Michigan State University

Federal Awards
Supplemental Information
June 30, 2018

Michigan State University

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Suite 100 1111 Michigan Ave. East Lansing, MI 48823 Tel: 517.332.6200 Fax: 517.332.8502 plantemoran.com

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

Independent Auditor's Report

To the Board of Trustees Michigan State University

We have audited the basic financial statements of Michigan State University (the "University") and its discretely presented component unit as of and for the year ended June 30, 2018 and the related notes to the financial statements, which collectively comprise the University's basic financial statements. We issued our report thereon dated October 25, 2018, which contained an unmodified opinion on the financial statements and its component unit. 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 25, 2018. We did not audit the financial statements of Michigan State University Foundation (the "Foundation"), which represent all of the assets, net assets, and revenue of the discretely presented component unit. Those financial statements were audited by other auditors, whose report thereon has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Foundation, is based on the report of the other auditors.

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 or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Plante & Moran, PLLC

February 21, 2019



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

Independent Auditor's Report

To Management and the Board of Trustees Michigan State University

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Michigan State University (the "University") and its discretely presented component unit as of and for the year ended June 30, 2018 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 25, 2018. Our report includes a reference to other auditors who audited the financial statements of Michigan State University Foundation (the "Foundation"), as described in our report on the Michigan State University's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. The financial statements of the Foundation were not audited in accordance with *Government Auditing Standards*.

Internal Control Over Financial Reporting

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

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

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

Compliance and Other Matters

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



To Management and the Board of Trustees Michigan State University

Purpose of this Report

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

Plante & Moran, PLLC

October 25, 2018



Suite 100 Suite 100 1111 Michigan Ave. East Lansing, MI 48823 Tel: 517.332.6200 Fax: 517.332.8502 plantemoran.com

Report on Compliance for Each Major Federal Program and Report on Internal Control Over Compliance

Independent Auditor's Report

To the Board of Trustees Michigan State University

Report on Compliance for Each Major Federal Program

We have audited Michigan State University's (the "University") compliance with the types of compliance requirements described in the U.S. Office of Management and Budget (OMB) Compliance Supplement that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2018. 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.

Michigan State University's basic financial statements include the operations of Michigan State University Foundation (the "Foundation"). Our audit, described below, did not include the operations of the Foundation because the Foundation did not expend any federal awards during the year ended June 30, 2018.

Management's Responsibility

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

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the University's major federal programs based on our audit of the types of compliance requirements referred to above.

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

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

Opinion on Each Major Federal Program

In our opinion, the University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of the major federal programs for the year ended June 30, 2018.



To the Board of Trustees Michigan State University

Report on Internal Control Over Compliance

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

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

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

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

Flante & Moran, PLLC

February 21, 2019

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Research and Development Cluster:						
Agriculture	Direct	10	E17-87	U.S. ENDOWMENT FOR FORESTRY & COMMUNITIES, INC.	\$ 29,420	\$ -
Agriculture	Direct	10	12-JV-11242302-114	USDA - FOREST SERVICE	58	-
Agriculture	Direct	10	16-JV-11242305-055	USDA - FOREST SERVICE	96,640	-
Agriculture Agriculture	Direct	10	12-JV-11242306-067	USDA - FOREST SERVICE USDA - FOREST SERVICE	(1,630)	-
· ·	Direct Direct	10 10	14-CS-11052007-030 14-JV-11272139-016	USDA - FOREST SERVICE	105,652 693	-
Agriculture Agriculture	Direct	10	14-PA-11091000-020	USDA - FOREST SERVICE	77,605	
Agriculture	Direct	10	16-CR-11242303-136	USDA - FOREST SERVICE	11,840	_
Agriculture	Direct	10	4300501633	USDA - FOREST SERVICE	37,524	_
Agriculture	Direct	10.001	58-1265-2-036	USDA - AGRI RESEARCH SERV US D	17,037	_
Agriculture	Direct	10.001	58-3060-5-033	USDA - AGRI RESEARCH SERV US D	(171)	-
Agriculture	Direct	10.001	58-3060-6-031	USDA - AGRI RESEARCH SERV US D	4,323	-
Agriculture	Direct	10.001	58-3607-3-985	USDA - AGRI RESEARCH SERV US D	33,667	-
Agriculture	Direct	10.001	58-3655-2-635	USDA - AGRI RESEARCH SERV US D	(2)	-
Agriculture	Direct	10.001	58-3655-4-042	USDA - AGRI RESEARCH SERV US D	24,761	-
Agriculture	Direct	10.001	58-3655-4-044	USDA - AGRI RESEARCH SERV US D	8,265	-
Agriculture	Direct	10.001	58-5012-7-023	USDA - AGRI RESEARCH SERV US D	3,490	-
Agriculture	Direct	10.001	58-5012-8-009	USDA - AGRI RESEARCH SERV US D	7,280	-
Agriculture	Direct	10.001	58-5050-5-016	USDA - AGRI RESEARCH SERV US D	34,991	-
Agriculture	Direct	10.001	58-5050-6-008	USDA - AGRI RESEARCH SERV US D	21,030	-
Agriculture	Direct	10.001	58-5050-6-009	USDA - AGRI RESEARCH SERV US D	25,020	-
Agriculture	Direct	10.001	58-5050-7-002	USDA - AGRI RESEARCH SERV US D	1,742	-
Agriculture	Direct	10.001	58-5050-7-005	USDA - AGRI RESEARCH SERV US D	176,718	-
Agriculture	Direct	10.001	58-5050-7-006	USDA - AGRI RESEARCH SERV US D	90,641	=
Agriculture	Direct	10.001	58-5080-5-009	USDA - AGRI RESEARCH SERV US D	14,191	-
Agriculture	Direct	10.001	58-5442-4-016	USDA - AGRI RESEARCH SERV US D	45,561	-
Agriculture	Direct	10.001	58-5442-4-017	USDA - AGRI RESEARCH SERV US D	68,742	-
Agriculture	Direct	10.001	58-6040-6-029	USDA - AGRI RESEARCH SERV US D	6,844	-
Agriculture	Direct	10.001	58-6040-7-006	USDA - AGRI RESEARCH SERV US D	7,495	-
Agriculture	Direct	10.001	58-6040-7-023	USDA - AGRI RESEARCH SERV US D	22,172	-
Agriculture	Direct	10.001	58-6040-7-025	USDA - AGRI RESEARCH SERV US D	12,534	-
Agriculture	Direct	10.001	58-6040-8-012	USDA - AGRI RESEARCH SERV US D	3,692	-
Agriculture	Direct	10.001	58-6040-8-013	USDA - AGRI RESEARCH SERV US D	3,596	-
Agriculture	Direct	10.001	58-8010-5-020	USDA - AGRI RESEARCH SERV US D	30,931	-
Agriculture	Direct	10.001 10.001	58-8030-6-004	USDA - AGRI RESEARCH SERV US D USDA - AGRI RESEARCH SERV US D	23,600 11,000	-
Agriculture Agriculture	Direct Direct	10.001	58-8042-7-083 58-8060-6-009	USDA - AGRI RESEARCH SERV US D	49,219	-
Agriculture	Direct	10.001	58-8062-5-036	USDA - AGRI RESEARCH SERV US D	141,357	-
Agriculture	Direct	10.001	59-0206-4-001	USDA - AGRI RESEARCH SERV US D	110,912	
Agriculture	Direct	10.001	59-0206-4-008	USDA - AGRI RESEARCH SERV US D	88,752	
Agriculture	Direct	10.001	59-0206-4-037	USDA - AGRI RESEARCH SERV US D	23,135	_
Agriculture	Direct	10.001	59-0206-6-003	USDA - AGRI RESEARCH SERV US D	79,674	_
Agriculture	Direct	10.001	59-0206-6-004	USDA - AGRI RESEARCH SERV US D	42,358	_
Agriculture	Direct	10.001	59-0206-6-004	USDA - AGRI RESEARCH SERV US D	21,549	_
Agriculture	Direct	10.001	59-2080-8-001	USDA - AGRI RESEARCH SERV US D	98,179	_
Agriculture	Direct	10.001	59-3040-5-001	USDA - AGRI RESEARCH SERV US D	22,605	-
Agriculture	Direct	10.001	59-5012-6-001	USDA - AGRI RESEARCH SERV US D	(14)	-
Agriculture	Direct	10.001	59-5050-7-001	USDA - AGRI RESEARCH SERV US D	113,979	-
Agriculture	Direct	10.001	59-5090-5-004	USDA - AGRI RESEARCH SERV US D	25,836	-
Agriculture	Direct	10.001	ARS-58-3040-8-010	USDA - AGRI RESEARCH SERV US D	35,188	-
Agriculture	Direct	10.025	15-8130-0254-CA	USDA - ANIMAL AND PLT HTL INSP SER	(8,275)	968
Agriculture	Direct	10.025	15-8130-0324-CA	USDA - ANIMAL AND PLT HTL INSP SER	24,493	-
Agriculture	Direct	10.025	15-8130-0540-CA	USDA - ANIMAL AND PLT HTL INSP SER	17,298	-
Agriculture	Direct	10.025	16-8130-0024-CA	USDA - ANIMAL AND PLT HTL INSP SER	46,217	-
Agriculture	Direct	10.025	16-8130-0666-CA	USDA - ANIMAL AND PLT HTL INSP SER	41,381	-
Agriculture	Direct	10.025	AP17PPQS&T00C002	USDA - ANIMAL AND PLT HTL INSP SER	23,636	-
Agriculture	Direct	10.025	AP17PPQS&T00C017	USDA - ANIMAL AND PLT HTL INSP SER	89,646	-
Agriculture	Direct	10.025	AP17PPQS&T00C173	USDA - ANIMAL AND PLT HTL INSP SER	456	-
Agriculture	Direct	10.025	AP18PPQFO000C003	USDA - ANIMAL AND PLT HTL INSP SER	176	-
Agriculture	Direct	10.025	APHIS AP18PPQS&T00C030	USDA - ANIMAL AND PLT HTL INSP SER	1,243	-
Agriculture	Direct	10.028	APHIS 15-7488-1077-CA	USDA - ANIMAL AND PLT HTL INSP SER	1,776	-
Agriculture	Direct	10.164	15-TMXXX-MI-0002	USDA - AGRI MARKETING SERV US DEPT AGR	2,591	-
Agriculture	Direct	10.164	15-TMXXX-MI-0001	USDA - AGRI MARKETING SERV US DEPT AGR	968	-
Agriculture	Direct	10.164	16-TMMSD-MI-0005	USDA - AGRI MARKETING SERV US DEPT AGR	57,429	-
Agriculture	Direct	10.164	16-TMMSD-MI-0012	USDA - AGRI MARKETING SERV US DEPT AGR	21,839	-
Agriculture	Direct	10.164	17-TMMSD-MI-0001	USDA - AGRI MARKETING SERV US DEPT AGR	23,571	42.405
Agriculture	Direct Direct	10.200	2014-34141-22487 2015-34383-23852	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	29,861	43,485
Agriculture		10.200		USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	637,493	398,207
Agriculture	Direct	10.200	2016-34141-25707 2016-70007-25756	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	596,403	396,207
Agriculture	Direct	10.200			169,826	-
Agriculture	Direct Direct	10.200 10.202	2017-34383-27028 32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	975,740 59,199	-
Agriculture Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	50,343	-
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	49,562	
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	45,315	-
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	30,000	-
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	29,104	_
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	27,752	_
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	21,454	-
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,723	-
Agriculture	Direct	10.202	32100-06026 MCINTIRE-STENNIS	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	3,266	-
Agriculture	Direct	10.202	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	980,795	-
Agriculture	Direct	10.203	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	944,671	-
Agriculture	Direct	10.203	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	906,629	-
Agriculture	Direct	10.203	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	755,918	-
Agriculture	Direct	10.203	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	409,367	-
Agriculture	Direct	10.203	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	324,485	-

Page		Direct/	CFDA			Total	
	Federal Agency			Award Number	Grantor Name		Subaward Payments
APTORDER							
April		Direct	10.203	31100-60263 HATCH	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	\$ 192,462	\$ -
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Particular							-
April Control Discript Disc							-
Aproxime							-
Agriculture							-
Agriculture	Agriculture	Direct	10.203			59,202	-
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Agriculture							-
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Agriculture	Agriculture				USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE		-
Agriculture							-
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Agriculture Direct 12,233 1220-04026. INCID MULTISTATE 105A- NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 1,5891 1,589		Direct	10.203	31200-06026 HATCH MULTISTATE	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	18,375	-
Agriculure							-
Agriculture							-
Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONALA INSTITUTE OF FOOD AND AGRICULTURE 13,146 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONALA INSTITUTE OF FOOD AND AGRICULTURE 13,185 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONALA INSTITUTE OF FOOD AND AGRICULTURE 13,185 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONALA INSTITUTE OF FOOD AND AGRICULTURE 8,423 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 6,522 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 5,523 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 5,523 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 5,523 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 5,523 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 5,523 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 2,568 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 2,568 - Agriculture Direct 10.203 31200-60006 HATCH MULTISATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 2,568 - AGRICULTURE 2,568	•						-
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Agriculture		Direct	10.203	31200-06026 HATCH MULTISTATE		13,185	-
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Agriculture Direct 10.203 31200 00026 HATCH MULTISTATE USDA - NATIONAL INSTITUT OF FOOD AND AGRICULTURE 414 414 415	Agriculture						-
Agriculture Direct 10.208 31200 00505 HATCH MUITSTATE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 4.144 4.475 4.47							-
Agriculture							-
Agriculture Direct 10.207 35100-96028 ANIMAL HEALTH USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 11,765 - Agriculture Direct 10.207 35100-96028 ANIMAL HEALTH USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 10,509 - Agriculture Direct 10.207 35100-96028 ANIMAL HEALTH USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 2,550 - Agriculture Direct 10.207 35100-96028 ANIMAL HEALTH USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 1,902 - Agriculture Direct 10.219 2013-33522-21090 USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 31,375 - Agriculture Direct 10.303 2013-51106-20044 USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 6,677 - Agriculture Direct 10.303 2015-51106-23876 USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 6,622 6,666 Agriculture Direct 10.303 2015-51106-23876 USBA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 6,222 6,666 Agriculture Direct 10.303 <td>Agriculture</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>	Agriculture						-
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Agriculture Direct 10.310 2013-67019-2137 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 26,051 43,861 Agriculture Direct 10.310 2013-68004-20371 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 359,802 125,262 Agriculture Direct 10.310 2013-68004-20439 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 359,485 115,934 Agriculture Direct 10.310 2014-67009-22310 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 386,088 264,350 Agriculture Direct 10.310 2014-67015-21619 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 34,185 -	Agriculture	Direct	10.310	2013-67015-20962	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	13,569	=
Agriculture Direct 10.310 2013-68004-20371 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 359,802 125,262 Agriculture Direct 10.310 2014-67009-22310 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 359,485 115,934 Agriculture Direct 10.310 2014-67009-22310 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 386,088 264,350 Agriculture Direct 10.310 2014-67015-21619 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 243,185 -							42.064
Agriculture Direct 10.310 2013-68004-20439 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 359,485 115,934 Agriculture Direct 10.310 2014-67009-22310 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 386,088 264,350 Agriculture Direct 10.310 2014-67015-21619 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 243,185 - 243,185							
Agriculture Direct 10.310 2014-67015-21619 USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE 243,185 -	Agriculture	Direct	10.310	2013-68004-20439	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	359,485	115,934
							264,350
20/100	Agriculture	Direct	10.310	2014-67015-21639	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	107,286	-

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster						
(continued): Agriculture	Direct	10.310	2014-67015-21708	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	\$ 725	\$ -
Agriculture	Direct	10.310	2014-67015-21832	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	203,272	74,445
Agriculture	Direct	10.310	2014-68004-21881	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	180,981	-
Agriculture	Direct	10.310	2014-68004-21952	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	138,990	-
Agriculture Agriculture	Direct Direct	10.310 10.310	2014-68004-21972 2014-68006-21828	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	39,730 92,011	-
Agriculture	Direct	10.310	2014-68006-21863	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	110,581	86,457
Agriculture	Direct	10.310	2014-68006-21869	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	66,421	-
Agriculture	Direct	10.310	2014-68006-21870	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	69,400	-
Agriculture	Direct	10.310	2014-68006-21870	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	1,567	-
Agriculture	Direct Direct	10.310 10.310	2014-68006-21870 2015-67013-22932	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	(53) 80,931	10,647
Agriculture Agriculture	Direct	10.310	2015-67013-22952	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	211,545	10,647
Agriculture	Direct	10.310	2015-67015-23207	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	109,244	-
Agriculture	Direct	10.310	2015-67017-28336	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	53,637	-
Agriculture	Direct	10.310	2015-67019-23007	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	54,197	43,921
Agriculture	Direct	10.310	2015-67028-23510	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	79,177	-
Agriculture Agriculture	Direct Direct	10.310 10.310	2015-67028-23652 2015-67030-25204	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	40,471 7,767	-
Agriculture	Direct	10.310	2015-68001-23239	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	664,498	345,918
Agriculture	Direct	10.310	2015-68003-23415	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	668,648	249,064
Agriculture	Direct	10.310	2015-68007-23133	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	1,116,200	168,283
Agriculture	Direct	10.310	2016-67011-24713	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	19,676	-
Agriculture	Direct	10.310 10.310	2016-67011-24726 2016-67011-25205	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	15,074	-
Agriculture Agriculture	Direct Direct	10.310	2016-67011-25205	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	1,732 55,001	-
Agriculture	Direct	10.310	2016-67015-24891	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	142,097	68,613
Agriculture	Direct	10.310	2016-67015-24898	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	175,911	-
Agriculture	Direct	10.310	2016-67015-28200	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	16,584	-
Agriculture	Direct	10.310	2016-67017-24514	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	169,193	-
Agriculture	Direct Direct	10.310 10.310	2016-68004-24931 2016-68004-24931	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	863,222 8,100	680,053
Agriculture Agriculture	Direct	10.310	2016-68006-24852	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	120,200	21,000
Agriculture	Direct	10.310	2017-67007-25947	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	70,686	14,988
Agriculture	Direct	10.310	2017-67007-26176	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	90,459	4,461
Agriculture	Direct	10.310	2017-67011-26038	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	32,654	-
Agriculture	Direct	10.310	2017-67011-26042	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	48,995	-
Agriculture Agriculture	Direct Direct	10.310 10.310	2017-67011-26073 2017-67011-26074	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	40,266 34,979	-
Agriculture	Direct	10.310	2017-67013-26257	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	98,157	-
Agriculture	Direct	10.310	2017-67015-26084	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	300,695	-
Agriculture	Direct	10.310	2017-67015-26673	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	173,641	=
Agriculture	Direct	10.310	2017-67015-26676	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	70,659	=
Agriculture	Direct	10.310	2017-67015-26806	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	88,433	-
Agriculture Agriculture	Direct Direct	10.310 10.310	2017-67017-26168 2017-67017-26528	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	146,085 145,474	-
Agriculture	Direct	10.310	2017-67023-26271	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	35,808	-
Agriculture	Direct	10.310	2017-67023-26395	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	25,814	=
Agriculture	Direct	10.310	2017-68004-26323	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	362,821	14,218
Agriculture	Direct	10.310	2018-67003-27406	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	53,486	-
Agriculture	Direct	10.310	2018-67013-27404	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	600	=
Agriculture Agriculture	Direct Direct	10.310 10.310	2018-67013-27424 2018-67013-27457	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	85,228 36,804	-
Agriculture	Direct	10.310	2018-67013-27592	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	26,002	=
Agriculture	Direct	10.310	2018-67013-28065	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	17,870	=
Agriculture	Direct	10.310	2018-67015-28288	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	285	=
Agriculture	Direct	10.310	2018-67017-27876	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	9,268	-
Agriculture	Direct Direct	10.310 10.310	2018-67021-27967 2018-67030-28150	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	14,602	-
Agriculture Agriculture	Direct	10.310	2018-68008-27887	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	3,257 7,346	444
Agriculture	Direct	10.310	3014-67003-21812	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	136,716	103,998
Agriculture	Direct	10.311	2015-70017-22856	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	220,382	67,080
Agriculture	Direct	10.329	2015-70006-24280	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	21,959	=
Agriculture	Direct	10.500	2013-48765-21544 FE-CR-16-005	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	295,583	231,154
Agriculture Agriculture	Direct Direct	10.613 10.652	13-JV-11242303-078	USDA - FOREIGN AGRICULTURAL SERVICE USDA - FOREST SERVICE	198,847 35,458	-
Agriculture	Direct	10.652	13-JV-11242306-055	USDA - FOREST SERVICE	144,999	_
Agriculture	Direct	10.674	15-CA-11420004-084	USDA - FOREST SERVICE	63,147	-
Agriculture	Direct	10.678	15-CS-11083601-002	USDA - FOREST SERVICE	94,910	-
Agriculture	Direct	10.678	15-JV-11242303-067	USDA - FOREST SERVICE	15,754	-
Agriculture	Direct	10.678 10.680	15-JV-11242315-036 14-CA-11420004-054	USDA - FOREST SERVICE USDA - FOREST SERVICE	8,157 6,887	-
Agriculture Agriculture	Direct Direct	10.680	14-CA-11420004-034 14-CA-11420004-201	USDA - FOREST SERVICE	84,431	-
Agriculture	Direct	10.680	14-DG-11420004-059	USDA - FOREST SERVICE	2	=
Agriculture	Direct	10.680	14-JV-11242307-114	USDA - FOREST SERVICE	16,900	-
Agriculture	Direct	10.680	14-JV-11242313-149	USDA - FOREST SERVICE	2,536	=
Agriculture	Direct	10.680	15-CA-11420004-102	USDA - FOREST SERVICE	10,535	-
Agriculture Agriculture	Direct Direct	10.680 10.680	15-DG-11420004-222 16-CA-11420004-072	USDA - FOREST SERVICE USDA - FOREST SERVICE	52,328 55,089	-
Agriculture Agriculture	Direct	10.680	16-CA-11420004-072 16-DG-11420004-081	USDA - FOREST SERVICE USDA - FOREST SERVICE	39,737	-
Agriculture	Direct	10.680	17-CA-11420004-081	USDA - FOREST SERVICE	18,408	-
Agriculture	Direct	10.680	17-CA-11420004-315	USDA - FOREST SERVICE	180,067	-
Agriculture	Direct	10.699	FS-17-JV-11242306-042	USDA - FOREST SERVICE	16,809	-
Agriculture	Direct	10.902	NRCS-68-5D21-18-009	USDA - NATURAL RESOURCES CONSERVATION SERVICE	5,342	-
Agriculture	Direct	10.912 10.960	69-3A75-13-93	USDA - NATURAL RESOURCES CONSERVATION SERVICE USDA - FOREIGN AGRICULTURAL SERVICE	2,703	-
Agriculture Agriculture	Direct Direct	10.960	FX17TA-10960R003 PR6732733 STH20017M3441	USDA - FOREIGN AGRICULTURAL SERVICE USDA - FOREIGN AGRICULTURAL SERVICE	33,601 28,567	-
Agriculture	Direct	10.960	TA-CR-15-050-03	USDA - FOREIGN AGRICULTURAL SERVICE	21,592	
	Direct To	tal			29,518,468	7,917,905

Schedule of Expenditures of Federal Awards (Continued)

Year Ended June 30, 2018

			CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
		(1101	(Note 5)	Award Number	Granioi Name	Experialitures	Subaward Payments
Agriculture							
Agriculture						\$ 25,570 (87)	\$ -
Agriculture						873	=
Agriculture	02			I-ARS17-MSU	RUTGERS, THE STATE UNIVERSITY	9,148	-
Pass-Procupy 10.025 79.1177/20055 MICHAN DEF OF AGRICULTURE & BINAL DEFECUPMENT 29.						4,409	-
Aprichative Pass-through 10.023 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT OF ARGICUTURE & RUNAL DEPT/COMMENT 10.75 / PSINY/DOSSS MICHIGAN DEPT. 10.7						68,236	-
Agriculture Pass-Promph 10.22 79.117700375 MICHGAN DEPT OF ARRIQUITURE ARRIAN DEVICOPMENT 3 23.717700376 MICHGAN DEPT OF ARRIQUITURE ARRIAN DEVICOPMENT 3 25.065255 MICHGAN DEPT OF ARRIQUITURE ARRIAN DEVICOPMENT 3 25.065255 MICHGAN DEPT OF ARRICULTURE ARRIAN DEVICOPMENT 3 25.065255 MICHGAN DEPT OF ARRICULTURE ARRIAN DEVICOPMENT 3 25.065255 MICHGAN DEPT OF ARRICULTURE ARRIAN DEVICOPMENT 3 25.065255 MICHGAN DEVICE ARRIVATE 3 25.065255 MI						92,342 32,587	-
Agriculture Pass-brough 10.025 PSIXTRODYS Agriculture Pass-brough 10.025 Co.0626-1 Agriculture Pass-brough 10.025 Co.0626-1 Agriculture Pass-brough 10.026 Co.0626-1 Agriculture Pass-brough 10.070 Co.0626-1 Agriculture Pass-brough 10.070 Co.0646-1 Agriculture Pass-brough 10.070 Co.06						15,591	-
Agriculture						31,379	-
Agriculture Pass through 10.170 (0.14625) 2.1675 (1.147500) 2.1675	G-I	10.02	10.025 G-062	5256-1	COLORADO STATE UNIV	92	=
Agriculture Pass-through 10.170 10.07						13,944	-
Agriculture Pass-through 10.170 0.0346374 HOP GROWERS OF MIGHGMA 2 CAPITURE Pass-through 10.170 M. Agriculture Pass-through 10.170 M. Agriculture Pass-through 10.170 M. Agriculture Pass-through 10.170 M. Agriculture MIGHAPARAGUS ADVISION'S DAILD 7 CAPITURE 2 CAPITURE Agriculture Pass-through 10.170 M. Agriculture MIGHAPARAGUS ADVISION'S DAILD 7 September 10.170 Mighapa management MIGHAPARAGUS ADVISION'S DAILD 7						45,942	=
Agriculture Pass-through 10,170 10,070 10,079 10,079 10,079 10,070 1						47,997 2,350	-
Agriculture Pass-through 10.170 M. Appraigns MICH ASPARAGUS EXPANDITE CAMPTER 24 Agriculture Pass-through 10.170 J. 27.137/7 Molt Michael Pass-through 10.170 J. 27.137/7 Michael Pass-through 10.170 J. 27.13						63,653	-
Agriculture Pass-through 10.70 (27)377 MOU (MIGH ASPROTOCOMMITTEE (MIGH Agriculture Pass-through 10.70 (MIARD IDEOCRAPE) (MIGH ASPROTOCOMMITTEE (MIGH AGRICULTURE) (MIGH ASPROTOCOMMITTEE (MIGH AGRICULTURE) (MIGH ASPROTOCOMMITTEE (MIGH AGRICULTURE) (MIGH AGRICUL						76,203	=
Agriculture Pass-through 1.0.170 (Fungicle sensitivity MICH CARROT COMMITTE 1.0.174) Agriculture Pass-through 10.170 Spotted Wing Drosophila MICH CARROT COMMITTE 1.0.174 Agriculture Pass-through 10.170 Spotted Wing Drosophila MICH CARROT COMMITTE 1.0.174 Agriculture Pass-through 10.170 Apple and Cherry MIR MICH CARROT COMMITTE 1.0.174 Agriculture Pass-through 10.170 Apple and Cherry MIR MICH STATE (MORNO) COMMITTE 1.0.174 Agriculture Pass-through 10.170 Apple and Cherry MIR MICH STATE (MORNO) COMMITTE 1.0.174 Agriculture Pass-through 10.170 MICH STATE (MORNO) COMMITTE 1.0.174 Agriculture Pass-through 10.170 MICH STATE (MORNO) COMMITTE 1.0.174 Agriculture Pass-through 10.170 MICH STATE (MORNO) COMMITTE 1.0.174 Agriculture Pass-through 10.121 SBIR Phase II MIRTECH, INC. Agriculture Pass-through 10.121 SBIR Phase II MIRTECH, INC. Agriculture Pass-through 10.121 SBIR Phase II MIRTECH, INC. Agriculture Pass-through 10.121 H004991236 UUW OF MINESTOT CARROT MIR Agriculture Pass-through 10.121 H004901236 UUW OF MINESTOT MIRTECH, INC. Agriculture Pass-through 10.121 H004901236 UUW OF MINESTOT MIRTECH, INC. Agriculture Pass-through 10.121 H004901236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H004901230 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H004901230 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H00591236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H00591236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H00591236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H00591236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H00591236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.121 H00591236 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agriculture Pass-through 10.120 NORTH CENTRAL REGION SARE AT THE UNIVESTOT OF MIRT Agricult						24,527	-
Agriculture Pass-through 10.70 MARD 18000001855 MLCARROT COMMITTE 132 Agriculture Pass-through 10.170 Onto Thirps Agriculture Pass-through 10.170 V416-1-150 CCIBIS MVC Subwest 100 V43 5176 LUNESTY 11.180 V43 V43 V44 V44 V44 V44 V44 V44 V44 V44						81,574	-
Agriculture Past-through 10.170 Spotted Wing Droophila MICH CHERN COMMITTEE 56 Agriculture Past-through 10.170 Onion Thrigh MICH GOVERNOUS CONTROL 10.170 ONION THRICK CONTROL 10.170 ONION THRIC						4,948	=
Agriculture Pass-through 10.170 Apple and Cherry MRL MICH STATE HORISTOLUTURAL SOCIETY 12 Agriculture Pass-through 10.170 Apple and Cherry MRL MICH STATE HORISTOLUTURAL SOCIETY 12 Agriculture Pass-through 10.270 48.4 Agriculture Pass-through 10.250 48.0 Agriculture Pass-through 10.255 58.0 Agriculture Pass-through 10.257 58.0 Agriculture Pass-through 10.297 79.0 Agriculture Pass-through 10.299 79.0 Agriculture Pass						13,217 75,646	-
Agriculture Past-through 10.170 Apple and Cherry MRL MICH STATE HORTICULTURAL SOCIETY 12 Agriculture Past-through 10.200 USAD 7946062183 MVS CHAPMA MICH VIGETRIAL CONTINUAL SOCIETY 12 USAD 7946062183 MVS CHAPMA MICH VIGETRIAL CONTINUAL SOCIETY 12 USAD 7946062183 MVS CHAPMA MICH VIGETRIAL CONTINUAL SOCIETY 12 USAD 7946062183 MVS CHAPMA MICH VIGETRIAL CONTINUAL SOCIETY 12 USAD 794604184 MICH VIGETRIAL CONTINUAL SOCIETY 12 USAD 794604184 MICH VIGETRY 13 USAD 794604184 MICH VIGETRY 14 USAD 79460						63,914	-
Agriculture Pass-brough 10.170						17,636	-
Agriculture Pass-through 10.200 8000073491-AG PURDLE UNIV 8.28 Agriculture Pass-through 10.212 No. 121					MICH VEGETABLE COUNCIL	16,867	-
Agriculture						869	-
Agriculture						18,669	-
Agriculture Agriculture Agriculture Agriculture Agriculture Pass-through 10.215 Agriculture Agriculture Pass-through 10.215 Agriculture Agriculture Agriculture Pass-through 10.215 Agriculture Agriculture Agriculture Pass-through 10.215 Agriculture Agriculture Pass-through 10.215 Agriculture Pass-through 10.215 Agriculture Agriculture Pass-through 10.215 Agriculture Pass-through 10.216 Agriculture Pass-through 10.209 Agriculture Pass-through 10.303 Agriculture Pass-through 10.303 Agriculture Pass-through 10.303 Agriculture Pass-through 10.307 Agriculture Pass-through 1						14,299	-
Agriculture						(488) 6,193	-
Agriculture						63,365	-
Agriculture Pass-brough 10.215 H004403737 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 17 Agriculture Pass-brough 10.215 H00491223 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 17 Agriculture Pass-brough 10.215 H00572294 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 18 Agriculture Pass-brough 10.215 H00572294 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 19 Agriculture Pass-brough 10.215 H00572294 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 2 Agriculture Pass-brough 10.215 H00572294 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 2 Agriculture Pass-brough 10.215 SARE-H00572292 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 2 Agriculture Pass-brough 10.217 R000044977-AG PURDULT CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 1 Agriculture Pass-brough 10.217 R000044977-AG PURDULT CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 1 Agriculture Pass-brough 10.209 H006035703 UNIV OF MINNESOTA PASS-brough 10.200 H006035703 UNIV OF MINNESOTA PASS-brough 10.200 H006035703 UNIV OF MINNESOTA PASS-						10,548	=
Agriculture	НО			4403726	NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN	14,872	-
Agriculture Pass through 10.215 H005991275 NORTH CENTRAL REGION SARE ATT INE UNIVERSITY OF MINN 18 Agriculture Pass through 10.215 H005722934 NORTH CENTRAL REGION SARE ATT INE UNIVERSITY OF MINN 18 Agriculture Pass through 10.215 H005722940 NORTH CENTRAL REGION SARE ATT INE UNIVERSITY OF MINN 18 Agriculture Pass through 10.215 NORTH CENTRAL REGION SARE ATT INE UNIVERSITY OF MINN 18 Agriculture Pass through 10.215 SARE-H005722952 NORTH CENTRAL REGION SARE ATT INE UNIVERSITY OF MINN 19 Agriculture Pass through 10.217 NORTH CENTRAL REGION SARE ATT INE UNIVERSITY OF MINN 19 Agriculture Pass through 10.209 H006035703 UNIV OF MINNESOTA PUBLICATION OF MINNESOTA PAGRICULTURE PASS H00614 Pass through 10.309 17367-610347 CORNEL UNIV Agriculture Pass through 10.307 73676-10347 CORNEL UNIV Agriculture Pass through 10.307 73676-10347 CORNEL UNIV 23 Agriculture Pass through 10.309 1762-207-200386 CLERNON UNIVERSITY 44 Agriculture Pass through 10.309 1762-207-200386 CLERNON UNIVERSITY 44 Agriculture Pass through 10.309 1762-207-200386 CLERNON UNIVERSITY 24 Agriculture Pass through 10.309 2991-10750 CORNEL UNIV 200 Agriculture Pass through 10.309 200-107-107-107-107-107-107-107-107-107-1						1,055	-
Agriculture Pass through 10.215 H005722934 NORTH CENTRAL REGION SARE ATT HE UNIVERSITY OF MINN 18 Agriculture Pass through 10.215 H005722940 NORTH CENTRAL REGION SARE ATT HE UNIVERSITY OF MINN 2 Agriculture Pass through 10.215 SARE-H00572292 NORTH CENTRAL REGION SARE ATT THE UNIVERSITY OF MINN 1 Agriculture Pass through 10.219 8000064677-AG PURDUE UNIV 1 Agriculture Pass through 10.230 20.1256-497 UTAN STATE UNIVERSITY 7 Agriculture Pass through 10.303 310388 SOUTH DAKOTA STATE UNIVERSITY 7 Agriculture Pass through 10.307 75876-10347 CORNELL UNIV 28 Agriculture Pass through 10.307 75876-10347 CORNELL UNIV 28 Agriculture Pass through 10.307 75876-10347 CORNELL UNIV 28 Agriculture Pass through 10.307 75876-10347 CORNELL UNIV 20 Agriculture Pass through 10.309						7,380	=
Agriculture Pass-through 10.215 H005722940 NORTH CENTRAR REGION SARE ATT HE UNIVERSITY OF MINN 2 Agriculture Pass-through 10.215 SARE-H005722952 NORTH CENTRAR REGION SARE ATT HE UNIVERSITY OF MINN 1 Agriculture Pass-through 10.215 SARE-H005722952 NORTH CENTRAR REGION SARE AT THE UNIVERSITY OF MINN 1 Agriculture Pass-through 10.290 H00635703 UNIV OF MINNESOTA Agriculture Pass-through 10.303 310388 SOUTH DAXOTA STATE UNIVERSITY 3 Agriculture Pass-through 10.307 73676-10347 CORNEL UNIV 49 Agriculture Pass-through 10.307 73676-10347 CORNEL UNIV 49 Agriculture Pass-through 10.307 73676-10347 CORNEL UNIV 49 Agriculture Pass-through 10.307 RC39-368-5000855 LUNVERSITY OF GEORGIA 76 Agriculture Pass-through 10.309 1762-207-2003386 CLEMSON UNIVERSITY 42 Agriculture Pass-through 10.309						10,296	-
Agriculture Pass-through 10.215 HODGGO7414 NORTH CENTRAR REGION SARE AT THE UNIVERSITY OF MINN 6 Agriculture Pass-through 10.217 8000064677-AG PURDUE UNIV 1 Agriculture Pass-through 10.209 MODGGA5703 UNIV OF MINNESOTA Agriculture Pass-through 10.303 20125-6497 UTAH STATE UNIVERSITY 7 Agriculture Pass-through 10.303 3170388 SOUTH OAKOTA STATE UNIVERSITY 7 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 49 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 49 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 49 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 40 Agriculture Pass-through 10.309 1762-207-200386 CLEMSON UNIVERSITY 42 Agriculture Pass-through 10.309 73699-10421 CORNELL UNIV 42						18,313 2,716	-
Agriculture Pass-through 10.215 SARE-H005727952 NORTH CENTRAL REGION SARE AT THE UNIVERSITY OF MINN 1 Agriculture Pass-through 10.20 H006093703 UNIV OF MINNESOTA Agriculture Pass-through 10.303 201265-497 UTAH STATE UNIVERSITY 7 Agriculture Pass-through 10.303 370388 SOUTH DAXOTA STATE UNIVERSITY 3 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 48 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 28 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 28 Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV 12 Agriculture Pass-through 10.309 1762-207-200386 CLEMSON UNIVERSITY 62 Agriculture Pass-through 10.309 1762-207-200386 CLEMSON UNIVERSITY 26 Agriculture Pass-through 10.309 7961-10750 CORNELL UNIV 20						6,193	-
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Agriculture						7,712	-
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Agriculture Pass-through 10.307 73676-10347 CORNELL UNIV Agriculture Pass-through 10.307 RC293-636-5000865 UNIVERSITY OF GEORGIA 7.4 Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 2.6 Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 2.6 Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 2.6 Agriculture Pass-through 10.309 73999-10421 CORNELL UNIV 2.0 Agriculture Pass-through 10.309 73999-10421 CORNELL UNIV 2.0 Agriculture Pass-through 10.309 7399-10421 CORNELL UNIV 2.0 Agriculture Pass-through 10.309 SUBBO000423 UNIVERSITY OF GEORGIA 3.3 Agriculture Pass-through 10.309 SUBBO000423 UNIVERSITY OF GEORGIA 3.3 Agriculture Pass-through 10.309 2012-1785-04 NORTH CAROLINA STATE UNIVERSITY 1.2 Agriculture Pass-through 10.309 2012-1785-04 NORTH CAROLINA STATE UNIVERSITY 1.2 Agriculture Pass-through 10.309 215-0228-11 NORTH CAROLINA STATE UNIVERSITY 3.27 Agriculture Pass-through 10.309 8000078815-AG PURDUE UNIV 6.6 Agriculture Pass-through 10.309 8000078815-AG PURDUE UNIV 7.5 Agriculture Pass-through 10.310 80666-PP2016-5mitley RUTGERS, THE STATE UNIVERSITY 1.5 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 6.4 Agriculture Pass-through 10.310 7482287 59001279 UNIVERSITY 6.4 CALPON COMPAN STATE UNIVERSITY 1.2 Agriculture Pass-through 10.310 73706-10403 CORNELL UNIVERSITY 8.4 Agriculture Pass-through 10.310 14-09-006 UNIVERSITY 6.4 CALPON COMPAN STATE UNIVERSITY 8.4 Agriculture Pass-through 10.310 14-09-006 UNIVERSITY 6.4 Agriculture Pass-through 10.310 14-09-006 UNIVERSITY 6.4 Agriculture Pass-through 10.310 10-00050735-1 UNIV						49,757 28,149	-
Agriculture Pass-through 10.307 RC293-636-5000885 UNIVERSITY OF GEORGIA 74 Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 26 Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 26 Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 20 Agriculture Pass-through 10.309 79611-10750 CORNELL UNIV 20 Agriculture Pass-through 10.309 79611-10750 CORNELL UNIV 25 Agriculture Pass-through 10.309 79611-10750 CORNELL UNIV 25 Agriculture Pass-through 10.309 2017-0398-06 NORTH CAROLINA STATE UNIVERSITY 12 Agriculture Pass-through 10.309 2017-0398-06 NORTH CAROLINA STATE UNIVERSITY 12 Agriculture Pass-through 10.309 2007-0398-06 NORTH CAROLINA STATE UNIVERSITY 12 Agriculture Pass-through 10.309 2006-092-016-5mitley </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>14,767</td> <td>-</td>						14,767	-
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Agriculture Pass-through 10.309 1762-207-2020386 CLEMSON UNIVERSITY 20 Agriculture Pass-through 10.309 73999-10421 CORNELL UNIV 25 Agriculture Pass-through 10.309 79611-10750 CORNELL UNIV 25 Agriculture Pass-through 10.309 SUB00000423 UNIVERSITY OF GEORGIA 31 Agriculture Pass-through 10.309 2012-1785-04 NORTH CAROLINA STATE UNIVERSITY 12 Agriculture Pass-through 10.309 2017-0398-06 NORTH CAROLINA STATE UNIVERSITY 12 Agriculture Pass-through 10.309 215-0228-11 NORTH CAROLINA STATE UNIVERSITY 327 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.309 6066-PP2016-Smitley RUTGERS, THE STATE UNIVERSITY 150 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 71482287 990	17	10.30	1762-	2-207-2020386	CLEMSON UNIVERSITY	44,971	-
Agriculture Pass-through 10.309 73999-10421 CORNELL UNIV 201 Agriculture Pass-through 10.309 79611-10750 CORNELL UNIV 25 Agriculture Pass-through 10.309 SUB000000423 UNIVERSITY OF GEORGIA 33 Agriculture Pass-through 10.309 2012-1785-04 NORTH CAROLINA STATE UNIVERSITY (1 Agriculture Pass-through 10.309 2017-0398-06 NORTH CAROLINA STATE UNIVERSITY 327 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.310 31-AGR-37303-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 2018-757817 CAL POLY CORP 11 Agriculture Pass-through 10.310 71482287 S9001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 73706-10403 CORNELL						26,651	-
Agriculture Pass-through 10.309 79611-10750 CORNELL UNIV 25 Agriculture Pass-through 10.309 SUB00000423 UNIVERSITY OF GEORGIA 31 Agriculture Pass-through 10.309 2012-1788-04 NORTH CAROLINA STATE UNIVERSITY (1 Agriculture Pass-through 10.309 2017-0398-06 NORTH CAROLINA STATE UNIVERSITY 142 Agriculture Pass-through 10.309 215-0228-11 NORTH CAROLINA STATE UNIVERSITY 327 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.309 6066-PP2016-Smitley RUTGERS, THE STATE UNIVERSITY 150 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 71482287 59001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310<						20,777	-
Agriculture Pass-through 10.309 SUB00000423 UNIVERSITY OF GEORGIA 31 Agriculture Pass-through 10.309 2012-1785-04 NORTH CAROLINA STATE UNIVERSITY (1 Agriculture Pass-through 10.309 2017-0389-06 NORTH CAROLINA STATE UNIVERSITY 124 Agriculture Pass-through 10.309 215-0228-11 NORTH CAROLINA STATE UNIVERSITY 327 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.309 6066-PP2016-Smitley RUTGERS, THE STATE UNIVERSITY 150 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 714-82287 39001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 416-22287 39001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-th						201,580	-
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Agriculture Pass-through 10.309 2017-0398-06 NORTH CAROLINA STATE UNIVERSITY 142 Agriculture Pass-through 10.309 215-0228-11 NORTH CAROLINA STATE UNIVERSITY 327 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.309 6066-PP2016-Smitley RUTGERS, THE STATE UNIVERSITY 150 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 2018-7-57817 CAL POLY CORP 11 Agriculture Pass-through 10.310 71482287 59001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 71482287 59001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 73706-10403 CORNELL UNIV 8 Agriculture Pass-through 10.310 8K290-58-005 UNIVERSITY OF IDAHO 89 Agriculture Pass-through 10.310 <td></td> <td></td> <td></td> <td></td> <td></td> <td>(1,427)</td> <td>-</td>						(1,427)	-
Agriculture Pass-through 10.309 215-0228-11 NORTH CAROLINA STATE UNIVERSITY 327 Agriculture Pass-through 10.309 8000076815-AG PURDUE UNIV 62 Agriculture Pass-through 10.309 6066-P2016-mitley RUTGERS, THE STATE UNIVERSITY 15 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 71-ASZ-287 59001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 40998-5801 COLORADO SCHOOL OF MINES 10 Agriculture Pass-through 10.310 73706-10403 CORNELL UNIV 8 Agriculture Pass-through 10.310 BKX290-SB-005 UNIVERSITY OF IDAHO 89 Agriculture Pass-through 10.310 416-40-638 IOWA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 3002559358 UNIVERSITY OF MICHIGAN 18 Agriculture Pass-through 10.310 300255935						142,981	-
Agriculture Pass-through 10.309 6066-PP 2016-Smitley RUTGERS, THE STATE UNIVERSITY 150 Agriculture Pass-through 10.310 13-AGR-373036-MSU AUBURN UNIVERSITY 12 Agriculture Pass-through 10.310 2018-7-S7817 CAL POLY CORP 11 Agriculture Pass-through 10.310 71482287 S9001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 400998-S801 COLORADO SCHOOL OF MINES 10 Agriculture Pass-through 10.310 8K8290-S8-005 UNIVERSITY OF IDAHO 88 Agriculture Pass-through 10.310 416-40-638 IOWA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 3002559358 UNIVERSITY OF MICHIGAN 18 Agriculture Pass-through 10.310 00005735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 000059735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 80000	21	10.30	10.309 215-0	0228-11	NORTH CAROLINA STATE UNIVERSITY	327,196	=
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Agriculture Pass-through 10.310 2018-7-57817 CAL POLY CORP 11 Agriculture Pass-through 10.310 71482287 59001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 400998-5801 COLORADO SCHOOL OF MINES 10 Agriculture Pass-through 10.310 73706-10403 CORNELL UNIV 8 Agriculture Pass-through 10.310 8KX290-58-005 UNIVERSITY OF IDAHO 89 Agriculture Pass-through 10.310 416-40-638 IOWA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 14-09-006 LOUISIANA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 300259938 UNIVERSITY OF MICHIGAN 18 Agriculture Pass-through 10.310 HO01897203 UNIV OR MINNESSITY OF MICHIGAN 46 Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 300063332-AG PURDUE						150,376	-
Agriculture Pass-through 10.310 71482287 S9001279 UNIVERSITY OF CALIFORNIA SAN DIEGO 14 Agriculture Pass-through 10.310 400998-S801 COLORADO SCHOOL OF MINES 10 Agriculture Pass-through 10.310 80098-S801 CORNELL UNIV 8 Agriculture Pass-through 10.310 8000000000000000000000000000000000000						12,928 11,880	=
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Agriculture Pass-through 10.310 416-40-63B IOWA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 14-09-006 LOUISIANA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 3002559358 UNIVERSITY OF MICHIGAN 18 Agriculture Pass-through 10.310 H001897203 UNIV OF MINNESOTA 44 Agriculture Pass-through 10.310 000050735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 8000069332-AG PURDUE UNIV 11 Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-MI702000 TEXAS A & M 19 Agriculture Pass-through 10.310 07-MI702000 TEXAS A & M 19						8,531	-
Agriculture Pass-through 10.310 14-09-006 LOUISIANA STATE UNIVERSITY 48 Agriculture Pass-through 10.310 300259358 UNIVERSITY OF MICHIGAN 18 Agriculture Pass-through 10.310 HO01897203 UNIV OF MINNESOTA Agriculture Pass-through 10.310 C00050735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 8000053332-AG PURDUE UNIV 110 Agriculture Pass-through 10.310 3TG453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M170000 TEXAS A & M 19 Agriculture Pass-through 10.310 07-M170000 TEXAS A & M 19						89,902	-
Agriculture Pass-through 10.310 3002559358 UNIVERSITY OF MICHIGAN 18 Agriculture Pass-through 10.310 H001897203 UNIV OF MINNESOTA Agriculture Pass-through 10.310 C00050735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 8000053332-AG PURDUE UNIV 110 Agriculture Pass-through 10.310 3T8462 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						(120)	=
Agriculture Pass-through 10.310 H001897203 UNIV OF MINNESOTA Agriculture Pass-through 10.310 C00050735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 80000693332-AG PURDUE UNIV 110 Agriculture Pass-through 10.310 3TB462 SOUTH DAKOTA STATE UNIVERSITY 124 Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						48,074	-
Agriculture Pass-through 10.310 C00050735-1 UNIVERSITY OF MISSOURI 46 Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 8000053332-AG PURDUE UNIV 110 Agriculture Pass-through 10.310 3TE452 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						18,404	-
Agriculture Pass-through 10.310 8000069354 PURDUE UNIV 10 Agriculture Pass-through 10.310 8000053332-AG PURDUE UNIV 110 Agriculture Pass-through 10.310 3TB462 SOUTH DAKOTA STATE UNIVERSITY 124 Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						(9) 46,638	-
Agriculture Pass-through 10.310 8000053332-AG PURDUE UNIV 110 Agriculture Pass-through 10.310 3T8462 SOUTH DAKOTA STATE UNIVERSITY 124 Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						10,566	_
Agriculture Pass-through 10.310 3TC453 SOUTH DAKOTA STATE UNIVERSITY 12 Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						110,677	-
Agriculture Pass-through 10.310 07-M1702000 TEXAS A & M 19 Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120	3T	10.31	10.310 3TB46	162	SOUTH DAKOTA STATE UNIVERSITY	124,816	=
Agriculture Pass-through 10.310 20152118-01 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 120						12,578	-
						19,958	=
METICULUIE PASS-LITTOURIT 10.310 ZU1603566-06 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS 83						120,316	=
						83,767 70,344	-
						70,344 25,650	-
Agriculture Pass-through 10.330 517K296 UNIVERSITY OF WISCONSIN - MADISON						43	=
						116,505	-
	12			995_G003680	WASHINGTON STATE UNIVERSITY	7,046	=
						7,370	-
						2,486	-
						184,787 19,070	14 700
						25,867	14,700

