outstanding as of June 30, 2022 were:	

Gross student notes receivable outstanding as of June 30, 2022 were:

Program Title	Federal ALN Number	<u>Amount</u>
Federal Perkins Loan Program	84.038	\$ 6,446,928
Health Professions Student Loans	93.342	<u>3,295,276</u>
Total Student Notes Receivable		\$ <u>9,742,204</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, 2022, the University had the following gross loan activity related to new loans under this program:

<u>Program</u>	Federal ALN <u>Number</u>	Number of Loans Issued	<u>Amount</u>
Federal Stafford Loans	84.268	23,795	\$125,539,679
Federal PLUS Loans	84.268	<u>2,373</u>	<u>40,352,080</u>
Totals		<u>26,168</u>	\$ <u>165,891,759</u>

PURDUE UNIVERSITY NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS June 30, 2022 (Continued)

Note 5. Adjustments and Transfers

As allowable and in accordance with federal regulations issued by the U.S. Department of Education, the University transferred \$608,616 of Federal Work-Study Program (ALN 84.033) funds to the Federal Supplemental Educational Opportunity Grant (ALN 84.007).

The University carried forward \$71,587 of the 2021-2022 Federal Work-Study Program (ALN 84.033) funds to provide aid to students in 2022-2023. In addition, the University carried forward \$93,469 of the 2020-2021 Federal Work-Study Program funds to provide aid to students in 2021-2022.

Note 6. Assistance Listing Numbers

All programs with identifiable Assistance Listing numbers have been listed separately. Award numbers have been provided for all programs for which Assistance Listing numbers were not available. Programs without an identifiable Assistance Listing number are identified by agency number only. If the agency number is not known, the program is listed using an agency number of 99.

Purdue University

Schedule of Findings and Questioned Costs

Year Ended June 30, 2022

Section I - Su	ummary of Auditor's Results		
Financial Statem	ents		
Type of auditor's i	report issued:	Unmodified	
Internal control ov	er financial reporting:		
Material weak	ness(es) identified?	Yes X	No
 Significant deficiency(ies) identified that are not considered to be material weaknesses? 		Yes <u>X</u>	None reported
Noncompliance material to financial statements noted?		YesX	None reported
Federal Awards			
Internal control ov	ver major programs:		
Material weakness(es) identified?		X Yes	No
 Significant deficiency(ies) identified that are not considered to be material weaknesses? 		<u>X</u> Yes	None reported
Any audit findings disclosed that are required to be reported in accordance with Section 2 CFR 200.516(a)?		<u>X</u> Yes	No
Identification of m	ajor programs:		
ALN	Name of Federal Program	n or Cluster	Opinion
Various 11.611 93.391	11.611Manufacturing Extension PartnershipUnmo93.391Activities to Support (STLT) Health Department Response to Public		Unmodified Unmodified Unmodified
93.224Health Center Program Cluster84.425COVID-19 Education Stabilization Fund		Unmodified Unmodified Unmodified	
Dollar threshold u type A and typ	sed to distinguish between e B programs:	\$3,000,000	
Auditee qualified as low-risk auditee? Yes X No		No	

Section II - Financial Statement Audit Findings

Current Year None

Year Ended June 30, 2022

Section III - Federal Program Audit Findings

Reference Number Finding

2022-001 Assistance Listing Number, Federal Agency, and Program Name

Federal Agency: Department of Education Federal Programs: Federal Supplemental Educational Opportunity Grants (FSEOG), Federal Pell Grant Program, Federal Direct Student Loans Assistance Listing Numbers: 84.007, 84.063, 84.268

Finding Type - Significant deficiency

Repeat Finding - Yes

2021-004

Criteria

34 CFR 668.173 states in part that there is a timely return of Title IV, HEA program funds in accordance with procedures established by the secretary or FFEL Program lender if an institution initiates an electronic funds transfer (EFT) or issues a check no later than 45 days after the date it determines that the student withdrew.

Condition

Special Tests and Provisions - Return of Title IV Funds

The Purdue Fort Wayne (PFW) campus did not properly design or implement an effective internal control system to ensure compliance with requirement for timely return of funds related to the Special Tests and Provisions - Return of Title IV Funds. Specifically, there was a lack of timeliness in initiating a return of Title IV funds, causing a return to be issued more than 45 days after the date the University became aware of a student's withdrawal date.

Questioned Costs

There were no questioned costs identified.

Context

During our testing of the University's return of Title IV calculations, we noted 1 out of 13 students tested at the Purdue Fort Wayne campus (1 out of 40 students total tested) had return of Title IV funds that were returned outside of the timeliness requirement.