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
Agriculture	Pass-through	10.652	080500.330397.01	MISSISSIPPI STATE UNIVERSITY	\$ 15,206	\$ -
Agriculture	Pass-through	10.664	P3-8b	U.S. ENDOWMENT FOR FORESTRY & COMMUNITIES, INC.	965	-
Agriculture Agriculture	Pass-through Pass-through	10.664 10.674	Yreka MSU (E16-51) App 148050	U.S. ENDOWMENT FOR FORESTRY & COMMUNITIES, INC. RENEWABLE RESOURCE SOLUTIONS	44,771 22,894	-
Agriculture	Pass-through	10.680	Root Disease APP153122	WISCONSIN DEPT. OF NATURAL RESOURCES	4,747	-
Agriculture	Pass-through	10.902	68-52KY-16-1050	USDA - INDIANA NATURAL RESOURCES CONSERVATION SERV	442	-
Agriculture	Pass-through	10.903	8000083093-AG	PURDUE UNIV	2,328	-
Agriculture	Pass-through	10.932 ough Total	060915-1	NATURE CONSERVANCY THE	55,791 3,567,203	14,700
	Agricultu			-	33,085,671	7,932,605
Commerce	Direct	11.303	ED16CHI3030037	ECONOMIC DEVELOPMENT ADMINISTRATION	106,887	
Commerce	Direct	11.303	ED16CHI3030037	ECONOMIC DEVELOPMENT ADMINISTRATION	42,372	-
Commerce	Direct	11.429	NA16NOS4290194	NATL OCEANIC & ATMOSPHERIC ADMIN	49,743	-
Commerce	Direct	11.431	NA120AR4310081	NATL OCEANIC & ATMOSPHERIC ADMIN	9,239	-
Commerce Commerce	Direct Direct	11.431 11.431	NA12OAR4310081 NA17OAR4310132	NATL OCEANIC & ATMOSPHERIC ADMIN NATL OCEANIC & ATMOSPHERIC ADMIN	4,247 37,023	-
Commerce	Direct	11.609	70NANB15H280	NATL INST OF STANDARDS & TECHNOLOGY	49,047	-
Commerce	Direct	11.609	70NANB16H244	NATL INST OF STANDARDS & TECHNOLOGY	66,376	-
Commerce Commerce	Direct Direct	11.609 11.620	70NANB17H027 70NANB17H319	NATL INST OF STANDARDS & TECHNOLOGY NATL INST OF STANDARDS & TECHNOLOGY	60,398 30,995	-
commerce	Direct To		70NANB1711313	NATE INST OF STANDARDS & TECHNOLOGY	456,327	
Commerce	Pass-through	11.417	3003003042	UNIVERSITY OF MICHIGAN	37,857	
Commerce	Pass-through	11.417	3003003042	UNIVERSITY OF MICHIGAN	2,054	-
Commerce	Pass-through	11.417	3003807199	UNIVERSITY OF MICHIGAN	4,462	-
Commerce	Pass-through	11.417	3004752711	UNIVERSITY OF MICHIGAN	8,951	-
Commerce Commerce	Pass-through Pass-through	11.417 11.417	3004924855 3004924855	UNIVERSITY OF MICHIGAN UNIVERSITY OF MICHIGAN	24,050 3,038	-
Commerce	Pass-through	11.417	WSU14081	MICHIGAN SEA GRANT COLLEGE PROGRAM	1,100	-
Commerce	Pass-through	11.419	18-CHab-001	MI ENVIRONMENTAL QUALITY	24,638	-
Commerce	Pass-through	11.419	18-CHab-002	MI ENVIRONMENTAL QUALITY	11,095	-
Commerce Commerce	Pass-through Pass-through	11.419 11.427	Coastal Dunes 505116-78050	MICHIGAN ENVIRONMENTAL COUNCIL NORTHEASTERN UNIVERSITY	13,516 20,741	-
Commerce	Pass-through	11.431	3003959776	UNIVERSITY OF MICHIGAN	67,472	=
Commerce	Pass-through	11.432	3003314015	UNIVERSITY OF MICHIGAN	92,700	-
Commerce	Pass-through	11.432	3004178132	UNIVERSITY OF MICHIGAN	54,792	-
Commerce Commerce	Pass-through Pass-through	11.432 11.432	3004178132 3004903227	UNIVERSITY OF MICHIGAN UNIVERSITY OF MICHIGAN	6,425 14,197	-
commerce		ough Total	300-1303227		387,088	
	Commer	-			843,415	
Defense	Direct	12	2017-17020200004	INTELLIGENCE ADVANCED RESEARCH PROJECTS ACTIVITY	1,449,877	556,346
Defense	Direct	12	2018-18012900001	INTELLIGENCE ADVANCED RESEARCH PROJECTS ACTIVITY	69,118	-
Defense	Direct	12	FA8750-17-C-0182	AIR FORCE RESEARCH LABORATORY	63,899	-
Defense Defense	Direct Direct	12 12	W912HQ-17-C-0006 W912P6-16-C-0006	ARMY US CORPS OF ENGINEERS ARMY US CORPS OF ENGINEERS	87,600 44,071	-
Defense	Direct	12.010	W912DR-17-2-0001	ARMY US CORPS OF ENGINEERS	52,444	-
Defense	Direct	12.116	FA9453-14-C-0215	AIR FORCE RESEARCH LABORATORY	15,335	-
Defense Defense	Direct Direct	12.116 12.116	W912HQ-12-C-0020 W912HQ-13-C-0071	ARMY US CORPS OF ENGINEERS ARMY US CORPS OF ENGINEERS	267 261,695	21,820
Defense	Direct	12.300	FA8750-16-2-0284	AIR FORCE RESEARCH LABORATORY	287,443	
Defense	Direct	12.300	FA8750-17-1-0139	AIR FORCE RESEARCH LABORATORY	109,952	-
Defense	Direct	12.300	W9126G-12-2-0020	ARMY US CORPS OF ENGINEERS	16,501	42,192
Defense Defense	Direct Direct	12.300 12.300	W9126G-18-2-0011 W912G-14-2-0044	ARMY US CORPS OF ENGINEERS ARMY US CORPS OF ENGINEERS	16,861 (2,355)	-
Defense	Direct	12.300	N00014-17-1-2678	NAVAL RESEARCH US OFFICE OF USDN	181,727	_
Defense	Direct	12.300	N00014-17-1-2713	NAVAL RESEARCH US OFFICE OF USDN	82,208	-
Defense	Direct	12.300	N00014-14-1-0631	NAVAL RESEARCH US OFFICE OF USDN	111,547	-
Defense Defense	Direct Direct	12.300 12.300	N00014-15-1-2005 N00014-16-1-2109	NAVAL RESEARCH US OFFICE OF USDN NAVAL RESEARCH US OFFICE OF USDN	125,853 141,967	-
Defense	Direct	12.300	N00014-16-1-2457	NAVAL RESEARCH US OFFICE OF USDN	128,563	=
Defense	Direct	12.300	N00014-16-1-2760	NAVAL RESEARCH US OFFICE OF USDN	220,601	-
Defense	Direct	12.300	N00014-16-1-2841	NAVAL RESEARCH US OFFICE OF USDN	159,202	-
Defense Defense	Direct Direct	12.300 12.300	N00014-17-1-2102 N00014-17-1-2265	NAVAL RESEARCH US OFFICE OF USDN NAVAL RESEARCH US OFFICE OF USDN	85,583 109,205	-
Defense	Direct	12.300	N00014-17-1-2886	NAVAL RESEARCH US OFFICE OF USDN	67,754	-
Defense	Direct	12.300	N00014-18-1-2032	NAVAL RESEARCH US OFFICE OF USDN	169,575	91,306
Defense Defense	Direct Direct	12.300 12.300	N00014-18-1-2273 N00014-16-1-3051	NAVAL RESEARCH US OFFICE OF USDN NAVAL RESEARCH US OFFICE OF USDN	100,811	-
Defense	Direct	12.420	W81XWH-14-1-0349	US DEPT OF ARMY	85,115 943	-
Defense	Direct	12.420	W81XWH-15-1-0018	US DEPT OF ARMY	96,848	-
Defense	Direct	12.420	W81XWH-15-1-0453	US DEPT OF ARMY	163,724	-
Defense Defense	Direct Direct	12.420 12.420	W81XWH-15-1-0454 W81XWH-16-1-0631	US DEPT OF ARMY US DEPT OF ARMY	28,595 223,592	-
Defense	Direct	12.420	W81XWH-16-1-0676	US DEPT OF ARMY	158,529	-
Defense	Direct	12.420	W81XWH-16-1-0732	US DEPT OF ARMY	77,646	-
Defense	Direct	12.420	W81XWH-16-1-0735	US DEPT OF ARMY	228,043	-
Defense Defense	Direct Direct	12.420 12.420	W81XWH-17-1-0270 W81XWH-17-1-0282	US DEPT OF ARMY US DEPT OF ARMY	285,976 31,541	=
Defense	Direct	12.420	W81XWH-17-1-0282 W81XWH-17-1-0536	US DEPT OF ARMY	317,852	17,640
Defense	Direct	12.431	W911NF-14-1-0063	ARMY RESEARCH OFFICE U S	73,077	-
Defense	Direct	12.431	W911NF-14-1-0063	ARMY RESEARCH OFFICE U S	1,439	-
Defense Defense	Direct Direct	12.431 12.431	W911NF-15-1-0487 W911NF-17-1-0153	ARMY RESEARCH OFFICE U S ARMY RESEARCH OFFICE U S	130,153 198,645	-
Defense	Direct	12.630	HM04761510001	US DEPT OF DEFENSE	80,536	-

esearch and Development Cluster (continued): Defense	Direct	12.630 12.630 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901 12.901	W911NF-14-1-0026 W912H2-17-2-0030 FA8650-18-2-6880 FA9550-11-1-010 FA9550-15-1-0214 FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0062 FA9550-18-1-0062	UNITED STATES ARMY RESEARCH INSTITUTE UNITED STATES ARMY RESEARCH INSTITUTE AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	\$ 161,853 21,309 40,981 874 (715) 197,405 76,564 75,544 220,502 85,140	\$ -
(continued): Defense	Direct	12.630 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901	W912HZ-17-2-0030 FA8650-18-2-6880 FA9550-11-1-010 FA9550-15-1-0243 FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0061	UNITED STATES ARMY RESEARCH INSTITUTE AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	21,309 40,981 874 (715) 197,405 76,564 75,544 220,502 85,140	\$
Defense	Direct	12.630 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901	W912HZ-17-2-0030 FA8650-18-2-6880 FA9550-11-1-010 FA9550-15-1-0243 FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0061	UNITED STATES ARMY RESEARCH INSTITUTE AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	21,309 40,981 874 (715) 197,405 76,564 75,544 220,502 85,140	5 -
Defense	Direct	12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901	FA8650-18-2-6880 FA9550-11-1-010 FA9550-12-1-0343 FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0061	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	40,981 874 (715) 197,405 76,564 75,544 220,502 85,140	- - - - - -
Defense	Direct	12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901	FA9550-11-1-010 FA9550-12-1-0244 FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0062	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	874 (715) 197,405 76,564 75,544 220,502 85,140	- - - - -
Defense	Direct	12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901 12.901	FA9550-12-1-0343 FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-061 FA9550-18-1-061	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	(715) 197,405 76,564 75,544 220,502 85,140	- - - -
Defense	Direct	12.800 12.800 12.800 12.800 12.800 12.800 12.800 12.901 12.901	FA9550-15-1-0224 FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-18-1-0061 FA9550-18-1-0061	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	197,405 76,564 75,544 220,502 85,140	- - - -
Defense	Direct	12.800 12.800 12.800 12.800 12.800 12.800 12.901 12.901	FA9550-15-1-0282 FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0062	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	76,564 75,544 220,502 85,140	- - -
Defense	Direct	12.800 12.800 12.800 12.800 12.800 12.901 12.901	FA9550-17-1-0150 FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0062	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH AIR FORCE OFFICE OF SCIENTIFIC RESEARCH AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	75,544 220,502 85,140	-
Defense	Direct	12.800 12.800 12.800 12.800 12.901 12.901	FA9550-17-1-0394 FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0062	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	220,502 85,140	-
Defense	Direct	12.800 12.800 12.800 12.901 12.901	FA9550-17-1-0411 FA9550-18-1-0061 FA9550-18-1-0062	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	85,140	
Defense	Direct Direct Direct Direct Direct Direct Direct Direct Direct	12.800 12.800 12.901 12.901	FA9550-18-1-0061 FA9550-18-1-0062			
Defense	Direct Direct Direct Direct Direct Direct Direct Direct Direct	12.800 12.901 12.901	FA9550-18-1-0062	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH		-
Defense	Direct Direct Direct Direct Direct Direct	12.901 12.901		ALD FORCE OFFICE OF COUNTIES DECEARCH	53,694	475.631
Defense	Direct Direct Direct Direct Direct	12.901	H39530-13-1-0500	AIR FORCE OFFICE OF SCIENTIFIC RESEARCH DEFENSE ADVANCED RESEARCH PROJECTS AGENC	232,612	175,635
Defense Defense Defense Defense Defense Defense Defense Defense Defense	Direct Direct Direct Direct		1100330 40 4 0043		12,885	-
Defense Defense Defense Defense Defense Defense Defense	Direct Direct Direct	12.901	H98230-18-1-0042	DEFENSE ADVANCED RESEARCH PROJECTS AGENC DEFENSE ADVANCED RESEARCH PROJECTS AGENC	68,000	-
Defense Defense Defense Defense Defense Defense	Direct Direct		H98230-18-1-0042		8,390	-
Defense Defense Defense Defense	Direct	12.910	D16AP00117	DEFENSE ADVANCED RESEARCH PROJECTS AGENC	277,236	-
Defense Defense Defense Defense		12.910	FA8650-15-1-7525	DEFENSE ADVANCED RESEARCH PROJECTS AGENC	201,222	49,93
Defense Defense Defense		12.910	HR0011-15-2-0002	DEFENSE ADVANCED RESEARCH PROJECTS AGENC	353,604	273,273
Defense Defense		12.910	HR0011-15-2-0034	DEFENSE ADVANCED RESEARCH PROJECTS AGENC	91,984	-
Defense	Direct	12.910	N66001-17-1-4045	DEFENSE ADVANCED RESEARCH PROJECTS AGENC	229,317	-
	Direct	12.910	W56HZV-07-2-0001	US DEPT OF ARMY	(89)	
	Direct To	otal			8,747,870	1,228,149
	Pass-through	12	A002-2018	ARRAY INFORMATION TECHNOLOGY	19,870	-
	Pass-through	12	404-77-20	IOWA STATE UNIVERSITY	150,868	-
Defense	Pass-through	12	137253	JOHNS HOPKINS UNIVERSITY	33,352	_
Defense	Pass-through	12	8217	MATECH GSM	(3)	_
Defense	Pass-through	12	G42871-N01-065-MSU	STRATEGIC ANALYSIS, INC.	22,020	_
Defense	Pass-through	12	SA-MSU-NRL-P010	STRATEGIC ANALYSIS, INC.	11,536	_
Defense	Pass-through	12	FA8650-16-C-1764-MSU	TECH-X CORPORATION	52,239	_
Defense	Pass-through	12	N68335-18-C-0060	TECH-X CORPORATION	30,269	_
Defense	Pass-through	12	W31P4Q-17-C-0037	TECH-X CORPORATION	151,432	
Defense	Pass-through	12	754K902	UNIVERSITY OF WISCONSIN - MADISON	10,706	
		12.116	13-S7128-01-C1	UNIVERSAL TECHNOLOGY CORPORATION	133	-
Defense Defense	Pass-through			UNIVERSAL TECHNOLOGY CORPORATION UNIVERSAL TECHNOLOGY CORPORATION		-
	Pass-through	12.116	16-S7412-06-C1		(4)	-
Defense	Pass-through	12.116	7000295420	MASSACHUSETTS INST OF TECHNOLOGY	65,048	-
Defense	Pass-through	12.116	8140000819	NORTHROP GRUMMAN CORP	332,570	-
Defense	Pass-through	12.116	VEM-MSU-2	VIRTUAL EM, INC.	2,028	-
Defense	Pass-through	12.225	201658-140851	NATL CTR FOR MANUFACTURING SCIENCE	131,552	-
Defense	Pass-through	12.300	Z8907001	UNIV OF MARYLAND	164,249	-
Defense	Pass-through	12.420	1(GG011705)	COLUMBIA UNIVERSITY	56,790	-
Defense	Pass-through	12.420	3004148034	UNIVERSITY OF MICHIGAN	20,893	-
Defense	Pass-through	12.420	UWSC8721	UNIVERSITY OF WASHINGTON	81,397	-
Defense	Pass-through	12.431	10034220-S1	UNIVERSITY OF UTAH	136,780	-
Defense	Pass-through	12.431	ONR-00000834	BROWN UNIVERSITY	287,473	-
Defense	Pass-through	12.630	HM02101310002	NATL GEOSPATIAL-INTELLIGENCE AGENCY	(270)	-
Defense	Pass-through	12.800	3004148184	MICHIGAN UNIVERSITY OF	50,845	-
Defense	Pass-through	12.800	8263-A	BOISE STATE UNIVERSITY	31,159	-
Defense	Pass-through	12.800	NMC0155-01	NEW MEXICO CONSORTIUM	41,387	-
Defense	Pass-through	12.910	0006	RUTGERS, THE STATE UNIVERSITY	141,197	-
Defense	Pass-through	12.910	079287-15764	ILLINOIS URBANA CHAMPAIGN UNIV OF	102,914	_
Defense	Pass-through	12.910	1015 G UA497	UNIVERSITY OF CALIFORNIA	184,282	_
Defense	Pass-through	12.910	1015 S TA037	UNIVERSITY OF CALIFORNIA	23,434	_
Defense	Pass-through	12.910	126.001	SIEMENS CORPORATION	193,182	_
Defense	Pass-through	12.910	14-503	ARIZONA STATE UNIVERSITY	54,226	
Detense		ough Total	14 303	ANIZONA STATE ON VENSITI	2,583,554	
	Defense				11,331,424	1,228,149
						1,220,14
Education	Direct	84.015	P015B140098	U.S. DEPT OF EDUCATION	256,710	-
Education	Direct	84.305	R305A150210 - 17	U.S. DEPT OF EDUCATION	534,151	226,70
Education	Direct	84.305	R305A160049	U.S. DEPT OF EDUCATION	215,779	-
Education	Direct	84.324	R324A150063 - 15A	U.S. DEPT OF EDUCATION	387,563	-
Education	Direct	84.324	R324B170003	U.S. DEPT OF EDUCATION	87,264	
	Direct To	otal			1,481,467	226,70
Education	Pass-through	84	APP 142705	ILLINOIS ACTION FOR CHILDREN	97	
Education	Pass-through	84.004	S004D160011	INDIANA UNIVERSITY PURDUE UNIVERSITY INDIANAPOLIS	17,589	
Education	Pass-through	84.010	Men of Promise	GOGEBIC ONTONAGON INTERMEDIATE SCHOOL DISTRICT	7,570	-
Education	Pass-through	84.048	173430-17133	MICHIGAN DEPARTMENT OF EDUCATION	716	
Education			183430-18133		60,391	-
	Pass-through	84.048		MICHIGAN DEPARTMENT OF EDUCATION		-
Education	Pass-through	84.116	SP00012139-06	GEORGIA STATE UNIVERSITY	315,522	-
Education	Pass-through	84.263	84.263B P000160361	UNIVERSITY OF WISCONSIN STOUT	72,827	-
Education	Pass-through	84.287	172122-MSUEVAL	MICHIGAN DEPARTMENT OF EDUCATION	155,073	-
Education	Pass-through	84.287	182122-MSUEVAL	MICHIGAN DEPARTMENT OF EDUCATION	208,186	-
Education	Pass-through	84.305	0388700002	AMERICAN INSTITUTES FOR RESEARCH	61,904	-
Education	Pass-through	84.305	130596	UNIVERSITY OF CONNECTICUT	154,906	-
Education	Pass-through	84.305	224640A	UNIVERSITY OF OREGON	37,609	-
Education	Pass-through	84.305	511140-02	TEACHERS COLLEGE, COLUMBIA UNIVERSITY	30,632	-
Education	Pass-through	84.305	ED162A-A	OREGON STATE UNIVERSITY	16,275	-
	Pass-through	84.324	201501255-02	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	(67)	-
Education	Pass-through	84.324	Efficacy of Comprehensive	CANISIUS COLLEGE	(764)	-
	Pass-through	84.411	i3	HIGH/SCOPE EDUCATIONAL RESEARCH FDN.	11,209	-
Education						
Education Education Education	Pass-through	84.412	App #153956	ILLINOIS ACTION FOR CHILDREN	3.329	-
Education Education	Pass-through Pass-thro	84.412 ough Total	App #153956	ILLINOIS ACTION FOR CHILDREN	3,329 1,153,004	-

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Research and Development Cluster						
(continued):					4 447.400	
Energy	Direct	81.049	DE-FG02-01ER15228	US DEPT OF ENERGY	\$ 247,468	\$ -
Energy	Direct Direct	81.049 81.049	DE-FG02-01ER15282 DE-FG02-03ER41259	US DEPT OF ENERGY US DEPT OF ENERGY	173,578 105,089	-
Energy Energy	Direct	81.049	DE-FG02-06ER15808	US DEPT OF ENERGY	195,617	3,652
Energy	Direct	81.049	DE-FG02-06ER15808	US DEPT OF ENERGY	52	-
Energy	Direct	81.049	DE-FG02-06ER46309	US DEPT OF ENERGY	203,599	-
Energy	Direct	81.049	DE-FG02-08ER15929	US DEPT OF ENERGY	95,751	40,452
Energy	Direct	81.049	DE-FG02-08ER41546	US DEPT OF ENERGY	149,518	-
Energy	Direct	81.049	DE-FG02-08ER41556	US DEPT OF ENERGY	62,562	-
Energy	Direct	81.049	DE-FG02-91ER20021	US DEPT OF ENERGY	2,971,062	-
Energy	Direct	81.049	DE-FG02-98ER20305	US DEPT OF ENERGY	68,105	-
Energy	Direct	81.049	DE-FG02-99ER62848	US DEPT OF ENERGY	207,740	-
Energy	Direct	81.049	DE-SC0000661	US DEPT OF ENERGY	62,150,654	(225,554)
Energy	Direct	81.049	DE-SC0000661	US DEPT OF ENERGY	5,491,296	-
Energy	Direct	81.049	DE-SC0001525	US DEPT OF ENERGY	225,976	-
Energy	Direct	81.049	DE-SC0002325	US DEPT OF ENERGY	194,480	-
Energy	Direct	81.049	DE-SC0007101	US DEPT OF ENERGY	205,974	-
Energy	Direct	81.049	DE-SC0008509	US DEPT OF ENERGY	(208)	-
Energy	Direct	81.049	DE-SC0008511	US DEPT OF ENERGY	7,356	-
Energy	Direct	81.049	DE-SC0008511	US DEPT OF ENERGY	6,962	-
Energy	Direct	81.049	DE-SC0009962	US DEPT OF ENERGY	438,869	159,926
Energy	Direct	81.049	DE-SC0010472	US DEPT OF ENERGY	47,674	-
Energy	Direct	81.049	DE-SC0010847	US DEPT OF ENERGY	159,167	-
Energy	Direct	81.049	DE-SC0013365	US DEPT OF ENERGY	180,924	-
Energy	Direct	81.049	DE-SC0013617	US DEPT OF ENERGY	182,499	-
Energy	Direct	81.049	DE-SC0013617	US DEPT OF ENERGY	5,112	-
Energy	Direct	81.049	DE-SC0014108	US DEPT OF ENERGY	298,502	-
Energy	Direct	81.049	DE-SC0014108	US DEPT OF ENERGY	266,490	-
Energy	Direct	81.049	DE-SC0014108	US DEPT OF ENERGY	250,731	-
Energy	Direct	81.049	DE-SC0014108	US DEPT OF ENERGY	5,172	-
Energy	Direct	81.049	DE-SC0014384	US DEPT OF ENERGY	2,117,878	208,120
Energy	Direct	81.049	DE-SC0014530	US DEPT OF ENERGY	229,022	-
Energy	Direct	81.049	DE-SC0014537	US DEPT OF ENERGY	177,994	-
Energy	Direct	81.049	DE-SC0014554	US DEPT OF ENERGY	391,342	114,333
Energy	Direct	81.049	DE-SC0015903	US DEPT OF ENERGY	123,271	-
Energy	Direct	81.049	DE-SC0015904	US DEPT OF ENERGY	128,272	-
Energy	Direct	81.049	DE-SC0016052	US DEPT OF ENERGY US DEPT OF ENERGY	143,287	-
Energy	Direct	81.049	DE-SC0016604		192,412	-
Energy	Direct	81.049	DE-SC0016948	US DEPT OF ENERGY	141,745	-
Energy	Direct	81.049	DE-SC0017342	US DEPT OF ENERGY	117,185	44 201
Energy	Direct Direct	81.049 81.049	DE-SC0017883 DE-SC0017887	US DEPT OF ENERGY US DEPT OF ENERGY	164,854 90,696	44,291
Energy						-
Energy	Direct	81.049	DE-SC0017888	US DEPT OF ENERGY	59,452	-
Energy	Direct	81.049	DE-SC0017889	US DEPT OF ENERGY	620	-
Energy	Direct Direct	81.049 81.049	DE-SC0017952 DE-SC0017955	US DEPT OF ENERGY US DEPT OF ENERGY	136,131 3,814	1,111
Energy	Direct	81.049	DE-SC0017955 DE-SC0017955	US DEPT OF ENERGY	1,523	1,111
Energy	Direct	81.049	DE-SC0017933 DE-SC0018083	US DEPT OF ENERGY	215,083	79,022
Energy	Direct	81.049	DE-SC0018083	US DEPT OF ENERGY	22,142	75,022
Energy Energy	Direct	81.049	DE-SC0018269	US DEPT OF ENERGY	714,977	331,656
Energy	Direct	81.049	DE-SC0018269	US DEPT OF ENERGY	133,797	331,030
Energy	Direct	81.049	DE-SC0018269	US DEPT OF ENERGY	81,107	
Energy	Direct	81.049	DE-SC0018362	US DEPT OF ENERGY	35,470	
Energy	Direct	81.049	DE-SC0018432	US DEPT OF ENERGY	10,621	
Energy	Direct	81.049	DE-SC0018636	US DEPT OF ENERGY	53,375	
Energy	Direct	81.049	DE-SC0018638	US DEPT OF ENERGY	11,456	
Energy	Direct	81.049	DE-SC0018966	US DEPT OF ENERGY	29,365	
Energy	Direct	81.086	DE-EE0007803	US DEPT OF ENERGY	338,556	208,451
Energy	Direct	81.087	DE-EE0008148	US DEPT OF ENERGY	65,866	14,724
Energy	Direct	81.089	DE-FE0023315	US DEPT OF ENERGY	79,608	
Energy	Direct	81.089	DE-FE0030977	US DEPT OF ENERGY	227,491	109,531
Energy	Direct	81.089	DE-FE0031250	US DEPT OF ENERGY	7,033	,
Energy	Direct	81.112	DE-NA0002847	US DEPT OF ENERGY	167,527	-
Energy	Direct	81.112	DE-NA0002923	US DEPT OF ENERGY	155,337	-
Energy	Direct	81.112	DE-NA0002924	US DEPT OF ENERGY	152,561	-
Energy	Direct	81.112	DE-NA0003221	US DEPT OF ENERGY	259,397	-
Energy	Direct	81.135	DE-AR0000455	US DEPT OF ENERGY	301,537	122,016
	Direct To	tal			81,879,575	1,211,731
Energy	Pass-through	81	8F-30001	ARGONNE NATIONAL LABORATORY	20,025	
= -	Pass-through	81	Joint Appt. Peter Ostroumov	ARGONNE NATIONAL LABORATORY ARGONNE NATIONAL LABORATORY	20,025 8,028	-
Energy Energy	Pass-through	81	270062	BROOKHAVEN NATL LABORATORY	8,028	-
Energy Energy	Pass-through	81	312011	BROOKHAVEN NATL LABORATORY BROOKHAVEN NATL LABORATORY	190,843	-
Energy	Pass-through	81	344028	BROOKHAVEN NATL LABORATORY	21,014	-
Energy	Pass-through	81	344514	BROOKHAVEN NATL LABORATORY	5,484	-
Energy	Pass-through	81	BNL-308720	BROOKHAVEN NATL LABORATORY	170,087	-
Energy	Pass-through	81	Joint Appt Hao	BROOKHAVEN SCIENCE ASSOC LLC	150,786	-
Energy	Pass-through	81	637941	FERMI NATL ACCELERATOR LAB	64,301	-
Energy	Pass-through	81	638420	FERMI NATL ACCELERATOR LAB	50,223	-
Energy	Pass-through	81	640672	FERMI NATL ACCELERATOR LAB	72,172	-
Energy	Pass-through	81	646732	FERMI NATL ACCELERATOR LAB	133,187	-
Energy	Pass-through	81	N000199915	HONEYWELL CORPORATION	138,980	-
Energy	Pass-through	81	N000199915 N000216846	HONEYWELL CORPORATION	34,284	-
	Pass-through	81	N000251535	HONEYWELL CORPORATION HONEYWELL CORPORATION	34,284 19,865	-
Energy Energy	Pass-through	81	N000251535 N000254451	HONEYWELL CORPORATION HONEYWELL CORPORATION	115,230	-
		81 81	N000254451 276363	LOS ALAMOS NATIONAL LABORATORY	115,230 (27,680)	-
Energy	Pass-through Pass-through	81	319838	LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS NATIONAL LABORATORY	(27,680) 82,356	-
Energy		81 81	319838 332574	LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS NATIONAL LABORATORY		-
Energy	Pass-through Pass-through	81	404227	LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS NATIONAL LABORATORY	62,654 199,432	-
Energy	rass-uii Ougii	01	10744	TAUTANUGAL LANGUTAN CONTRACTOR	199,432	-