Cause and Effect

The Purdue Fort Wayne campus experienced turnover in the student financial aid director position in the fall of 2021. The temporary lack of staff resources caused the campus to have a failure in following internal policies and resulted in an untimely return of Title IV funds exceeding 45 days after the date the University became aware of a student's withdrawal date, which was not in compliance with the established return of Title IV policy.

Recommendation

We recommend that the Purdue Fort Wayne campus modify its existing internal control structure to ensure returns of Title IV funds are initiated timely, regardless of staff resource constraints, to ensure compliance with the Special Tests and Provisions - Return of Title IV Funds compliance requirements.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding	
2022-001	Views of Responsible Officials and Corrective Action Plan	
(Continued)	The PFW office of financial aid has an established Return of Title Four Aid (R2T4) policy and	

Ine PFW office of financial aid has an established Return of Title Four Aid (R214) policy and underlying control structure in place to ensure compliance with the R2T4 requirements. The PFW office of financial aid will enhance its current R2T4 policy and procedure to include a stepby-step process to completing an R2T4. This will ensure that, in the absence of the assistant director of loans (who is currently responsible for R2T4 calculation completion), a succession list determining who is next in line to complete R2T4 calculations will be established to ensure these are completed in the 45-day window.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference	
Number	Finding

2022-002 Assistance Listing Number, Federal Agency, and Program Name

Federal Agency: Department of Education Federal Program: COVID-19 Education Stabilization Fund Assistance Listing Number: 84.425F

Finding Type - Significant deficiency

Repeat Finding - No

Criteria

Uniform Guidance (2 CFR 200.303(a)) requires nonfederal entities receiving federal awards to establish and maintain effective internal control to reasonably ensure compliance with federal statutes, regulations, and the terms and conditions of the federal award. Effective internal controls should include procedures to ensure expenses are recorded only when purchased goods or services have been received. Costs should be determined in accordance with generally accepted accounting principles (GAAP) as described in 2 CFR Part 200.

Condition

The Purdue Fort Wayne campus did not have adequate controls in place to ensure invoices related to technology services were properly recorded in accordance with GAAP.

Questioned Costs

There were no questioned costs identified.

Context

During our testing of expenditures, we noted 2 out of 32 HEERF institutional portion expenditure samples tested included expenses initially recorded in the improper period and improperly included on the SEFA. The identified error was \$301,717 and was removed from the SEFA as of June 30, 2022.

Cause and Effect

The failure to establish an effective internal control to review technology services expenditures caused the Purdue Fort Wayne campus to improperly include expenses related to fiscal year 2023 in fiscal year 2022, which was not in compliance with generally accepting accounting principles.

Recommendation

We recommend that the Purdue Fort Wayne campus ensure employees receive proper training to ensure policies and procedures are followed and expenditures are recorded in the proper period.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2022-002 (Continued)	Views of Responsible Officials and Planned Corrective Actions The University system, including the Purdue Fort Wayne (PFW) Campus, has internal controls and training in place related to noncatalog purchases and the review of goods receipt/invoice receipt (GRIR) discrepancies. In the case of these two purchase orders, it appears these were isolated instances where established controls were not fully implemented as designed. These processes will be covered in staff meetings on all campuses and procurement services will review and update noncatalog order instructions and GRIR report documentation to ensure clear guidance is given.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference	
Number	Finding

2022-003 Assistance Listing Number, Federal Agency, and Program Name

Federal Agency: Department of Education Federal Program: COVID-19 Education Stabilization Fund Assistance Listing Number: 84.425F

Finding Type - Material weakness

Repeat Finding - Yes

2021-003

Criteria

The Coronavirus Aid, Relief, and Economic Security (CARES) Act Section 18004(e) and the Coronavirus Response and Relief Supplemental Appropriations Act, 2021 Section 314(e) require an institution receiving funds under HEERF I and HEERF II to submit a report to the secretary, at such time and in such a manner as the secretary may require. American Rescue Plan Section 2003 specifies that the same terms and conditions of CRRSAA Section 314 apply to HEERF III funds. While the acts do not explicitly identify procedures by which institutions must report on their uses of HEERF grant funds, pursuant to these requirements, the Department of Education required quarterly public reporting of student portion and institutional portion awards.

Uniform Guidance (2 CFR 200.303(a)) requires nonfederal entities receiving federal awards to establish and maintain effective internal control to reasonably ensure compliance with federal statutes, regulations, and the terms and conditions of the federal award. Effective internal controls should include procedures to ensure reports include accurate and complete information and are submitted timely.