Schedule of Expenditures of Federal Awards (Continued)

Year Ended June 30, 2018

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
Energy	Pass-through	81	LBNL Subcontract 7216019 Mod 6 Sev	SEVENTHWAVE	\$ 38,440	\$ -
Energy	Pass-through	81.041	MEO-18-007	MICHIGAN ENERGY OFFICE	66,961	-
Energy	Pass-through	81.049	2017-67015-26676 AGR2017 00021 - DE-SC0013233	E3TEC SERVICE, LLC	158,287	=
Energy Energy	Pass-through Pass-through	81.049 81.049	130300-5085053	E3TEC SERVICE, LLC HARVARD UNIVERSITY	(13,174) 32,384	-
Energy	Pass-through	81.049	17630-Z7181004	UNIV OF MARYLAND	96,210	=
Energy	Pass-through	81.049	3003805140	UNIVERSITY OF MICHIGAN	13,281	-
Energy	Pass-through	81.049	STTR	NAMESFORLIFE LLC	164	-
Energy	Pass-through Pass-through	81.049 81.049	5102729 2014-13	UNIV OF NORTH CAROLINA UNIVERSITY OF OKLAHOMA	(15,693) 218,116	-
Energy Energy	Pass-through	81.049	C15-25	RADIATION MONITORING DEVICES, INC.	(59)	-
Energy	Pass-through	81.049	APP 128563-K3840	SHEAR FORM INC	9	-
Energy	Pass-through	81.049	UHV-1501	UHV TECHNOLOGIES, INC.	14,096	-
Energy	Pass-through	81.049	5103977	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	46,998	-
Energy	Pass-through	81.049	384H963	UNIVERSITY OF WISCONSIN - MADISON	4,448,018	-
Energy Energy	Pass-through Pass-through	81.049 81.086	812K980 4300501633	UNIVERSITY OF WISCONSIN - MADISON GENERAL MOTORS CORPORATION	3,864,082 74,805	-
Energy	Pass-through	81.086	A16-0349-S005	COLLABORATIVE COMPOSITE SOLUTIONS CORP.	374,193	-
Energy	Pass-through	81.086	A16-0349-S005	COLLABORATIVE COMPOSITE SOLUTIONS CORP.	34,566	-
Energy	Pass-through	81.086	DOE DE-EE0008235 MB Subaward	MERCEDES BENZ RESEARCH & DEVELOPMENT NORTH AMERI	6,962	-
Energy	Pass-through	81.086	PA16-0349-3.1-01	COLLABORATIVE COMPOSITE SOLUTIONS CORP.	4,266,266	-
Energy	Pass-through	81.086	PA16-0349-3.2-02	COLLABORATIVE COMPOSITE SOLUTIONS CORP.	234,148	-
Energy Energy	Pass-through Pass-through	81.086 81.086	PA16-0349-3.2-02 PA16-0349-5.3-01	COLLABORATIVE COMPOSITE SOLUTIONS CORP. COLLABORATIVE COMPOSITE SOLUTIONS CORP.	14,988 11,989	-
Energy	Pass-through	81.086	PA16-0349-5.3-01	COLLABORATIVE COMPOSITE SOLUTIONS CORP.	2,197	_
Energy	Pass-through	81.087	3004665464	UNIVERSITY OF MICHIGAN	13,212	-
Energy	Pass-through	81.087	NCGA APP114981 MILLER	NATL CORN GROWERS ASSOCIATION	205,742	-
Energy	Pass-through	81.112	4-10469-28	CARNEGIE INSTITUTE	45,787	-
Energy	Pass-through	81.112	S1924106 5108 S1928815 5109 PO 579853	RUTGERS, THE STATE UNIVERSITY RUTGERS, THE STATE UNIVERSITY	70,103	-
Energy Energy	Pass-through Pass-through	81.112 81.113	00007638	UNIV OF CALIFORNIA BERKELEY	233,300 (1,519)	-
Energy	Pass-through	81.113	00009330	UNIV OF CALIFORNIA BERKELEY	756,548	_
Energy	Pass-through	81.135	087707-16477	UNIV OF ILLINOIS URBANA CHAMPAIGN	10,765	-
		ough Total			16,833,361	
	Energy T	otal		_	98,712,936	1,211,731
Environmental Protection Agency	Direct	66.001	EPA 83589201	ENVIRONMENTAL PROTECTION AGENCY	214,167	-
Environmental Protection Agency	Direct	66.509	83579801	ENVIRONMENTAL PROTECTION AGENCY	207,371	132,686
Environmental Protection Agency Environmental Protection Agency	Direct Direct	66.509 66.509	83616801 RD-83520301-1	ENVIRONMENTAL PROTECTION AGENCY ENVIRONMENTAL PROTECTION AGENCY	109,608 (71)	-
Environmental Protection Agency Environmental Protection Agency	Direct	66.516	83594101	ENVIRONMENTAL PROTECTION AGENCY ENVIRONMENTAL PROTECTION AGENCY	3,532	-
Environmental Protection Agency	Direct	66.516	83676701	ENVIRONMENTAL PROTECTION AGENCY	2,552	-
Environmental Protection Agency	Direct	66.951	00E01570-0	ENVIRONMENTAL PROTECTION AGENCY	26,137	-
Environmental Protection Agency	Direct	66.951	00E01570-0	ENVIRONMENTAL PROTECTION AGENCY	5,663	
	Direct To	tal		_	568,959	132,686
Environmental Protection Agency	Pass-through	66	10006-7-105247	CH2M HILL	149,995	-
Environmental Protection Agency	Pass-through	66.419	2017-7216	MI ENVIRONMENTAL QUALITY	20,047	-
Environmental Protection Agency Environmental Protection Agency	Pass-through Pass-through	66.469 66.469	1509080Z2 APP# 150589	MICHIGAN TECH RESEARCH INSTITUTE TIP OF THE MITT WATERSHED COUNCIL	31,870 15,987	-
Environmental Protection Agency	Pass-through	66.469	EPA 143652	THE STEWARDSHIP NETWORK	9,410	=
Environmental Protection Agency	Pass-through	66.469	GL-00E02209	GREAT LAKES COMMISSION	50,246	-
Environmental Protection Agency	Pass-through	66.509	2013-04551-02	UNIV OF ILLINOIS URBANA CHAMPAIGN	23,178	-
Environmental Protection Agency	Pass-through	66.509	429-40-10D	IOWA STATE UNIVERSITY	22,496	-
Environmental Protection Agency Environmental Protection Agency	Pass-through Pass-through	66.511 66.511	4109-79628 4109-79628	PURDUE UNIV PURDUE UNIV	139,267 79,241	89,358
Environmental Protection Agency Environmental Protection Agency	Pass-through	66.511	4109-79628	PURDUE UNIV	11,522	-
		ough Total		_	553,259	89,358
	Environn	nental Protect	ion Agency Total		1,122,218	222,044
Federal Council on the Arts and Humanities	Direct	45.149	PW-51639-14	NATL ENDOWMENT FOR THE HUMANITIES	1,398	-
Federal Council on the Arts and Humanities	Direct	45.161	RZ-51461-12	NATL ENDOWMENT FOR THE HUMANITIES	(4,542)	-
Federal Council on the Arts and Humanities	Direct	45.169	HK-50173-14	NATL ENDOWMENT FOR THE HUMANITIES	80,145	
	Federal (Council on the	Arts and Humanities Total	_	77,001	
Health and Human Services	Direct	93	200-2016-89831	CENTERS FOR DISEASE CONTROL AND PREVENTION	1,207,157	-
Health and Human Services	Direct	93	200-2016-89831	CENTERS FOR DISEASE CONTROL AND PREVENTION	1,288	-
Health and Human Services Health and Human Services	Direct Direct	93.103 93.110	HHS-UFD004632B 5 R40MC27704-03-00	FOOD & DRUG ADMINISTRATION -PHS HEALTH RESOURCES & SERVICES ADMIN -PHS	4 211,438	-
Health and Human Services	Direct	93.113	1K22ES026208-01A1	NATL INST OF HEALTH - NIH/PHS	74,398	_
Health and Human Services	Direct	93.113	1R01ES024966-01A1 Revised	NATL INST OF HEALTH - NIH/PHS	376,666	7,223
Health and Human Services	Direct	93.113	1R01ES027353-01A1	NATL INST OF HEALTH - NIH/PHS	425,914	38,243
Health and Human Services	Direct	93.113	1R21ES027418-01	NATL INST OF HEALTH - NIH/PHS	153,299	-
Health and Human Services	Direct	93.113	1R21ES029205-01	NATL INST OF HEALTH - NIH/PHS	29,969	-
Health and Human Services Health and Human Services	Direct Direct	93.113 93.113	3R01ES024064-03S1 4R01ES002520-29	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	60,147 283,814	-
Health and Human Services	Direct	93.113	5R00ES024570-04	NATL INST OF HEALTH - NIH/PHS	301,780	=
Health and Human Services	Direct	93.113	5R00ES024806-04	NATL INST OF HEALTH - NIH/PHS	290,793	=
Health and Human Services	Direct	93.113	5R01ES017537-07	NATL INST OF HEALTH - NIH/PHS	318,870	28,798
Health and Human Services	Direct	93.113	5R01ES022302-03	NATL INST OF HEALTH - NIH/PHS	383,248	186,929
Health and Human Services	Direct	93.113	5R01ES024064-02	NATL INST OF HEALTH - NIH/PHS	421,592	-
Health and Human Services Health and Human Services	Direct Direct	93.113 93.113	5R01ES024064-02 5R21ES024470-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	2,752 (402)	-
Health and Human Services	Direct	93.113	5R21ES026022 - 02	NATL INST OF HEALTH - NIH/PHS	10,742	65,333
Health and Human Services	Direct	93.113	5R25ES0250602-02	NATL INST OF HEALTH - NIH/PHS	73,399	-
Health and Human Services	Direct	93.113	5R25ES0250602-04S1	NATL INST OF HEALTH - NIH/PHS	7,519	-
Health and Human Services	Direct	93.113	5T3ES007255-28	NATL INST OF HEALTH - NIH/PHS	181,816	-

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster						
(continued): Health and Human Services	Direct	93.113	5T3ES007255-28	NATL INST OF HEALTH - NIH/PHS	\$ 1,475	\$ -
Health and Human Services	Direct	93.113	5T3ES007255-29	NATL INST OF HEALTH - NIH/PHS	183,943	-
Health and Human Services	Direct	93.113	5U01ES020885-04	NATL INST OF HEALTH - NIH/PHS	(12,915)	-
Health and Human Services	Direct	93.113	5U01ES026119-03	NATL INST OF HEALTH - NIH/PHS	918,318	84,499
Health and Human Services	Direct Direct	93.113 93.113	9R56ES029064-05A1 KES025435C	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	47,104 22,946	=
Health and Human Services Health and Human Services	Direct	93.113	KES028047B	NATL INST OF HEALTH - NIH/PHS	13,822	-
Health and Human Services	Direct	93.113	RES024795B	NATL INST OF HEALTH - NIH/PHS	56,915	-
Health and Human Services	Direct	93.136	5R01CE002682-04	CENTERS FOR DISEASE CONTROL AND PREVENTION	507,223	37,936
Health and Human Services	Direct	93.143	5PA2ES004911-26 Revised	NATL INST OF HEALTH - NIH/PHS	185,806	-
Health and Human Services Health and Human Services	Direct Direct	93.143 93.143	5PA2ES004911-26 Revised 5PA2ES004911-26 Revised	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	134,937 121,179	134,937
Health and Human Services	Direct	93.143	5PA2ES004911-26 Revised	NATE INST OF HEALTH - NIH/PHS	52,415	-
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	251,623	-
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	250,922	250,922
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	242,623	-
Health and Human Services	Direct	93.143 93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	218,584	-
Health and Human Services Health and Human Services	Direct Direct	93.143	PES004911F PES004911F	NATL INST OF HEALTH - NIH/PHS	181,682 177,614	-
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	173,106	=
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	163,027	-
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	130,133	-
Health and Human Services	Direct	93.143	PES004911F	NATL INST OF HEALTH - NIH/PHS	62,858	62,858
Health and Human Services Health and Human Services	Direct Direct	93.143 93.143	PES004911F PES004911F	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	50,863 15,825	-
Health and Human Services	Direct	93.143	PES004911F	NATE INST OF HEALTH - NIH/PHS	54,090	54,090
Health and Human Services	Direct	93.172	5R01HG007060-03	NATL INST OF HEALTH - NIH/PHS	73,187	-
Health and Human Services	Direct	93.173	1R21DC015550-01A1	NATL INST OF HEALTH - NIH/PHS	217,487	15,560
Health and Human Services	Direct	93.173	1R21DC016102-01	NATL INST OF HEALTH - NIH/PHS	52,525	-
Health and Human Services	Direct	93.173	5R01DC012315-04	NATL INST OF HEALTH - NIH/PHS	438,296	125,304
Health and Human Services	Direct Direct	93.213 93.213	1K99AT009156-01A1 3U19AT006057-01A1S1	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	99,044 475,566	-
Health and Human Services Health and Human Services	Direct	93.213	5F32AT008761-02	NATL INST OF HEALTH - NIH/PHS	8,505	-
Health and Human Services	Direct	93.213	5F32AT008761-03	NATL INST OF HEALTH - NIH/PHS	44,743	=
Health and Human Services	Direct	93.213	5R01AT007695-05	NATL INST OF HEALTH - NIH/PHS	347,068	126,134
Health and Human Services	Direct	93.213	RAT007695B	NATL INST OF HEALTH - NIH/PHS	(11,117)	=
Health and Human Services Health and Human Services	Direct	93.226	5R18HS020208-05	AGENCY FOR HEALTHCARE RSCH & QUAL -PHS	252,895	3,772
Health and Human Services Health and Human Services	Direct Direct	93.226 93.242	5R21HS022335-02 1R01MH111604-02	AGENCY FOR HEALTHCARE RSCH & QUAL -PHS NATL INST OF HEALTH - NIH/PHS	938 511,952	-
Health and Human Services	Direct	93.242	1R01MH114883	NATL INST OF HEALTH - NIH/PHS	160,141	5,744
Health and Human Services	Direct	93.242	1UG3MH114249-01	NATL INST OF HEALTH - NIH/PHS	390,405	263,909
Health and Human Services	Direct	93.242	4R01MH093445-05	NATL INST OF HEALTH - NIH/PHS	64,397	=
Health and Human Services	Direct	93.242	4R01MH096705-05	NATL INST OF HEALTH - NIH/PHS	40,833	-
Health and Human Services	Direct	93.242	5R01MH108511-02 Revised	NATL INST OF HEALTH - NIH/PHS	512,947	117,284
Health and Human Services Health and Human Services	Direct Direct	93.242 93.242	5R01MH111276-02 5R21MH100238-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	482,279 99,104	-
Health and Human Services	Direct	93.242	5R21MH104780-02	NATL INST OF HEALTH - NIH/PHS	26,859	=
Health and Human Services	Direct	93.242	5R21MH105626-02	NATL INST OF HEALTH - NIH/PHS	(3,023)	1,107
Health and Human Services	Direct	93.242	5U01MH106660-02	NATL INST OF HEALTH - NIH/PHS	1,754,340	961,681
Health and Human Services	Direct	93.242	7R01MH102456-04	NATL INST OF HEALTH - NIH/PHS	550,086	-
Health and Human Services Health and Human Services	Direct Direct	93.242 93.242	R01MH111715 R01MH112644	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	46,988 177,939	11,694
Health and Human Services	Direct	93.242	RMH111715A	NATE INST OF HEALTH - NIH/PHS	577,426	13,102
Health and Human Services	Direct	93.262	1U60OH010892-01A1	CENTERS FOR DISEASE CONTROL AND PREVENTION	278,213	100,000
Health and Human Services	Direct	93.262	5U60OH008466-12	CENTERS FOR DISEASE CONTROL AND PREVENTION	636,702	100,502
Health and Human Services	Direct	93.273	1R01AA026057	NATL INST OF HEALTH - NIH/PHS	80,329	43,260
Health and Human Services	Direct	93.273	5R03AA024288-02	NATL INST OF HEALTH - NIH/PHS	75,740	-
Health and Human Services Health and Human Services	Direct Direct	93.279 93.279	1F31DA042502-01A1 4K01DA033346-04	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	31,963 128,659	-
Health and Human Services	Direct	93.279	4T32DA021129-10	NATE INST OF HEALTH - NIH/PHS	189,429	-
Health and Human Services	Direct	93.279	4T32DA021129-10	NATL INST OF HEALTH - NIH/PHS	5,162	-
Health and Human Services	Direct	93.279	5K05DA015799-11	NATL INST OF HEALTH - NIH/PHS	14,066	-
Health and Human Services	Direct	93.279	5R00DA037271-04	NATL INST OF HEALTH - NIH/PHS	204,565	-
Health and Human Services Health and Human Services	Direct Direct	93.279 93.279	5R01DA007908-20 5R01DA007908-20	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	11	-
Health and Human Services	Direct	93.279	5R01DA007908-20 5R01DA039112-03 Revised	NATL INST OF HEALTH - NIH/PHS	(3) 405,772	98,241
Health and Human Services	Direct	93.279	5R01DA039895-02	NATL INST OF HEALTH - NIH/PHS	476,455	
Health and Human Services	Direct	93.279	5R25DA030310-05	NATL INST OF HEALTH - NIH/PHS	177,315	15,312
Health and Human Services	Direct	93.279	RDA043501A	NATL INST OF HEALTH - NIH/PHS	121,718	=
Health and Human Services	Direct	93.283	5U10DD000901-04 1R21EB023051-01A1	CENTERS FOR DISEASE CONTROL AND PREVENTION	16,836	=
Health and Human Services Health and Human Services	Direct Direct	93.286 93.286	5R00EB016753-04 Revised	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	133,024 72,632	-
Health and Human Services	Direct	93.286	5R21EB017881-02	NATL INST OF HEALTH - NIH/PHS	(956)	=
Health and Human Services	Direct	93.286	5U01EB018818-04	NATL INST OF HEALTH - NIH/PHS	752,609	584,890
Health and Human Services	Direct	93.307	5U54MD011227-02	NATL INST OF HEALTH - NIH/PHS	2,145,540	164,992
Health and Human Services	Direct	93.307	5U54MD011227-02S1	NATL INST OF HEALTH - NIH/PHS	73,865	-
Health and Human Services Health and Human Services	Direct Direct	93.310 93.310	5DP7OD020320-04 5UG3OD023285-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	287,321 2,652,126	1,676,379
Health and Human Services Health and Human Services	Direct	93.310	5R01OD012206-04	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	2,652,126 86,316	3,057
Health and Human Services	Direct	93.351	5R21OD019915-02	NATL INST OF HEALTH - NIH/PHS	9,562	-
Health and Human Services	Direct	93.351	5R24OD012221-15 Revised	NATL INST OF HEALTH - NIH/PHS	116,914	24,703
Health and Human Services	Direct	93.351	5R25OD016534-03	NATL INST OF HEALTH - NIH/PHS	276,699	80,895
Health and Human Services	Direct	93.351	5T32OD011167-13	NATL INST OF HEALTH - NIH/PHS	464	-
Health and Human Services Health and Human Services	Direct Direct	93.351 93.351	5T35OD016477-15 ROD016534A	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	49,840 3,819	-
Health and Human Services	Direct	93.361	1R21NR015589-01A1	NATE INST OF HEALTH - NIH/PHS	182,323	64,556
Health and Human Services	Direct	93.361	7R01NR014484-04	NATL INST OF HEALTH - NIH/PHS	377,317	139,198
Health and Human Services	Direct	93.393	1R01CA225105-01	NATL INST OF HEALTH - NIH/PHS	110,929	-
Health and Human Services	Direct	93.393	4R01CA160514-05	NATL INST OF HEALTH - NIH/PHS	63,980	-

Schedule of Expenditures of Federal Awards (Continued)

Year Ended June 30, 2018

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Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Research and Development Cluster					<u> </u>	
(continued):						
Health and Human Services	Direct	93.393	5R00CA177868-03	NATL INST OF HEALTH - NIH/PHS	\$ 187,937	\$ -
Health and Human Services Health and Human Services	Direct Direct	93.394 93.395	7R01CA135650-09 5R01CA149451-05 REVISED	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	95,070 11,305	42,714
Health and Human Services	Direct	93.395	5R01CA157459-05	NATL INST OF HEALTH - NIH/PHS	21,099	-
Health and Human Services	Direct	93.395	5R01CA193706-02	NATL INST OF HEALTH - NIH/PHS	587,915	110,490
Health and Human Services	Direct	93.396	5R01CA188305-02	NATL INST OF HEALTH - NIH/PHS	329,163	-
Health and Human Services	Direct	93.396	7R01CA197398	NATL INST OF HEALTH - NIH/PHS	515,732	242,524
Health and Human Services Health and Human Services	Direct Direct	93.398 93.398	1F99CA212221-01 5K22CA188149-03	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	34,910 158,718	-
Health and Human Services	Direct	93.398	5T32OD011167-14	NATL INST OF HEALTH - NIH/PHS	19,966	-
Health and Human Services	Direct	93.837	2R25HL103156-06 Revised	NATL INST OF HEALTH - NIH/PHS	83,865	-
Health and Human Services	Direct	93.837	2R25HL108864-06A1	NATL INST OF HEALTH - NIH/PHS	198,065	-
Health and Human Services	Direct	93.837	4RO0HL121073-03	NATL INST OF HEALTH - NIH/PHS	185,170	-
Health and Human Services Health and Human Services	Direct	93.837 93.837	5K01HL128843-02 5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	106,180 422,772	=
Health and Human Services	Direct Direct	93.837	5P01HL070687-13 5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS	248,988	-
Health and Human Services	Direct	93.837	5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS	206,962	-
Health and Human Services	Direct	93.837	5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS	175,635	=
Health and Human Services	Direct	93.837	5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS	126,531	-
Health and Human Services	Direct	93.837	5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS	106,779	-
Health and Human Services	Direct	93.837	5P01HL070687-13	NATL INST OF HEALTH - NIH/PHS	55,032	-
Health and Human Services Health and Human Services	Direct Direct	93.837 93.837	5R00HL121160-05 5R01HL107495-04	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	117,100 (1,716)	-
Health and Human Services	Direct	93.837	5R01HL109101-05	NATL INST OF HEALTH - NIH/PHS	168	_
Health and Human Services	Direct	93.837	5R01HL115185-04	NATL INST OF HEALTH - NIH/PHS	7,555	-
Health and Human Services	Direct	93.837	5R01HL117847-03	NATL INST OF HEALTH - NIH/PHS	374,792	-
Health and Human Services	Direct	93.837	5R01HL117847-04	NATL INST OF HEALTH - NIH/PHS	62,800	-
Health and Human Services Health and Human Services	Direct	93.837 93.837	5R01HL122223-05	NATL INST OF HEALTH - NIH/PHS	131,278	-
Health and Human Services Health and Human Services	Direct Direct	93.837	5R01HL130624 - 03 RHL128628B	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	580,815 499,874	506,079 143,706
Health and Human Services	Direct	93.837	RHL134841A	NATL INST OF HEALTH - NIH/PHS	510,403	346,778
Health and Human Services	Direct	93.837	RHL137694A	NATL INST OF HEALTH - NIH/PHS	299,017	12,161
Health and Human Services	Direct	93.846	1F30AR071201-01A1	NATL INST OF HEALTH - NIH/PHS	38,455	=
Health and Human Services	Direct	93.846	5R01AR066028-02	NATL INST OF HEALTH - NIH/PHS	19,097	19,097
Health and Human Services	Direct	93.847	1R01DK108798-01A1	NATL INST OF HEALTH - NIH/PHS	215,229	-
Health and Human Services Health and Human Services	Direct Direct	93.847 93.847	1R01DK111475-01A1 1R01DK112695-01	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	317,123 300,467	-
Health and Human Services	Direct	93.847	3R01DK103723-02S1	NATE INST OF HEALTH - NIH/PHS	486,946	39,106
Health and Human Services	Direct	93.847	4R01DK094932-05	NATL INST OF HEALTH - NIH/PHS	22,625	-
Health and Human Services	Direct	93.847	5F30DK107163-03 Revised	NATL INST OF HEALTH - NIH/PHS	50,065	-
Health and Human Services	Direct	93.847	5F31DK107081-02 Revised	NATL INST OF HEALTH - NIH/PHS	7,978	=
Health and Human Services	Direct	93.847	5F31DK107232-02 Revised	NATL INST OF HEALTH - NIH/PHS	2,706	-
Health and Human Services	Direct	93.847	5R01DK073566 - 09	NATL INST OF HEALTH - NIH/PHS	256,867	=
Health and Human Services Health and Human Services	Direct Direct	93.847 93.847	5R01DK101050-03 5R01DK103723-03	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	15,816 51,529	-
Health and Human Services	Direct	93.847	5R01DK103723-03 5R01DK103759-03 Revised	NATL INST OF HEALTH - NIH/PHS	293,292	106,062
Health and Human Services	Direct	93.847	5R01DK103808 - 04	NATL INST OF HEALTH - NIH/PHS	391,123	-
Health and Human Services	Direct	93.847	5R01DK105099-03 Revised	NATL INST OF HEALTH - NIH/PHS	392,873	48,459
Health and Human Services	Direct	93.847	5R01DK107697-03	NATL INST OF HEALTH - NIH/PHS	511,199	56,289
Health and Human Services	Direct Direct	93.847 93.847	5R01DK110665-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	350,215	23,243
Health and Human Services Health and Human Services	Direct	93.847	RDK105468B RDK105503B	NATL INST OF HEALTH - NIH/PHS	30,897 28,259	-
Health and Human Services	Direct	93.853	1F31NS090866-01A1	NATL INST OF HEALTH - NIH/PHS	28,570	=
Health and Human Services	Direct	93.853	1R01NS094460-01	NATL INST OF HEALTH - NIH/PHS	527,310	351,042
Health and Human Services	Direct	93.853	1R13NS106885	NATL INST OF HEALTH - NIH/PHS	10,000	-
Health and Human Services	Direct	93.853	1R21NS099416-01A1	NATL INST OF HEALTH - NIH/PHS	269,592	23,301
Health and Human Services	Direct	93.853	1R21NS099632-01	NATL INST OF HEALTH - NIH/PHS	201,353	-
Health and Human Services Health and Human Services	Direct Direct	93.853 93.853	4R00NS096108 5R01NS045195-15	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	204,601 315,221	-
Health and Human Services	Direct	93.853	5R03NS095202-02	NATL INST OF HEALTH - NIH/PHS	23,227	_
Health and Human Services	Direct	93.853	5R21NS090107-02	NATL INST OF HEALTH - NIH/PHS	38,223	-
Health and Human Services	Direct	93.853	5R21NS094900-02 Revised	NATL INST OF HEALTH - NIH/PHS	159,141	-
Health and Human Services	Direct	93.853	5R21NS096637-02	NATL INST OF HEALTH - NIH/PHS	136,282	-
Health and Human Services Health and Human Services	Direct Direct	93.853 93.853	5R21NS098079-02 5R25NS090989-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	180,463 375,677	42,106
Health and Human Services	Direct	93.853	5T32NS044928-13	NATL INST OF HEALTH - NIH/PHS	28,157	-
Health and Human Services	Direct	93.853	R21NS098173	NATL INST OF HEALTH - NIH/PHS	169,873	_
Health and Human Services	Direct	93.853	R21NS098173-S1	NATL INST OF HEALTH - NIH/PHS	50,144	-
Health and Human Services	Direct	93.853	RNS072171C	NATL INST OF HEALTH - NIH/PHS	129,156	14,457
Health and Human Services	Direct	93.853	RNS095656A (P)	NATL INST OF HEALTH - NIH/PHS	90,221	40,610
Health and Human Services	Direct	93.853	RNS098231A	NATLINST OF HEALTH - NIH/PHS	273,329	7,098
Health and Human Services Health and Human Services	Direct Direct	93.853 93.855	RNS105888A 1R01Al116605-01A1	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	28,071 429,965	98,242
Health and Human Services	Direct	93.855	1R01Al121178-01A1	NATL INST OF HEALTH - NIH/PHS	357,713	-
Health and Human Services	Direct	93.855	1R01Al121178-01A1	NATL INST OF HEALTH - NIH/PHS	117,318	-
Health and Human Services	Direct	93.855	1R01AI121178-01A1	NATL INST OF HEALTH - NIH/PHS	108,604	-
Health and Human Services	Direct	93.855	1R03Al130554-01	NATL INST OF HEALTH - NIH/PHS	59,263	-
Health and Human Services	Direct	93.855	1R21Al138707-01	NATL INST OF HEALTH - NIH/PHS	5,424	-
Health and Human Services	Direct Direct	93.855	1R21Al138707-01	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	75,956 1,036,656	- EE2 210
Health and Human Services Health and Human Services	Direct	93.855 93.855	1U01AI126610-01 1U01AI126610-01	NATE INST OF HEALTH - NIH/PHS NATE INST OF HEALTH - NIH/PHS	1,036,656 42,231	552,219 -
Health and Human Services	Direct	93.855	4R01AI048758-17	NATL INST OF HEALTH - NIH/PHS	212,949	-
Health and Human Services	Direct	93.855	5R01AI047153-15	NATL INST OF HEALTH - NIH/PHS	(5,610)	-
Health and Human Services	Direct	93.855	5R01AI113257-04	NATL INST OF HEALTH - NIH/PHS	318,451	36,285
Health and Human Services	Direct	93.855	5R01Al120189-03	NATL INST OF HEALTH - NIH/PHS	183,428	-
Health and Human Services	Direct	93.855	5R03Al111054-02	NATL INST OF HEALTH - NIH/PHS	9,826	-
Health and Human Services Health and Human Services	Direct Direct	93.855 93.855	5R21AI106477-02 5R21AI111192-03	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	38,518 141,333	-
Health and Human Services	Direct	93.855	5R21Al121748-02	NATL INST OF HEALTH - NIH/PHS	221,476	-
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Schedule of Expenditures of Federal Awards (Continued)

Year Ended June 30, 2018

	Discort	OFDA			Total	
Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Research and Development Cluster						
(continued):						
Health and Human Services	Direct	93.855	5R21AI122808-02	NATL INST OF HEALTH - NIH/PHS	\$ 170,109	\$ -
Health and Human Services Health and Human Services	Direct Direct	93.855 93.855	5R21AI122863-02 5R21AI126359-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	104,761 223,128	-
Health and Human Services	Direct	93.855	5R21AI17018-02	NATE INST OF HEALTH - NIH/PHS	124,578	-
Health and Human Services	Direct	93.855	5R37AI021884 - 32	NATL INST OF HEALTH - NIH/PHS	313,471	-
Health and Human Services	Direct	93.855	5U19AI089683-04	NATL INST OF HEALTH - NIH/PHS	136,864	134,912
Health and Human Services	Direct	93.855	R56AI047153	NATL INST OF HEALTH - NIH/PHS	211,503	-
Health and Human Services Health and Human Services	Direct Direct	93.855 93.855	RAI117018A UAI089683C	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	46,985 596,747	256,660
Health and Human Services	Direct	93.859	1F30GM123632-01A1	NATE INST OF HEALTH - NIH/PHS	36,399	230,000
Health and Human Services	Direct	93.859	1R01GM121499-01A1	NATL INST OF HEALTH - NIH/PHS	146,123	-
Health and Human Services	Direct	93.859	1R01GM122085-01	NATL INST OF HEALTH - NIH/PHS	296,367	196,610
Health and Human Services	Direct	93.859	1R01GM124137	NATL INST OF HEALTH - NIH/PHS	233,377	-
Health and Human Services Health and Human Services	Direct	93.859 93.859	1R01GM125743-01 1R01GM127431-01	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	29,630	=
Health and Human Services	Direct Direct	93.859	1R25GM116761-01A1	NATL INST OF HEALTH - NIH/PHS	14,169 126,651	-
Health and Human Services	Direct	93.859	1R35GM126948-01	NATL INST OF HEALTH - NIH/PHS	108,141	-
Health and Human Services	Direct	93.859	2R01GM043585-22	NATL INST OF HEALTH - NIH/PHS	26,372	=
Health and Human Services	Direct	93.859	2T32GM092715-06	NATL INST OF HEALTH - NIH/PHS	16,361	-
Health and Human Services	Direct	93.859	3R01GM072667 - 11S1	NATL INST OF HEALTH - NIH/PHS	(437)	-
Health and Human Services	Direct	93.859	4R00GM120386-03	NATL INST OF HEALTH - NIH/PHS	16,130	-
Health and Human Services Health and Human Services	Direct Direct	93.859 93.859	4R01GM100908-05 4R01GM101353 - 04	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	49,096 183,806	-
Health and Human Services	Direct	93.859	5R01GM026916-35	NATL INST OF HEALTH - NIH/PHS	74,347	_
Health and Human Services	Direct	93.859	5R01GM043585-21	NATL INST OF HEALTH - NIH/PHS	1,017	-
Health and Human Services	Direct	93.859	5R01GM057440-16	NATL INST OF HEALTH - NIH/PHS	520	-
Health and Human Services	Direct	93.859	5R01GM063188-11	NATL INST OF HEALTH - NIH/PHS	315,841	-
Health and Human Services Health and Human Services	Direct Direct	93.859 93.859	5R01GM072667-12 Revised 5R01GM084953-08	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	197,726 175,657	86,447
Health and Human Services	Direct	93.859	5R01GM094534-06	NATL INST OF HEALTH - NIH/PHS	389,030	121,161
Health and Human Services	Direct	93.859	5R01GM101038-06	NATL INST OF HEALTH - NIH/PHS	368,456	-
Health and Human Services	Direct	93.859	5R01GM101219-06	NATL INST OF HEALTH - NIH/PHS	227,540	-
Health and Human Services	Direct	93.859	5R01GM101386-04	NATL INST OF HEALTH - NIH/PHS	16,486	-
Health and Human Services	Direct	93.859	5R01GM104009-04	NATL INST OF HEALTH - NIH/PHS	228,557	-
Health and Human Services Health and Human Services	Direct Direct	93.859 93.859	5R01GM109259-03 5R01GM109928-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	512,215 300,993	355,067
Health and Human Services	Direct	93.859	5R01GM110185-02	NATL INST OF HEALTH - NIH/PHS	266,838	11,828
Health and Human Services	Direct	93.859	5R01GM110195-03	NATL INST OF HEALTH - NIH/PHS	121,620	-
Health and Human Services	Direct	93.859	5R01GM110525-03	NATL INST OF HEALTH - NIH/PHS	296,167	=
Health and Human Services	Direct	93.859	5R01GM115373-03	NATL INST OF HEALTH - NIH/PHS	431,791	-
Health and Human Services	Direct	93.859	5R01GM115459-02	NATL INST OF HEALTH - NIH/PHS	345,974	132,912
Health and Human Services	Direct	93.859	5R01GM115475-02	NATL INST OF HEALTH - NIH/PHS	337,809	-
Health and Human Services Health and Human Services	Direct Direct	93.859 93.859	5R01GM118685-02 5R25GM108593-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	323,950 134,737	10,886
Health and Human Services	Direct	93.859	5R25GM115335-03	NATL INST OF HEALTH - NIH/PHS	49,753	25,246
Health and Human Services	Direct	93.859	5T32GM092715-07	NATL INST OF HEALTH - NIH/PHS	147,201	-
Health and Human Services	Direct	93.859	5T32GM110523-03	NATL INST OF HEALTH - NIH/PHS	38,947	-
Health and Human Services	Direct	93.859	5T32GM110523-04	NATL INST OF HEALTH - NIH/PHS	159,256	-
Health and Human Services	Direct	93.859	7R01GM099992-04	NATL INST OF HEALTH - NIH/PHS	5,239	-
Health and Human Services Health and Human Services	Direct Direct	93.859 93.859	KGM115766A (P) R01GM061893	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	29,281 (1,499)	-
Health and Human Services	Direct	93.859	R01GM125991	NATL INST OF HEALTH - NIH/PHS	88,345	-
Health and Human Services	Direct	93.859	R01GM125991	NATL INST OF HEALTH - NIH/PHS	3,324	=
Health and Human Services	Direct	93.865	1R21HD083058-01A1	NATL INST OF HEALTH - NIH/PHS	197,160	=
Health and Human Services	Direct	93.865	1R21HD090406-01A1	NATL INST OF HEALTH - NIH/PHS	52,205	7,679
Health and Human Services Health and Human Services	Direct Direct	93.865 93.865	1T32HD087166-01 1T32HD087166-01	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	106,530 2,189	-
Health and Human Services	Direct	93.865	1T32HD087166-01	NATE INST OF HEALTH - NIH/PHS	1,325	-
Health and Human Services	Direct	93.865	1T32HD087166-02	NATL INST OF HEALTH - NIH/PHS	109,769	-
Health and Human Services	Direct	93.865	2R01HD042280-10A1	NATL INST OF HEALTH - NIH/PHS	508,103	31,554
Health and Human Services	Direct	93.865	3R01HD083273-02S1	NATL INST OF HEALTH - NIH/PHS	38,750	-
Health and Human Services	Direct	93.865	4R01HD072972-05	NATL INST OF HEALTH - NIH/PHS	10.240	-
Health and Human Services Health and Human Services	Direct Direct	93.865 93.865	5F32HD081856-02 5R00HD058698-05	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	10,240 94,097	-
Health and Human Services	Direct	93.865	5R01HD064416-05	NATL INST OF HEALTH - NIH/PHS	38,429	37,203
Health and Human Services	Direct	93.865	5R01HD070723-05	NATL INST OF HEALTH - NIH/PHS	80,975	72,801
Health and Human Services	Direct	93.865	5R01HD070723-05	NATL INST OF HEALTH - NIH/PHS	66,602	52,274
Health and Human Services	Direct	93.865	5R01HD072489-05	NATL INST OF HEALTH - NIH/PHS	281,681	-
Health and Human Services	Direct	93.865	5R01HD072968-05 Revised	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	253,031	11,695
Health and Human Services Health and Human Services	Direct Direct	93.865 93.865	5R01HD083273-02 5R01HD084377-02	NATL INST OF HEALTH - NIH/PHS	253,087 527,919	10,409 196,923
Health and Human Services	Direct	93.865	5R01HD084478-02	NATL INST OF HEALTH - NIH/PHS	284,737	-
Health and Human Services	Direct	93.865	5R01HD084494 - 03	NATL INST OF HEALTH - NIH/PHS	435,987	-
Health and Human Services	Direct	93.865	5R01HD085990-02	NATL INST OF HEALTH - NIH/PHS	585,006	276,064
Health and Human Services	Direct	93.865	5R03HD073275-02	NATL INST OF HEALTH - NIH/PHS	16,965	-
Health and Human Services Health and Human Services	Direct Direct	93.865 93.865	5R03HD08184-02 5R21HD075974-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	21,964 169	-
Health and Human Services Health and Human Services	Direct	93.865	5R21HD075974-02 5R21HD085138-02	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	220,725	107,300
Health and Human Services	Direct	93.865	R00HD084759	NATL INST OF HEALTH - NIH/PHS	67,779	-
Health and Human Services	Direct	93.865	R03HD091640	NATL INST OF HEALTH - NIH/PHS	34,488	-
Health and Human Services	Direct	93.865	RHD075903A	NATL INST OF HEALTH - NIH/PHS	442,319	32,763
Health and Human Services	Direct	93.865	RHD086062B	NATL INST OF HEALTH - NIH/PHS	225,465	-
Health and Human Services	Direct	93.865	RHD088169A RHD091429A	NATL INST OF HEALTH - NIH/PHS	81,733	8,000
Health and Human Services Health and Human Services	Direct Direct	93.865 93.865	RHD091429A RHD093334A	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	111,885 320,305	174,000
Health and Human Services	Direct	93.866	1RA56AG0523328-01A1	NATL INST OF HEALTH - NIH/PHS	178,626	52,412
Health and Human Services	Direct	93.866	5K01AG043417-03	NATL INST OF HEALTH - NIH/PHS	102,409	-
Health and Human Services	Direct	93.866	5R01AG040715-05	NATL INST OF HEALTH - NIH/PHS	44,135	-
Health and Human Services	Direct	93.866	5R01AG044372-04 Revised	NATL INST OF HEALTH - NIH/PHS	597,691	23,896

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster						
(continued): Health and Human Services	Direct	93.866	5R01AG048642-03	NATL INST OF HEALTH - NIH/PHS	\$ 664,495	\$ 572,652
	Direct	93.866	5R21AG051820-02	NATL INST OF HEALTH - NIH/PHS	250,674	54,298
Health and Human Services	Direct	93.866	5R21AG053581-02	NATL INST OF HEALTH - NIH/PHS	135,603	-
	Direct	93.866	7R01AG051500-3	NATL INST OF HEALTH - NIH/PHS	91,563	-
	Direct	93.866	RAG054705A	NATL INST OF HEALTH - NIH/PHS	74,695	=
	Direct	93.867	1F32EY028426-01A1	NATL INST OF HEALTH - NIH/PHS	10,045	-
	Direct	93.867	2T35OD016477-16	NATL INST OF HEALTH - NIH/PHS	46,714	-
	Direct Direct	93.867 93.867	4R01EY022727-05 5R01EY016077	NATL INST OF HEALTH - NIH/PHS NATL INST OF HEALTH - NIH/PHS	142,535 11,248	-
	Direct	93.867	5R01EY016077-09	NATL INST OF HEALTH - NIH/PHS	493,480	20,383
	Direct	93.867	5R21EY024757-02	NATL INST OF HEALTH - NIH/PHS	8,013	20,565
	Direct	93.867	REY025752A	NATL INST OF HEALTH - NIH/PHS	838,507	237,623
	Direct	93.867	REY028049A	NATL INST OF HEALTH - NIH/PHS	65,073	-
Health and Human Services	Direct	93.989	1R21TW010896	NATL INST OF HEALTH - NIH/PHS	49,419	30,530
	Direct	93.989	4D43TW009639-05	FOGARTY INTL CENTER -NIH/PHS	397,209	188,873
Health and Human Services	Direct	93.989	5K01TW009654-02	FOGARTY INTL CENTER -NIH/PHS	153,246	38,351
	Direct Total	al			62,110,590	12,124,524
	Pass-through	93	NIH 5P01HL081588 Purchased Service		1,295	-
	Pass-through	93	BCHS/MSU FY17	MICH DEPT OF LICENSING & REGULATORY AFFAIRS	114,302	28,806
	Pass-through	93	3004138691	UNIVERSITY OF MICHIGAN	304,851	-
Health and Human Services	Pass-through	93	EAY-131	NRG ONCOLOGY	1,067	-
Health and Human Services	Pass-through	93 93	NCT02775383 PROTOCOL S1207	NRG ONCOLOGY	2,128	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.001	CK #3058112	NRG ONCOLOGY SOUTHWEST ONCOLOGY GROUP	4,633 16,113	-
Health and Human Services	Pass-through	93.001	NRG Oncology B-43	NRG ONCOLOGY	3,716	-
Health and Human Services	Pass-through	93.070	E20172768-00-AO	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	10,792	_
	Pass-through	93.070	E20180657-00-I	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	20,255	-
Health and Human Services	Pass-through	93.077	114970-5101334	HARVARD UNIVERSITY	22,312	-
Health and Human Services	Pass-through	93.084	723K866	UNIV OF WISCONSIN	199,954	-
Health and Human Services	Pass-through	93.113	083348-16161	UNIV OF ILLINOIS URBANA CHAMPAIGN	34,781	-
Health and Human Services	Pass-through	93.113	1009036_MSU	OREGON HEALTH SCIENCES UNIVERSITY	121,883	-
Health and Human Services	Pass-through	93.113	2003482688	JOHNS HOPKINS UNIVERSITY	18,038	-
Health and Human Services	Pass-through	93.113	3004687116	UNIVERSITY OF MICHIGAN	28,034	-
Health and Human Services	Pass-through	93.113	3RBB7	UNIVERSITY OF NEW MEXICO	113,638	-
	Pass-through Pass-through	93.113 93.113	713K053 782K261	UNIVERSITY OF WISCONSIN - MADISON UNIVERSITY OF WISCONSIN - MADISON	4,404 33,672	-
	Pass-through	93.113	796K305	UNIV OF WISCONSIN	7,495	
Health and Human Services	Pass-through	93.113	UIUC-083348-16161	UNIV OF ILLINOIS URBANA CHAMPAIGN	(235)	-
Health and Human Services	Pass-through	93.113	WSU16078	WAYNE STATE UNIVERSITY	25,221	-
Health and Human Services	Pass-through	93.136	2003124173	JOHNS HOPKINS UNIVERSITY	(1)	-
Health and Human Services	Pass-through	93.173	0044466 (125619-1)	UNIVERSITY OF PITTSBURGH	59,809	-
Health and Human Services	Pass-through	93.173	17-0491	BRIGHAM YOUNG UNIVERSITY	26,205	-
Health and Human Services	Pass-through	93.173	3004261216	UNIVERSITY OF MICHIGAN	28,546	-
	Pass-through	93.173	60051342	OHIO STATE UNIVERSITY	160,601	-
	Pass-through	93.173	BL-4633518-MSU	INDIANA UNIV	83,858	-
	Pass-through	93.173	VUMC56181	VANDERBILT UNIVERSITY	6,457	-
	Pass-through	93.173	VUMC56181	VANDERBILT UNIVERSITY	(31)	-
	Pass-through Pass-through	93.226 93.226	FY17.688.002 UWSC8138	UNIVERSITY OF COLORADO - DENVER UNIVERSITY OF WASHINGTON	63,698 35,656	-
	Pass-through	93.242	00000777	BROWN UNIVERSITY	3,301	-
	Pass-through	93.242	00000778	BROWN UNIVERSITY	2,037	-
	Pass-through	93.242	0255-4061-4609	MOUNT SINAI MEDICAL CENTER	21,465	-
Health and Human Services	Pass-through	93.242	3003210937	UNIVERSITY OF MICHIGAN	35,856	-
	Pass-through	93.242	5-20953	SCRIPPS RESEARCH INST	337	-
	Pass-through	93.242	5-27105	SCRIPPS RESEARCH INST	25,909	-
	Pass-through	93.242	FP00004867_SA001	VIRGINIA COMMONWEALTH UNIVERSITY	13,563	-
	Pass-through	93.242	WSU16128	WAYNE STATE UNIVERSITY	3,772	-
	Pass-through	93.243	172734-AWARE17 9053-8349	MICHIGAN DEPARTMENT OF EDUCATION	34,964	-
	Pass-through Pass-through	93.273 93.273	NIH 5R34AA024275-03 Subaward	BUTLER HOSPITAL OREGON RESEARCH INSTITUTE	66,049 29,144	-
	Pass-through	93.273	R921	TRUSTEES OF DARTMOUTH COLLEGE	23,373	_
Health and Human Services	Pass-through	93.279	1418(R195)	TRUSTEES OF DARTMOUTH COLLEGE	(36,111)	_
Health and Human Services	Pass-through	93.279	2003097399	JOHNS HOPKINS UNIVERSITY	15,511	-
Health and Human Services	Pass-through	93.279	3002871750	UNIVERSITY OF MICHIGAN	(1)	-
Health and Human Services	Pass-through	93.279	3020746	DUKE UNIVERSITY	23,142	-
	Pass-through	93.279	9522	WOMEN & INFANTS HOSPITAL	9,372	-
	Pass-through	93.279	FP00001192_SA001	VIRGINIA COMMONWEALTH UNIVERSITY	16,446	-
	Pass-through	93.279	FP00003327_SA004	VIRGINIA COMMONWEALTH UNIVERSITY	30,321	-
	Pass-through	93.279	NIH-18-023 UTA17-000881	UNIV OF TEXAS MEDICAL BRANCH GALVESTON UNIVERSITY OF TEXAS AT AUSTIN	88,734	-
	Pass-through Pass-through	93.279 93.283	E20170245-0-M	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	41,446 5,743	-
	Pass-through	93.283	E20170657-00 -U	MI DEPT COMMUNITY HEALTH	5,623	_
	Pass-through	93.286	2003719763	JOHNS HOPKINS UNIVERSITY	159,261	-
	Pass-through	93.307	057063-87D5	UNIVERSITY OF NEW MEXICO	59,359	-
Health and Human Services	Pass-through	93.307	WSU17108	WAYNE STATE UNIVERSITY	23,074	-
	Pass-through	93.310	5106190	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	10,823	=
	Pass-through	93.310	5108608	UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	79,147	-
	Pass-through	93.310	68-1096430	CALIFORNIA INSTITUTE OF TECHNOLOGY	369,439	=
	Pass-through	93.310	706K672	UNIVERSITY OF WISCONSIN - MADISON	29,715	-
	Pass-through	93.310	FP060906	UNIVERSITY OF CHICAGO	(414)	-
	Pass-through Pass-through	93.325 93.351	Reeve Foundation Grant 215720B	REEVE CHRISTOPHER AND DANA FOUNDATION UNIVERSITY OF OREGON	166 132,404	-
	Pass-through	93.351	4102-83615	PURDUE UNIV	2,141	-
Health and Human Services	Pass-through	93.351	App 143125	FREEZEBACK, LLC	34,822	-
	Pass-through	93.361	0255-3001-4609	MOUNT SINAI MEDICAL CENTER	8,943	=
Health and Human Services	Pass-through	93.393	5102580	UNIV OF NORTH CAROLINA	897	288
	Pass-through	93.393	R789	TRUSTEES OF DARTMOUTH COLLEGE	41,924	-
Health and Human Services	Pass-through	93.394	228473	MASSACHUSETTS GENERAL HOSPITAL	9,101	-

Schedule of Expenditures of Federal Awards (Continued)

Year Ended June 30, 2018

5.1.1	Direct/	CFDA			Total	
Federal Agency esearch and Development Cluster	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
(continued):						
Health and Human Services Health and Human Services	Pass-through Pass-through	93.395 93.395	9500080216-13c APP 145069 Martinez Hackert	CHILDRENS HOSPITAL OF PHILADELPHIA ABREOS BIOSCIENCES INC	\$ 21,990	\$ -
Health and Human Services	Pass-through	93.395	FP00017458 SUB40 01	CHILDRENS HOSPITAL OF PHILADELPHIA	(6) 8,299	-
Health and Human Services	Pass-through	93.395	NSABP B-49	NRG ONCOLOGY	(1,618)	-
Health and Human Services	Pass-through	93.395	TFED37-090, AMD#1	NATL SURGICAL ADJ BRST & BWL PROJ FDN	4,835	-
Health and Human Services	Pass-through	93.397	16157	UNIVERSITY OF ILLINOIS - CHICAGO	17,591	-
Health and Human Services Health and Human Services	Pass-through	93.397 93.596	36001068803	THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY A	17,869	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.600	BCHS/MSU FY18 WSU17003	WAYNE STATE UNIVERSITY	169,843 44,430	-
Health and Human Services	Pass-through	93.600	WSU17121	WAYNE STATE UNIVERSITY	84,674	_
Health and Human Services	Pass-through	93.624	E20182361-00-AL	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	412,626	-
Health and Human Services	Pass-through	93.624	E20182362-00-AM	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	278,842	-
Health and Human Services	Pass-through	93.757	E20170242-00-J	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	438	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.757 93.799	E20170243-00-K E20180566-00-AA	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	1,755	- 22.055
Health and Human Services	Pass-through	93.799	20180292-00-N	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	187,149 18,117	33,855
Health and Human Services	Pass-through	93.810	E20170657-00 -U	MI DEPT COMMUNITY HEALTH	1,976	-
Health and Human Services	Pass-through	93.810	E20170245-0-M	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	1,814	-
Health and Human Services	Pass-through	93.810	E20180229-00-AB	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	25,684	-
Health and Human Services	Pass-through	93.837	3004463783	UNIVERSITY OF MICHIGAN	201,293	-
Health and Human Services	Pass-through	93.837	3200001401-18-026	UNIV OF KENTUCKY	76,589	-
Health and Human Services	Pass-through	93.837	IP 00326652	DIAPIN THERAPEUTICS, LLC	48,721	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.837 93.837	N003631001 OOS100311-MSU	MINNESOTA UNIV OF TWIN CITIES KAISER PERMANENTE	54,211 14,068	-
Health and Human Services	Pass-through	93.837	WSU15107-A1	WAYNE STATE UNIVERSITY	14,088	-
Health and Human Services	Pass-through	93.838	540544	UNIVERSITY OF MEMPHIS	233,195	-
Health and Human Services	Pass-through	93.838	540544	UNIVERSITY OF MEMPHIS	150,273	-
Health and Human Services	Pass-through	93.846	3003073874	UNIVERSITY OF MICHIGAN	58,215	-
Health and Human Services	Pass-through	93.846	SP004 SC003	ALABAMA UNIV OF BIRMINGHAM	18,049	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.847 93.847	15-A0-00-003649-01 3003071149	NEW YORK UNIVERSITY SCHOOL OF MEDICINE UNIVERSITY OF MICHIGAN	22,526 151,953	-
Health and Human Services	Pass-through	93.847	UND10495	UNIVERSITY OF MICHIGAN UNIVERSITY OF NORTH DAKOTA	10,664	-
Health and Human Services	Pass-through	93.853	IN4689687MSU	INDIANA UNIV	6,609	_
Health and Human Services	Pass-through	93.853	PSG 186	MASSACHUSETTS GENERAL HOSPITAL	14,942	-
Health and Human Services	Pass-through	93.853	3004086345	UNIVERSITY OF MICHIGAN	1,296	-
Health and Human Services	Pass-through	93.853	3004548920	UNIVERSITY OF MICHIGAN	28,484	-
Health and Human Services	Pass-through	93.853	60036745 MSU	NORTHWESTERN UNIVERSITY	17,131	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.853 93.853	416854 416854	UNIV OF ROCHESTER UNIV OF ROCHESTER	15,473 (1,848)	-
Health and Human Services	Pass-through	93.853	417168	UNIV OF ROCHESTER	37,741	-
Health and Human Services	Pass-through	93.853	R21NS088554 - West/Tseng	ROSALIND FRANKLIN UNIVERSITY OF MEDICINE & SCIENCE	3,411	-
Health and Human Services	Pass-through	93.853	7357	UNIVERSITY OF ILLINOIS - CHICAGO	273,499	-
Health and Human Services	Pass-through	93.853	488389 E2728	UNIVERSITY OF ILLINOIS - CHICAGO	(1,840)	-
Health and Human Services	Pass-through	93.853	PG18-61028-01	UNIVERSITY OF MONTANA	40,230	-
Health and Human Services	Pass-through	93.855	151062	UNIVERSITY OF PRETORIA	3,988	=
Health and Human Services Health and Human Services	Pass-through Pass-through	93.855 93.855	2(GG011631-02) 2R44AI112164-03A1-MSU	COLUMBIA UNIVERSITY VISIONQUEST BIOMEDICAL, LLC	15,346 25,065	-
Health and Human Services	Pass-through	93.855	3200000654-17-016	UNIV OF KENTUCKY	47,374	_
Health and Human Services	Pass-through	93.855	LDR 01 MOD 3	JOHNS HOPKINS UNIVERSITY	29,216	-
Health and Human Services	Pass-through	93.855	VUMC63296	VANDERBILT UNIVERSITY	100,848	-
Health and Human Services	Pass-through	93.859	00020791 Phase II	QUANTUMBIO, INC.	45,412	-
Health and Human Services	Pass-through	93.859	0051314 (126984-2)	UNIVERSITY OF PITTSBURGH	38,555	=
Health and Human Services Health and Human Services	Pass-through Pass-through	93.859 93.859	0056117(129070-1) 06-M1703453	UNIVERSITY OF PITTSBURGH TEXAS A & M	38,362 32,795	-
Health and Human Services	Pass-through	93.859	202375MSU	UNIVERSITY OF NOTRE DAME	105,756	-
Health and Human Services	Pass-through	93.859	3004222911	UNIVERSITY OF MICHIGAN	118,806	=
Health and Human Services	Pass-through	93.859	56810 PO H005230501	UNIV OF MINNESOTA	17,564	-
Health and Human Services	Pass-through	93.859	APP 151787	QUANTUMBIO, INC.	23,348	-
Health and Human Services	Pass-through	93.859	Prime 4R44GM112406-02	QUANTUMBIO, INC.	167,910	-
Health and Human Services Health and Human Services	Pass-through	93.865	2001660125 2003075281	JOHNS HOPKINS UNIVERSITY JOHNS HOPKINS UNIVERSITY	(6,965)	=
Health and Human Services Health and Human Services	Pass-through Pass-through	93.865 93.865	9922sc	UNIV OF CALIFORNIA AT SAN FRANCISCO	12,487 25,238	-
Health and Human Services	Pass-through	93.865	FY15.284.002	UNIVERSITY OF COLORADO	80,280	-
Health and Human Services	Pass-through	93.865	R-16-0019	UNIVERSITY OF HOUSTON	18,145	-
Health and Human Services	Pass-through	93.865	R866	TRUSTEES OF DARTMOUTH COLLEGE	30,381	-
Health and Human Services	Pass-through	93.865	RNG200543-02 (2680-2828)	KAISER PERMANENTE	12,596	=
Health and Human Services	Pass-through	93.865	UA-NIH-000388010-016	ALABAMA UNIV OF BIRMINGHAM	141,285	-
Health and Human Services Health and Human Services	Pass-through	93.865 93.866	WU-15-394 1032114-MSU	WASHINGTON UNIVERSITY IN ST LOUIS DIGNITY HEALTH	102,513	-
Health and Human Services	Pass-through Pass-through	93.866	160236	UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER	315,145 63,193	-
Health and Human Services	Pass-through	93.866	3003090374	UNIVERSITY OF MICHIGAN	73,187	_
Health and Human Services	Pass-through	93.866	3004127215	UNIVERSITY OF MICHIGAN	47,883	-
Health and Human Services	Pass-through	93.866	3004217514	UNIVERSITY OF MICHIGAN	4,924	-
Health and Human Services	Pass-through	93.866	3004443560	UNIVERSITY OF MICHIGAN	21,000	-
Health and Human Services	Pass-through	93.866	3004657721	UNIVERSITY OF MICHIGAN	7,968	-
Health and Human Services	Pass-through	93.866	GMO 181212	UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER	25,390	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.866 93.866	NIH-1R41AG058283-01 ST Subcontrac NIH-1R44AG058330-01 Hesperos Sub		7,407 17,951	-
Health and Human Services	Pass-through	93.867	000517565-003	ALABAMA UNIV OF BIRMINGHAM	195,876	-
Health and Human Services	Pass-through	93.867	000518070-002	ALABAMA UNIV OF BIRMINGHAM	5,635	-
Health and Human Services	Pass-through	93.867	4500002464	BOSTON UNIVERSITY	7,837	-
Health and Human Services	Pass-through	93.867	App 153768	BIO TIME, INC.	244,928	-
Health and Human Services	Pass-through	93.867	IN4684833MSU	INDIANA UNIV	(5,156)	-
Health and Human Services	Pass-through	93.867	Medi027207	MEDIBEACON, INC.	25,031	-
Health and Human Services	Pass-through	93.867 93.879	RES512052 W000896258	CASE WESTERN RESERVE UNIV UNIV OF IOWA	358,562 1,835	=
Health and Human Consises					1.835	-
Health and Human Services	Pass-through					
Health and Human Services Health and Human Services Health and Human Services	Pass-through Pass-through Pass-through	93.958 93.958	E20170238-00-F E20170241-00-I	MI DEPARTMENT OF HUMAN SERVICES MI DEPARTMENT OF HUMAN SERVICES	34,217 15,795	-

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
Health and Human Services	Pass-through	93.958	E20170666-00-V	MI DEPARTMENT OF HUMAN SERVICES	\$ 31,745	\$ -
Health and Human Services	Pass-through	93.958	E20170674-00-AF	MI DEPARTMENT OF HUMAN SERVICES	60,888	-
Health and Human Services	Pass-through	93.958	E20180370-00-X	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	23,371	-
Health and Human Services	Pass-through	93.958	E20182632-00-H	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	57,619	-
Health and Human Services	Pass-through	93.958	E20182633-00-V	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	50,689	-
Health and Human Services	Pass-through	93.958	E20182634-00-AE	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	50,914	-
Health and Human Services	Pass-through	93.958	E20182635-00-AQ	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	116,376	-
Health and Human Services	Pass-through	93.989	1600922	MARYLAND UNIV OF SCHOOL OF MEDICINE	41,085	-
Health and Human Services	Pass-through	93.989	TRN506258	CASE WESTERN RESERVE UNIV VANDERBILT UNIV MEDICAL CENTER	5,411	-
Health and Human Services	Pass-through	93.989	VUMC 42900	VANDERBILT UNIV MEDICAL CENTER	740	635
		ough Total	nices Total		8,915,902	
	Health ar	nd Human Se			71,026,492	12,188,108
Homeland Security	Pass-through	97.061	E2042937	GEORGE MASON UNIVERSITY	22,239	-
Homeland Security	Pass-through	97.061	Z901213	UNIV OF MARYLAND	59,659	14,000
Homeland Security	Pass-through	97.062	30345-Z9058104	UNIV OF MARYLAND	(1,276)	
	Homelan	d Security To	tal		80,622	14,000
Interior	Direct	15.232	15-JV-11242313-115	BUREAU OF LAND MANAGEMENT	90,429	-
Interior	Direct	15.608	F13AC00565	US FISH AND WILDLIFE SERVICE	19,941	_
Interior	Direct	15.608	F17AP00582	US FISH AND WILDLIFE SERVICE	27,005	_
Interior	Direct	15.630	F17AC00989	US FISH AND WILDLIFE SERVICE	39,568	-
Interior	Direct	15.637	F14AC00225	US FISH AND WILDLIFE SERVICE	41,728	-
Interior	Direct	15.637	F17AP00743	US FISH AND WILDLIFE SERVICE	28,833	-
Interior	Direct	15.647	F14AC00397	US FISH AND WILDLIFE SERVICE	37,284	-
Interior	Direct	15.662	F16AC00099	US FISH AND WILDLIFE SERVICE	110,666	-
Interior	Direct	15.662	F16AP00875	US FISH AND WILDLIFE SERVICE	18,680	-
Interior	Direct	15.662	F17AC00774	US FISH AND WILDLIFE SERVICE	19,261	-
Interior	Direct	15.678	155500	US FISH AND WILDLIFE SERVICE	42,417	-
Interior	Direct	15.678	F17AC00575	US FISH AND WILDLIFE SERVICE	42,108	-
Interior	Direct	15.678	F17AC00981	US FISH AND WILDLIFE SERVICE	16,054	-
Interior	Direct	15.805	G16AP00020	US GEOLOGICAL SURVEY	63,019	-
Interior	Direct	15.805	G16AP00063	US GEOLOGICAL SURVEY	51,668	-
Interior	Direct	15.805	G17AP00031	US GEOLOGICAL SURVEY	(353)	-
Interior	Direct	15.808	16AC00421	US GEOLOGICAL SURVEY	133,326	=
Interior	Direct	15.808	G12AC20394	US GEOLOGICAL SURVEY	(68)	=
Interior	Direct	15.808	G13AC00044	US GEOLOGICAL SURVEY	(137)	-
Interior	Direct	15.808	G13AC00112	US GEOLOGICAL SURVEY	(1,554)	-
Interior	Direct	15.808	G13AC00284	US GEOLOGICAL SURVEY	287	-
Interior	Direct	15.808	G15AC00026	US GEOLOGICAL SURVEY	44,045	-
Interior	Direct	15.808	G15AC00164	US GEOLOGICAL SURVEY	97,282	-
Interior	Direct	15.808	G16AC00116	US GEOLOGICAL SURVEY	84,321	-
Interior	Direct	15.808	G16AC00244	US GEOLOGICAL SURVEY	6,186	-
Interior	Direct	15.808	G17AC00148	US GEOLOGICAL SURVEY	83,803	-
Interior	Direct	15.808	G17AC00152	US GEOLOGICAL SURVEY	115,264	-
Interior	Direct	15.808	G17AC00273	US GEOLOGICAL SURVEY	49,447	-
Interior Interior	Direct Direct	15.808 15.808	G17AC00385 G17AC00387	US GEOLOGICAL SURVEY US GEOLOGICAL SURVEY	28,386	-
Interior	Direct	15.808	G17AC00387 G17AC00408	US GEOLOGICAL SURVEY	67,022 8,693	-
Interior	Direct	15.808	G18AC00105	US GEOLOGICAL SURVEY	12,351	-
Interior	Direct	15.808	G1AC20368	US GEOLOGICAL SURVEY	(241)	_
Interior	Direct	15.808	USGS G13AC00140	US GEOLOGICAL SURVEY	13,364	_
Interior	Direct	15.811	G14AC00321	US GEOLOGICAL SURVEY	19,122	_
Interior	Direct	15.811	G17AC00185	US GEOLOGICAL SURVEY	171,176	_
Interior	Direct	15.820	G15AC00126	US GEOLOGICAL SURVEY	23,500	_
Interior	Direct	15.820	G15AC00351	US GEOLOGICAL SURVEY	10,290	-
Interior	Direct	15.820	G17AC00291	US GEOLOGICAL SURVEY	41,094	-
Interior	Direct	15.945	P15AC01378	NATL PARK SERVICE	3,201	-
Interior	Direct	15.945	P16AC01326	NATL PARK SERVICE	134,714	-
Interior	Direct	15.945	P17AC01465	NATL PARK SERVICE	9,753	-
	Direct To	tal			1,802,935	
Interior	Pass-through	15	USW0F028	NATURESERVE	7,012	
Interior	Pass-through	15.156	153877	INTER TRIBAL COUNCIL OF MICH	8,143	-
Interior	Pass-through	15.156	BIA A15AV00507 ITC of MI Climate Ac		2,340	-
Interior	Pass-through	15.232	60040808	OHIO STATE UNIVERSITY	8,049	_
Interior	Pass-through	15.232	60064793	OHIO STATE UNIVERSITY	12,920	-
Interior	Pass-through	15.608	Phase 3	GREAT LAKES COMMISSION	7,339	-
Interior	Pass-through	15.615	Arkansas Darter	KANSAS DEPARTMENT OF WILDLIFE, PARKS & TOURISM	28,366	-
Interior	Pass-through	15.662	101817-1	NATURE CONSERVANCY THE	4,412	-
Interior	Pass-through	15.662	2013-0100	MI ENVIRONMENTAL QUALITY	(448)	-
Interior	Pass-through	15.820	404-42-07A	IOWA STATE UNIVERSITY	63,674	-
Interior	Pass-through	15.820	404-42-07A	IOWA STATE UNIVERSITY	(1,128)	-
Interior	Pass-through	15.820	App 152482	COLLEGE OF MENOMINEE NATIOIN	17,860	-
		ugh Total			158,539	
	Interior T	otal			1,961,474	-
Justice	Direct	16.026	2017-SI-AX-0002	US DEPT OF JUSTICE	15,841	
Justice	Direct	16.026	2017-SI-AX-0002 2015-BJ-CX-K022	US DEPT OF JUSTICE	(7,693)	-
Justice	Direct	16.550	2016-BJ-CX-K022 2016-BJ-CX-K026	US DEPT OF JUSTICE	139,655	-
Justice	Direct	16.550	2017-BJ-CX-K020	US DEPT OF JUSTICE	56,500	-
Justice	Direct	16.550	2013-IJ-CX-0019	US DEPT OF JUSTICE	141,689	-
Justice	Direct	16.560	2013-R2-CX-0015	US DEPT OF JUSTICE	49,745	-
Justice	Direct	16.560	2014-NE-BX-0006	US DEPT OF JUSTICE	98,016	-
Justice	Direct	16.560	2014-NE-BX-0006 2014-ZA-BX-0004	US DEPT OF JUSTICE	(8,918)	1,879
Justice	Direct	16.560	2015-CK-BX-0003	US DEPT OF JUSTICE	245,660	86,042
Justice	Direct	16.560	2015-CK-BX-0017	US DEPT OF JUSTICE	471,106	311,391
Justice	Direct	16.560	2015-DN-BX-K012	US DEPT OF JUSTICE	158,929	-
			- 1		,	