Condition

The University did not properly design or implement an effective internal control system to ensure HEERF reports were properly completed and posted.

Questioned Costs

There were no questioned costs identified.

Context

During our testing, we tested one annual report and six quarterly reports submitted by the University. The Purdue Northwest (PNW) campus and Purdue Fort Wayne (PFW) campus did not comply with the HEERF student portion reporting requirement for the quarter ended December 31, 2021 and the quarter ended March 31, 2022, failing to complete quarterly reporting on their websites related to the HEERF student portion. PNW subsequently updated its website on April 10, 2022 and PFW subsequently updated its website on September 30, 2022 to report cumulative information for the HEERF student portion.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference Finding

2022-003 Cause and Effect

(Continued)

PNW and PFW campuses had not developed a system of internal controls to ensure reports are completed timely and reviewed and submitted in accordance with HEERF reporting requirements.

The failure to establish an effective internal control caused required reports to not be completed for PNW and PFW campuses.

Recommendation

We recommend the PNW and PFW campuses modify existing internal control structures to include internal controls that would ensure compliance with HEERF reporting requirements.

Views of Responsible Officials and Planned Corrective Actions

The PFW office of financial aid director will complete the quarterly reports, and a dual review process will be implemented to ensure accuracy. The quarterly report will be updated on the HEERF site and sent to the assistant director of enrollment and institutional scholarships to post. The information posted will be compared to the reports submitted quarterly.

PNW acknowledges that, while it had the appropriate Institutional HERF reporting completed, they missed updating the required student portion questions and answers that get posted to the reporting webpage. Once that was discovered, it was corrected in April 2022. PNW has ensured that the process now identifies looking at both the combined (updated) reporting PDF and the questions and answers that are required to be posted to the reporting webpage.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference	
Number	Finding

2022-004 Assistance Listing Number, Federal Agency, and Program Name

Federal Agency: Department of Education Federal Programs: TRIO Student Support Services, TRIO Talent Search, TRIO Upward Bound, and TRIO McNair Post-Baccalaureate Achievement Assistance Listing Numbers: 84.042, 84.044, 84.047, and 84.217

Finding Type - Significant deficiency

Repeat Finding - No

Criteria

Uniform Guidance (2 CFR 200.510(b)) requires a schedule of expenditures of federal awards (SEFA) that must provide total federal awards expended for each individual federal program and the Assistance Listing Number (ALN) or other identifying number when the Assistance Listing information is not available. For a cluster of programs, the schedule of expenditures of federal awards must also provide the total for the cluster.

Condition

Purdue did not have adequate controls in place to ensure the SEFA was prepared to include appropriate ALNs for each federal program and federal programs were included in the appropriate cluster.

Questioned Costs

There were no questioned costs identified.

Context

During our review of the University's SEFA, we noted one TRIO grant with expenditures of \$275,851 that were improperly included within the Research and Development cluster, rather than the TRIO cluster. The University completed an additional review of the SEFA, identifying an additional TRIO grant with expenditures of \$352,099 that were being presented under a placeholder Department of Education ALN and not properly adjusted to the proper ALN. As a result, the TRIO cluster on the SEFA was updated to reflect total expenditures of \$3,608,222, which surpassed the Type A threshold and were required to be tested as a major program. The University conducted a full review of ALNs, and, as a result, 51 ALNs were adjusted. No additional cluster changes were identified.

Cause and Effect

Purdue University did not have adequate processes and internal control structure in place to ensure appropriate ALNs were ultimately assigned to all grants and that all grants were included in the appropriate cluster. As a result, the TRIO cluster on the SEFA was updated to reflect total expenditures of \$3,608,222, which surpassed the Type A threshold and were required to be tested as a major program.

Recommendation

We recommend that the University refine its processes and modify its existing internal control structure in place to ensure appropriate ALNs are assigned to all grants and that all grants are included in the appropriate cluster.

Year Ended June 30, 2022

Section III - Federal Program Audit Findings (Continued)

Reference Number	Finding
2022-004	Views of Responsible Officials and Planned Corrective Actions
(Continued)	 A report has been created to identify all grants assigned a placeholder ALN.
	 This ALN report will be reviewed monthly by the senior manager of the Award Set-Up Team in Post Award to ensure all placeholder ALNs are appropriately and timely corrected once the proper ALN is known.
	 Annually, as the SEFA is prepared, a full review of all grants assigned a placeholder ALN will be conducted by the assistant director of Post Award and the assistant director of Research Quality Assurance and any misassigned ALNs will be appropriately corrected before the SEFA is created.