Fadaral Aganay	Direct/ Pass-through	CFDA	August Number	Creater Name	Total Expenditures	Cubaucard Daymanta
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
rch and Development Cluster ntinued):						
Justice	Direct	16.560	2015-DN-BX-K013	US DEPT OF JUSTICE	\$ 160,484	\$ -
Justice	Direct	16.560	2015-DN-BX-K031	US DEPT OF JUSTICE	72,600	-
Justice	Direct	16.560	2015-DN-BX-K036	US DEPT OF JUSTICE	22,646	-
Justice	Direct	16.560	2015-IJ-CX-K008	US DEPT OF JUSTICE	41,837	-
Justice	Direct	16.560	2015-R2-CX-K041	US DEPT OF JUSTICE	183,768	77,186
Justice	Direct	16.560	2016-R2-CX-0052	US DEPT OF JUSTICE	76,116	-
Justice	Direct	16.562	2015-R2-CX-0005	US DEPT OF JUSTICE	36,066	-
Justice	Direct	16.562	2017-IJ-CX-0002	US DEPT OF JUSTICE	34,001	-
Justice	Direct	16.609	2015-GP-BX-K003	US DEPT OF JUSTICE	198,867	-
Justice	Direct	16.738	2016-MU-BX-K001	US DEPT OF JUSTICE	435,724	125,785
Justice	Direct Direct T	16.738	2016-MU-BX-K001	US DEPT OF JUSTICE	45,981 2,668,620	602,283
						002,283
Justice	Pass-through	16	09-097CCC-MSU	WEST VIRGINIA UNIVERSITY	68,102	-
Justice	Pass-through	16	09-097NN-MSU	WEST VIRGINIA UNIVERSITY	190,068	-
Justice	Pass-through	16.123	6000742	CITY OF DETROIT MISSISSIPPI STATE UNIVERSITY	59,277	-
Justice	Pass-through	16.560 16.560	031100.364880.01 40582-Z9246101	UNIV OF MARYLAND	78,538 132,024	-
Justice Justice	Pass-through Pass-through	16.560	CM00000097-00	JOHN JAY COLLEGE	91,090	-
	Pass-through	16.560	GR101771(CON80001079)	YALE UNIVERSITY	64,944	-
Justice	-		153908			-
Justice	Pass-through Pass-through	16.609 16.662	2016-0113	BLACK FAMILY DEVELOPMENT, INC. MI ENVIRONMENTAL QUALITY	53,066 109,380	-
Justice Justice	Pass-through	16.817	Kettering/DOJ 5301095MSU	KETTERING UNIVERSITY	15,579	-
Justice	Pass-through	16.833	SAKI-15-04	MI STATE POLICE	190,069	-
sustilit		ough Total	5, IN 15 07	WI STATE I OLICE	1,052,137	
	Justice 1				3,720,757	602,283
	Justice				3,720,737	002,283
Library of Congress	Direct	42.000	Home Care Aides	LIBRARY OF CONGRESS	18,141	<u> </u>
	Library	of Congress To	tal		18,141	
			00110001711			
National Aeronautics and Space Administration	Direct	43.001	80NSSC17K0259	NATL AERONAUTICS AND SPACE ADM	231,871	67,188
National Aeronautics and Space Administration	Direct	43.001	80NSSC17K0507	NATL AERONAUTICS AND SPACE ADM	28,056	-
National Aeronautics and Space Administration	Direct	43.001	80NSSC18K0382	NATL AERONAUTICS AND SPACE ADM	10,468	-
National Aeronautics and Space Administration	Direct	43.001	GSFC- NNX16AQ44G	NATL AERONAUTICS AND SPACE ADM	53,400	20,314
National Aeronautics and Space Administration	Direct	43.001	GSFC-NNX16AQ44G	NATL AERONAUTICS AND SPACE ADM	12,696	-
National Aeronautics and Space Administration	Direct	43.001	NNX12AN71G	NATL AERONAUTICS AND SPACE ADM	40,458	-
National Aeronautics and Space Administration	Direct	43.001	NNX13AI41G	NATL AERONAUTICS AND SPACE ADM	494	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct	43.001 43.001	NNX14AD93G NNX14AQ36G	NATL AERONAUTICS AND SPACE ADM NATL AERONAUTICS AND SPACE ADM	31,924 5,645	-
					32,806	11,361
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct	43.001 43.001	NNX15AD10G NNX15AD51G	NATL AERONAUTICS AND SPACE ADM NATL AERONAUTICS AND SPACE ADM	227,285	11,301
National Aeronautics and Space Administration	Direct	43.001	NNX15AI71G	NATL AERONAUTICS AND SPACE ADM	81,328	
National Aeronautics and Space Administration	Direct	43.001	NNX15AP39G	NATL AERONAUTICS AND SPACE ADM	162,155	16,250
National Aeronautics and Space Administration	Direct	43.001	NNX15AU83G	NATL AERONAUTICS AND SPACE ADM	31,043	10,230
National Aeronautics and Space Administration	Direct	43.001	NNX16AE52G	NATL AERONAUTICS AND SPACE ADM	27,513	-
National Aeronautics and Space Administration	Direct	43.001	NNX16AN73G	NATL AERONAUTICS AND SPACE ADM	5,756	-
National Aeronautics and Space Administration	Direct	43.001	NNX16AP81G	NATL AERONAUTICS AND SPACE ADM	50,677	
National Aeronautics and Space Administration	Direct	43.001	NNX17AE16G	NATL AERONAUTICS AND SPACE ADM	262,432	
National Aeronautics and Space Administration	Direct	43.002	NNX15AR80G	NATL AERONAUTICS AND SPACE ADM	42,788	_
National Aeronautics and Space Administration	Direct	43.002	NNX13AM77G	NATL AERONAUTICS AND SPACE ADM	177,635	_
National Aeronautics and Space Administration	Direct	43.007	NNX16AC24A	NATL AERONAUTICS AND SPACE ADM	80,175	_
National Aeronautics and Space Administration	Direct	43.007	NNX16AD52A	NATL AERONAUTICS AND SPACE ADM	144,779	_
National Aeronautics and Space Administration	Direct	43.007	NNX16AT85G	NATL AERONAUTICS AND SPACE ADM	16,433	_
National Aeronautics and Space Administration	Direct	43.003	NNX16AR52G	NATL AERONAUTICS AND SPACE ADM	2,210	_
	Direct T				1,760,027	115,113
National Aeronautics and Space Administration	Pass-through	43	1566995	JET PROPULSION LABORATORY	18,043	-
National Aeronautics and Space Administration	Pass-through	43	1587104	JET PROPULSION LABORATORY	27,113	=
National Aeronautics and Space Administration	Pass-through	43	HST-GO-14086.001-A	SPACE TELESCOPE SCIENCE INST	34,265	-
National Aeronautics and Space Administration	Pass-through	43	HST-GO-14351.001-A	SPACE TELESCOPE SCIENCE INST	2,416	-
National Aeronautics and Space Administration	Pass-through	43	HST-GO-14639.008	SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST	5,667	-
National Aeronautics and Space Administration	Pass-through	43 43	HST-GO-14704.003-A		7,095	-
National Aeronautics and Space Administration	Pass-through		NNX17CK13P	ROLF MILES OLSEN DBA TWO PLANET STEEL	71,932	-
National Aeronautics and Space Administration	Pass-through	43.001	403356	UNIVERSITY OF COLORADO	104,984	-
National Aeronautics and Space Administration	Pass-through	43.001	1552613 1590333 Subcontract	UNIVERSITY OF COLORADO JET PROPULSION LABORATORY	138,949	-
National Aeronautics and Space Administration	Pass-through	43.001	1580232 Subcontract		21,880	-
National Aeronautics and Space Administration	Pass-through	43.001	1609082Z1 AR7-18008X	MICHIGAN TECH RESEARCH INSTITUTE	68,688	-
National Aeronautics and Space Administration	Pass-through	43.001 43.001	AR7-18008X DD5-16078X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY SMITHSONIAN ASTROPHYSICAL OBSERVATORY	64,481 5,991	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through	43.001	G06-17040X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY SMITHSONIAN ASTROPHYSICAL OBSERVATORY	12,348	-
National Aeronautics and Space Administration	Pass-through	43.001	G06-17040X G06-17047X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	42,757	-
National Aeronautics and Space Administration	Pass-through	43.001	G04-15089A	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	15,590	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through	43.001	GO5-16036X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY SMITHSONIAN ASTROPHYSICAL OBSERVATORY	10,976	-
National Aeronautics and Space Administration	Pass-through	43.001	GO5-16084A	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	17,046	-
	Pass-through	43.001	GO5-16084A GO5-16132X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	2,378	-
		43.001	GO6-17035X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	35,646	-
National Aeronautics and Space Administration	Pass-through	43.001	GO6-17045X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY	18,759	_
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through			SMITHSONIAN ASTROPHYSICAL OBSERVATORY	14,172	-
National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through		GO7-18036X			
National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through	43.001	GO7-18036X TM7-18005X	SMITHSONIAN ASTROPHYSICAL ORSERVATORY		_
National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through	43.001 43.001	TM7-18005X	SMITHSONIAN ASTROPHYSICAL OBSERVATORY SPACE TELESCOPE SCIENCE INST	49,523	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through Pass-through	43.001 43.001 43.001	TM7-18005X HST-AR-13923.001-A	SPACE TELESCOPE SCIENCE INST	49,523 11,252	- -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through Pass-through Pass-through	43.001 43.001 43.001 43.001	TM7-18005X HST-AR-13923.001-A HST-AR-14315.001-A	SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST	49,523 11,252 8,472	- - -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	43.001 43.001 43.001 43.001 43.001	TM7-18005X HST-AR-13923.001-A HST-AR-14315.001-A HST-GA-13942.001-A	SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST	49,523 11,252 8,472 8,947	- - - -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	43.001 43.001 43.001 43.001 43.001 43.001	TM7-18005X HST-AR-13923.001-A HST-AR-14315.001-A HST-GA-13942.001-A HST-GO-13720.001-A	SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST SPACE TELESCOPE SCIENCE INST	49,523 11,252 8,472 8,947 17,356	- - - - -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	43.001 43.001 43.001 43.001 43.001 43.001 43.001	TM7-18005X HST-AR-13923.001-A HST-AR-14315.001-A HST-GA-13942.001-A HST-GO-13720.001-A HST-GO-14203.002-A	SPACE TELESCOPE SCIENCE INST	49,523 11,252 8,472 8,947 17,356 3,767	- - - - -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	43.001 43.001 43.001 43.001 43.001 43.001 43.001 43.008	TM7-18005X HST-AR-13923.001-A HST-AR-14315.001-A HST-GA-13942.001-A HST-GO-13720.001-A HST-GO-13720.002-A 3003977407	SPACE TELESCOPE SCIENCE INST UNIVERSITY OF MICHIGAN	49,523 11,252 8,472 8,947 17,356 3,767 1,142	- - - - - -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through	43.001 43.001 43.001 43.001 43.001 43.001 43.001 43.008 43.008	TM7-18005X H5T-AR-13923.001-A H5T-AR-14315.001-A H5T-GA-139342.001-A H5T-GO-13720.001-A H5T-GO-14203.002-A 3003977407 3004469965	SPACE TELESCOPE SCIENCE INST UNIVERSITY OF MICHIGAN UNIVERSITY OF MICHIGAN	49,523 11,252 8,472 8,947 17,356 3,767 1,142 22,251	- - - - - - -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-through	43.001 43.001 43.001 43.001 43.001 43.001 43.001 43.008	TM7-18005X HST-AR-13923.001-A HST-AR-14315.001-A HST-GA-13942.001-A HST-GO-13720.001-A HST-GO-13720.002-A 3003977407	SPACE TELESCOPE SCIENCE INST UNIVERSITY OF MICHIGAN	49,523 11,252 8,472 8,947 17,356 3,767 1,142	- - - - - - - -

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
National Science Foundation	Direct	47.041	1231869	NATIONAL SCIENCE FOUNDATION	\$ (3,036)	\$ -
National Science Foundation	Direct	47.041	1444991	NATIONAL SCIENCE FOUNDATION	28,937	-
National Science Foundation	Direct	47.041	1444991	NATIONAL SCIENCE FOUNDATION	10,323	-
National Science Foundation National Science Foundation	Direct Direct	47.041 47.041	1463164 1510895	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	80,980 89,634	-
National Science Foundation National Science Foundation	Direct	47.041	1510895	NATIONAL SCIENCE FOUNDATION	7,160	-
National Science Foundation	Direct	47.041	1511098	NATIONAL SCIENCE FOUNDATION	78,749	-
National Science Foundation	Direct	47.041	1544068	NATIONAL SCIENCE FOUNDATION	25,640	-
National Science Foundation	Direct	47.041	1547518	NATIONAL SCIENCE FOUNDATION	104,740	-
National Science Foundation	Direct	47.041	1549517	NATIONAL SCIENCE FOUNDATION	96,939	-
National Science Foundation	Direct	47.041	1549517	NATIONAL SCIENCE FOUNDATION	4,970	=
National Science Foundation	Direct	47.041	1561628	NATIONAL SCIENCE FOUNDATION	43,281	=
National Science Foundation	Direct	47.041	1561964	NATIONAL SCIENCE FOUNDATION	135,635	-
National Science Foundation National Science Foundation	Direct Direct	47.041 47.041	1565232 1600417	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	63,946 120,135	81,526
National Science Foundation	Direct	47.041	1603347	NATIONAL SCIENCE FOUNDATION	69,489	-
National Science Foundation	Direct	47.041	1603646	NATIONAL SCIENCE FOUNDATION	85,584	-
National Science Foundation	Direct	47.041	1603705	NATIONAL SCIENCE FOUNDATION	79,086	-
National Science Foundation	Direct	47.041	1603720	NATIONAL SCIENCE FOUNDATION	71,724	-
National Science Foundation	Direct	47.041	1603892	NATIONAL SCIENCE FOUNDATION	18,048	=
National Science Foundation	Direct	47.041	1603892	NATIONAL SCIENCE FOUNDATION	8,885	-
National Science Foundation	Direct	47.041	1628958	NATIONAL SCIENCE FOUNDATION	166,622	- 4 472
National Science Foundation National Science Foundation	Direct Direct	47.041 47.041	1632051 1639115	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	206,321 551,931	4,472 33,698
National Science Foundation	Direct	47.041	1651674	NATIONAL SCIENCE FOUNDATION	70,383	-
National Science Foundation	Direct	47.041	1658802	NATIONAL SCIENCE FOUNDATION	2,539	=
National Science Foundation	Direct	47.041	1661618	NATIONAL SCIENCE FOUNDATION	20,734	-
National Science Foundation	Direct	47.041	1700785	NATIONAL SCIENCE FOUNDATION	174,291	-
National Science Foundation	Direct	47.041	1700787	NATIONAL SCIENCE FOUNDATION	99,135	-
National Science Foundation	Direct	47.041	1702591	NATIONAL SCIENCE FOUNDATION	99,758	=
National Science Foundation	Direct	47.041	1702987	NATIONAL SCIENCE FOUNDATION	28,664	-
National Science Foundation National Science Foundation	Direct	47.041 47.041	1703735 1703735	NATIONAL SCIENCE FOUNDATION	23,828	-
National Science Foundation	Direct Direct	47.041	1708820	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	5,723 73,580	-
National Science Foundation	Direct	47.041	1724941	NATIONAL SCIENCE FOUNDATION	35,089	-
National Science Foundation	Direct	47.041	1725278	NATIONAL SCIENCE FOUNDATION	45,700	=
National Science Foundation	Direct	47.041	1727525	NATIONAL SCIENCE FOUNDATION	70,222	-
National Science Foundation	Direct	47.041	1744273	NATIONAL SCIENCE FOUNDATION	24,838	-
National Science Foundation	Direct	47.041	1744604	NATIONAL SCIENCE FOUNDATION	100,938	=
National Science Foundation	Direct	47.041	1750785	NATIONAL SCIENCE FOUNDATION	8,000	-
National Science Foundation National Science Foundation	Direct Direct	47.041 47.041	1751655 1752773	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	11,727	-
National Science Foundation National Science Foundation	Direct	47.041	1759823	NATIONAL SCIENCE FOUNDATION	46,449 15,928	-
National Science Foundation	Direct	47.041	1800466	NATIONAL SCIENCE FOUNDATION	55,339	-
National Science Foundation	Direct	47.041	CBET - 1134215	NATIONAL SCIENCE FOUNDATION	13,469	-
National Science Foundation	Direct	47.041	CBET-1254238	NATIONAL SCIENCE FOUNDATION	14,897	-
National Science Foundation	Direct	47.041	CBET-1254238	NATIONAL SCIENCE FOUNDATION	4,866	-
National Science Foundation	Direct	47.041	CBET-1254453	NATIONAL SCIENCE FOUNDATION	17,724	=
National Science Foundation	Direct	47.041	CBET-1254662	NATIONAL SCIENCE FOUNDATION	214	-
National Science Foundation	Direct	47.041	CBET-1254662	NATIONAL SCIENCE FOUNDATION	(455) 85	-
National Science Foundation National Science Foundation	Direct Direct	47.041 47.041	CBET-1264772 CBET-1437657	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	23,437	-
National Science Foundation	Direct	47.041	CBET-1438105	NATIONAL SCIENCE FOUNDATION	103,490	-
National Science Foundation	Direct	47.041	CBET-1507789	NATIONAL SCIENCE FOUNDATION	104,572	-
National Science Foundation	Direct	47.041	CBET-1510203	NATIONAL SCIENCE FOUNDATION	78,535	-
National Science Foundation	Direct	47.041	CMMI-1150376	NATIONAL SCIENCE FOUNDATION	33,121	=
National Science Foundation	Direct	47.041	CMMI-1150376	NATIONAL SCIENCE FOUNDATION	2,070	-
National Science Foundation	Direct	47.041	CMMI-1150376	NATIONAL SCIENCE FOUNDATION	1,139	-
National Science Foundation	Direct	47.041	CMMI-1150376	NATIONAL SCIENCE FOUNDATION	(18)	=
National Science Foundation	Direct Direct	47.041 47.041	CMMI-1250261 CMMI-1301243	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	8,379 (2,433)	-
National Science Foundation National Science Foundation	Direct	47.041	CMMI-1335177	NATIONAL SCIENCE FOUNDATION	2,012	-
National Science Foundation	Direct	47.041	CMMI-1435126	NATIONAL SCIENCE FOUNDATION	71,722	_
National Science Foundation	Direct	47.041	CMMI-1462118	NATIONAL SCIENCE FOUNDATION	81,895	-
National Science Foundation	Direct	47.041	CMMI-1463006	NATIONAL SCIENCE FOUNDATION	68,153	=
National Science Foundation	Direct	47.041	ECCS-1128467	NATIONAL SCIENCE FOUNDATION	9,855	-
National Science Foundation	Direct	47.041	ECCS-1139773	NATIONAL SCIENCE FOUNDATION	(3,603)	-
National Science Foundation	Direct	47.041	ECCS-1232109	NATIONAL SCIENCE FOUNDATION	9,012	-
National Science Foundation National Science Foundation	Direct	47.041	ECCS-1306311	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	47,551	-
National Science Foundation National Science Foundation	Direct Direct	47.041 47.041	ECCS-1310257 ECCS-1350560	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	1,305 51,141	-
National Science Foundation	Direct	47.041	ECCS-1350560	NATIONAL SCIENCE FOUNDATION	61	-
National Science Foundation	Direct	47.041	ECCS-1407880	NATIONAL SCIENCE FOUNDATION	76,539	54,089
National Science Foundation	Direct	47.041	ECCS-1408115	NATIONAL SCIENCE FOUNDATION	77,767	-
National Science Foundation	Direct	47.041	ECCS-1408506	NATIONAL SCIENCE FOUNDATION	60,415	-
National Science Foundation	Direct	47.041	ECCS-1446793	NATIONAL SCIENCE FOUNDATION	207,475	-
National Science Foundation	Direct	47.041	PHY-1531199	NATIONAL SCIENCE FOUNDATION	510,566	-
National Science Foundation	Direct	47.049	1056840	NATIONAL SCIENCE FOUNDATION	27,281	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1149408 1150872	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	58,621 57,887	-
National Science Foundation National Science Foundation	Direct	47.049 47.049	1403906	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	26,469	-
National Science Foundation	Direct	47.049	1404442	NATIONAL SCIENCE FOUNDATION	100	-
National Science Foundation	Direct	47.049	1410417	NATIONAL SCIENCE FOUNDATION	30,118	-
National Science Foundation	Direct	47.049	1453661	NATIONAL SCIENCE FOUNDATION	101,090	-
National Science Foundation	Direct	47.049	1462156	NATIONAL SCIENCE FOUNDATION	17,316	-
National Science Foundation	Direct	47.049	1464807	NATIONAL SCIENCE FOUNDATION	113,660	Ē
National Science Foundation	Direct	47.049	1465043	NATIONAL SCIENCE FOUNDATION	125,793	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1502135 1502135	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	10,213 5,276	-
National Science Foundation National Science Foundation	Direct	47.049 47.049	1505364	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	69,356	-
					33,330	

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
National Science Foundation	Direct	47.049	1507226	NATIONAL SCIENCE FOUNDATION	\$ 415,407	\$ -
National Science Foundation	Direct	47.049	1514591	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	43,125	15,729
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1514700 1514763	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	38,514 54,390	-
National Science Foundation	Direct	47.049	1516969	NATIONAL SCIENCE FOUNDATION	85,687	-
National Science Foundation	Direct	47.049	1519045	NATIONAL SCIENCE FOUNDATION	193,133	=
National Science Foundation	Direct	47.049	1520929	NATIONAL SCIENCE FOUNDATION	55,344	=
National Science Foundation	Direct	47.049	1522249	NATIONAL SCIENCE FOUNDATION	76,659	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1554315 1559776	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	69,369 45,295	-
National Science Foundation	Direct	47.049	1559776	NATIONAL SCIENCE FOUNDATION	18,432	-
National Science Foundation	Direct	47.049	1559866	NATIONAL SCIENCE FOUNDATION	99,397	-
National Science Foundation	Direct	47.049	1559866	NATIONAL SCIENCE FOUNDATION	17,311	-
National Science Foundation	Direct	47.049	1562140	NATIONAL SCIENCE FOUNDATION	140,618	-
National Science Foundation	Direct	47.049	1600065	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	55,813	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1607089 1607942	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	36,016 161,434	-
National Science Foundation	Direct	47.049	1608752	NATIONAL SCIENCE FOUNDATION	72,369	-
National Science Foundation	Direct	47.049	1612867	NATIONAL SCIENCE FOUNDATION	63,141	-
National Science Foundation	Direct	47.049	1612885	NATIONAL SCIENCE FOUNDATION	44,055	-
National Science Foundation	Direct	47.049	1613899	NATIONAL SCIENCE FOUNDATION	21,874	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1614566 1619960	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	91,066 49,029	-
National Science Foundation	Direct	47.049	1620047	NATIONAL SCIENCE FOUNDATION	5,802	-
National Science Foundation	Direct	47.049	1620216	NATIONAL SCIENCE FOUNDATION	56,876	-
National Science Foundation	Direct	47.049	1621798	NATIONAL SCIENCE FOUNDATION	82,399	-
National Science Foundation	Direct	47.049	1624942	NATIONAL SCIENCE FOUNDATION	426,606	50,258
National Science Foundation	Direct	47.049	1625181	NATIONAL SCIENCE FOUNDATION	231,638	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1632761 1636557	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	61,942 249,895	-
National Science Foundation	Direct	47.049	1642322	NATIONAL SCIENCE FOUNDATION	4,161	_
National Science Foundation	Direct	47.049	1653405	NATIONAL SCIENCE FOUNDATION	57,944	-
National Science Foundation	Direct	47.049	1654610	NATIONAL SCIENCE FOUNDATION	250,592	-
National Science Foundation	Direct	47.049	1663778	NATIONAL SCIENCE FOUNDATION	38,326	-
National Science Foundation	Direct	47.049	1664823	NATIONAL SCIENCE FOUNDATION	134,014	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1665285 1700026	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	39,380 10,201	-
National Science Foundation	Direct	47.049	1700020	NATIONAL SCIENCE FOUNDATION	60,791	_
National Science Foundation	Direct	47.049	1700837	NATIONAL SCIENCE FOUNDATION	36,800	-
National Science Foundation	Direct	47.049	1702115	NATIONAL SCIENCE FOUNDATION	66,918	-
National Science Foundation	Direct	47.049	1707812	NATIONAL SCIENCE FOUNDATION	1,004,162	-
National Science Foundation	Direct	47.049	1707842	NATIONAL SCIENCE FOUNDATION	152,027	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1708249 1708331	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	4,564 119,820	-
National Science Foundation	Direct	47.049	1709016	NATIONAL SCIENCE FOUNDATION	30,697	=
National Science Foundation	Direct	47.049	1709158	NATIONAL SCIENCE FOUNDATION	109,069	=
National Science Foundation	Direct	47.049	1712390	NATIONAL SCIENCE FOUNDATION	5,000	=
National Science Foundation	Direct	47.049	1713901	NATIONAL SCIENCE FOUNDATION	149,047	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1714144 1714825	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	(1,810) 25,798	-
National Science Foundation	Direct	47.049	1715178	NATIONAL SCIENCE FOUNDATION	31,653	-
National Science Foundation	Direct	47.049	1719406	NATIONAL SCIENCE FOUNDATION	10,000	-
National Science Foundation	Direct	47.049	1719863	NATIONAL SCIENCE FOUNDATION	56,776	-
National Science Foundation	Direct	47.049	1719914	NATIONAL SCIENCE FOUNDATION	86,124	-
National Science Foundation	Direct	47.049	1720002	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	50,133	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1720023 1721024	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	51,922 51,467	-
National Science Foundation	Direct	47.049	1734183	NATIONAL SCIENCE FOUNDATION	36,215	=
National Science Foundation	Direct	47.049	1751857	NATIONAL SCIENCE FOUNDATION	420	-
National Science Foundation	Direct	47.049	1751857	NATIONAL SCIENCE FOUNDATION	167	-
National Science Foundation	Direct	47.049	1751874	NATIONAL SCIENCE FOUNDATION	7,177	-
National Science Foundation	Direct Direct	47.049 47.049	1754967 1758326	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	48,836	-
National Science Foundation National Science Foundation	Direct	47.049	1759824	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	37,010 9,327	-
National Science Foundation	Direct	47.049	1763855	NATIONAL SCIENCE FOUNDATION	10,322	-
National Science Foundation	Direct	47.049	1800446	NATIONAL SCIENCE FOUNDATION	59,838	-
National Science Foundation	Direct	47.049	1802934	NATIONAL SCIENCE FOUNDATION	40,673	-
National Science Foundation	Direct	47.049	1807573	NATIONAL SCIENCE FOUNDATION	7,862	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	1811855 AST-1308124	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	19,032 15,994	-
National Science Foundation	Direct	47.049	AST-1308124 AST-1412549	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	15,478	-
National Science Foundation	Direct	47.049	AST-1412774	NATIONAL SCIENCE FOUNDATION	52,678	-
National Science Foundation	Direct	47.049	AST-1412980	NATIONAL SCIENCE FOUNDATION	69,330	-
National Science Foundation	Direct	47.049	CHE-1151590	NATIONAL SCIENCE FOUNDATION	59,229	-
National Science Foundation	Direct	47.049	CHE-1300063	NATIONAL SCIENCE FOUNDATION	35,729	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	CHE-1358842 CHE-1358842	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	45,348 18,845	-
National Science Foundation	Direct	47.049	CHE-1362812	NATIONAL SCIENCE FOUNDATION	71,517	-
National Science Foundation	Direct	47.049	CHE-1412776	NATIONAL SCIENCE FOUNDATION	20,010	-
National Science Foundation	Direct	47.049	CHE-1507588	NATIONAL SCIENCE FOUNDATION	108,292	-
National Science Foundation	Direct	47.049	CHE-1516126	NATIONAL SCIENCE FOUNDATION	120,752	-
National Science Foundation	Direct	47.049	CHE-1516126	NATIONAL SCIENCE FOUNDATION	116,829	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	CHE-1565634 DMR-1410850	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	121,580 48,623	-
National Science Foundation	Direct	47.049	DMR-1411102	NATIONAL SCIENCE FOUNDATION	29,176	-
National Science Foundation	Direct	47.049	DMR-1507489	NATIONAL SCIENCE FOUNDATION	73,792	-
National Science Foundation	Direct	47.049	DMS-1149408	NATIONAL SCIENCE FOUNDATION	794	-
National Science Foundation	Direct	47.049	DMS-1150872	NATIONAL SCIENCE FOUNDATION	783	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	DMS-1300924 DMS-1305377	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	2,342 34,134	-
National Science Foundation	Direct	47.049	DMS-1352407	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	81,339	-
			-		,	

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
National Science Foundation	Direct	47.049	DMS-1360733	NATIONAL SCIENCE FOUNDATION	\$ 95,450	\$ -
National Science Foundation	Direct	47.049	DMS-1362352	NATIONAL SCIENCE FOUNDATION	18,219	-
National Science Foundation	Direct	47.049	DMS-1404754	NATIONAL SCIENCE FOUNDATION	74,021	-
National Science Foundation	Direct	47.049	DMS-1409940	NATIONAL SCIENCE FOUNDATION	94,185	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	DMS-1409940 DMS-1411411	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	4,653 92,872	-
National Science Foundation	Direct	47.049	DMS-1411411 DMS-1413060	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	15,948	-
National Science Foundation	Direct	47.049	DMS-1416752	NATIONAL SCIENCE FOUNDATION	85,368	-
National Science Foundation	Direct	47.049	DMS-1418804	NATIONAL SCIENCE FOUNDATION	36,185	-
National Science Foundation	Direct	47.049	DMS-1418959	NATIONAL SCIENCE FOUNDATION	53,867	=
National Science Foundation	Direct	47.049	DMS-1500386	NATIONAL SCIENCE FOUNDATION	23,438	-
National Science Foundation	Direct	47.049	DMS-1513481	NATIONAL SCIENCE FOUNDATION	37,438	-
National Science Foundation	Direct	47.049	DMS-1622301	NATIONAL SCIENCE FOUNDATION	39,753	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	PHY-1102511 PHY-1350234	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	1,166,315 65,845	-
National Science Foundation	Direct	47.049	PHY-1350234	NATIONAL SCIENCE FOUNDATION	8,407	-
National Science Foundation	Direct	47.049	PHY-1404159	NATIONAL SCIENCE FOUNDATION	58,587	-
National Science Foundation	Direct	47.049	PHY-1404442	NATIONAL SCIENCE FOUNDATION	61,282	27,325
National Science Foundation	Direct	47.049	PHY-1410972	NATIONAL SCIENCE FOUNDATION	(46,366)	-
National Science Foundation	Direct	47.049	PHY-1415462	NATIONAL SCIENCE FOUNDATION	67,059	=
National Science Foundation	Direct	47.049	PHY-1417326	NATIONAL SCIENCE FOUNDATION	34,890	-
National Science Foundation	Direct	47.049	PHY-1428914	NATIONAL SCIENCE FOUNDATION	(35,840)	-
National Science Foundation	Direct	47.049	PHY-1430152	NATIONAL SCIENCE FOUNDATION	2,068,829	1,357,809
National Science Foundation National Science Foundation	Direct	47.049	PHY-1430152	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	62,151	-
National Science Foundation National Science Foundation	Direct Direct	47.049 47.049	PHY-1520971 PHY-1565546	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	23,227 24,868,304	-
National Science Foundation	Direct	47.050	1443165	NATIONAL SCIENCE FOUNDATION	60,346	-
National Science Foundation	Direct	47.050	1446328	NATIONAL SCIENCE FOUNDATION	79,709	-
National Science Foundation	Direct	47.050	1456430	NATIONAL SCIENCE FOUNDATION	67,295	-
National Science Foundation	Direct	47.050	1523628	NATIONAL SCIENCE FOUNDATION	367,666	90,603
National Science Foundation	Direct	47.050	1531086	NATIONAL SCIENCE FOUNDATION	133,810	=
National Science Foundation	Direct	47.050	1540576	NATIONAL SCIENCE FOUNDATION	76,321	28,686
National Science Foundation	Direct	47.050	1549764	NATIONAL SCIENCE FOUNDATION	88,708	-
National Science Foundation	Direct	47.050	1551872	NATIONAL SCIENCE FOUNDATION	63,539	=
National Science Foundation	Direct	47.050	1620509	NATIONAL SCIENCE FOUNDATION	91,831	-
National Science Foundation National Science Foundation	Direct Direct	47.050 47.050	1629439 1630399	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	32,494 83,660	-
National Science Foundation	Direct	47.050	1638958	NATIONAL SCIENCE FOUNDATION	224,378	-
National Science Foundation	Direct	47.050	1644453	NATIONAL SCIENCE FOUNDATION	58,492	=
National Science Foundation	Direct	47.050	1645299	NATIONAL SCIENCE FOUNDATION	5,192	-
National Science Foundation	Direct	47.050	1649117	NATIONAL SCIENCE FOUNDATION	1,850	-
National Science Foundation	Direct	47.050	1649186	NATIONAL SCIENCE FOUNDATION	12,507	-
National Science Foundation	Direct	47.050	1664332	NATIONAL SCIENCE FOUNDATION	124,775	=
National Science Foundation	Direct	47.050	1751664	NATIONAL SCIENCE FOUNDATION	20,237	-
National Science Foundation	Direct	47.050	1752729	NATIONAL SCIENCE FOUNDATION	6,449	=
National Science Foundation	Direct	47.050	1722623	NATIONAL SCIENCE FOUNDATION	51,244	-
National Science Foundation National Science Foundation	Direct Direct	47.050 47.070	EAR-1348935 1054585	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	58,758 (1,152)	-
National Science Foundation	Direct	47.070	1115926	NATIONAL SCIENCE FOUNDATION	1,316	-
National Science Foundation	Direct	47.070	1524698	NATIONAL SCIENCE FOUNDATION	75,379	-
National Science Foundation	Direct	47.070	1533802	NATIONAL SCIENCE FOUNDATION	140,340	-
National Science Foundation	Direct	47.070	1560168	NATIONAL SCIENCE FOUNDATION	88,887	=
National Science Foundation	Direct	47.070	1560168	NATIONAL SCIENCE FOUNDATION	4,218	-
National Science Foundation	Direct	47.070	1565596	NATIONAL SCIENCE FOUNDATION	59,897	=
National Science Foundation	Direct	47.070	1565604	NATIONAL SCIENCE FOUNDATION	97,776	-
National Science Foundation	Direct	47.070	1615489	NATIONAL SCIENCE FOUNDATION	98,918	-
National Science Foundation National Science Foundation	Direct Direct	47.070 47.070	1615597 1617412	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	6,651 13,148	-
National Science Foundation	Direct	47.070	1617412	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	66,298	-
National Science Foundation	Direct	47.070	1617627	NATIONAL SCIENCE FOUNDATION	124,017	-
National Science Foundation	Direct	47.070	1617682	NATIONAL SCIENCE FOUNDATION	90,345	-
National Science Foundation	Direct	47.070	1622659	NATIONAL SCIENCE FOUNDATION	253,269	-
National Science Foundation	Direct	47.070	1645783	NATIONAL SCIENCE FOUNDATION	37,165	-
National Science Foundation	Direct	47.070	1655422	NATIONAL SCIENCE FOUNDATION	69,694	-
National Science Foundation	Direct	47.070	1656905	NATIONAL SCIENCE FOUNDATION	54,585	-
National Science Foundation National Science Foundation	Direct	47.070	1714126	NATIONAL SCIENCE FOUNDATION	108,550	-
National Science Foundation National Science Foundation	Direct Direct	47.070 47.070	1714126 1714417	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	11,973 35,787	-
National Science Foundation	Direct	47.070	1714741	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	116,881	-
National Science Foundation	Direct	47.070	1715714	NATIONAL SCIENCE FOUNDATION	27,220	_
National Science Foundation	Direct	47.070	1715940	NATIONAL SCIENCE FOUNDATION	58,975	_
National Science Foundation	Direct	47.070	1719275	NATIONAL SCIENCE FOUNDATION	12,225	-
National Science Foundation	Direct	47.070	1723560	NATIONAL SCIENCE FOUNDATION	28,256	=
National Science Foundation	Direct	47.070	1724807	NATIONAL SCIENCE FOUNDATION	20,000	-
National Science Foundation	Direct	47.070	1730137	NATIONAL SCIENCE FOUNDATION	42,618	-
National Science Foundation	Direct	47.070	1734272	NATIONAL SCIENCE FOUNDATION	129,665	-
National Science Foundation	Direct	47.070	1738677	NATIONAL SCIENCE FOUNDATION	110,073	43,565
National Science Foundation	Direct	47.070 47.070	174838	NATIONAL SCIENCE FOUNDATION	14,189	-
National Science Foundation National Science Foundation	Direct Direct	47.070 47.070	1748381 1749018	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	62,588 19,974	-
National Science Foundation National Science Foundation	Direct	47.070	1749018 ACI-1514580	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	7,667	-
National Science Foundation National Science Foundation	Direct	47.070	ACI-1514580 ACI-1566049	NATIONAL SCIENCE FOUNDATION	61,694	-
National Science Foundation	Direct	47.070	CCF-1422262	NATIONAL SCIENCE FOUNDATION	55,931	-
National Science Foundation	Direct	47.070	CCF-1565719	NATIONAL SCIENCE FOUNDATION	81,435	-
National Science Foundation	Direct	47.070	CNS 1305358	NATIONAL SCIENCE FOUNDATION	66,067	=
National Science Foundation	Direct	47.070	CNS 1502462	NATIONAL SCIENCE FOUNDATION	158,839	110,362
National Science Foundation	Direct	47.070	CNS-1116544	NATIONAL SCIENCE FOUNDATION	581	-
National Science Foundation	Direct	47.070	CNS-1217206	NATIONAL SCIENCE FOUNDATION	47,023	-
National Science Foundation National Science Foundation	Direct Direct	47.070 47.070	CNS-1318563 CNS-1318678	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	12,901 19,757	-
national selence Foundation	5		1010070		13,737	

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Research and Development Cluster	1 doo diredgii	(11010 0)	/ Wald Hallbol	Oldrick Hallio		oubanara i aymonio
(continued):						
National Science Foundation	Direct	47.070	CNS-1320561	NATIONAL SCIENCE FOUNDATION	\$ 42,530	\$ 8,471
National Science Foundation	Direct	47.070	CNS-1329807	NATIONAL SCIENCE FOUNDATION	11,214	426.020
National Science Foundation National Science Foundation	Direct Direct	47.070 47.070	CNS-1405273 CNS-1421407	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	362,066 261,646	136,020
National Science Foundation National Science Foundation	Direct	47.070	CNS-1421407 CNS-1423102	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	3,619	-
National Science Foundation	Direct	47.070	CNS-1423221	NATIONAL SCIENCE FOUNDATION	11,281	-
National Science Foundation	Direct	47.070	CNS-1502462	NATIONAL SCIENCE FOUNDATION	6,968	-
National Science Foundation	Direct	47.070	CNS-1524296	NATIONAL SCIENCE FOUNDATION	64,345	-
National Science Foundation	Direct	47.070	CNS-1524520	NATIONAL SCIENCE FOUNDATION	62,977	-
National Science Foundation	Direct	47.070	CNS-1547015	NATIONAL SCIENCE FOUNDATION	138,205	-
National Science Foundation	Direct	47.070	CNS-1609339	NATIONAL SCIENCE FOUNDATION	183,757	-
National Science Foundation	Direct	47.070	CNS-1609339	NATIONAL SCIENCE FOUNDATION	86,553	-
National Science Foundation National Science Foundation	Direct	47.070	CNS1618518	NATIONAL SCIENCE FOUNDATION	78,069	-
National Science Foundation	Direct Direct	47.070 47.070	IIS-1054585 IIS-1208390	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	2,881 3,086	-
National Science Foundation	Direct	47.070	IIS-1208390	NATIONAL SCIENCE FOUNDATION	299	-
National Science Foundation	Direct	47.070	IIS-1217212	NATIONAL SCIENCE FOUNDATION	18,530	-
National Science Foundation	Direct	47.070	IIS-1302285	NATIONAL SCIENCE FOUNDATION	278,132	-
National Science Foundation	Direct	47.070	IIS-1302285	NATIONAL SCIENCE FOUNDATION	3,366	-
National Science Foundation	Direct	47.070	IIS-1319909	NATIONAL SCIENCE FOUNDATION	51,852	-
National Science Foundation	Direct	47.070	IIS-1350253	NATIONAL SCIENCE FOUNDATION	52,875	-
National Science Foundation	Direct	47.070	IIS-1350253	NATIONAL SCIENCE FOUNDATION	5,333	-
National Science Foundation	Direct	47.070	IIS-1403004	NATIONAL SCIENCE FOUNDATION	12,420	-
National Science Foundation	Direct	47.070	IIS-1422316	NATIONAL SCIENCE FOUNDATION	104,120	-
National Science Foundation	Direct	47.070 47.070	IIS-1422316 IIS-1452479	NATIONAL SCIENCE FOUNDATION	4,695 120,714	Ē
National Science Foundation National Science Foundation	Direct Direct	47.070	IIS-1452479 IIS-1615612	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	76,809	-
National Science Foundation	Direct	47.070	IIS-1615612	NATIONAL SCIENCE FOUNDATION	69,309	-
National Science Foundation	Direct	47.070	REU-1617682	NATIONAL SCIENCE FOUNDATION	12,693	_
National Science Foundation	Direct	47.074	0939454	NATIONAL SCIENCE FOUNDATION	4,320,561	1,744,141
National Science Foundation	Direct	47.074	0939454	NATIONAL SCIENCE FOUNDATION	16,889	11,003
National Science Foundation	Direct	47.074	0939454	NATIONAL SCIENCE FOUNDATION	14,413	-
National Science Foundation	Direct	47.074	0939454	NATIONAL SCIENCE FOUNDATION	6,481	-
National Science Foundation	Direct	47.074	1027253	NATIONAL SCIENCE FOUNDATION	62,294	-
National Science Foundation	Direct	47.074	1027253	NATIONAL SCIENCE FOUNDATION	61,535	-
National Science Foundation	Direct	47.074	1027253	NATIONAL SCIENCE FOUNDATION	4,569	-
National Science Foundation	Direct	47.074	1253225	NATIONAL SCIENCE FOUNDATION	174,812	-
National Science Foundation	Direct	47.074	1330441	NATIONAL SCIENCE FOUNDATION	56	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	1354089 1356380	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	132,809 63,736	-
National Science Foundation	Direct	47.074	1455405	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	180,486	3,188
National Science Foundation	Direct	47.074	1455405	NATIONAL SCIENCE FOUNDATION	9,036	5,100
National Science Foundation	Direct	47.074	1456615	NATIONAL SCIENCE FOUNDATION	23,621	-
National Science Foundation	Direct	47.074	1514706	NATIONAL SCIENCE FOUNDATION	101,475	_
National Science Foundation	Direct	47.074	1518366	NATIONAL SCIENCE FOUNDATION	106,540	17,881
National Science Foundation	Direct	47.074	1546617	NATIONAL SCIENCE FOUNDATION	397,647	168,321
National Science Foundation	Direct	47.074	1546617	NATIONAL SCIENCE FOUNDATION	10,979	-
National Science Foundation	Direct	47.074	1546657	NATIONAL SCIENCE FOUNDATION	39,952	-
National Science Foundation	Direct	47.074	1546657	NATIONAL SCIENCE FOUNDATION	17,289	-
National Science Foundation	Direct	47.074	1546657	NATIONAL SCIENCE FOUNDATION	1,367	-
National Science Foundation	Direct	47.074	1550686	NATIONAL SCIENCE FOUNDATION	16,045	-
National Science Foundation	Direct	47.074 47.074	1550765 1557324	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	97,400	-
National Science Foundation National Science Foundation	Direct Direct	47.074	1557324	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	165,525 41,000	-
National Science Foundation	Direct	47.074	1557437	NATIONAL SCIENCE FOUNDATION	258,074	-
National Science Foundation	Direct	47.074	1557657	NATIONAL SCIENCE FOUNDATION	85,747	-
National Science Foundation	Direct	47.074	1600556	NATIONAL SCIENCE FOUNDATION	59,077	_
National Science Foundation	Direct	47.074	1620018	NATIONAL SCIENCE FOUNDATION	(5,775)	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	549,751	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	81,445	=
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	73,568	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	69,670	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	33,788	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	27,503	=
National Science Foundation National Science Foundation	Direct	47.074 47.074	1637653	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	15,979 14,661	-
National Science Foundation National Science Foundation	Direct Direct	47.074	1637653 1637653	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	9,062	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	8,965	-
National Science Foundation	Direct	47.074	1637653	NATIONAL SCIENCE FOUNDATION	372	-
National Science Foundation	Direct	47.074	1638679	NATIONAL SCIENCE FOUNDATION	478,246	-
National Science Foundation	Direct	47.074	1638679	NATIONAL SCIENCE FOUNDATION	4,948	-
National Science Foundation	Direct	47.074	1638778	NATIONAL SCIENCE FOUNDATION	194,121	12,895
National Science Foundation	Direct	47.074	1638778	NATIONAL SCIENCE FOUNDATION	14,622	-
National Science Foundation	Direct	47.074	1644965	NATIONAL SCIENCE FOUNDATION	247,479	136,108
National Science Foundation	Direct	47.074	1644965	NATIONAL SCIENCE FOUNDATION	4,183	-
National Science Foundation	Direct	47.074	1655386	NATIONAL SCIENCE FOUNDATION	24,470	-
National Science Foundation	Direct	47.074	1655386	NATIONAL SCIENCE FOUNDATION	23,826	-
National Science Foundation	Direct	47.074	1655392	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	52,644	-
National Science Foundation	Direct Direct	47.074 47.074	1655394 1655715	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	12,544 122,082	-
National Science Foundation National Science Foundation	Direct	47.074 47.074	1655/15 1655715	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	1,000	-
National Science Foundation National Science Foundation	Direct	47.074	1701602	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	9,200	-
National Science Foundation	Direct	47.074	1701736	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	5,417	-
National Science Foundation	Direct	47.074	1702379	NATIONAL SCIENCE FOUNDATION	62,317	14,771
National Science Foundation	Direct	47.074	1702635	NATIONAL SCIENCE FOUNDATION	23,400	,,,,,
National Science Foundation	Direct	47.074	1702635	NATIONAL SCIENCE FOUNDATION	2,340	-
National Science Foundation	Direct	47.074	1714093	NATIONAL SCIENCE FOUNDATION	8,348	-
National Science Foundation	Direct	47.074	1714093	NATIONAL SCIENCE FOUNDATION	5,542	-
National Science Foundation	Direct	47.074	1714322	NATIONAL SCIENCE FOUNDATION	22,843	-
National Science Foundation	Direct	47.074	1714561	NATIONAL SCIENCE FOUNDATION	206,267	-

	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
National Science Foundation	Direct	47.074	1714561	NATIONAL SCIENCE FOUNDATION	\$ 10,998	\$ -
National Science Foundation	Direct	47.074	1714612	NATIONAL SCIENCE FOUNDATION	163,063	-
National Science Foundation	Direct	47.074	1719376	NATIONAL SCIENCE FOUNDATION	165,830	=
National Science Foundation	Direct	47.074	1722621	NATIONAL SCIENCE FOUNDATION	121,419	-
National Science Foundation	Direct	47.074	1733552	NATIONAL SCIENCE FOUNDATION	32,557	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	1733633 1733633	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	99,105 31,943	1,187
National Science Foundation	Direct	47.074	1733633	NATIONAL SCIENCE FOUNDATION	9,000	-
National Science Foundation	Direct	47.074	1735934	NATIONAL SCIENCE FOUNDATION	55,939	-
National Science Foundation	Direct	47.074	1737898	NATIONAL SCIENCE FOUNDATION	65,458	-
National Science Foundation	Direct	47.074	1737898	NATIONAL SCIENCE FOUNDATION	5,250	=
National Science Foundation	Direct	47.074	1740874	NATIONAL SCIENCE FOUNDATION	35,713	-
National Science Foundation	Direct	47.074	1740874	NATIONAL SCIENCE FOUNDATION	9,315	-
National Science Foundation	Direct	47.074	1740874	NATIONAL SCIENCE FOUNDATION	4,540	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	1750003 1750125	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	27,682 50,053	-
National Science Foundation	Direct	47.074	1753543	NATIONAL SCIENCE FOUNDATION	586,695	135,146
National Science Foundation	Direct	47.074	1755089	NATIONAL SCIENCE FOUNDATION	433	-
National Science Foundation	Direct	47.074	1757043	NATIONAL SCIENCE FOUNDATION	44,382	-
National Science Foundation	Direct	47.074	1757043	NATIONAL SCIENCE FOUNDATION	1,683	-
National Science Foundation	Direct	47.074	1757530	NATIONAL SCIENCE FOUNDATION	85,937	-
National Science Foundation	Direct	47.074	1758091	NATIONAL SCIENCE FOUNDATION	102,468	-
National Science Foundation	Direct	47.074	1818898	NATIONAL SCIENCE FOUNDATION	51,597	-
National Science Foundation	Direct	47.074	1822254	NATIONAL SCIENCE FOUNDATION	65,029	=
National Science Foundation	Direct	47.074 47.074	1822343 DBI-0939454	NATIONAL SCIENCE FOUNDATION	88,804 38,050	-
National Science Foundation National Science Foundation	Direct Direct	47.074	DBI-0939454 DBI-0939454	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	4,672	4,672
National Science Foundation	Direct	47.074	DBI-0953738	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	8,372	
National Science Foundation	Direct	47.074	DBI-1358474	NATIONAL SCIENCE FOUNDATION	67,480	=
National Science Foundation	Direct	47.074	DBI-1358474	NATIONAL SCIENCE FOUNDATION	6,249	-
National Science Foundation	Direct	47.074	DBI-1460569	NATIONAL SCIENCE FOUNDATION	50,927	=
National Science Foundation	Direct	47.074	DBI-1460569	NATIONAL SCIENCE FOUNDATION	16,734	-
National Science Foundation	Direct	47.074	DEB - 1401582	NATIONAL SCIENCE FOUNDATION	(661)	-
National Science Foundation	Direct	47.074	DEB 1354878	NATIONAL SCIENCE FOUNDATION	6	-
National Science Foundation	Direct	47.074	DEB-1027253	NATIONAL SCIENCE FOUNDATION	43,165	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	DEB-1027253 DEB-1027253	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	37,360 24,640	-
National Science Foundation	Direct	47.074	DEB-1027253 DEB-1027253	NATIONAL SCIENCE FOUNDATION	14,745	-
National Science Foundation	Direct	47.074	DEB-1027253	NATIONAL SCIENCE FOUNDATION	2,784	-
National Science Foundation	Direct	47.074	DEB-1027253	NATIONAL SCIENCE FOUNDATION	448	-
National Science Foundation	Direct	47.074	DEB-1136710	NATIONAL SCIENCE FOUNDATION	41,844	-
National Science Foundation	Direct	47.074	DEB-1145808	NATIONAL SCIENCE FOUNDATION	7,202	-
National Science Foundation	Direct	47.074	DEB-1256663	NATIONAL SCIENCE FOUNDATION	13	=
National Science Foundation	Direct	47.074	DEB-1257756	NATIONAL SCIENCE FOUNDATION	11,588	-
National Science Foundation	Direct	47.074	DEB-1257756	NATIONAL SCIENCE FOUNDATION	124	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	DEB-1342793 DEB-1354085	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	21,272 14,246	-
National Science Foundation	Direct	47.074	DEB-1354085	NATIONAL SCIENCE FOUNDATION	6,794	-
National Science Foundation	Direct	47.074	DEB-1354414	NATIONAL SCIENCE FOUNDATION	48,704	41,360
National Science Foundation	Direct	47.074	DEB-1359138	NATIONAL SCIENCE FOUNDATION	1,075	-
National Science Foundation	Direct	47.074	DEB-1451740	NATIONAL SCIENCE FOUNDATION	128,443	=
National Science Foundation	Direct	47.074	DEB-1518518	NATIONAL SCIENCE FOUNDATION	666,184	98,872
National Science Foundation	Direct	47.074	DEB-1547024	NATIONAL SCIENCE FOUNDATION	55,996	-
National Science Foundation	Direct	47.074	DEB-1547961	NATIONAL SCIENCE FOUNDATION	4,870	-
National Science Foundation National Science Foundation	Direct	47.074 47.074	DEB-1547961	NATIONAL SCIENCE FOUNDATION	(1,258)	-
National Science Foundation	Direct Direct	47.074	DEB-1552197 DEB-1552197	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	91,775 11,388	-
National Science Foundation	Direct	47.074	DEB-1655425	NATIONAL SCIENCE FOUNDATION	17,271	-
National Science Foundation	Direct	47.074	EF-1065786	NATIONAL SCIENCE FOUNDATION	10,509	-
National Science Foundation	Direct	47.074	EF-1065786	NATIONAL SCIENCE FOUNDATION	64	-
National Science Foundation	Direct	47.074	EF-1253225	NATIONAL SCIENCE FOUNDATION	16,554	-
National Science Foundation	Direct	47.074	EF-1340604	NATIONAL SCIENCE FOUNDATION	19,970	-
National Science Foundation	Direct	47.074	EF-1340812	NATIONAL SCIENCE FOUNDATION	654,571	-
National Science Foundation	Direct	47.074	IOS-1237969	NATIONAL SCIENCE FOUNDATION	288,909	154,685
National Science Foundation National Science Foundation	Direct	47.074	IOS-1237969	NATIONAL SCIENCE FOUNDATION	31,878	14.042
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	IOS-1237969 IOS-1237969	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	21,556 3,800	14,043
National Science Foundation	Direct	47.074	IOS-1237969	NATIONAL SCIENCE FOUNDATION	(356)	
National Science Foundation	Direct	47.074	IOS-1331218	NATIONAL SCIENCE FOUNDATION	178,030	-
National Science Foundation	Direct	47.074	IOS-1350772	NATIONAL SCIENCE FOUNDATION	78,012	-
National Science Foundation	Direct	47.074	IOS-1353110	NATIONAL SCIENCE FOUNDATION	122,088	2,736
National Science Foundation	Direct	47.074	IOS-1354195	NATIONAL SCIENCE FOUNDATION	36,916	=
National Science Foundation	Direct	47.074	IOS-1354721	NATIONAL SCIENCE FOUNDATION	108,145	-
National Science Foundation	Direct	47.074	IOS-1444499	NATIONAL SCIENCE FOUNDATION	1,170,180	577,304
National Science Foundation National Science Foundation	Direct	47.074	IOS-1444499	NATIONAL SCIENCE FOUNDATION	20,095	-
National Science Foundation National Science Foundation	Direct	47.074 47.074	IOS-1444499	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	434 158,996	-
National Science Foundation National Science Foundation	Direct Direct	47.074	IOS-1456482 IOS-1456864	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	134,980	-
National Science Foundation	Direct	47.074	IOS-1456864	NATIONAL SCIENCE FOUNDATION	5,355	-
National Science Foundation	Direct	47.074	MCB 1121943	NATIONAL SCIENCE FOUNDATION	(1)	=
National Science Foundation	Direct	47.074	MCB-1121650	NATIONAL SCIENCE FOUNDATION	32,898	-
National Science Foundation	Direct	47.074	MCB-1121943	NATIONAL SCIENCE FOUNDATION	1	=
National Science Foundation	Direct	47.074	MCB-1243654	NATIONAL SCIENCE FOUNDATION	4,156	-
National Science Foundation	Direct	47.074	MCB-1243792	NATIONAL SCIENCE FOUNDATION	53,220	-
National Science Foundation	Direct	47.074	MCB-1243983	NATIONAL SCIENCE FOUNDATION	118,416	-
National Science Foundation	Direct	47.074	MCB-1243983	NATIONAL SCIENCE FOUNDATION	2,822	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	MCB-1253684 MCB-1330441	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	93,387 79,840	-
National Science Foundation	Direct	47.074	MCB-1330441 MCB-1330441	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	12,494	-
National Science Foundation	Direct	47.074	MCB-1330560	NATIONAL SCIENCE FOUNDATION	119,808	-
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	Direct/	CFDA			Total	
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	Expenditures	Subaward Payments
Research and Development Cluster (continued):						
National Science Foundation	Direct	47.074	MCB-135594	NATIONAL SCIENCE FOUNDATION	\$ 74,052	\$ -
National Science Foundation	Direct	47.074	MCB-1359636	NATIONAL SCIENCE FOUNDATION	17	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	MCB-1411272 MCB-1411272	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	(352) (530)	1,690
National Science Foundation	Direct	47.074	MCB-1411272 MCB-1413356	NATIONAL SCIENCE FOUNDATION	155,060	-
National Science Foundation	Direct	47.074	MCB-1515002	NATIONAL SCIENCE FOUNDATION	56,677	-
National Science Foundation	Direct	47.074	MCB-1515002	NATIONAL SCIENCE FOUNDATION	3,143	-
National Science Foundation	Direct	47.074	MCB-1515169	NATIONAL SCIENCE FOUNDATION	191,347	-
National Science Foundation National Science Foundation	Direct Direct	47.074 47.074	MCB-1515169 MCB-1517241	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	21,507 151,958	-
National Science Foundation	Direct	47.074	MCB-1517241	NATIONAL SCIENCE FOUNDATION	5,810	-
National Science Foundation	Direct	47.074	NSF-1546617	NATIONAL SCIENCE FOUNDATION	208,914	-
National Science Foundation	Direct	47.074	NSF-1546617	NATIONAL SCIENCE FOUNDATION	133,054	-
National Science Foundation	Direct	47.074	NSF-1546617	NATIONAL SCIENCE FOUNDATION	121,148	-
National Science Foundation National Science Foundation	Direct Direct	47.075 47.075	1533499 1540314	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	(55) 167,740	63,119
National Science Foundation	Direct	47.075	1556270	NATIONAL SCIENCE FOUNDATION	30,145	-
National Science Foundation	Direct	47.075	1559045	NATIONAL SCIENCE FOUNDATION	(12)	-
National Science Foundation	Direct	47.075	1559045	NATIONAL SCIENCE FOUNDATION	(22)	-
National Science Foundation	Direct	47.075	1560846	NATIONAL SCIENCE FOUNDATION	243,865	-
National Science Foundation	Direct	47.075	1560846	NATIONAL SCIENCE FOUNDATION	132,831 96,326	-
National Science Foundation National Science Foundation	Direct Direct	47.075 47.075	1630982 1638167	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	47,488	-
National Science Foundation	Direct	47.075	1654929	NATIONAL SCIENCE FOUNDATION	58,206	9,238
National Science Foundation	Direct	47.075	1658249	NATIONAL SCIENCE FOUNDATION	77,885	-
National Science Foundation	Direct	47.075	1728749	NATIONAL SCIENCE FOUNDATION	10,009	-
National Science Foundation	Direct	47.075	1728923	NATIONAL SCIENCE FOUNDATION	53,785	-
National Science Foundation	Direct Direct	47.075 47.075	1728975 1734063	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	26,672 63,193	=
National Science Foundation National Science Foundation	Direct	47.075 47.075	1734063	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	2,609	-
National Science Foundation	Direct	47.075	1734237	NATIONAL SCIENCE FOUNDATION	934	-
National Science Foundation	Direct	47.075	1744094	NATIONAL SCIENCE FOUNDATION	3,288	-
National Science Foundation	Direct	47.075	1744094	NATIONAL SCIENCE FOUNDATION	103	-
National Science Foundation	Direct	47.075	1745150 1754863	NATIONAL SCIENCE FOUNDATION	2,818	-
National Science Foundation National Science Foundation	Direct Direct	47.075 47.075	1754863	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	60,405 8,947	-
National Science Foundation	Direct	47.075	1759587	NATIONAL SCIENCE FOUNDATION	9,435	_
National Science Foundation	Direct	47.075	1760254	NATIONAL SCIENCE FOUNDATION	109,042	-
National Science Foundation	Direct	47.075	1817665	NATIONAL SCIENCE FOUNDATION	1,323	-
National Science Foundation	Direct	47.075	BCS-1149078	NATIONAL SCIENCE FOUNDATION	66,559	-
National Science Foundation National Science Foundation	Direct Direct	47.075 47.075	BCS-1431063 BCS-1656133	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	31,339 75,578	-
National Science Foundation	Direct	47.075	SES-1231206	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	1,403	-
National Science Foundation	Direct	47.075	SES-1231206	NATIONAL SCIENCE FOUNDATION	1,329	-
National Science Foundation	Direct	47.075	SES-1318885	NATIONAL SCIENCE FOUNDATION	19	-
National Science Foundation	Direct	47.075	SES-1338614	NATIONAL SCIENCE FOUNDATION	4,726	-
National Science Foundation	Direct	47.075	SES-1429948	NATIONAL SCIENCE FOUNDATION	5,009	-
National Science Foundation National Science Foundation	Direct Direct	47.075 47.075	SES-1430372 SES-1449466	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	10,806 94,877	64,371
National Science Foundation	Direct	47.075	SES-1459879	NATIONAL SCIENCE FOUNDATION	(5,022)	
National Science Foundation	Direct	47.075	SMA-1328503	NATIONAL SCIENCE FOUNDATION	49,262	-
National Science Foundation	Direct	47.075	SMA-1416730	NATIONAL SCIENCE FOUNDATION	165,751	100,350
National Science Foundation	Direct	47.076	HDRL-1232388	NATIONAL SCIENCE FOUNDATION	6,843	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	1316908 1316908	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	156,098 14,252	-
National Science Foundation	Direct	47.076	1440988	NATIONAL SCIENCE FOUNDATION	1,266,043	400,391
National Science Foundation	Direct	47.076	1503211	NATIONAL SCIENCE FOUNDATION	306,969	-
National Science Foundation	Direct	47.076	1503211	NATIONAL SCIENCE FOUNDATION	51,650	-
National Science Foundation	Direct	47.076	1503277	NATIONAL SCIENCE FOUNDATION	17,474	-
National Science Foundation	Direct	47.076	1503277	NATIONAL SCIENCE FOUNDATION	5,547	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	1504659 1504786	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	77,037 19,434	-
National Science Foundation	Direct	47.076	1524128	NATIONAL SCIENCE FOUNDATION	121,325	-
National Science Foundation	Direct	47.076	1561122	NATIONAL SCIENCE FOUNDATION	69,293	=
National Science Foundation	Direct	47.076	1561159	NATIONAL SCIENCE FOUNDATION	158,451	=
National Science Foundation National Science Foundation	Direct	47.076	1564745	NATIONAL SCIENCE FOUNDATION	132,288	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	1564745 1620580	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	21,686 295,273	-
National Science Foundation	Direct	47.076	1620746	NATIONAL SCIENCE FOUNDATION	257,348	_
National Science Foundation	Direct	47.076	1620746	NATIONAL SCIENCE FOUNDATION	9,794	-
National Science Foundation	Direct	47.076	1620934	NATIONAL SCIENCE FOUNDATION	222,641	-
National Science Foundation	Direct	47.076	1620934	NATIONAL SCIENCE FOUNDATION	10,938	-
National Science Foundation	Direct	47.076	1643723	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	72,000	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	1643723 1643833	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	44,625 8,854	-
National Science Foundation	Direct	47.076	1643833	NATIONAL SCIENCE FOUNDATION	111	-
National Science Foundation	Direct	47.076	1646869	NATIONAL SCIENCE FOUNDATION	47,394	=
National Science Foundation	Direct	47.076	1649981	NATIONAL SCIENCE FOUNDATION	82,738	=
National Science Foundation	Direct	47.076	1660643	NATIONAL SCIENCE FOUNDATION	51,680	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	1661064 1661236	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	73,345 548,051	=
National Science Foundation National Science Foundation	Direct	47.076	1702592	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	20,359	-
National Science Foundation	Direct	47.076	1708506	NATIONAL SCIENCE FOUNDATION	49,546	26,359
National Science Foundation	Direct	47.076	1708664	NATIONAL SCIENCE FOUNDATION	48,137	-
National Science Foundation	Direct	47.076	1711260	NATIONAL SCIENCE FOUNDATION	8,911	-
National Science Foundation	Direct	47.076	1713060	NATIONAL SCIENCE FOUNDATION	6,250	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	1713197 1719950	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	42,800 36,738	-
National Science Foundation	Direct	47.076	1719950	NATIONAL SCIENCE FOUNDATION	32,873	=
National Science Foundation	Direct	47.076	1725320	NATIONAL SCIENCE FOUNDATION	221,539	16,091

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Research and Development Cluster						
(continued): National Science Foundation	Direct	47.076	1725520	NATIONAL SCIENCE FOUNDATION	\$ 21.678	\$ -
National Science Foundation National Science Foundation	Direct	47.076	1725520	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	\$ 21,678 69,346	\$ -
National Science Foundation	Direct	47.076	1725910	NATIONAL SCIENCE FOUNDATION	122,865	_
National Science Foundation	Direct	47.076	1725956	NATIONAL SCIENCE FOUNDATION	93,823	=
National Science Foundation	Direct	47.076	1741575	NATIONAL SCIENCE FOUNDATION	20,015	-
National Science Foundation	Direct	47.076	1741575	NATIONAL SCIENCE FOUNDATION	30	-
National Science Foundation	Direct	47.076	1742381	NATIONAL SCIENCE FOUNDATION	52,989	-
National Science Foundation	Direct	47.076	DGE-1424871	NATIONAL SCIENCE FOUNDATION	1,308,500	-
National Science Foundation	Direct	47.076	DGE-1438739	NATIONAL SCIENCE FOUNDATION	24,562	
National Science Foundation	Direct	47.076	DGE-1535011	NATIONAL SCIENCE FOUNDATION	182,737	126,977
National Science Foundation	Direct	47.076	DRL-0514431	NATIONAL SCIENCE FOUNDATION	8,395	-
National Science Foundation National Science Foundation	Direct Direct	47.076 47.076	DRL-1119055 DRL-1119327	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	12,089	5,019
National Science Foundation National Science Foundation	Direct	47.076	DRL-1119327 DRL-1228034	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	63,648 21,537	-
National Science Foundation	Direct	47.076	DRL-1232388	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	36,995	2,133
National Science Foundation	Direct	47.076	DRL-1252439	NATIONAL SCIENCE FOUNDATION	69,050	21,921
National Science Foundation	Direct	47.076	DRL-1253036	NATIONAL SCIENCE FOUNDATION	122,787	-
National Science Foundation	Direct	47.076	DRL-1253036	NATIONAL SCIENCE FOUNDATION	11,864	_
National Science Foundation	Direct	47.076	DRL-1253822	NATIONAL SCIENCE FOUNDATION	72,153	_
National Science Foundation	Direct	47.076	DRL-1316702	NATIONAL SCIENCE FOUNDATION	(487)	-
National Science Foundation	Direct	47.076	DRL-1347187	NATIONAL SCIENCE FOUNDATION	(2,777)	-
National Science Foundation	Direct	47.076	DRL-1404467	NATIONAL SCIENCE FOUNDATION	47,186	-
National Science Foundation	Direct	47.076	DRL-1417672	NATIONAL SCIENCE FOUNDATION	587,452	199,188
National Science Foundation	Direct	47.076	DRL-1417672	NATIONAL SCIENCE FOUNDATION	36,111	=
National Science Foundation	Direct	47.076	DRL-1417900	NATIONAL SCIENCE FOUNDATION	214,010	-
National Science Foundation	Direct	47.076	DRL-1417900	NATIONAL SCIENCE FOUNDATION	17,712	-
National Science Foundation	Direct	47.076	DRL-1420492	NATIONAL SCIENCE FOUNDATION	121,707	-
National Science Foundation	Direct	47.076	DRL-1420532	NATIONAL SCIENCE FOUNDATION	219,365	6,480
National Science Foundation	Direct	47.076	DRL-1421116	NATIONAL SCIENCE FOUNDATION	1,032	1,764
National Science Foundation	Direct	47.076	DRL-1421214	NATIONAL SCIENCE FOUNDATION	15,543	-
National Science Foundation	Direct	47.076	DRL-1440988	NATIONAL SCIENCE FOUNDATION	143,915	-
National Science Foundation	Direct	47.076	DRL-1502755	NATIONAL SCIENCE FOUNDATION	256,415	78,167
National Science Foundation	Direct	47.076	DRL-1647033	NATIONAL SCIENCE FOUNDATION	260,598	88,896
National Science Foundation	Direct	47.076	DRL-1660926	NATIONAL SCIENCE FOUNDATION	233,122	41,755
National Science Foundation	Direct	47.076	DRL-1712834	NATIONAL SCIENCE FOUNDATION	163,430	56,192
National Science Foundation	Direct Direct	47.076 47.076	DRL-1744202	NATIONAL SCIENCE FOUNDATION	118,238	62.100
National Science Foundation National Science Foundation	Direct	47.076	DUE-1323162 DUE-1340048	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	321,336 108,457	63,189
National Science Foundation	Direct	47.076	DUE-1340048	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	41,466	-
National Science Foundation	Direct	47.076	DUE-1347605	NATIONAL SCIENCE FOUNDATION	62,964	60,243
National Science Foundation	Direct	47.076	DUE-1347740	NATIONAL SCIENCE FOUNDATION	19,178	-
National Science Foundation	Direct	47.076	DUE-1431725	NATIONAL SCIENCE FOUNDATION	371,305	119,975
National Science Foundation	Direct	47.076	DUE-1431725	NATIONAL SCIENCE FOUNDATION	9,153	-
National Science Foundation	Direct	47.076	DUE-1431776	NATIONAL SCIENCE FOUNDATION	49	-
National Science Foundation	Direct	47.076	DUE-1432563	NATIONAL SCIENCE FOUNDATION	349,749	-
National Science Foundation	Direct	47.076	DUE-1432563	NATIONAL SCIENCE FOUNDATION	16,677	-
National Science Foundation	Direct	47.076	DUE-1502552	NATIONAL SCIENCE FOUNDATION	83,717	-
National Science Foundation	Direct	47.076	FED GOV FELLOWSHIPS-FEES	NATIONAL SCIENCE FOUNDATION	(95,496)	-
National Science Foundation	Direct	47.076	HRD-1305819	NATIONAL SCIENCE FOUNDATION	111,251	-
National Science Foundation	Direct	47.076	HRD-1305819	NATIONAL SCIENCE FOUNDATION	7,562	-
National Science Foundation	Direct	47.076	NSF-1623824	NATIONAL SCIENCE FOUNDATION	204,943	-
National Science Foundation	Direct	47.079	1556407	NATIONAL SCIENCE FOUNDATION	70,160	-
National Science Foundation	Direct	47.079	1556407	NATIONAL SCIENCE FOUNDATION	3,688	-
National Science Foundation	Direct	47.079	1614130	NATIONAL SCIENCE FOUNDATION	83,186	-
National Science Foundation	Direct	47.079	IIA-1358110	NATIONAL SCIENCE FOUNDATION	23,432	-
National Science Foundation	Direct	47.079	IIA-1358110	NATIONAL SCIENCE FOUNDATION	22,405	-
National Science Foundation	Direct Direct	47.079 47.079	OISE-1545684	NATIONAL SCIENCE FOUNDATION	725,817	-
National Science Foundation National Science Foundation	Direct	47.079	OISE-1545684 OIA-1125163	NATIONAL SCIENCE FOUNDATION NATIONAL SCIENCE FOUNDATION	13,686 4,922	-
National Science Foundation	Direct To		UIA-1123103	NATIONAL SCIENCE POUNDATION	78,663,066	6,734,434
				-		0,734,434
National Science Foundation	Pass-through	47.000	11-160H-MSU	WEST VIRGINIA UNIVERSITY	732	=
National Science Foundation National Science Foundation	Pass-through	47.041	11-160-MSU-2	WEST VIRGINIA UNIVERSITY	32,333	-
National Science Foundation National Science Foundation	Pass-through Pass-through	47.041 47.041	150282 3003795364	KOPESS AG TECH, LLC UNIVERSITY OF MICHIGAN	58,146 10,801	-
National Science Foundation	Pass-through	47.041	4101-71104	PURDUE UNIV	97,636	-
National Science Foundation	Pass-through	47.041	G-01151-1	COLORADO STATE UNIV	128,363	-
National Science Foundation	Pass-through	47.041	S1863P-B	OREGON STATE UNIVERSITY	4,932	_
National Science Foundation	Pass-through	47.049	2003349346	JOHNS HOPKINS UNIVERSITY	69,137	_
National Science Foundation	Pass-through	47.049	3002333711	UNIVERSITY OF MICHIGAN	(187)	_
National Science Foundation	Pass-through	47.049	3004423504	UNIVERSITY OF MICHIGAN	255,318	=
National Science Foundation	Pass-through	47.049	359609	NATL RADIO ASTRONOMY OBSERVATORY	6,178	-
National Science Foundation	Pass-through	47.049	203086MSU	UNIVERSITY OF NOTRE DAME	60,726	-
National Science Foundation	Pass-through	47.049	SDSMT-Michigan St U 17-13	SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY	5,624	=
National Science Foundation	Pass-through	47.049	76749-1136652-2	STONY BROOK UNIVERSITY	190,431	-
National Science Foundation	Pass-through	47.049	76749/1136652/2	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	100,783	-
National Science Foundation	Pass-through	47.049	76749/1136652/2	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	15,122	-
National Science Foundation	Pass-through	47.049	76749/1136652/2R&D	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	819	=
National Science Foundation	Pass-through	47.049	68790	THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW	504,408	-
	Pass-through	47.049	F-2015-76	UNIVERSITY OF TOLEDO	12,740	-
National Science Foundation	_	47.049	10030626	UNIVERSITY OF UTAH	2,579	-
National Science Foundation	Pass-through					
National Science Foundation National Science Foundation	Pass-through	47.050	24(GG009393-01)	COLUMBIA UNIVERSITY	41,141	-
National Science Foundation National Science Foundation National Science Foundation	Pass-through Pass-through	47.050 47.050	3004146006	UNIVERSITY OF MICHIGAN	66,306	-
National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Pass-through Pass-through Pass-through	47.050 47.050 47.050	3004146006 479483-19057	UNIVERSITY OF MICHIGAN VIRGINIA POLYTECHNIC INST	66,306 59,506	- - -
National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Pass-through Pass-through Pass-through Pass-through	47.050 47.050 47.050 47.050	3004146006 479483-19057 675K964	UNIVERSITY OF MICHIGAN VIRGINIA POLYTECHNIC INST UNIVERSITY OF WISCONSIN - MADISON	66,306 59,506 19,717	- - -
National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Pass-through Pass-through Pass-through Pass-through Pass-through	47.050 47.050 47.050 47.050 47.050	3004146006 479483-19057 675K964 SP0024578-PROJ0006670	UNIVERSITY OF MICHIGAN VIRGINIA POLYTECHNIC INST UNIVERSITY OF WISCONSIN - MADISON NORTHWESTERN UNIVERSITY	66,306 59,506 19,717 25,310	- - - -
National Science Foundation National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Pass-through Pass-through Pass-through Pass-through	47.050 47.050 47.050 47.050	3004146006 479483-19057 675K964	UNIVERSITY OF MICHIGAN VIRGINIA POLYTECHNIC INST UNIVERSITY OF WISCONSIN - MADISON	66,306 59,506 19,717	- - - - -

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
earch and Development Cluster	rass-unough	(Note 3)	Award Number	Grantoi Name	Experioritores	Subawaiu Fayillelits
ontinued): National Science Foundation	Pass-through	47.074	15-571	ARIZONA STATE UNIVERSITY	\$ 44,999	\$ -
National Science Foundation	Pass-through	47.074	RSC14014	UNIVERSITY OF DAYTON	20,317	-
National Science Foundation	Pass-through	47.074	UFDSP0001070	UNIV OF FLORIDA	78,451	-
National Science Foundation	Pass-through	47.074	RR167-629/S001557	UNIVERSITY OF GEORGIA	147,904	_
National Science Foundation	Pass-through	47.074	420-66-08B	IOWA STATE UNIVERSITY	121,172	-
National Science Foundation	Pass-through	47.074	1716340	UNIV OF KENTUCKY	50,320	-
National Science Foundation	Pass-through	47.074	502294-78050	NORTHEASTERN UNIVERSITY	2,722	-
National Science Foundation	Pass-through	47.074	1002973-01	NORTHERN ARIZONA UNIVERSITY	77,779	-
National Science Foundation	Pass-through	47.074	1002973-01	NORTHERN ARIZONA UNIVERSITY	45,057	-
National Science Foundation	Pass-through	47.074	1002973-01	NORTHERN ARIZONA UNIVERSITY	19,015	-
National Science Foundation	Pass-through	47.074	1002973-01	NORTHERN ARIZONA UNIVERSITY	16,213	-
National Science Foundation	Pass-through	47.074	1002973-01	NORTHERN ARIZONA UNIVERSITY	4,370	-
National Science Foundation	Pass-through	47.074	202236	UNIVERSITY OF NOTRE DAME	36,776	-
National Science Foundation	Pass-through	47.074	4101-68711	PURDUE UNIV	33,302	-
National Science Foundation	Pass-through	47.074	4101-80632	PURDUE UNIV	23,613	-
National Science Foundation	Pass-through	47.074	42271 Subaward	SAINT LOUIS UNIVERSITY	93,786	-
National Science Foundation	Pass-through	47.074	2015-984-001	SAMUEL ROBERTS NOBLE FOUNDATION INC	199,596	-
National Science Foundation	Pass-through	47.074	UNR 17-21	UNIVERSITY OF NEVADA RENO	111,002	-
National Science Foundation	Pass-through	47.074	7793-MSU	WESTERN MICHIGAN UNIVERSITY	180,372	-
National Science Foundation	Pass-through	47.074	7793-MSU	WESTERN MICHIGAN UNIVERSITY	6,275	-
National Science Foundation	Pass-through	47.075	129152	UNIVERSITY OF ARIZONA	1,930	-
National Science Foundation	Pass-through	47.075	17-009496 A	UNIVERSITY OF MASSACHUSETTS	8,191	-
National Science Foundation	Pass-through	47.075	GTK137-SB-002	IDAHO UNIVERSITY OF	45,107	-
National Science Foundation	Pass-through	47.076	DRL1421198	AMERICAN INSTITUTES FOR RESEARCH	14,233	-
National Science Foundation	Pass-through	47.076	Z4625001	UNIV OF MARYLAND	71,528	-
National Science Foundation	Pass-through	47.076	3003620154	UNIVERSITY OF MICHIGAN	51,248	-
National Science Foundation	Pass-through	47.076	3004280408	UNIVERSITY OF MICHIGAN	55,687	-
National Science Foundation	Pass-through	47.076	3004280408	UNIVERSITY OF MICHIGAN	16,386	-
National Science Foundation	Pass-through	47.076	16043-003	MISSOURI STATE UNIVERSITY	53,306	-
National Science Foundation	Pass-through	47.076	16043-003	MISSOURI STATE UNIVERSITY	7,774	-
National Science Foundation	Pass-through	47.076	64155-1	NORTHERN ILLINOIS UNIVERSITY	33,326	-
National Science Foundation	Pass-through	47.076	SP0009801-PROJ0002727	NORTHWESTERN UNIVERSITY	11,178	-
National Science Foundation	Pass-through	47.076	4101-65235	PURDUE UNIV	8,682	-
National Science Foundation	Pass-through	47.076	415908-G	UNIV OF ROCHESTER	12,545	-
National Science Foundation	Pass-through	47.076	1555285	UNIVERSITY OF COLORADO AT BOULDER	20,168	-
National Science Foundation	Pass-through	47.076	418K670	UNIVERSITY OF WISCONSIN - MADISON	44,979	-
National Science Foundation	Pass-through	47.076	488K806	UNIVERSITY OF WISCONSIN - MADISON	30,282	-
National Science Foundation	Pass-through	47.076	490K840	UNIVERSITY OF WISCONSIN - MADISON	2,066	-
National Science Foundation	Pass-through	47.076	782K493	UNIVERSITY OF WISCONSIN - MADISON	53,528	-
National Science Foundation	Pass-through	47.076	22512-S1	VANDERBILT UNIVERSITY	10,303	-
National Science Foundation	Pass-through	47.076	479493-19057	VIRGINIA POLYTECHNIC INST	1,614	-
National Science Foundation	Pass-through	47.076	GA11161 150025	UNIV OF VIRGINIA	238,451	-
National Science Foundation	Pass-through	47.079	OISE-1243433	DUKE UNIVERSITY	172,958	-
National Science Foundation	Pass-through	47.079	OISE-16-62750-0	CRDF GLOBAL	6,039	-
		ough Total Science Four	idation Total		4,119,919 82,782,985	6,734,434
						0,734,434
State	Direct	19	SAQMMA15M2452	US DEPARTMENT OF STATE	(573)	-
State	Direct	19	SAQMMA16M2200	US DEPARTMENT OF STATE	47,737	-
State	Direct	19.345	S-LMAQM-17-GR-1177	US DEPARTMENT OF STATE	7,117	
	State Tot	tal			54,281	
Transportation	Direct	20.200	DTFH61-3-H-00009	US DEPT OF TRANSPORTATION	107,759	66,525
Transportation	Direct	20.701	DTRT13-G-UTC44	US DEPT OF TRANSPORTATION	767,060	579,166
Transportation	Direct	20.701	DTRT13-G-UTC44	US DEPT OF TRANSPORTATION	45,936	
Transportation	Direct	20.701	DTRT13-G-UTC44	US DEPT OF TRANSPORTATION	45,560	_
Transportation	Direct	20.701	DTRT13-G-UTC44	US DEPT OF TRANSPORTATION	43,538	_
Transportation	Direct	20.701	DTRT13-G-UTC44	US DEPT OF TRANSPORTATION	24,589	_
	Direct To				1,034,442	645,691
Transportation	Pass-through	20	201401725-03	UNIVERSITY OF CALIFORNIA	8,235	-
Transportation	Pass-through	20	ESC-17-44	ENGINEERING AND SOFTWARE CONSULTANTS, INC (ESC) IOWA STATE UNIVERSITY	6,510	-
Transportation	Pass-through	20	404-77-50		1,735	-
Transportation	Pass-through	20	436-17-42B	IOWA STATE UNIVERSITY	170,246	-
Transportation	Pass-through	20	MC-17-02	MI OFFICE OF HIGHWAY SAFETY PLANNING	28,941	-
Transportation	Pass-through	20	OP-18-02	MICHIGAN DEPARTMENT OF STATE POLICE	62,853	-
Transportation	Pass-through	20	OP-18-05 2013-0066	MICHIGAN DEPARTMENT OF STATE POLICE	29,663	25.644
Transportation	Pass-through	20		MICHIGAN DEPARTMENT OF TRANSPORTATION	70,806	25,611
Transportation	Pass-through	20	2013-0066 Rev 5	MICHIGAN DEPARTMENT OF TRANSPORTATION	128,933	114,729
Transportation	Pass-through	20	2013-0066 Z8	MICHIGAN DEPARTMENT OF TRANSPORTATION	102,898	21,030
Transportation	Pass-through	20	12-S171220	TEXAS TRANSPORTATION INSTITUTE	944	-
Transportation	Pass-through	20.215	436-17-35B	IOWA STATE UNIVERSITY	5,213	-
Transportation	Pass-through	20.505	2013-0066 Z9	MICHIGAN DEPARTMENT OF TRANSPORTATION	4,184	-
Transportation	Pass-through	20.505	2013-0066-Z10	MICHIGAN DEPARTMENT OF TRANSPORTATION	149,936	-
Transportation	Pass-through	20.505	2013-0066-Z11	MICHIGAN DEPARTMENT OF TRANSPORTATION	109,799	-
Transportation	Pass-through	20.505	2018-0074	MICHIGAN DEPARTMENT OF TRANSPORTATION	13,547	-
Transportation	Pass-through	20.724	17-158	ARIZONA STATE UNIVERSITY	58,912	-
Transportation	Pass-through	20.724	FY16.675.001	UNIVERSITY OF COLORADO - DENVER	66,483	-
Transportation	Pass-through	20.724	FY16.675.001	UNIVERSITY OF COLORADO - DENVER	46,803	
		ough Total			1,066,641	161,370
	Transpor	tation Total			2,101,083	807,061
	Direct	98.001	155588	US AGENCY FOR INTERNATIONAL DEVELOPMENT	12,388	-
USAID				US AGENCY FOR INTERNATIONAL DEVELOPMENT	67	_
USAID USAID		98,001				
USAID	Direct	98.001 98.001	611-A-00-11-00001-00 AID-482-LA-14-00003			582,930
USAID USAID	Direct Direct	98.001	AID-482-LA-14-00003	US AGENCY FOR INTERNATIONAL DEVELOPMENT	1,270,934	582,930 533.819
USAID USAID USAID	Direct Direct Direct	98.001 98.001	AID-482-LA-14-00003 AID-612-LA-15-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT	1,270,934 1,296,629	533,819
USAID USAID	Direct Direct	98.001	AID-482-LA-14-00003	US AGENCY FOR INTERNATIONAL DEVELOPMENT	1,270,934	

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
	Pass-Illiough	(Note 5)	Award Number	Grantor Name	Experiorures	Subawaru Payments
Research and Development Cluster (continued):						
USAID	Direct	98.001	AID-EDH-A-00-07-00005	US AGENCY FOR INTERNATIONAL DEVELOPMENT	\$ 1,277,655	\$ 570,807
USAID	Direct	98.001	AID-EDH-A-00-07-00005	US AGENCY FOR INTERNATIONAL DEVELOPMENT	1,072,637	1,072,637
USAID	Direct	98.001	AID-EDH-A-00-07-00005	US AGENCY FOR INTERNATIONAL DEVELOPMENT	272,308	272,308
USAID	Direct	98.001	AID-OAA-A-15-00056	US AGENCY FOR INTERNATIONAL DEVELOPMENT	1,261,238	192,419
USAID	Direct	98.001	AID-OAA-L-13-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT	2,189,484	986,904
USAID	Direct	98.001	AID-OAA-L-13-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT	1,823,356	174,034
USAID	Direct	98.001	AID-OAA-L-13-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT	101,145	-
USAID	Direct	98.001	AID-OAA-L-13-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT	68,116	22,674
USAID	Direct	98.001	AID-OAA-L-13-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT	56,155	72,902
USAID USAID	Direct Direct	98.001 98.001	AID-OAA-L-13-00001 AID-OAA-L-13-00001	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT	13,104 237,658	50,000
USAID	Direct	98.001	AID-OAA-LA-14-00005	US AGENCY FOR INTERNATIONAL DEVELOPMENT	789,189	492,389
USAID	Direct	98.001	AID-OAA-LA-15-00006	US AGENCY FOR INTERNATIONAL DEVELOPMENT	278,664	93,178
USAID	Direct	98.001	EDH-A-00-07-00005	US AGENCY FOR INTERNATIONAL DEVELOPMENT	150,671	21,120
USAID	Direct	98.001	EDH-A-00-07-00005	US AGENCY FOR INTERNATIONAL DEVELOPMENT	13,531	,
USAID	Direct	98.001	EDH-A-00-07-00005-00	US AGENCY FOR INTERNATIONAL DEVELOPMENT	894,616	894,553
USAID	Direct	98.001	EDH-A-00-07-00005-00	US AGENCY FOR INTERNATIONAL DEVELOPMENT	459,110	459,110
USAID	Direct	98.001	EDH-A-00-07-00005-00	US AGENCY FOR INTERNATIONAL DEVELOPMENT	430,263	430,262
USAID	Direct	98.001	EDH-A-00-07-00005-00	US AGENCY FOR INTERNATIONAL DEVELOPMENT	425,792	425,792
USAID	Direct	98.001	EDH-A-00-07-00005-00	US AGENCY FOR INTERNATIONAL DEVELOPMENT	177,165	177,165
USAID	Direct	98.001	EDH-A-00-7-00005 MAREDIA MSU	US AGENCY FOR INTERNATIONAL DEVELOPMENT	155,183	-
USAID	Direct	98.001	OAA-LA-17-00002	US AGENCY FOR INTERNATIONAL DEVELOPMENT	27,244	-
USAID	Direct	98.001	sub of 61-2940	US AGENCY FOR INTERNATIONAL DEVELOPMENT	307,004	141,723
	Direct To	otal			21,099,291	11,692,539
USAID	Pass-through	98	016258-143	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	(1,232)	-
USAID	Pass-through	98	C-044-16	CENTRO INTL DE AGRICULTURA TROPICAL	(19)	-
USAID	Pass-through	98.001	BHEARD	CIMMYT INC	10,732	-
USAID	Pass-through	98.001	P225-2010-05-00	COOPERATIVE LEAGUE OF THE USA	49,015	-
USAID	Pass-through	98.001	App 120588	EGERTON UNIVERSITY NAIROBI KENYA	125,918	-
USAID	Pass-through	98.001	MTO 069018	INTL INST FOR TROPICAL AGRICULTURE	106,910	-
USAID	Pass-through	98.001	Prime AID-BFS-G11-00002	INTL INST FOR TROPICAL AGRICULTURE	1,059,672	157,228
USAID	Pass-through	98.001	S15218	KANSAS STATE UNIVERSITY	7,473	-
USAID	Pass-through	98.001	S16058	KANSAS STATE UNIVERSITY	209,511	90,354
USAID	Pass-through	98.001	S16058	KANSAS STATE UNIVERSITY	7,063	-
USAID	Pass-through	98.001	S17090	KANSAS STATE UNIVERSITY	45,072	-
USAID	Pass-through	98.001	S17182	KANSAS STATE UNIVERSITY	219,008	-
USAID	Pass-through	98.001	PGA-2000003665	NATL ACADEMY OF SCIENCES	98,857	-
USAID	Pass-through	98.001	RD011G-J	OREGON STATE UNIVERSITY	136,499	-
USAID	Pass-through	98.001	8000072696	PURDUE UNIV	1,514	-
USAID	Pass-through	98.001	8000075688	PURDUE UNIV	14,878	-
USAID	Pass-through	98.001	1856-000	TETRA TECH INC.	30,383	
USAID	Pass-through	98.001	09-002945-103	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	149,937	118,766
USAID	Pass-through	98.001	201121454-08	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	104,160	-
USAID	Pass-through	98.001	MA1279	UNIVERSITY OF HAWAII	109,076	-
USAID	Pass-through	98.001	078517-15682	UNIVERSITY OF ILLINOIS	72,047	200 240
	Pass-thr USAID T	ough Total			2,556,474	366,348 12,058,887
	TOTAL R	ESEARCH AND	DEVELOPMENT CLUSTER		335,847,892	43,341,119
Student Financial Assistance Programs						
Cluster:	Discort	04.007	UCDE D0074403046 6506 46 47	H.C. DEDT OF EDUCATION	(5.000)	
Education	Direct	84.007	USDE P007A102046 SEOG 16-17	U.S. DEPT OF EDUCATION	(5,000)	-
Education Education	Direct	84.007	USDE P007A102046 SEOG 17-18	U.S. DEPT OF EDUCATION U.S. DEPT OF EDUCATION	1,219,336	-
	Direct	84.033 84.033	USDE P033A102045 FWS 16-17	U.S. DEPT OF EDUCATION	500 2,552,124	-
Education Education	Direct Direct	84.033	USDE P033A102045 FWS 17-18 USDE P033A102045 FWS AC 17-18	U.S. DEPT OF EDUCATION	12,965	-
Education	Direct	84.033	USDE P033A102045 FWS AR 17-18	U.S. DEPT OF EDUCATION	58,568	-
Education	Direct	84.033	USDE P033A102045 FWS JL 17-18	U.S. DEPT OF EDUCATION	39,832	
Education	Direct	84.038	VARIOUS PERKINS	U.S. DEPT OF EDUCATION	35,308,024	-
Education	Direct	84.063	USDE P063P110233 PELL 16-17	U.S. DEPT OF EDUCATION	(187,978)	-
Education	Direct	84.063	USDE P063P110233 PELL 17-18	U.S. DEPT OF EDUCATION	44,766,806	-
Education	Direct	84.063	USDE P063P110233 PELL ADMIN ALLO		89,445	-
Education	Direct	84.268	FED DIRECT LOAN PROG-98 AID YR	U.S. DEPT OF EDUCATION	349,507,276	-
Education	Direct	84.268	FEDERAL DIRECT LOAN PROGRAM	U.S. DEPT OF EDUCATION	1,124,576	-
Education	Direct	84.379	USDE P379T110233 TEACH 16-17	U.S. DEPT OF EDUCATION	1,864	-
Education	Direct	84.379	USDE P379T110233 TEACH 17-18	U.S. DEPT OF EDUCATION	120,919	
	Educatio	on Total			434,609,257	
Health and Human Services	Direct	93.264	VARIOUS - NURSING FACULTY PROG S	HEALTH AND HUMAN SERVICES	354,073	
Health and Human Services	Direct	93.342	VARIOUS - HEALTH PROFESSIONAL ST		10,795,815	-
Health and Human Services	Direct	93.364	VARIOUS - NURSING PROFESSION STU		4,089	-
ricardi and riaman services		ind Human Se			11,153,977	
	TOTAL S	TUDENT FINA	NCIAL ASSISTANCE PROGRAMS CLUSTE	R	445,763,234	-
Economic Development Cluster:						
Commerce	Direct	11.300	06-01-05931	ECONOMIC DEVELOPMENT ADMINISTRATION	998,470	-
Commerce	Direct	11.300	FOOD PROCESSING & INNOVATION C	US DEPT OF COMMERCE	1,674,821	
	TOTAL E	CONOMIC DE	VELOPMENT CLUSTER		2,673,291	
Fish and Wildlife Cluster:						
Interior	Pass-through	15.611	60060893	OHIO STATE UNIVERSITY	31,239	-
Interior	Pass-through	15.611	MSU-001 Advance	NEVADA DEPARTMENT OF WILDLIFE	109,410	-
** *			DLIFE CLUSTER		140,649	-
Ulabora Plancka and Oc. 1 Ct. 1	. C.ALI				2-10,043	
Highway Planning and Construction Cluster:	David 1	20.225	MCUADO4 CEE	MICHICAN FITNESS FOUNDATION		
Transportation	Pass-through	20.205	MSUAP01-CEE MSUAP01-SPDC	MICHIGAN FITNESS FOUNDATION MICHIGAN FITNESS FOUNDATION	89,986	-
Transportation	Pass-through	20.205	NNING AND CONSTRUCTION CLUSTER	MICHIGAN FITNESS FOUNDATION	64,079 154,065	

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payment
ghway Safety Cluster -	Daniel Alexandr	20.646	00.47.03	AN OFFICE OF LUCIDARY CAFFETY DI ANNUNC	440.363	45.65
Transportation	Pass-through TOTAL H	20.616 IGHWAY SAFE	OP-17-02 TY CLUSTER	MI OFFICE OF HIGHWAY SAFETY PLANNING	\$ 118,363 118,363	\$ 45,658 45,658
edicaid Cluster:						
Health and Human Services	Pass-through	93.778	E20170239-00-H	MI DEPT COMMUNITY HEALTH	14,434	-
Health and Human Services Health and Human Services	Pass-through Pass-through	93.778 93.778	E20170253-00-R 20170673-00-AE	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	24,362 20,758	-
Health and Human Services	Pass-through	93.778	E20172453-00-AA	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	42,073	-
Health and Human Services	Pass-through	93.778	20180328-00-AN	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	102,568	_
Health and Human Services	Pass-through	93.778	20182877-00-Q	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	164,114	-
Health and Human Services	Pass-through	93.778	E20170254-00-S	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	27,394	-
Health and Human Services	Pass-through	93.778	E20170255-00-T	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	97,720	-
Health and Human Services	Pass-through	93.778	E20170671-00-AC	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	3,981	-
Health and Human Services	Pass-through	93.778	E20170672-00 AD	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	12,711	-
Health and Human Services	Pass-through	93.778	E20180226-00-W	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	77,999	-
Health and Human Services	Pass-through	93.778	E20180325-00-AJ	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	112,412	-
Health and Human Services	Pass-through	93.778	E20180326-00 E20172805-00-AQ	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	79,957	20.55
Health and Human Services Health and Human Services	Pass-through	93.778 93.778	E20172805-00-AQ E20180329-00-P	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	72,540 138,467	26,57 27,08
Health and Human Services	Pass-through Pass-through	93.778	E20180329-00-P E20181145-00-AF	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	25,712	27,08
Health and Human Services	Pass-through	93.778	E20182788-00-Z	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	387,973	
rieditii diid ridiilali Services		MEDICAID CLUS		WICHIGAN DEPARTMENT OF HEALTH & HOWAN SERVICES	1,405,175	53,65
	TOTAL	ILDICAID CLO.	JIEN.		1,403,173	
IAP Cluster:					(40.000)	
Agriculture	Pass-through	10.561	ADMIN-15-99010	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	(43,967)	-
Agriculture	Pass-through Pass-through	10.561	Admin16-99010	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	1,760,001	-
Agriculture Agriculture	Pass-through Pass-through	10.561 10.561	ADMIN-16-99010 E20182777-00-AR	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	68,803 5 295 965	-
Agriculture		10.561 NAP CLUSTER	L2U102///-UU-AK	WILCHIGAN DEPARTIVIENT OF HEALTH & HUMAN SERVICES	5,295,965 7,080,802	
	TOTALS	NAP CLUSTER			7,080,802	
bal Maternal, Infant, and Early Childhood						
Cluster - Health and Human Services	Pass-through	93.872	FY17.494.004	UNIVERSITY OF COLORADO - DENVER	21,523	
Treater and Trainian Services			NAL, INFANT, AND EARLY CHILDH		21,523	
			,			
IO Cluster:						
Education	Direct	84.042	P042A150804	U.S. DEPT OF EDUCATION	766,975	-
Education	Direct	84.044	P044A160125	U.S. DEPT OF EDUCATION	281,876	-
Education	Direct	84.047	P047A120896 - 16	U.S. DEPT OF EDUCATION	4,599	
	TOTAL T	RIO CLUSTER			1,053,450	
DF Cluster:						
Health and Human Services	Pass-through	93.596	BCHS/MSU FY17	MICH DEPT OF LICENSING & REGULATORY AFFAIRS	49,250	16,49
Health and Human Services	Pass-through	93.596	BCHS/MSU FY18	MICH DEPT OF LICENSING & REGULATORY AFFAIRS	78,699	35,08
	TOTAL C	CDF CLUSTER			127,949	51,57
her Federal Awards:						
nei i edelai Awaids.						
Agriculture	Direct	10	14-PA-11090400-024	USDA - FOREST SERVICE	43,432	-
	Direct Direct	10	14-PA-11090400-024 16-CS-11090400-038	USDA - FOREST SERVICE	4,094	
Agriculture Agriculture Agriculture	Direct Direct	10 10	16-CS-11090400-038 17-CS-11090400-027	USDA - FOREST SERVICE USDA - FOREST SERVICE	4,094 22,495	- - -
Agriculture Agriculture Agriculture Agriculture	Direct Direct Direct	10 10 10	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019	USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FOREST SERVICE	4,094 22,495 4,606	- - -
Agriculture Agriculture Agriculture Agriculture Agriculture	Direct Direct Direct Direct	10 10 10 10	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604	USDA - FOREST SERVICE	4,094 22,495 4,606 6,263	- - - -
Agriculture Agriculture Agriculture Agriculture Agriculture Agriculture	Direct Direct Direct Direct Direct	10 10 10 10 10	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046	USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FARM SER AGENCY	4,094 22,495 4,606 6,263 5,670	- - - - -
Agriculture Agriculture Agriculture Agriculture Agriculture Agriculture Agriculture Agriculture Agriculture	Direct Direct Direct Direct Direct Direct Direct	10 10 10 10 10.069 10.164	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005	USDA - FOREST SERVICE USDA - FOREIGN AGENCY USDA - FOREIGN AG SER	4,094 22,495 4,606 6,263 5,670 4,085	- - - - - -
Agriculture	Direct Direct Direct Direct Direct Direct Direct Direct Direct	10 10 10 10 10.069 10.164 10.210	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803	USDA - FOREST SERVICE USDA - FARM SER AGENCY USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778	- - - - - - -
Agriculture	Direct Direct Direct Direct Direct Direct Direct Direct Direct	10 10 10 10 10.069 10.164 10.210	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697	USDA - FOREST SERVICE USDA - FOREN SER AGENCY USDA - FOREIGN AG SER USDA - MATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561	- - - - - - - -
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-25759	USDA - FOREST SERVICE USDA - FOREM SER AGENCY USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577	
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.210	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363	USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FOREST SERVICE USDA - FARM SER AGENCY USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209	- - - - - - - - 28,2:
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-26759 2014-7003-22363 2016-38414-25820	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151	- - - - - - - 28,2:
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-3720-27296	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458	
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-2679 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-8001-23407	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308	
Agriculture	Direct	10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-7003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,279 59,151 261,458 12,308 50,000	
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-38420-26759 2014-70003-22363 2016-38414-25820 2017-38620-27296 2011-68001-23407 2017-68001-25601 2018-67011-27991	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208	
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310 10.310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-7003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,279 59,151 261,458 12,308 50,000	
Agriculture	Direct	10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310 10.310 10.310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-2679 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-28006	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555	15,0 - - - - - -
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310 10.310 10.310 10.310	16-CS-11090400-038 17-CS-11090400-027 4S-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-78003-22363 2016-38414-25820 2017-37620-27296 2011-68003-2361 2016-8001-23407 2017-68003-26501 2018-67011-27991 2018-67011-28006 2018-67012-27996	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790	15,0 - - - - - - -
Agriculture	Direct	10 10 10 10 10.669 10.164 10.210 10.210 10.210 10.211 10.215 10.304 10.310 10.310 10.310 10.310 10.310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2018-67011-28006 2018-67011-27991 2018-67011-28006 2017-70017-26860	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819	15,0 - - - - - -
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.310 10.310 10.310 10.310 10.310 10.311	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-26799 2014-70003-22363 2016-38414-25820 2017-3620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27996 2011-70017-26860 2017-70017-26860	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369	15,0 - - - - - -
Agriculture	Direct	10 10 10 10,069 10,164 10,210 10,210 10,210 10,210 10,210 10,310 10,310 10,310 10,310 10,310 10,310 10,310 10,310 10,310 10,310	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2018-67011-28006 2018-67011-27991 2018-67011-28006 2017-70017-26860 2011-70017-26860 2011-70017-26860	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630	15,0 - - - - - -
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.304 10.310 10.310 10.310 10.311 10.311 10.311 10.329	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2018-67011-28006 2018-67011-27991 2018-67011-28060 2017-70017-26860 2017-70017-26860 2014-70006-22498 2017-70006-27175 2013-41520-2039 2013-41520-2039	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790	15,0 - - - - - -
Agriculture	Direct	10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.310 10.310 10.310 10.310 10.311 10.311 10.329 10.329	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-26799 2014-70003-22363 2016-38414-25820 2017-3620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27991 2018-67017-26860 2017-70017-26860 2014-70006-22498 2017-70006-22498 2017-0006-27175 2013-41520-20939	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553	15,0 - - - - - - 2,4 - - -
Agriculture	Direct	10 10 10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.310 10.310 10.310 10.310 10.311 10.311 10.329 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-2679 2014-7003-22363 2016-38414-25820 2017-3620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27991 2018-67011-27996 2011-70017-26860 2011-70017-26860 2011-70017-26800 2013-41520-20939 2013-41520-20939 2013-41580-20792 2014-48778-22647	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877	15,0
Agriculture	Direct	10 10 10 10 10 10 10.069 10.164 10.210 10.210 10.211 10.221 10.304 10.310 10.310 10.310 10.311 10.311 10.311 10.329 10.500 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68001-23407 2018-67011-27991 2018-67011-27996 2017-70017-26860 2017-70017-26860 2014-70006-22498 2017-70006-22498 2017-70006-27175 2013-41520-2039 2013-41580-20792 2014-41590-22327 2014-48778-22647	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000	15,0
Agriculture	Direct	10 10 10 10 10 10 10 10.069 10.164 10.210 10.210 10.211 10.310 10.329 10.500 10.500 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-28006 2018-67011-28006 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26860 2017-70017-26800 2014-70006-22498 2017-70006-27175 2013-41520-20939 2013-41520-20939 2014-41590-22327 2014-48778-22647 2015-41595-24254	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10.69 10.164 10.210 10.210 10.217 10.226 10.310 10.310 10.310 10.310 10.311 10.311 10.329 10.500 10.500 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-2679 2014-7003-22363 2016-38414-25820 2017-3620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27991 2018-67012-27996 2017-70017-26860 2017-70017-26860 2014-70006-22498 2017-70016-27175 2013-41520-20939 2013-41580-20792 2014-41590-22327 2014-48778-22647 2015-41595-24254 2016-41520-25564	USDA - FOREST SERVICE USDA - RARM SER AGENCY USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 103,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68001-23407 2018-67011-27991 2018-67011-27991 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26860 2017-70017-26800 2014-70006-22498 2017-70016-22498 2017-70016-22498 2017-70006-22498 2017-4018-67012-2018-67012-2018-67012-2018-67012-2018-67012-2018-2018-2018-2018-2018-2018-2018-2	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10.069 10.164 10.210 10.210 10.211 10.304 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.500 10.500 10.500 10.500 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 4S-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-28006 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26860 2017-70017-26800 2014-70006-22498 2017-70006-27175 2013-41520-20939 2013-41520-20939 2014-41590-22327 2014-48778-22647 2015-41590-22327 2014-48778-22647 2015-41590-25564 2017-41580-26940 2017-4580-26940 2017-4580-26940	USDA - FOREST SERVICE USDA - RATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTUR	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-26679 2014-70003-22363 2016-38414-25820 2017-3620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27991 2018-67012-27996 2011-70017-26860 2011-70017-26860 2014-70006-22498 2017-70017-26800 2014-4500-27175 2013-41520-20939 2013-41580-20792 2014-44578-22647 2014-48778-22647 2014-48778-22647 2014-41520-25564 2017-41580-26940 2017-4601-27162	USDA - FOREST SERVICE USDA - RARM SER AGENCY USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTU	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 103,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 2,7703	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-3620-27296 2011-68001-23407 2017-68001-23407 2018-67011-27991 2018-67011-28006 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26860 2017-70017-26802 2014-48708-2298 2017-70018-2298 2017-41520-2298 2017-41520-2298 2014-48778-22647 2014-48778-22647 2015-41595-24254 2016-41520-25564 2017-44601-27162 2017-46401-27162	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10.669 10.164 10.210 10.210 10.217 10.226 10.304 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-7003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-28006 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26800 2018-67012-27996 2013-41520-20939 2013-41520-20939 2013-41520-20939 2014-41590-22327 2014-48778-22647 2015-41590-22327 2014-48778-22647 2015-41590-2295 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2110-02200 SMITH-LEVER	USDA - FOREST SERVICE USDA - RATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTUR	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,7790 64,819 369 58,630 15,3790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10.069 10.164 10.210 10.210 10.217 10.226 10.304 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.310 10.300 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500 10.500	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68001-23407 2018-67011-28006 2018-67011-28006 2018-67011-27991 2018-67011-2806 2017-70017-26860 2017-70017-26860 2017-70017-26800 2013-4012-27996 2017-4017-26800 2014-47006-22498 2017-70017-26800 2014-47005-22327 2014-4878-22647 2015-41590-22327 2014-41590-22327 2014-41590-22327 2014-41590-25544 2017-41580-26940 2017-4601-27162 2017-4601-27162 2017-46401-27162 21100-02200 SMITH-LEVER 41100-02200 SMITH-LEVER 41100-02200 SMITH-LEVER	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2018-67011-28006 2018-67011-27991 2018-67011-28006 2017-70017-26860 2017-70017-26860 2017-70017-26860 2017-70017-2687 2014-48001-2715 2013-41520-2039 2014-4878-22647 2015-41595-24254 2016-41520-25564 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-02200 SMITH-LEVER 41100-02200 SMITH-LEVER 41100-02200 SMITH-LEVER 41100-02200 SMITH-LEVER	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTUR	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-7003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-28006 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26800 2018-67012-27996 2013-41520-20939 2013-41520-20939 2013-41520-20939 2013-41520-20939 2014-41590-22498 2017-70017-26800 2017-70017-2	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INST	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,770 64,819 369 58,630 15,3790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673 977,053	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68001-23407 2018-67011-28006 2018-67011-28006 2018-67011-27991 2018-67011-2806 2017-70017-26860 2017-70017-26860 2017-70017-2680 2014-70006-22498 2017-7007-27175 2013-41520-20939 2013-41520-20939 2013-41520-2039 2014-48778-22647 2015-41590-22327 2014-41590-22327 2014-41590-22554 2017-46401-27162 2017-46401-27162 2017-46401-27162 2110-022200 SMITH-LEVER 41100-022200 SMITH-LEVER 41100-022200 SMITH-LEVER 41100-02200 SMITH-LEVER	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673 1,862,142 1,248,673 3,70,053 802,259	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-MI-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-28006 2018-67011-28006 2017-70017-26860 2017-70017-26860 2017-70017-26860 2017-70017-26807 2014-48008-227996 2013-41520-2039 2014-41520-25248 2015-41520-25248 2016-41520-25564 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-46401-27162 2017-02200 SMITH-LEVER 41100-02200 SMITH-LEVER	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE OF FOOD	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673 977,053 802,259 207,934	15,0
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-7003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26800 2018-67012-27996 2013-41520-20939 2013-41520-25564 2017-46401-27162 2017-46401-2	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INST	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,770 64,819 369 58,630 15,3790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673 977,053 802,259 207,934 91,965	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2017-38420-26759 2014-70003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68001-23407 2018-67011-28006 2018-67011-27991 2018-67011-28006 2017-70017-26860 2017-70017-26860 2017-70017-26800 2014-70006-22498 2017-70017-2680 2014-47008-22755 2013-41520-2039 2013-41590-22327 2014-41590-22327 2014-41590-22354 2017-46401-27162 2017-46401-27162 2017-46401-27162 21010-022200 SMITH-LEVER 41100-022200 SMITH-LEVER 41100-022200 SMITH-LEVER 41100-02200 SMITH-LEVER	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INSTITUTE	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,790 64,819 369 58,630 153,790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673 977,053 802,259 207,934 91,965 53,529	2,4
Agriculture	Direct	10 10 10 10 10 10 10 10 10 10 10 10 10 1	16-CS-11090400-038 17-CS-11090400-027 45-5484-8-0019 AG-3604 FA-Mi-6-046 17-005 2014-38420-21803 2015-38420-23697 2014-7003-22363 2016-38414-25820 2017-37620-27296 2011-68001-23407 2017-68003-26501 2018-67011-27991 2018-67011-27996 2017-70017-26860 2017-70017-26860 2017-70017-26800 2018-67012-27996 2013-41520-20939 2013-41520-25564 2017-46401-27162 2017-46401-2	USDA - FOREST SERVICE USDA - FOREIGN AG SER USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE USDA - NATIONAL INST	4,094 22,495 4,606 6,263 5,670 4,085 50,778 70,561 26,577 34,209 59,151 261,458 12,308 50,000 8,208 11,555 23,770 64,819 369 58,630 15,3790 102,553 110,739 191,415 57,877 2,000 1,388,533 102,805 8,734 2,127 27,703 2,412,105 1,933,941 1,862,142 1,248,673 977,053 802,259 207,934 91,965	

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Federal Awards (continued):						
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE		\$ -
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	17,764	-
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	14,309	-
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	9,809	-
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	7,775	-
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	4,988	-
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	3,144	-
Agriculture	Direct	10.500	41100-02200 SMITH-LEVER	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	860	-
Agriculture	Direct	10.500	EFNEP-EXT HN	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	1,764,364	-
Agriculture	Direct	10.500	RENEW RESOURCES PROJECT DIR	USDA - NATIONAL INSTITUTE OF FOOD AND AGRICULTURE	69,216	-
Agriculture	Direct	10.614	17-004	USDA - FOREIGN AG SER	5,493	-
Agriculture	Direct	10.614	FX17SE-10614R003	USDA - FOREIGN AG SER	4,067	-
Agriculture	Direct	10.614	FX17SE-10614R004	USDA - FOREIGN AG SER	5,222	_
Agriculture	Direct	10.771	386005984	USDA - RURAL BUSINESS-COOPERATIVE SERVICE	109,905	_
Agriculture	Direct	10.777	BF-CR-16-014	USDA - FOREIGN AG SER	2,079	_
Agriculture	Direct	10.777	BF-CR-16-020	USDA - FOREIGN AG SER	13	_
Agriculture	Direct	10.777	BF-CR-16-050	USDA - FOREIGN AG SER	8,609	
•		10.777	FX17BF-10777R022	USDA - FOREIGN AG SER	28,161	
Agriculture	Direct					-
Agriculture	Direct	10.777	FX17BF-10777R035	USDA - FOREIGN AG SER	17,822	-
Agriculture	Direct	10.777	FX17BF-10777R036	USDA - FOREIGN AG SER	31,597	-
Agriculture	Direct	10.868	26-033-030879893	US DEPT AGRICULTURE	21,479	-
Agriculture	Direct	10.903	68-3A75-17-442	USDA - NATURAL RESOURCES CONSERVATION SERVICE	2,464	-
Agriculture	Direct	10.960	FAS 2015 - 2016	USDA - FOREIGN AG SER	86,100	-
Agriculture	Direct	10.960	TA-CR-16-043	USDA - FOREIGN AG SER	141,066	-
Agriculture	Direct	10.962	CO-CR-16-030	USDA - FOREIGN AG SER	4,042	-
Agriculture	Direct	10.962	CO-CR-17-013	USDA - FOREIGN AG SER	8,714	-
Agriculture	Direct	10.962	FX17CO-10962R002	USDA - FOREIGN AG SER	4,533	-
Agriculture	Direct	10.962	FX17CO-10962R003	USDA - FOREIGN AG SER	40,221	-
Agriculture	Direct	10.962	FX17CO-10962R012	USDA - FOREIGN AG SER	57,587	_
Agriculture	Direct	10.962	FX17CO-10962R034	USDA - FOREIGN AG SER	22,440	
-						-
Agriculture	Direct	10.962	FX18CO-10962R017	USDA - FOREIGN AG SER	22,503	4 452 24
	Direct To	otal			15,235,155	1,453,311
Agriculture	Pass-through	10	018000.340753.48	MISSISSIPPI STATE UNIVERSITY	5,000	-
Agriculture	Pass-through	10.163	ASI - Let's Grow	AMERICAN SHEEP INDUSTRY ASSOCIATION	8,270	-
Agriculture	Pass-through	10.200	416-41-15H	IOWA STATE UNIVERSITY	42	-
Agriculture	Pass-through	10.200	416-41-71A	IOWA STATE UNIVERSITY	27,927	-
Agriculture	Pass-through	10.200	8000064756-AG	PURDUE UNIV	12,054	_
Agriculture	Pass-through	10.216	36 22091 396 76190	TUSKEGEE UNIVERSITY	(274)	_
Agriculture	Pass-through	10.216	36 22091 396 76190	TUSKEGEE UNIVERSITY	(3,722)	_
Agriculture	Pass-through	10.227	2017-03930 Tribal College	BAY MILLS COMMUNITY COLLEGE	1,568	_
		10.227	2015-0097-24	NORTH CAROLINA STATE UNIVERSITY	9,086	
Agriculture	Pass-through					-
Agriculture	Pass-through	10.329	076332-16831	NORTH CENTRAL INTEGRATED PEST MANAGEMENT	15,271	-
Agriculture	Pass-through	10.329	075978-15421	UNIVERSITY OF ILLINOIS	166,471	-
Agriculture	Pass-through	10.329	076332-16597	UNIVERSITY OF ILLINOIS	3,627	-
Agriculture	Pass-through	10.329	076332-16698	UNIVERSITY OF ILLINOIS	8,055	-
Agriculture	Pass-through	10.329	2014-07306-13	UNIVERSITY OF ILLINOIS	6,116	-
Agriculture	Pass-through	10.329	2014-07306-16	UNIVERSITY OF ILLINOIS	17,695	-
Agriculture	Pass-through	10.350	018000.340753.26	MISSISSIPPI STATE UNIVERSITY	5,543	-
Agriculture	Pass-through	10.500	25-6324-0150-310	UNIVERSITY OF NEBRASKA	8,303	-
Agriculture	Pass-through	10.500	5367-MSU-USDA-4341	PENNSYLVANIA STATE UNIVERSITY	6,215	-
Agriculture	Pass-through	10.500	Empower Educators	NORTH CENTRAL REGION WATER NETWORK	12,629	4,13
Agriculture	Pass-through	10.500	S18072	KANSAS STATE UNIVERSITY	450	
Agriculture	Pass-through	10.557	E20170237-00-E	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	(89)	_
Agriculture	Pass-through	10.557	E20170244-00-L	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	20,400	
	-	10.574	313B7700003 PO180000008111	MICHIGAN DEPARTMENT OF FEDUCATION		
Agriculture	Pass-through				33,568	-
Agriculture	Pass-through	10.574	313P6600017	MICHIGAN DEPARTMENT OF EDUCATION	11,545	-
Agriculture	Pass-through	10.575	Farm to School	MICHIGAN DEPARTMENT OF EDUCATION	33,887	
Agriculture	Pass-through	10.606	17-MSIKA-A-A-657	LAND O LAKES INC	208,168	12,05
Agriculture	Pass-through	10.680	8000064146	PURDUE UNIV	12,737	-
Agriculture	Pass-through	10.777	016258-141	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS	4,721	
		ough Total			635,263	16,18
	Agricult	ure Total			15,870,418	1,469,49
		11.303	ED17CHI3030031	ECONOMIC DEVELOPMENT ADMINISTRATION	36,141	-
Commerce	Direct		NA14OAR4170285	NATL OCEANIC & ATMOSPHERIC ADMIN	2,097	_
Commerce Commerce		11.417			2,037	-
Commerce	Direct	11.417			2 150	
Commerce Commerce	Direct Direct	11.429	NA18NOS4290003	NATL OCEANIC & ATMOSPHERIC ADMIN	3,159 17,918	
Commerce	Direct Direct	11.429 11.620			17,918	
Commerce Commerce	Direct Direct	11.429 11.620	NA18NOS4290003 70NANB15H339	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY	17,918 59,315	-
Commerce Commerce	Direct Direct	11.429 11.620	NA18NOS4290003	NATL OCEANIC & ATMOSPHERIC ADMIN	17,918	-
Commerce Commerce Commerce	Direct Direct Direct Direct T	11.429 11.620 otal	NA18NOS4290003 70NANB15H339	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY	17,918 59,315	-
Commerce Commerce Commerce	Direct Direct Direct Direct T Pass-through	11.429 11.620 otal 11	NA18NOS4290003 70NANB15H339 S2017-0131	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP	17,918 59,315 39,753	-
Commerce Commerce Commerce Commerce	Direct Direct Direct Direct T Pass-through Pass-through	11.429 11.620 otal 11 11.407	NA18NOS4290003 70NANB15H339 S2017-0131 102699	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES	17,918 59,315 39,753 13,626	- - - - -
Commerce Commerce Commerce Commerce Commerce Commerce	Direct Direct Direct T Pass-through Pass-through Pass-through	11.429 11.620 otal 11 11.407 11.417	NA18NOS4290003 70NANB15H339 52017-0131 102699 3002999560	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767	- - - - - -
Commerce Commerce Commerce Commerce Commerce Commerce Commerce Commerce Commerce	Direct Direct Direct Direct T Pass-through Pass-through Pass-through Pass-through Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000	- - - - - -
Commerce	Direct Direct Direct T Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032	
Commerce	Direct Direct Direct Direct T Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181 3003675941	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207	
Commerce	Direct Direct Direct T Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181 3003675941 3003675941	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343	
Commerce	Direct Direct Direct Direct Direct Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181 3003675941 3003675941 3004235158	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232	- - - - - - - - - - - - - - - - - - -
Commerce	Direct Di	11.429 11.620 obtal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181 3003675941 3003675941 3004629463	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232 985	
Commerce	Direct Direct Direct Direct Direct Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181 3003675941 3003675941 3004235158	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232	
Commerce	Direct Di	11.429 11.620 obtal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003179 3003003181 3003675941 3003675941 3004629463	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232 985	
Commerce	Direct Direct Direct T Pass-through	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003181 3003675941 3003675941 3004235158 3004629463 D004419455	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232 985	
Commerce	Direct Di	11.429 11.620 otal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003181 3003675941 3003675941 3004235158 3004629463 D004419455 089354-16821	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN UNIVO F MINNESOTA UNIV OF MINNESOTA UNIV OF MILLINOIS URBANA CHAMPAIGN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232 985 802 883	
Commerce	Direct Direct Direct Direct Direct Direct Direct Direct Pass-through	11.429 11.620 obtal 11 11.407 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003181 3003675941 3003675941 3004235158 3004629463 D004419455 089354-16821	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN UNIVO F MINNESOTA UNIV OF MINNESOTA UNIV OF MILLINOIS URBANA CHAMPAIGN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232 985 802 883 50,829	
Commerce	Direct Direct Direct Direct Direct Direct Pass-through	11.429 11.620 otal 11.407 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417 11.417	NA18NOS4290003 70NANB15H339 S2017-0131 102699 3002999560 3003003179 3003003181 3003675941 3003675941 3004235158 3004629463 D004419455 089354-16821	NATL OCEANIC & ATMOSPHERIC ADMIN NATL INST OF STANDARDS & TECHNOLOGY SYNOPTIC DATA CORP MINNESOTA DEPT OF NATURAL RESOURCES UNIVERSITY OF MICHIGAN UNIVO F MINNESOTA UNIV OF MINNESOTA UNIV OF MILLINOIS URBANA CHAMPAIGN	17,918 59,315 39,753 13,626 48,767 597,755 3,000 98,032 69,207 343 13,232 985 802 883 50,829	- - - - - - - - - - - - - - - - - - -

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
r Federal Awards (continued):						
Defense	Direct	12	14-0016-02	ARMY US CORPS OF ENGINEERS	\$ 23,202	\$ -
Defense	Direct	12	152950	ARMY US CORPS OF ENGINEERS	26,051	=
Defense	Direct	12	153048	ARMY US CORPS OF ENGINEERS	21,636	-
Defense	Direct	12.431	W911NF-16-1-0351	ARMY RESEARCH OFFICE U S	1,172	-
Defense	Direct	12.431	W911NF-16-1-0394	ARMY RESEARCH OFFICE U S	2,735	
	Direct T				74,796	
Defense	Pass-through	12	3287-DPA-2S	LUNA INNOVATIONS	76,899	=
Defense	Pass-through	12	BRAINSCOPE-App# 153470-Covassin	BRAINSCOPE CO INC.	118,593	-
Defense	Pass-through	12	PO 031054	LUNA INNOVATIONS	11,347	-
Defense	Pass-through	12.116	Brainscope/Navy APP 148409 Covassi		(5,607)	-
Defense	Pass-through	12.550	0054-MSU-22-PI-280-PO2	INST OF INTERNATL EDUCATION	188,078	
		ough Total			389,310	
	Defense	Total			464,106	
Education	Direct	84.015	P015A140097 - 16	U.S. DEPT OF EDUCATION	272,841	-
Education	Direct	84.015	P015A140098 - 16	U.S. DEPT OF EDUCATION	262,008	=
Education	Direct	84.015	P015B140097 - 17	U.S. DEPT OF EDUCATION	291,805	-
Education	Direct	84.015	P015B140099 - 16	U.S. DEPT OF EDUCATION	299,191	-
Education	Direct	84.022	P022A150034	U.S. DEPT OF EDUCATION	231	-
Education	Direct	84.022	P022A160061	U.S. DEPT OF EDUCATION	31,273	-
Education	Direct	84.022	P022A160061	U.S. DEPT OF EDUCATION	21,742	-
Education	Direct	84.022	P022A160061	U.S. DEPT OF EDUCATION	16,627	-
Education	Direct	84.022	P022A160061	U.S. DEPT OF EDUCATION	15,252	-
Education	Direct	84.022	P022A170045	U.S. DEPT OF EDUCATION	12,976	-
Education	Direct	84.032	FFELP Loans Receivable	U.S. DEPT OF EDUCATION	829,285	-
Education	Direct	84.129	H129B140012	U.S. DEPT OF EDUCATION	203,497	-
Education	Direct	84.141	S141A120010-15	U.S. DEPT OF EDUCATION	56,060	-
Education	Direct	84.149	S149A150003 - 16	U.S. DEPT OF EDUCATION	397,617	-
Education	Direct	84.200	P200A140215	U.S. DEPT OF EDUCATION	218,581	-
Education	Direct	84.220	P220A140001	U.S. DEPT OF EDUCATION	245,195	-
Education	Direct	84.229	P229A140006	U.S. DEPT OF EDUCATION	190,734	-
Education	Direct	84.334	GEAR UP	U.S. DEPT OF EDUCATION	93,100	
	Direct T	otal			3,458,015	
Education	Pass-through	84.010	App 151026	GOGEBIC ONTONAGON INTERMEDIATE SCHOOL DISTRICT	81,759	-
Education	Pass-through	84.011	171850-1617	MICHIGAN DEPARTMENT OF EDUCATION	110,320	-
Education	Pass-through	84.011	181850-1718	MICHIGAN DEPARTMENT OF EDUCATION	60,299	=
Education	Pass-through	84.015	565452	UNIVERSITY OF PENNSYLVANIA	8,500	-
Education	Pass-through	84.048	173280-17183	MICHIGAN DEPARTMENT OF EDUCATION	3,403	-
Education	Pass-through	84.048	183280-18183	MICHIGAN DEPARTMENT OF EDUCATION	68,285	-
Education	Pass-through	84.334	16-00-06	MICHIGAN ECONOMIC DEVELOPMENT CORP	181,199	-
Education	Pass-through	84.334	16-00-06	MICHIGAN ECONOMIC DEVELOPMENT CORP	143,508	-
Education	Pass-through	84.367	170291-2018	MICHIGAN DEPARTMENT OF EDUCATION	27,720	-
Education	Pass-through	84.367	94-MI04-SEED2017-CRWPAI	NATL WRITING PROJECT CORP.	11,020	-
Education	Pass-through	84.367	PR-94-MI04-SEED2018-C3WPPD	NATL WRITING PROJECT CORP.	2,836	
	Pass-thr	ough Total			698,849	-
	Education	n Total			4,156,864	
Energy	Pass-through	81.041	MEO-16-022	MICHIGAN AGENCY FOR ENERGY	79,252	-
2116.67	Energy 1		1110 10 022	MICHONIA NOCITOR ENERGY	79,252	
Environmental Protection Agency	Direct	66.469	00E02224	ENVIRONMENTAL PROTECTION AGENCY	79,719	-
Environmental Protection Agency	Direct	66.514	91778301	ENVIRONMENTAL PROTECTION AGENCY	13,452	-
	Direct T	otal			93,171	-
Environmental Brotection Agency	Pace through	66.469	APP#143229	THE STEWARDSHIP NETWORK	4,773	
Environmental Protection Agency	Pass-through	ough Total	APP#143229	THE STEWARDSHIP NETWORK	4,773	-
			tion Agency Total		97,944	
Federal Communications Commission	Direct	32.001	WKAR FCC Repack Account	FEDERAL COMMUNICATION COMMISSION	1,580,491	-
	Federal	Communicatio	ons Commission Total		1,580,491	
Fordered Council and the Astronomy Office	Discort	45.024	46 5500 7436	NATI SNEOWASNIT SOR THE ARTS	2.407	
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Direct Direct	45.024 45.024	16-5500-7136	NATL ENDOWMENT FOR THE ARTS NATL ENDOWMENT FOR THE ARTS	2,497	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Direct	45.024 45.024	17-5500-7010 1755007099	NATL ENDOWMENT FOR THE ARTS	15,031 29,877	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Direct	45.024 45.024	1830513-55-18	NATL ENDOWMENT FOR THE ARTS	12,318	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Direct	45.024 45.149	PW-51583-14	NATL ENDOWMENT FOR THE AKTS NATL ENDOWMENT FOR THE HUMANITIES	4,902	-
				NATL ENDOWMENT FOR THE HUMANITIES		-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Direct Direct	45.169	HT-50088-14 193247145	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	28,262	-
		45.301			12,060	-
Federal Council on the Arts and Humanities	Direct	45.301	MA-10-17-0377-17	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	11,440	-
Federal Council on the Arts and Humanities	Direct T	45.301	MA-30-15-0325-15	INSTITUTE OF MUSEUM AND LIBRARY SERVICES	3,740 120,127	
	Direct T					
Federal Council on the Arts and Humanities	Pass-through	45.024	00019955	ARTS MIDWEST	14,000	=
Federal Council on the Arts and Humanities	Pass-through	45.025	00020551	ARTS MIDWEST	1,875	-
Fordered Council on the Astronomy House of the	Pass-through	45.025	17NL4081EN	ARTS COUNCIL CENTER GREATER LANSING	2,400	-
Federal Council on the Arts and Humanities		45.025	17NL4060MT_MSU	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	1,403	-
Federal Council on the Arts and Humanities	Pass-through		17PS3670AC	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	(2)	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through	45.025		MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	21,000	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through	45.025	17PS3673AC			
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through	45.025 45.025	17PS3673AC 17PS4002AC	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025	17PS3673AC 17PS4002AC 17SF3476SV	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447	-
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025 45.025	17PS3673AC 17PS4002AC 17SF3476SV 17SF4159SV	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447 10,000	- - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025 45.025 45.025	17PS3673AC 17PS4002AC 17SF3476SV 17SF4159SV 18NL4717MT	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447 10,000 2,788	- - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025 45.025 45.025 45.025	17PS3673AC 17PS4002AC 17SF3476SV 17SF4159SV 18NL4717MT 18PS4195AC	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447 10,000 2,788 24,000	- - - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025 45.025 45.025 45.025 45.025	17P53673AC 17P54002AC 17SF3476SV 17SF4159SV 18N4717MT 18P54195AC 18P54198ED	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447 10,000 2,788 24,000 19,500	- - - - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025	17PS3673AC 17PS4002AC 17PS4002AC 17SF3476SV 18NL4717MT 18PS4195AC 18PS4195AC 18PS4198ED 18SF4094SV	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447 10,000 2,788 24,000 19,500 18,074	- - - - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.169	17P53673AC 17P54002AC 17SF3476SV 17SF4159SV 18N4717MT 18P54195AC 18P54198ED	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS	11,298 15,447 10,000 2,788 24,000 19,500	- - - - - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through	45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.169	17PS4002AC 17PS4002AC 17SF4476SV 17SF4159SV 18N4717MT 18PS4195AC 18PS4198ED 18SF4094SV 15-119-100485-010 NEH #HK-50155-14	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS OLD DOMINION UNIVERSITY THE NEW SCHOOL	11,298 15,447 10,000 2,788 24,000 19,500 18,074 7,597 (52)	- - - - - - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through	45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.169 45.169	17PS3673AC 17PS4002AC 17PS4156SV 17SF4159SV 18NL4717MT 18PS4195AC 18PS4198ED 18SF4094SV 15-119-100485-010	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS OLD DOMINION UNIVERSITY	11,298 15,447 10,000 2,788 24,000 19,500 18,074 7,597 (52) (3,883)	- - - - - - - - - - - - - - - - - - -
Federal Council on the Arts and Humanities Federal Council on the Arts and Humanities	Pass-through	45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.025 45.169 45.169 ough Total	17PS4002AC 17PS4002AC 17SF4476SV 17SF4159SV 18N4717MT 18PS4195AC 18PS4198ED 18SF4094SV 15-119-100485-010 NEH #HK-50155-14	MICHIGAN COUNCIL OF ARTS & CULTURAL AFFAIRS OLD DOMINION UNIVERSITY THE NEW SCHOOL	11,298 15,447 10,000 2,788 24,000 19,500 18,074 7,597 (52)	

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Paymer
Federal Awards (continued):						
Health and Human Services	Direct	93.103	4U18FD004632-04	FOOD & DRUG ADMINISTRATION -PHS	\$ 11,223	\$ -
Health and Human Services	Direct	93.103	UFD006175A	FOOD & DRUG ADMINISTRATION -PHS	32,613	-
Health and Human Services	Direct	93.124	6A22HP30937-01-00	HEALTH RESOURCES & SERVICES ADMIN -PHS	21,816	-
Health and Human Services	Direct	93.157	2-D24HP24457-06-01	HEALTH RESOURCES & SERVICES ADMIN -PHS	658,412	-
Health and Human Services	Direct	93.157	5D34HP24457-05-00	HEALTH RESOURCES & SERVICES ADMIN -PHS	577	-
Health and Human Services	Direct	93.197	1NUE2EH001370-01-00	CENTERS FOR DISEASE CONTROL AND PREVENTION	830,417	286,00
Health and Human Services	Direct	93.247	5 D09HP26953-03-00	HEALTH RESOURCES & SERVICES ADMIN -PHS	68,908	-
Health and Human Services	Direct	93.884	5 D54HP23284-05-00	HEALTH RESOURCES & SERVICES ADMIN -PHS	1,502	-
Health and Human Services	Direct	93.884	5D58HP23259-05-00	HEALTH RESOURCES & SERVICES ADMIN -PHS	(5,321)	
Health and Human Services	Direct	93.976	5 K02HP30816-02	HEALTH RESOURCES & SERVICES ADMIN -PHS	140,346	_
rieatti aliu riulian services	Direct To		3 KUZIIF 30810-02	TIEAETT RESOURCES & SERVICES ADMIN -FT13	1,760,493	286,00
Health and Human Services Health and Human Services	Pass-through Pass-through	93 93	ED-012.001-17 NHPCC-1-03	SAGINAW CHIPPEWA INDIAN TRIBE OF MICHIGAN AMERICAN THROMBOSIS & HEMOSTASIS NETWORK	37,343 79,678	-
Health and Human Services		93.001		ASSOC OCCUPATIONAL & ENVIRONMENT CLINICS		-
	Pass-through		AOEC Exposure Code		18,558	-
Health and Human Services	Pass-through	93.052	KINSHIP FY 18	TRI COUNTY OFFICE ON AGING	3,794	-
Health and Human Services	Pass-through	93.068	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	29,029	-
Health and Human Services	Pass-through	93.069	E20180371-00-F	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	64,080	
Health and Human Services	Pass-through	93.070	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	33,176	-
Health and Human Services	Pass-through	93.080	17-18-442	HEMOPHILIA FOUNDATION OF MICHIGAN	46,361	-
Health and Human Services	Pass-through	93.080	CDC 16-17-442	HEMOPHILIA FOUNDATION OF MICHIGAN	20,944	-
Health and Human Services	Pass-through	93.103	154180	IOWA STATE UNIVERSITY	(251)	_
						-
Health and Human Services	Pass-through	93.103	18000000241	MICHIGAN DEPT OF AGRICULTURE & RURAL DEVELOPMENT	275,454	-
Health and Human Services	Pass-through	93.103	180000001180	MICHIGAN DEPT OF AGRICULTURE & RURAL DEVELOPMENT	18,714	-
Health and Human Services	Pass-through	93.103	791N770000252	MICHIGAN DEPT OF AGRICULTURE & RURAL DEVELOPMENT	38,509	-
Health and Human Services	Pass-through	93.103	P157113	UNIVERSITY OF VERMONT	39	-
Health and Human Services	Pass-through	93.110	ATHN2015-HRSA-2	AMERICAN THROMBOSIS & HEMOSTASIS NETWORK	119	
Health and Human Services	Pass-through	93.110	ATHN2017-HRSA-3	AMERICAN THROMBOSIS & HEMOSTASIS NETWORK	71,068	
Health and Human Services	Pass-through	93.110	E20172700-00-AL	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	1,356	
Health and Human Services	Pass-through	93.110	E20182955-00 AT	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	4,809	
Health and Human Services	Pass-through	93.110	HFM / HRSA 150689 Kulkarni	HEMOPHILIA FOUNDATION OF MICHIGAN	361	
Health and Human Services	Pass-through	93.110	MCHB 442 17-18	HEMOPHILIA FOUNDATION OF MICHIGAN	62,295	
Health and Human Services	Pass-through	93.110	WSU17101	WAYNE STATE UNIVERSITY	70,833	
Health and Human Services	Pass-through	93.136	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	6,912	
Health and Human Services	Pass-through	93.184	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	2,765	
Health and Human Services	Pass-through	93.243	182734-AWARE18	MICHIGAN DEPARTMENT OF EDUCATION	107,257	
Health and Human Services	Pass-through	93.243	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	4,147	
Health and Human Services	Pass-through	93.243	SM063521-01	CITY OF FLINT	502,414	
Health and Human Services	Pass-through	93.268	E20170667-00-X	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	40,469	
Health and Human Services	Pass-through	93.268	E20180537-00-AH	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	97,121	
Health and Human Services	Pass-through	93.283	E20170233-00-B	MI DEPT COMMUNITY HEALTH	265,382	
Health and Human Services	Pass-through	93.283	E20170234-00-C	MI DEPT COMMUNITY HEALTH	13,913	
Health and Human Services	Pass-through	93.283	E20160881-001-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	(217)	
Health and Human Services	Pass-through	93.283	E20172468-00-O	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	288	
Health and Human Services	Pass-through	93.283	E20180536-00-S	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	1,265	
Health and Human Services	Pass-through	93.283	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	9,676	
Health and Human Services	Pass-through	93.336	E20180251-00-E	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	27,470	
Health and Human Services	Pass-through	93.336	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	271,926	
Health and Human Services	Pass-through	93.424	E20182701-00-AS	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	10,376	
Health and Human Services	Pass-through	93.424	E20173080-00-AV	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	4,800	
Health and Human Services	Pass-through	93.539	E20170667-00-X	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	17,008	
Health and Human Services	Pass-through	93.539	E20180537-00-AH	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	10,190	
Health and Human Services	Pass-through	93.556	SFSC14-19001	MI DEPARTMENT OF HUMAN SERVICES	12,174	
Health and Human Services	Pass-through	93.590	CTFDS-15-73001	CHILDRENS TRUST FUND OF MICHIGAN	36,155	
Health and Human Services	Pass-through	93.590	CTFDS-15-73001	CHILDRENS TRUST FUND OF MICHIGAN	16,019	
Health and Human Services	Pass-through	93.590	Promising Futures	GREAT LAKES CENTER FOR YOUTH DEVELOPMENT	28,368	
Health and Human Services	Pass-through	93.600	05CH8365	CACS HEAD START	8,527	
Health and Human Services	Pass-through	93.600	2017-2018	CACS HEAD START	94,131	
Health and Human Services	Pass-through	93.624	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	107,823	
Health and Human Services	Pass-through	93.628	E20170247-00-P	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	31,506	
Health and Human Services	Pass-through	93.628	20172985-00-AU	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	102,512	
Health and Human Services	Pass-through	93.628	E20180327-00-U	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	127,815	
Health and Human Services	Pass-through	93.644	E20172455-00 AH	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	8,664	
Health and Human Services	Pass-through	93.644	E20182776-00-C	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	23,883	
Health and Human Services	Pass-through	93.648	16-39	RESEARCH FOUNDATION OF S.U.N.Y.	203,436	71,
						/1,
Health and Human Services	Pass-through	93.648	F-18-19	RESEARCH FOUNDATION OF S.U.N.Y.	139,234	
Health and Human Services	Pass-through	93.733	E20170667-00-X	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	1,173	
Health and Human Services	Pass-through	93.733	E20180537-00-AH	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	10,189	
Health and Human Services	Pass-through	93.757	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	2,765	
Health and Human Services	Pass-through	93.758	E20172531-00-AK	MI DEPT COMMUNITY HEALTH	49,228	
Health and Human Services	Pass-through	93.758	E20172532-00-AJ	MI DEPT COMMUNITY HEALTH	7,644	
Health and Human Services	Pass-through	93.758	E20172760-00-AM	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	4,147	
Health and Human Services	Pass-through	93.758	E20182759-00-AD	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	3,862	
		93.799		MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	33,737	
Health and Human Services	Pass-through		E20173017-00-AS			
Health and Human Services	Pass-through	93.808	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	47,553	
Health and Human Services	Pass-through	93.926	HR-SBP14-05	SPECTRUM HEALTH SYSTEMS OF GRAND RAPIDS	99,906	
Health and Human Services	Pass-through	93.945	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	15,482	
Health and Human Services	Pass-through	93.958	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	8,294	
Health and Human Services	Pass-through	93.959	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	4,838	
ricular and riaman services		ough Total	L20102720 00 D	WINGTIGATE DELAKTIVIENT OF TIEAETT & HOWAY SERVICES	3,498,496	71,
	Health a	nd Human Se	rvices Total		5,258,989	357,
Homeland Security	Direct	97.012	3316SUR160102	US COAST GUARD	136,460	
	Direct To		33133011100102	OS CO. DI GOMID	136,460	
	Direct 10	real				
	Pass-through	97.012	1-312-0215847-52926L	RTI INTERNATIONAL	54,180	
Homeland Security				•	54,180	
Homeland Security	Pass-thre					
Homeland Security	Pass-thro		tal	•		
	Homelan	d Security To			190,640	
Homeland Security Housing and Urban Development			tal HUD B-17-MC-26-024 EL Subaward	CITY OF EAST LANSING		
Housing and Urban Development	Homelan	d Security To		CITY OF EAST LANSING MICH STATE HOUSING DEVELOPMENT AUTHORITY	190,640 7,728	
	Homelan Pass-through	d Security To	HUD B-17-MC-26-024 EL Subaward		190,640	

Federal Agency	Direct/ Pass-through	CFDA (Note 5)	Award Number	Grantor Name	Total Expenditures	Subaward Payments
Federal Awards (continued):						
Interior	Direct	15	G17PX01366	US GEOLOGICAL SURVEY	\$ 67,826	\$ -
Interior	Direct	15.658	F17AC00428	US FISH AND WILDLIFE SERVICE	791	
	Direct To	otal			68,617	
Interior	Pass-through	15.156	1002791-01	NORTHERN ARIZONA UNIVERSITY	12,198	-
Interior	Pass-through	15.805	078687-15712	UNIV OF ILLINOIS URBANA CHAMPAIGN	26,919	-
Interior	Pass-through	15.805	078687-15712	UNIV OF ILLINOIS URBANA CHAMPAIGN	14,324	-
Interior	Pass-through	15.922	153436	CITY OF ST IGNACE	3,838	-
		ough Total			57,279	
	Interior	-			125,896	
Justice	Direct To	16.001 otal	90-11-2-529Z	US DEPT OF JUSTICE	119,574 119,574	-
Justice	Pass-through	16.001	20161005-142733-49	BOOZ ALLEN HAMILTON, INC.	5	-
Justice	Pass-through	16.575	E20172267-00	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	133,044	-
Justice	Pass-through	16.575	E20172639-00	MI DEPARTMENT OF HUMAN SERVICES	17,966	-
Justice	Pass-through	16.575	E20180565-00	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES	260,409	-
Justice	Pass-through	16.726	DOJ 2016-JU-FX-022 N4H-NMP7	NATL 4-H COUNCIL	11,764	-
Justice	Pass-through	16.726	DOJ 2017-JU-FX-0016 N4H-NMP8	NATL 4-H COUNCIL	13,006	-
Justice	Pass-through	16.726	DOJ 2017-JU-FX-0016 N4H-NMP8	NATL 4-H COUNCIL	586	-
Justice	Pass-through	16.726	NMP7	NATL 4-H COUNCIL	238,674	_
Justice	Pass-through	16.726	NMP7 TTA	NATL 4-H COUNCIL	87,487	_
Justice	Pass-through	16.833	3-321-0215016-52458L	RTI INTERNATIONAL	118,030	
Justice			3-321-0213010-32430L	NT INTERIVATIONAL		
	Pass-thro Justice T	ough Total otal			880,971 1,000,545	
National Aeronautics and Space Administration	Direct	43.001	80NSSC17K0395	NATL AERONAUTICS AND SPACE ADM	37,700	
	Direct	43.001		NATL AERONAUTICS AND SPACE ADM NATL AERONAUTICS AND SPACE ADM		-
National Aeronautics and Space Administration			NNX14AO11H and Space Administration Total	INATE AERONAUTICS AND SPACE ADM	(3,442)	
			·			
State	Direct	19.040	SCI800-17-GR-0050	US DEPARTMENT OF STATE	10,346	-
State	Direct	19.415	S-ECAGD-17-CA-1077	US DEPARTMENT OF STATE	67,675	-
State	Direct	19.415	S-ECAGD-17-CA-1077	US DEPARTMENT OF STATE	67,531	-
	Direct To	tal			145,552	-
State	Pass-through	19	FST1801_5.1.18	INST OF INTERNATL EDUCATION	5,127	-
State	Pass-through	19	FST1801_5.1.18	INST OF INTERNATL EDUCATION	1,863	-
State	Pass-through	19	IIE 0136	INST OF INTERNATL EDUCATION	73,913	-
State	Pass-through	19.010	IIE0138_MSU_7.1.17	INST OF INTERNATL EDUCATION	217,289	-
	Pass-thre	ough Total			298,192	-
	State To	tal			443,744	-
Transportation	Discot	20.215	693JJ31845038	US DEPT OF TRANSPORTATION	4,808	
Transportation	Direct To		0531131843038	03 DEFT OF TRANSPORTATION	4,808	
Transportation	Pass-through	20	116500	MICHIGAN FITNESS FOUNDATION	20,915	-
Transportation	Pass-through	20.215	2016-0131	MICHIGAN DEPARTMENT OF TRANSPORTATION	19,984	
	Pass-thre	ough Total			40,899	
	Transpor	tation Total			45,707	-
			AID-OAA-A-13-00006	US AGENCY FOR INTERNATIONAL DEVELOPMENT		
LISAID	Direct				1 470 227	
USAID	Direct	98.001	AID 044 A 13 00006	LIC ACENCY FOR INTERNATIONAL DEVELORMENT	1,479,327	
USAID	Direct	98.001	AID-OAA-A-13-00006	US AGENCY FOR INTERNATIONAL DEVELOPMENT	17,557	
USAID USAID	Direct Direct	98.001 98.001	AID-OAA-A-13-00006	US AGENCY FOR INTERNATIONAL DEVELOPMENT	17,557 16,472	2,292
USAID USAID USAID	Direct Direct Direct	98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT	17,557 16,472 111,272	2,292
USAID USAID	Direct Direct	98.001 98.001	AID-OAA-A-13-00006	US AGENCY FOR INTERNATIONAL DEVELOPMENT	17,557 16,472	2,292 - 50,708
USAID USAID USAID	Direct Direct Direct	98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT	17,557 16,472 111,272	2,292 - 50,708
USAID USAID USAID USAID	Direct Direct Direct Direct Direct Direct To	98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT	17,557 16,472 111,272 2,385,950 4,010,578	2,292 - 50,708
USAID USAID USAID USAID	Direct Direct Direct Direct Pass-through	98.001 98.001 98.001 98.001 otal	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471	2,29; - 50,708
USAID USAID USAID USAID USAID USAID	Direct Direct Direct Direct To Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278	2,292 - 50,708 - 700,917 -
USAID USAID USAID USAID USAID USAID USAID	Direct Direct Direct Direct To Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157	2,29; 50,70;
USAID	Direct Direct Direct Direct Direct To Pass-through Pass-through Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD BHEARD BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC CIMMYT INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528	2,29; - 50,70; - 700,91; - 313,22; 187,53;
USAID	Direct Direct Direct Direct Direct Direct To Pass-through Pass-through Pass-through Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD BHEARD BHEARD BHEARD BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC CIMMYT INC CIMMYT INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779	2,29; 50,700,91; 700,91; 313,22; 187,53; 468,02;
USAID	Direct Pass-through Pass-through Pass-through Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD BHEARD BHEARD BHEARD BHEARD BHEARD BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC CIMMYT INC CIMMYT INC CIMMYT INC CIMMYT INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908	2,29; 50,70; 700,91; - 313,22 187,53; 468,02; 454,84
USAID	Direct Direct Direct Direct Direct To Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459	2,29: -50,700,91 - - - - - - - - - - - - - - - - - - -
USAID	Direct Direct Direct Direct Direct Direct Direct To Direct To Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145	2,29 50,70 - 700,91 313,22 187,53 468,02 454,84 132,37 293,64
USAID	Direct Direct Direct Direct Direct To Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145	2,29; 50,700,91; 700,91; 313,22; 187,53; 468,02; 454,84; 132,37; 293,64; 130,14;
USAID	Direct Direct Direct Direct Direct Direct Direct To Direct To Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145	2,29 - 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14
USAID	Direct Direct Direct Direct Direct To Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145	2,29 - 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14
USAID	Direct Direct Direct Direct To Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648	2,29 50,70 - 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38
USAID	Direct To Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138	2,29 - 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38
USAID	Direct Direct Direct Direct To Pass-through	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145	2,29 50,700
USAID	Direct Di	98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086	2,29 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94
USAID	Direct Direct Direct Direct Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344	2,29: 50,70: 700,91 313,22 187,53 468,02: 454,84 132,377 293,64 130,14: 252,38: - 34,96: 176,633 2,94: 73,88
USAID	Direct Di	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344	2,29 - 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 - 34,96 176,63 2,94 73,88
USAID	Direct Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-L-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741	2,29 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 - 34,96 176,63 2,94 73,88 136,92
USAID	Direct Direct Direct Direct Direct Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 223,453 224,145 189,086 184,344 175,741 172,751 117,762	2,29: 50,700
USAID	Direct Di	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 234,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998	2,29 50,70 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94 73,88 136,92 30,21 86,93
USAID	Direct Di	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565	2,29 50,70 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94 73,88 136,92 30,21 86,93
USAID	Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740	2,29 50,70 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94 73,88 136,92 30,21 86,93
USAID	Direct Di	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364	2,29 50,70 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94 73,88 136,92 30,21 86,93
USAID	Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740	2,29 50,700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 - 34,96 176,63 2,94 73,88 136,92 - 30,21 86,93
USAID	Direct Di	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364	2,29 - 50,70,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 - 34,96 73,88 136,92 - 30,21 86,93
USAID	Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802	2,25 50,77 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 14,96 2,94 73,88 136,92 - 30,21 86,93
USAID	Direct Di	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802 8,964	2,25 50,77 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 14,96 2,94 73,88 136,92 - 30,21 86,93
USAID	Direct Direct Direct Direct Direct Direct Direct Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802 8,964 1,198	2,29 - 50,70,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 - 34,96 73,88 136,92 - 30,21 86,93
USAID	Direct Direct Direct Direct Direct Direct Direct Direct Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 223,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802 8,964 1,198	2,29 50,70 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94 73,88 136,92 30,21 86,93
USAID	Direct Direct Direct Direct Direct Direct Direct Direct Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-L-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL INC CIMMYT INC	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 233,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802 8,964 1,198 564 (4,399)	2,29 50,70 700,91 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 34,96 176,63 2,94 73,88 136,92 30,21 86,93
USAID	Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 223,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802 8,964 1,198 564 (4,399) (10,874)	2,29 50,700,91
USAID	Direct Direct Direct Direct Direct Direct Direct Direct Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 223,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 1,198 9,802 8,964 1,198 564 (4,399) (10,874) (348,145)	2,29 50,700,91
USAID	Direct To Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 223,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 12,933 9,802 8,964 1,198 564 (4,399) (10,874)	2,29 50,70 - 700,91 - 313,22 187,53 468,02 454,84 132,37 293,64 130,14 252,38 - 34,96 176,63 2,94 73,88 136,92 - 30,21 86,93 40,39
USAID	Direct Direct Direct Direct Direct Direct Direct Direct Pass-through	98.001 98.001	AID-OAA-A-13-00006 AID-OAA-LA-17-00002 OAA-A-13-00006 SUB-401 BHEARD	US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT US AGENCY FOR INTERNATIONAL DEVELOPMENT CHEMONICS INTERNATIONAL INC CIMMYT	17,557 16,472 111,272 2,385,950 4,010,578 20,471 1,114,278 873,157 735,528 568,779 543,908 516,459 348,145 333,101 306,648 273,138 223,453 224,145 189,086 184,344 175,741 172,751 117,762 87,998 73,565 35,740 14,364 1,198 9,802 8,964 1,198 564 (4,399) (10,874) (348,145)	647,917 2,292 50,708 313,227 187,531 468,022 454,847 132,373 293,641 130,142 252,380 176,634 2,945 73,884 136,927 30,215 86,933 40,394

	Direct/	CFDA				Total		
Federal Agency	Pass-through	(Note 5)	Award Number	Grantor Name	E	xpenditures	Subay	vard Payments
Other Federal Awards (continued):								
USAID	Pass-through	98.001	60039687	OHIO STATE UNIVERSITY	\$	25,074	\$	-
USAID	Pass-through	98.001	005 LOA1862	TETRA TECH INC.		123,530		-
USAID	Pass-through	98.001	1856-000	TETRA TECH INC.		158,315		-
USAID	Pass-through	98.001	016258-158	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA - DAVIS		6,157		-
	Pass-thro	ough Total				7,237,565		2,521,42
	USAID TO	OTAL				11,248,143		3,222,34
Health and Human Services	Pass-through	99.000	E20182726-00-D	MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES		24,329		-
	Health ar	nd Human Se	rvices Total			24,329		-
	TOTAL O	THER FEDERA	L AWARDS			42,002,655		5,049,08
	TOTAL FE	DERAL EXPE	NDITURES		\$	836,389,048	\$	48,541,094
SUMMARY OF EXPENDITURES BY FEDERAL								
AGENCY Energy					\$	98,792,188	ė	1,211,73
National Science Foundation					٠	82,782,985	٠	6,734,43
Health and Human Services						77,864,457		12,650,58
Agriculture						56,036,891		9,402,10
Education						55,684,881		226,70
USAID						34,903,908		15,281,23
Defense						11,795,530		1,228,14
Justice						4,721,302		602,28
Commerce						4,513,235		,
National Aeronautics and Space Administration						2,673,414		115.11
Transportation						2,419,218		852,71
Interior						2,228,019		-
Federal Communications Commission						1,580,491		-
Environmental Protection Agency						1,220,162		222,04
State						498,025		
Federal Council on the Arts and Humanities						342,573		-
Homeland Security						271,262		14,00
Corporation for National and Community Service						76,857		-
Housing and Urban Development						42,371		-
Library of Congress						18,141		=
						438,465,910		48,541,094
SUMMARY OF LOAN BALANCES BY FEDERAL AGENCY								
Education						386,769,161		-
Health and Human Services						11,153,977		-
						397,923,138		-
TOTAL FEDERAL EXPENDITURES					\$	836,389,048	\$	48,541,094

Notes to Schedule of Expenditures of Federal Awards

Year Ended June 30, 2018

Note 1 - Basis of Presentation

The accompanying schedule of expenditures of federal awards (the "Schedule") includes the federal grant activity of Michigan State University (the "University") under programs of the federal government for the year ended June 30, 2018. 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* (the "Uniform Guidance"). Because the Schedule presents only a selected portion of the operations of the University, it is not intended to and does not present the financial position, changes in net position, or cash flows of the University.

Note 2 - Summary of Significant Accounting Policies

Expenditures reported in the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in OMB Circular A-21, Cost Principles for Educational Institutions, or 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, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. Pass-through entity identifying numbers are presented where available.

Note 3 - Indirect Costs

The University has elected not to use the 10 percent *de minimis* indirect cost rate to recover indirect costs, as allowed under the Uniform Guidance.

Included as federal expenditures are indirect costs of \$70,188,992, which are based on the approved university rate agreement negotiated with the cognizant agency. The negotiated rate is effective from July 1, 2016 through June 30, 2019.

Note 4 - Commingled Funds

Certain miscellaneous pass-through funds consist of commingled funds from federal and nonfederal sources. The commingled component cannot be separated to specify the individual funding sources; therefore, the total amount is included in the schedule of expenditures of federal awards.

Note 5 - Catalog of Federal Domestic Assistance (CFDA) Numbers

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

Notes to Schedule of Expenditures of Federal Awards

Year Ended June 30, 2018

Note 6 - Federal Student Loans Granted and Outstanding

As part of the Student Financial Assistance Cluster, the University participates in the Federal Perkins Loan Program through the U.S. Department of Education and the Health Professional Student Loan Program, Nursing Student Loan Program, and Nurse Faculty Loan Program, all through the U.S. Department of Health and Human Services. These loan programs are directly administered by the University and are considered revolving loan programs where collections received on past loans, including interest, and new funds received from federal agencies with university matching requirements are loaned out to current students. The loans disbursed during the year and year end outstanding balances for these loans are disclosed below:

CFDA Number	Loan Program	Loan Issued			Loan Balances			
84.038 93.264 93.342 93.364	Perkins Nurse Faculty Loans Health Professional Student Loan Nurse Student Loans	\$	665,059 69,054 1,652,117 -	\$	29,940,192 307,813 9,128,129 3,612			
		\$	2,386,230	\$	39,379,746			

The University participates in the Federal Direct Student Loan Program (FDLs). A total of \$350,530,306 of the amount presented in the schedule of expenditures of federal awards represents the value of the new FDLs accepted by students during the year ended June 30, 2018.

The University had participated in the discontinued U.S. Department of Education Federal Family Education Loan Program and continues to hold and service loans with a total outstanding balance of \$646,393 at June 30, 2018.

Note 7 - Federal Work Study Program Adjustments and Transfers

During the year ended June 30, 2018, certain Federal Work-Study funds were transferred in accordance with federal guidelines. The transfers were as follows:

Transferred From		Amount	Transferred To			
Federal Work-Study 2017-2018	\$	651,498	Federal Supplemental Educational Opportunity Grant 2017-2018			
Federal Work-Study 2016-2017 Federal Work-Study 2017-2018			Federal Work-Study 2017-2018 Federal Work-Study 2018-2019			
Total	\$	983,597				

Schedule of Findings and Questioned Costs

Year Ended June 30, 2018

Section I - Summary	y of Auditor's Results				
Financial Statements					
Type of auditor's report issu	ued:	Unn	nodified		
Internal control over financi	al reporting:				
Material weakness(es) i	dentified?		Yes	X	_ No
Significant deficiency(ie. not considered to be	s) identified that are material weaknesses?		Yes	X	_ None reported
Noncompliance material to statements noted?	financial		Yes	X	_ None reported
Federal Awards					
Internal control over major	programs:				
• Material weakness(es) i	dentified?		Yes	X	_ No
Significant deficiency(ie. not considered to be	s) identified that are material weaknesses?		Yes	X	_ None reported
Any audit findings disclosed accordance with Section	d that are required to be reported in n 2 CFR 200.516(a)?		Yes	X	_ No
Identification of major progr	rams:				
CFDA Number	Name of Federal Prog	ram or Clu	ıster		Opinion
84.007, 84.033, 84.038, 84.063, 84.268, 84.379, 93.342, 93.364, 93.264 84.032 10.561	Student Financial Assistance Cluster Federal Family Education Loan Progr SNAP Cluster - Supplemental Nutritio	ram - Lend		ı	Unmodified Unmodified Unmodified
Dollar threshold used to dis type A and type B progra		\$3,000,	,000		
Auditee qualified as low-ris	k auditee?	>	X Yes		_ No

Section II - Financial Statement Audit Findings

Current Year None

Section III - Federal Program Audit Findings

Current Year None